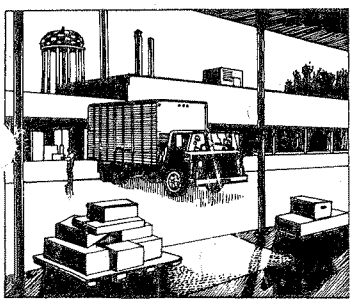


CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued March 1979

January 1979

BW-79-1

Notice—Monthly sales, inventories, and stock-sales ratios which are adjusted for seasonal variation and, in the case of sales, trading-day differences have been revised for 1978. These data reflect recomputed factors for seasonal adjustment based on monthly estimates through December 1978. Revised factors for seasonal adjustment are presented in table B-1.

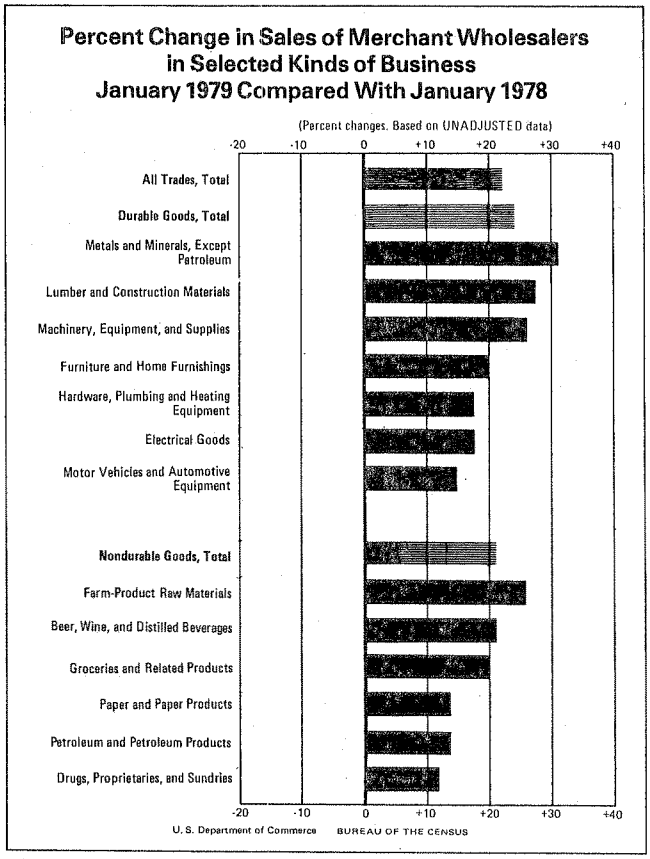
Sales—January 1979 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences, but not for price changes, were $67.1 billion, down 1 percent from the previous month, but 19 percent above January 1978. Adjusted November-through-January total sales were up 3 percent from the August-through-October period and were 20 percent above the total sales for the comparable months a year ago.

After adjustment, January sales in the durable goods trades were down 3 percent from the previous month, but were 21 percent above January 1978. Nondurable goods sales were virtually unchanged from December 1978, but were 18 percent above the same month a year ago. Total monthly sales in the durable goods group during the November-through-January period were 4 percent above the prior 3 months and were 22 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were up 2 percent from the August-through-October period and were 18 percent above the same period a year ago.

Based on adjusted data, most trade groups showed decreases from their previous month sales levels with the most substantial decrease shown in sporting goods, toys, and hobby goods (-11%). The largest increase was reported in petroleum and petroleum products (10%). Compared with sales of a year ago, all trade groups showed increases. The sharpest increase was reported in metals and minerals, except petroleum (28%).

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variation, but not for price changes, were valued at $81.9 billion at the end of January, up 1 percent from last month, and 18 percent above the same month a year ago. Durable goods stocks were up 1 percent from December and were 18 percent above January 1978. Nondurable goods stocks were up 3 percent from last month and were up 20 percent from stocks on hand a year ago.

Based on adjusted data, most trade groups showed increases from their previous month inventory levels with the largest increase reported in drugs, proprietaries, and sundries (9%). Compared with year-ago inventories, all trade groups showed increases. The sharper increases were reported in beer, wine, and distilled beverages (26%) and drugs, proprietaries, and sundries (24%).



Stock-Sales Ratios—The January stock-sales ratio for merchant wholesalers, based on seasonally adjusted data, was 122, up 3 points from the previous month, but 1 point below the year-ago ratio. The stock-sales ratio for durable goods was 170, up 6 points from December, but 5 points below the January 1978 ratio. The ratio for nondurable goods was 81, up 2 points from last month, and up 1 point from the year-ago ratio.

An advance release of the January 1979 data was issued on March 9, 1979.

U.S. Department of Commerce
BUREAU OF THE CENSUS

Inquiries concerning this report should be addressed to Ronald Piencykoski, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-5294/763-5295.

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Table 1. Estimated Monthly Sales of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979	1978											Total 12 months 1978
		Jan.[P]	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
	Merchant wholesalers, total	63,680	52,143	52,766	62,900	60,613	66,249	65,834	60,651	67,702	63,933	69,086	67,699	64,527	754,105
	Total (excluding farm-product raw materials)	56,291	46,343	47,112	55,848	54,095	58,061	58,658	54,411	60,838	57,342	61,033	59,923	57,237	670,902
50	Durable goods, total	28,374	22,869	23,880	28,985	28,784	30,405	30,991	28,701	32,279	30,404	32,242	31,037	29,340	349,916
501	Motor vehicles and automotive parts and supplies	5,517	4,797	5,065	5,870	5,956	6,083	5,929	5,552	6,134	5,381	6,009	6,013	5,510	68,298
5013,4	Automotive parts and supplies, tires and tubes	3,078	2,517	2,666	3,128	3,217	3,403	3,227	2,935	3,440	2,998	3,344	3,298	2,927	37,101
5013	Automotive parts and supplies	2,549	2,166	2,286	2,602	2,706	2,828	2,660	2,432	2,872	2,496	2,761	2,752	2,413	30,973
502	Furniture and home furnishings	1,038	867	921	1,111	1,046	1,077	1,104	1,013	1,133	1,162	1,174	1,218	1,140	12,966
5021	Furniture--household and office	350	304	311	356	352	368	370	328	366	379	379	411	422	4,344
5023	Home furnishings	689	564	610	755	695	710	735	685	767	783	795	807	718	8,622
503	Lumber and other construction materials	2,387	1,867	1,891	2,368	2,517	2,889	3,067	2,771	3,208	3,056	3,173	2,874	2,542	32,223
5031	Lumber, plywood, and millwork	1,675	1,290	1,288	1,582	1,676	1,947	2,037	1,845	2,105	1,949	2,083	1,915	1,682	21,399
5039	Construction materials, n.e.c.	743	576	603	786	841	942	1,031	927	1,103	1,107	1,089	959	860	10,825
505	Metals and minerals, except petroleum	3,293	2,505	2,557	3,040	2,942	3,153	3,169	2,817	3,306	3,037	3,186	3,209	2,942	35,864
5051 pt.	Ferrous metals service centers and offices	2,536	1,922	1,970	2,344	2,190	2,360	2,380	2,158	2,515	2,339	2,446	2,448	2,260	27,333
5051 pt.	Ferrous metals service centers	1,730	1,386	1,443	1,713	1,629	1,755	1,778	1,580	1,833	1,721	1,801	1,768	1,678	20,085
506	Electrical goods	3,003	2,541	2,627	3,096	2,980	3,239	3,385	3,193	3,540	3,338	3,590	3,474	3,322	38,325
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,517	1,262	1,354	1,561	1,556	1,698	1,725	1,663	1,812	1,663	1,832	1,722	1,655	19,502
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,487	1,279	1,273	1,535	1,424	1,541	1,660	1,530	1,728	1,675	1,758	1,751	1,667	18,823
5064	Electrical appliances, TV and radio sets	842	763	762	939	841	931	994	912	1,064	1,057	1,040	1,090	1,006	11,398
507	Hardware, plumbing, heating equipment, and supplies	2,111	1,790	1,708	2,021	2,102	2,306	2,360	2,247	2,412	2,159	2,455	2,250	2,057	25,868
5072	Hardware	788	693	679	793	797	856	836	760	864	771	859	830	721	9,458
5074	Plumbing and heating equipment and supplies (hydronics)	844	726	675	801	834	904	902	916	988	928	1,047	918	854	10,494
508	Machinery, equipment, and supplies	7,857	6,190	6,632	8,301	8,296	8,616	8,790	7,827	8,757	8,655	8,909	8,421	8,485	97,877
5082	Construction and mining machinery and equipment	860	825	875	1,130	1,254	1,276	1,229	1,122	1,196	1,115	1,155	1,126	1,125	13,429
5084,5	Industrial machinery, equipment, and supplies	3,506	2,545	2,790	3,294	3,077	3,388	3,505	3,049	3,532	3,450	3,573	3,474	3,623	39,301
5086	Professional equipment, supplies	906	710	732	863	816	873	952	888	990	949	941	949	975	10,637
5093	Scrap and waste materials	1,131	757	815	979	958	1,058	1,057	940	1,073	978	1,007	1,103	1,079	11,804
51	Nondurable goods, total	35,306	29,274	28,886	33,915	31,829	35,844	34,843	31,950	35,423	33,529	36,844	36,662	35,187	404,189
	Total (excluding farm-product raw materials)	27,917	23,474	23,232	26,863	25,311	27,656	27,667	25,710	28,559	26,937	28,791	28,885	27,897	320,986
511	Paper and paper products	1,502	1,316	1,284	1,506	1,395	1,508	1,498	1,384	1,581	1,456	1,598	1,569	1,489	17,586
5111,3	Printing, writing, industrials, and personal services paper	1,109	950	926	1,100	1,032	1,126	1,125	1,046	1,177	1,088	1,191	1,177	1,140	13,078
512	Drugs, drug proprietaries, and druggists' sundries	993	887	824	994	912	943	950	902	1,026	973	1,094	1,036	985	11,526
5122	Drugs, drug proprietaries, and druggists' sundries	993	887	824	994	912	943	950	902	1,026	973	1,094	1,036	985	11,526
5122 pt.	General-line drugs	479	423	393	470	423	447	448	409	482	464	506	484	467	5,416
513	Apparel, piece goods, and notions[1]	2,013	1,620	1,615	2,063	1,818	2,099	2,066	2,036	2,658	2,313	2,443	2,369	1,976	25,076
514	Groceries and related products	11,130	9,261	9,093	10,398	9,916	10,873	10,685	10,237	11,002	10,489	11,150	11,155	10,830	125,091
5141	Groceries, general-line	3,963	3,426	3,333	3,740	3,547	3,791	3,724	3,649	3,965	3,767	3,999	4,120	3,914	44,975
5144	Poultry and poultry products	514	402	397	486	468	507	503	482	539	505	525	569	536	5,916
5145	Confectionery	182	154	163	191	173	191	189	171	187	190	218	211	197	2,236
5147	Meats and meat products	2,001	1,460	1,462	1,651	1,688	1,871	1,826	1,800	1,974	1,840	1,928	1,911	1,885	21,297
5148	Fresh fruits and vegetables	1,020	839	824	986	1,035	1,184	1,198	1,044	1,005	909	980	974	973	11,951
515	Farm-product raw materials	7,389	5,800	5,654	7,052	6,518	8,188	7,176	6,240	6,864	6,591	8,053	7,777	7,290	83,204
5153	Grain	5,895	4,549	4,503	5,718	5,358	6,890	6,078	5,317	5,760	5,448	6,623	6,391	5,912	68,489
517	Petroleum and petroleum products	4,792	4,209	4,085	4,249	3,830	4,178	4,111	4,000	4,441	4,136	4,431	4,554	4,598	50,822
5171	Petroleum bulk stations and terminals	2,706	2,387	2,293	2,384	2,188	2,425	2,358	2,190	2,378	2,280	2,449	2,507	2,678	28,517
518	Beer, wine, and distilled alcoholic beverages	1,999	1,654	1,770	2,299	1,993	2,295	2,506	2,191	2,463	2,254	2,347	2,547	2,709	27,028
5181	Beer and ale	977	795	839	1,094	998	1,219	1,372	1,217	1,328	1,119	1,105	1,088	1,108	13,282
5182	Wine and distilled alcoholic beverages	1,022	859	931	1,204	996	1,076	1,134	974	1,134	1,135	1,242	1,459	1,601	13,746
519	Miscellaneous nondurable goods	4,481	3,723	3,782	4,434	4,568	4,730	4,819	4,040	4,297	4,311	4,510	4,486	4,425	52,125
5194	Tobacco and tobacco products	804	721	692	782	765	812	849	838	871	814	848	831	846	9,671

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals do to rounding and minor revisions.

NA Not available. [P]Preliminary estimate. See p.15, sample design and estimation procedures.

[1]The apparel piece goods and notions group is subject to a sampling variability of 15 percent for January 1979.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations)

1972 SIC code	Kind of business	1979	1978											
		Jan.[P]	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	82,236	69,596	71,156	73,931	74,635	74,634	74,882	74,874	74,943	76,074	78,715	80,100	80,922
	Total (excluding farm-product raw materials)	75,977	64,090	65,682	67,973	69,060	69,883	70,513	71,073	71,138	71,889	73,327	73,947	74,898
50	Durable goods, total	52,095	44,287	45,757	47,275	47,957	49,918	49,627	49,900	49,841	49,944	50,462	50,971	51,646
501	Motor vehicles and automotive parts and supplies	9,219	7,709	8,189	7,995	7,973	8,246	8,218	8,367	8,378	8,099	8,701	9,326	9,227
5013,4	Automotive parts and supplies, tires and tubes	5,639	4,743	4,962	4,856	4,901	5,149	5,035	5,034	5,206	5,172	5,298	5,635	5,552
5013	Automotive parts and supplies	4,755	3,953	4,163	4,041	4,171	4,382	4,241	4,288	4,415	4,345	4,489	4,792	4,674
502	Furniture and home furnishings	1,824	1,560	1,606	1,633	1,669	1,730	1,781	1,764	1,760	1,810	1,799	1,807	1,777
5023	Home furnishings	1,324	1,137	1,184	1,182	1,233	1,279	1,305	1,305	1,306	1,326	1,334	1,338	1,284
503	Lumber and other construction materials	3,149	2,676	2,761	2,919	2,966	3,030	3,071	3,095	3,007	3,076	3,076	2,995	3,117
5031	Lumber, plywood, and millwork	2,017	1,715	1,775	1,870	1,882	1,963	1,949	1,967	1,929	1,932	1,946	1,918	2,009
505	Metals and minerals, except petroleum	5,243	4,449	4,660	4,953	4,976	5,356	5,307	5,305	5,437	5,285	5,095	5,208	5,151
5051 pt.	Ferrous metals service centers and offices	4,319	3,471	3,591	3,820	3,823	4,116	4,108	4,104	4,232	4,148	3,976	4,150	4,191
5051 pt.	Ferrous metals service centers	3,420	2,633	2,760	3,039	2,971	3,220	3,268	3,191	3,308	3,299	3,098	3,236	3,336
506	Electrical goods	5,543	4,563	4,594	4,867	4,951	5,129	5,312	5,266	5,264	5,416	5,500	5,526	5,577
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,521	2,114	2,214	2,226	2,286	2,417	2,358	2,283	2,367	2,356	2,399	2,534	2,558
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3,023	2,449	2,380	2,640	2,665	2,712	2,954	2,983	2,899	3,059	3,101	3,016	3,023
507	Hardware, plumbing, heating equipment, and supplies	4,179	3,712	3,876	4,058	4,231	4,222	4,201	4,215	4,117	4,032	4,152	4,033	4,063
5072	Hardware	1,427	1,366	1,384	1,421	1,428	1,445	1,423	1,410	1,369	1,417	1,466	1,382	1,407
5074	Plumbing and heating equipment and supplies (hydronics)[1]	1,797	1,590	1,678	1,784	1,861	1,815	1,818	1,839	1,800	1,805	1,738	1,737	1,760
508	Machinery, equipment, and supplies	18,146	15,508	16,005	16,511	16,762	16,796	17,061	17,057	17,183	17,405	17,352	17,428	18,012
5082	Construction and mining machinery and equipment	4,044	3,281	3,396	3,505	3,516	3,589	3,636	3,637	3,793	3,899	3,937	4,002	4,109
5084,5	Industrial machinery, equipment, and supplies	5,847	4,816	4,912	4,996	5,055	5,160	5,328	5,301	5,317	5,519	5,508	5,570	5,752
51	Nondurable goods, total	30,141	25,309	25,399	26,656	26,678	25,716	25,255	24,974	25,102	26,130	28,253	29,129	29,276
	Total (excluding farm-product raw materials)	23,882	19,803	19,925	20,699	21,103	20,966	20,887	21,173	21,297	21,946	22,865	22,976	23,252
511	Paper and paper products	1,463	1,225	1,259	1,310	1,349	1,343	1,376	1,341	1,361	1,414	1,419	1,441	1,482
5111,3	Printing, writing, industrial, and personal service paper	1,015	868	877	910	911	929	955	938	921	976	969	967	1,025
512	Drugs, drug proprietaries, and druggists' sundries	1,568	1,266	1,292	1,330	1,345	1,350	1,401	1,368	1,410	1,489	1,525	1,518	1,496
514	Groceries and related products	6,512	5,401	5,376	5,710	5,740	5,752	5,871	5,833	5,803	6,186	6,469	6,412	6,497
5141	Groceries, general-line	2,739	2,350	2,366	2,562	2,500	2,495	2,512	2,480	2,505	2,641	2,811	2,814	2,761
517	Petroleum and petroleum products	2,127	2,045	1,936	1,953	1,872	1,938	1,837	1,974	2,093	2,098	2,151	2,151	2,153
518	Beer, wine, and distilled alcoholic beverages	2,422	1,917	1,889	2,017	2,133	2,135	2,148	2,178	2,158	2,221	2,453	2,513	2,290
5181	Beer and ale[2]	787	611	641	707	758	730	717	709	679	720	769	777	729
5182	Wines and distilled alcoholic beverages	1,636	1,305	1,248	1,311	1,375	1,405	1,431	1,469	1,480	1,501	1,684	1,736	1,561

See footnotes at end of table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Percent. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979	1978											
		Jan.[P]	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	129	133	135	118	123	113	114	123	111	119	114	118	125
	Total (excluding farm-product raw materials)	135	138	139	122	128	120	120	131	117	125	120	123	131
50	Durable goods, total	184	194	192	163	167	161	160	174	154	164	157	164	176
501	Motor vehicles and automotive parts and supplies	167	161	162	136	134	136	139	151	137	151	145	155	167
5013,4	Automotive parts and supplies, tires and tubes	183	188	186	155	152	151	156	172	151	173	158	171	190
5013	Automotive parts and supplies	187	183	182	155	154	155	159	176	154	174	163	174	194
502	Furniture and home furnishings	176	180	174	147	159	161	161	174	155	156	153	148	156
5023	Home furnishings	192	202	194	157	178	180	178	190	170	169	168	166	179
503	Lumber and other construction materials	132	143	146	123	118	105	100	112	94	101	97	104	123
5031	Lumber, plywood, and millwork	120	133	138	118	112	101	96	107	92	99	93	100	119
505	Metals and minerals, except petroleum	159	178	182	163	169	170	167	188	164	174	160	162	175
5051 pt.	Ferrous metals service centers and offices	170	181	182	163	175	174	173	190	168	177	163	170	185
5051 pt.	Ferrous metals service centers	198	190	191	177	182	184	184	202	181	192	172	183	199
506	Electrical goods	185	180	175	157	166	158	157	165	149	162	153	159	168
5063	Electrical apparatus and equipment, wiring supplies and construction materials	166	168	163	143	147	142	137	137	131	142	131	147	155
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	203	191	187	172	187	176	178	195	168	183	176	171	181
507	Hardware, plumbing, heating equipment, and supplies	198	207	227	201	201	183	178	188	171	187	169	179	198
5072	Hardware	181	197	204	179	179	169	170	185	158	179	171	167	195
5074	Plumbing and heating equipment and supplies (hydronics)	213	219	249	223	223	201	202	201	182	188	166	189	206
508	Machinery, equipment, and supplies	231	251	241	199	202	195	194	218	196	201	195	207	212
5082	Construction and mining machinery and equipment	470	398	388	310	280	281	296	324	317	350	341	356	365
5084,5	Industrial machinery, equipment, and supplies	167	189	176	152	164	152	152	174	151	160	154	160	159
51	Nondurable goods, total	85	86	88	79	84	72	72	78	71	78	77	79	83
	Total (excluding farm-product raw materials)	86	84	86	77	83	76	75	82	75	81	79	80	83
511	Paper and paper products	97	95	98	87	97	89	92	97	86	97	89	92	100
5111,3	Printing, writing, industrial, and personal service paper	92	91	95	83	88	82	85	90	78	90	81	82	90
512	Drugs, drug proprietaries, and druggists' sundries	158	143	157	134	147	143	147	152	137	153	139	146	152
514	Groceries and related products	59	58	59	55	58	53	55	57	53	59	58	57	60
5141	Groceries, general-line	69	69	71	68	70	66	67	68	63	70	70	68	71
517	Petroleum and petroleum products	44	49	47	46	49	46	45	49	47	51	49	47	47
518	Beer, wine, and distilled alcoholic beverages	121	116	107	88	107	93	86	99	88	99	105	99	85
5181	Beer and ale	81	77	76	65	76	60	52	58	51	64	70	71	66
5182	Wines and distilled alcoholic beverages	160	152	134	109	138	131	126	151	130	132	136	119	97

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. [P]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]The plumbing and heating equipment and supplies (hydronics) group is subject to a sampling variability of 8 percent for January 1979.
[2]The beer and ale group is subject to a sampling variability of 9 percent for January 1979.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1979 and 1978

(Sales and inventories in millions of dollars. Stock-sales ratios in percent)

1972 SIC code	Kind of business	1979	1978										
		Jan.[P]	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Sales ADJUSTED for seasonal variations and trading-day differences													
	Merchant wholesalers, total	67,069	56,260	57,729	58,803	61,640	63,171	62,656	63,425	64,894	64,531	67,338	67,552	67,823
	Total (excluding farm-product raw materials)	60,144	50,635	51,757	52,539	54,992	55,288	55,252	56,716	57,461	57,326	59,349	60,373	60,526
50	Durable goods, total	31,106	25,655	26,981	27,419	28,831	28,627	28,741	29,859	30,043	29,863	30,953	31,498	31,939
501	Motor vehicles and automotive parts and supplies	5,869	5,143	5,641	5,454	5,530	5,614	5,516	5,631	5,739	5,598	6,113	6,442	6,088
502	Furniture and home furnishings	1,192	1,023	1,026	1,056	1,080	1,060	1,036	1,136	1,077	1,118	1,047	1,136	1,197
503	Lumber and other construction materials	2,876	2,317	2,357	2,347	2,661	2,630	2,733	2,705	2,732	2,878	2,887	2,874	3,026
505	Metals and minerals, except petroleum	3,270	2,551	2,799	2,811	2,984	2,930	3,036	3,090	3,045	2,947	3,188	3,305	3,258
506	Electrical goods	3,264	2,844	2,950	3,034	3,103	3,259	3,179	3,225	3,377	3,311	3,340	3,356	3,362
507	Hardware, plumbing, heating equipment, and supplies	2,320	2,006	1,954	2,022	2,148	2,161	2,185	2,232	2,209	2,108	2,290	2,237	2,330
508	Machinery, equipment, and supplies	8,644	7,030	7,486	7,690	8,305	7,997	8,082	8,201	8,372	8,382	8,607	8,730	9,193
51	Nondurable goods, total	35,963	30,605	30,748	31,384	32,809	34,544	33,915	33,566	34,851	34,668	36,385	36,054	35,884
	Total (excluding farm-product raw materials)	29,038	24,980	24,776	25,120	26,161	26,661	26,511	26,857	27,418	27,463	28,396	28,875	28,587
511	Paper and paper products	1,502	1,378	1,386	1,416	1,494	1,459	1,446	1,447	1,473	1,419	1,536	1,579	1,608
512	Drugs, drug proprietaries, and druggists' sundries	996	907	890	938	947	940	952	971	980	965	1,012	1,026	1,020
513	Apparel, piece goods, and notions	2,144	1,798	1,711	1,926	1,981	2,075	2,091	2,173	2,299	2,177	2,268	2,291	2,269
514	Groceries and related products	11,415	9,781	9,984	9,978	10,199	10,319	10,176	10,340	10,443	10,607	11,039	11,178	11,400
515	Farm-product raw materials[1]	6,925	5,625	5,972	6,264	6,648	7,883	7,404	6,709	7,433	7,205	7,989	7,179	7,297
517	Petroleum and petroleum products	4,831	4,222	3,993	3,944	3,982	4,354	4,111	4,144	4,430	4,442	4,390	4,542	4,387
518	Beer, wine, and distilled alcoholic beverages	2,465	2,125	2,174	2,250	2,198	2,149	2,199	2,245	2,284	2,305	2,333	2,383	2,387
519	Miscellaneous nondurable goods	4,596	3,877	3,765	3,802	4,463	4,403	4,583	4,580	4,499	4,521	4,657	4,693	4,567
	Inventories ADJUSTED for seasonal variations													
	Merchant wholesalers, total	81,898	69,191	70,325	72,629	74,327	74,779	75,191	75,744	76,338	77,113	78,625	79,526	80,771
	Total (excluding farm-product raw materials)	76,616	64,556	65,573	67,319	68,769	69,436	70,028	70,920	71,546	72,119	73,434	74,285	75,546
50	Durable goods, total	52,733	44,837	45,738	46,871	47,677	48,319	48,756	49,414	49,972	50,160	50,948	51,625	52,460
501	Motor vehicles and automotive parts and supplies	9,101	7,610	7,950	7,869	7,925	8,084	8,177	8,434	8,637	8,315	8,870	9,420	9,236
502	Furniture and home furnishings	1,839	1,574	1,617	1,638	1,677	1,716	1,748	1,755	1,750	1,789	1,795	1,816	1,826
503	Lumber and other construction materials	3,197	2,720	2,786	2,818	2,888	2,925	3,020	3,052	3,013	3,101	3,181	3,113	3,19
505	Metals and minerals, except petroleum	5,280	4,476	4,745	4,943	4,937	5,345	5,296	5,161	5,289	5,290	5,269	5,266	5,16
506	Electrical goods	5,734	4,719	4,746	4,916	4,971	5,068	5,177	5,193	5,227	5,346	5,435	5,499	5,650
507	Hardware, plumbing, heating equipment, and supplies	4,308	3,827	3,947	3,990	4,053	4,091	4,095	4,149	4,092	4,098	4,207	4,153	4,228
508	Machinery, equipment, and supplies	18,329	15,665	15,847	16,251	16,745	16,630	16,710	17,006	17,357	17,510	17,527	17,658	18,249
51	Nondurable goods, total	29,165	24,354	24,587	25,758	26,650	26,460	26,435	26,330	26,366	26,953	27,677	27,901	28,311
	Total (excluding farm-product raw materials)	23,883	19,719	19,835	20,448	21,092	21,117	21,272	21,506	21,574	21,959	22,486	22,660	23,086
511	Paper and paper products	1,497	1,253	1,280	1,323	1,334	1,338	1,341	1,341	1,358	1,404	1,419	1,447	1,482
512	Drugs, drug proprietaries, and druggists' sundries	1,635	1,320	1,331	1,333	1,337	1,379	1,393	1,382	1,410	1,453	1,457	1,487	1,501
514	Groceries and related products	6,598	5,472	5,365	5,593	5,711	5,798	5,948	5,922	5,921	6,192	6,342	6,355	6,433
517	Petroleum and petroleum products	2,037	1,959	1,950	1,969	1,987	2,019	1,948	2,050	2,078	2,039	2,052	2,064	2,082
518	Beer, wine, and distilled alcoholic beverages	2,515	1,991	1,972	2,071	2,152	2,087	2,087	2,180	2,204	2,214	2,293	2,377	2,403
	Stock-sales ratios based on ADJUSTED data													
	Merchant wholesalers, total	122	123	122	124	121	118	120	119	118	119	117	118	119
	Total (excluding farm-product raw materials)	127	127	127	128	125	126	127	125	125	126	123	123	125
50	Durable goods, total	170	175	170	171	165	169	170	165	166	168	165	164	164
501	Motor vehicles and automotive parts and supplies	155	148	141	144	143	144	148	150	150	149	145	146	152
502	Furniture and home furnishings	154	154	158	155	155	162	169	154	162	160	171	160	153
503	Lumber and other construction materials	111	117	118	120	109	111	111	113	110	108	110	108	105
505	Metals and minerals, except petroleum	161	175	177	176	165	182	174	167	174	179	165	159	159
506	Electrical goods	176	166	161	162	160	156	163	161	155	161	163	164	168
507	Hardware, plumbing, heating equipment, and supplies	186	191	202	197	189	189	187	186	185	194	184	186	181
508	Machinery, equipment, and supplies	212	223	212	211	202	208	207	207	207	209	204	202	199
51	Nondurable goods, total	81	80	80	82	81	77	78	78	76	78	76	77	79
	Total (excluding farm-product raw materials)	82	79	80	81	81	79	80	80	79	80	79	78	81
511	Paper and paper products	100	91	92	93	89	92	93	92	92	99	92	92	92
512	Drugs, drug proprietaries, and druggists' sundries	164	146	150	142	141	147	146	142	144	151	144	145	147
514	Groceries and related products	58	56	54	56	56	56	58	57	57	58	57	57	56
517	Petroleum and petroleum products	42	46	49	50	50	46	47	49	47	46	47	45	47
518	Beer, wine, and distilled alcoholic beverages	102	94	91	92	98	97	95	97	97	96	98	100	101

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions. All data for 1978 have been revised to reflect recomputed factors for seasonal adjustment.

NA Not available. [P]Preliminary estimates. See p. 15, Sample Design and Estimation Procedures.

[1]There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table 4B. Percent Change Between Selected 3-Month Periods Sales of Merchant Wholesalers, United States

(Based on seasonally-adjusted data)

Item	3 month period, Nov. 1978-Jan. 1979 from--			
	August 1978-Oct. 1978 (3 months ago)	May 1978-July 1978 (6 months ago)	Feb. 1978-April 1978 (9 months ago)	Nov. 1977-Jan.1978 (12 months ago)
Merchant wholesalers, total.....	+3	+6	+13	+20
Durable goods, total.....	+4	+8	+13	+22
Nondurable goods, total.....	+2	+4	+13	+18

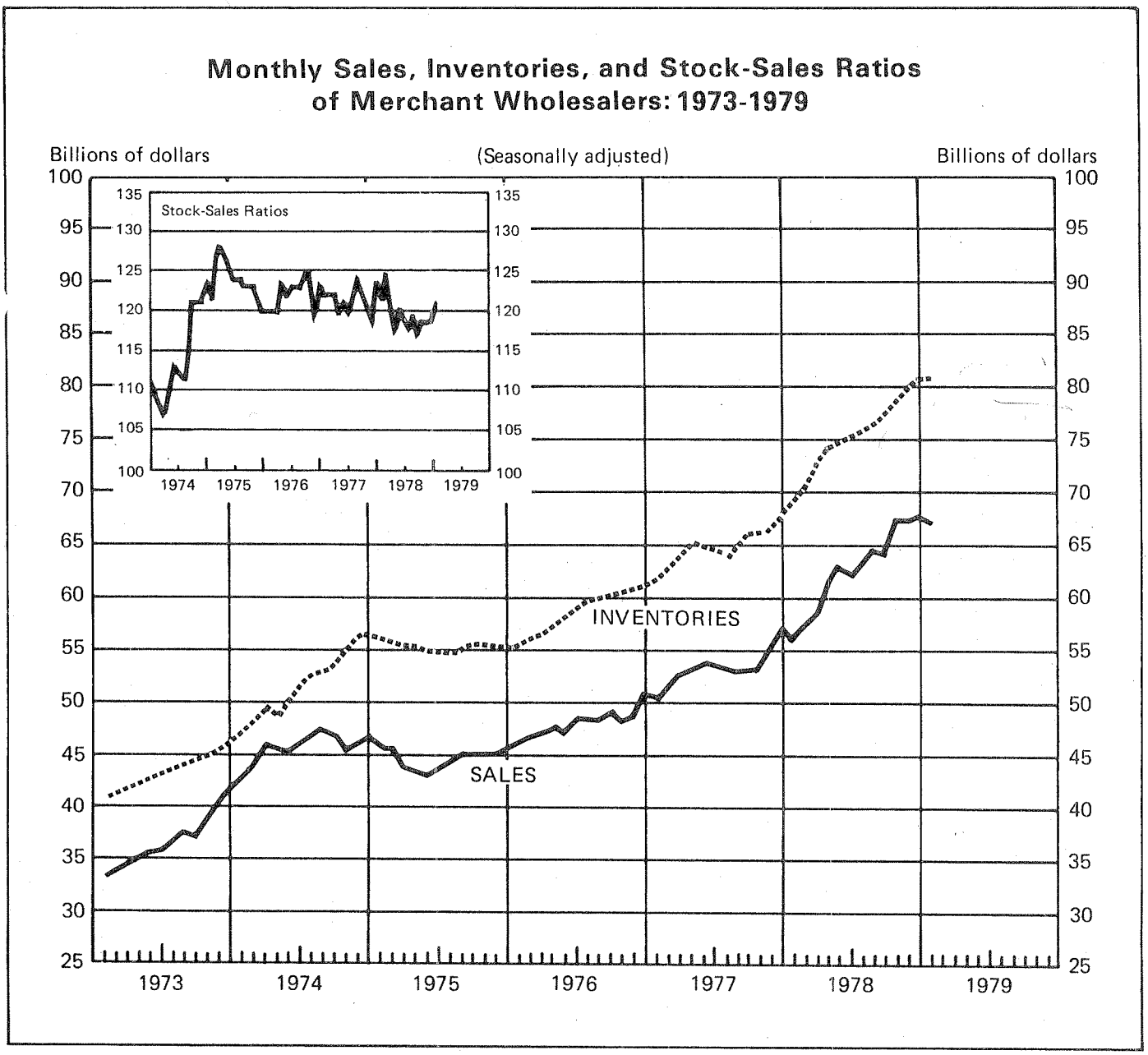


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: January 1979

1972 SIC code	Kind of business	Unadjusted				Adjusted[1]			
		Sales		Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		Jan. 1979 from Dec. 1978	Jan. 1979 from Jan. 1978	Jan. 1979 from Dec. 1978	Jan. 1979 from Jan. 1978	Jan. 1979 from Dec. 1978	Jan. 1979 from Jan. 1978	Jan. 1979 from Dec. 1978	Jan. 1979 from Jan. 1978
	Merchant wholesalers, total	-1	+22	+2	+18	-1	+19	+1	+18
	Total (excluding farm-product raw materials)	-2	+21	+1	+19	-1	+19	+1	+19
50	Durable goods, total	-3	+24	+1	+18	-3	+21	+1	+18
501	Motor vehicles and automotive parts and supplies	0	+15	0	+20	-4	+14	-1	+20
5012	Automobiles and other motor vehicles	-6	+7	-3	+21	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	+5	+22	+2	+19	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	+6	+18	+2	+20	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	-9	+20	+3	+17	0	+17	+1	+17
5021	Furniture--household and office	-17	+15	+2	+18	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	-30	+9	+3	+22	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	-9	+18	0	+16	(*)	(*)	(*)	(*)
5023	Home furnishings	-4	+22	+3	+16	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	-6	+28	+1	+18	-5	+24	0	+18
5031	Lumber, plywood, and millwork	0	+30	0	+18	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c.	-14	+29	+2	+17	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	-22	+22	+5	+17	-11	+14	-2	+17
505	Metals and minerals, except petroleum	+12	+31	+2	+18	0	+28	+2	+18
5051 pt.	Ferrous metals service centers and offices	+12	+32	+3	+24	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	+3	+25	+3	+30	(*)	(*)	(*)	(*)
5051 pt.	Nonferrous metals service centers and offices	+17	+26	-3	-3	(*)	(*)	(*)	(*)
506	Electrical goods	-10	+18	-1	+22	-3	+15	+1	+22
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-8	+20	-1	+19	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-11	+16	0	+23	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	-16	+10	-3	+17	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	+3	+18	+3	+13	0	+16	+2	+13
5072	Hardware	+9	+14	+1	+4	(*)	(*)	(*)	(*)
5074	Plumbing and heating equipment and supplies (hydronics)	-1	+16	+2	+13	(*)	(*)	(*)	(*)
5075	Warm air heating and air conditioning equipment and supplies	+2	+29	+4	+22	(*)	(*)	(*)	(*)
508	Machinery, equipment, and supplies	-7	+27	+1	+17	-6	+23	0	+1
5081	Commercial machines and equipment	+1	+13	-2	+15	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	-24	+4	-2	+23	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	-12	+30	+3	+8	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	-3	+38	+2	+21	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	-7	+28	-1	+17	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	+5	+49	-1	+13	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	+9	+60	-1	+18	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	-1	+35	-3	+2	(*)	(*)	(*)	(*)
51	Nondurable goods, total	0	+21	+3	+19	0	+18	+3	+20
	Total (excluding farm-product raw materials)	0	+19	+3	+21	+2	+16	+3	+21
511	Paper and paper products	+1	+14	-1	+17	-7	+9	+1	+19
5111,3	Printing, writing, industrial, and personal service paper	-3	+17	-1	+17	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	+1	+12	+5	+24	-2	+10	+9	+24
5122	Drugs, drug proprietaries, and druggists' sundries	+1	+12	+5	+24	(*)	(*)	(*)	(*)
5122 pt.	General-line drugs	+3	+13	+2	+26	(*)	(*)	(*)	(*)
514	Groceries and related products	+3	+20	0	+21	0	+17	+3	+21
5141	Groceries, general-line	+1	+16	-1	+17	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	+4	+16	-2	+13	(*)	(*)	(*)	(*)
5141 pt.	Retailers cooperatives	+1	+14	-2	+15	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	-1	+18	+2	+21	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	+4	+16	0	+18	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	-4	+28	+3	+31	(*)	(*)	(*)	(*)
5145	Confectionery	-7	+19	+2	+6	(*)	(*)	(*)	(*)
5147	Meats and meat products	+6	+37	+1	+44	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	+5	+22	+6	+46	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	+1	+27	+5	+15	-5	+23	+1	+14
5152	Cotton	+18	+23	+9	+12	(*)	(*)	(*)	(*)
5153	Grain	0	+30	+2	+12	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	+4	+14	-1	+4	+10	+14	-2	+4
5171	Petroleum bulk stations and terminals	+1	+13	-3	+10	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	-26	+21	+6	+26	+3	+16	+5	+26
5181	Beer and ale	-12	+23	+8	+29	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	-36	+19	+5	+25	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	+1	+20	+8	+20	+1	+19	+8	+20
5191	Farm supplies	+10	+28	+14	+32	(*)	(*)	(*)	(*)
5194	Tobacco and tobacco products	-5	+11	+2	+16	(*)	(*)	(*)	(*)
5198	Paints, varnishes, and supplies	+8	+17	-1	+42	(*)	(*)	(*)	(*)
5199 pt.	Books, periodicals, newspapers	-4	+11	+1	+2	(*)	(*)	(*)	(*)

*Adjusted data are available only for summary group totals.

S Does not meet publication standards because of extreme variability or high nonresponse rate.

[1]Adjusted for seasonal variations and, in the case of sales, also for trading-day differences. Adjusted data are only available for the summary kind-of-business groups shown.

[2]There are indications that the seasonal adjustment factors for this trade group may not reflect recent trends. The seasonally adjusted data for this trade group and also for the summary group totals should, therefore, be used with caution.

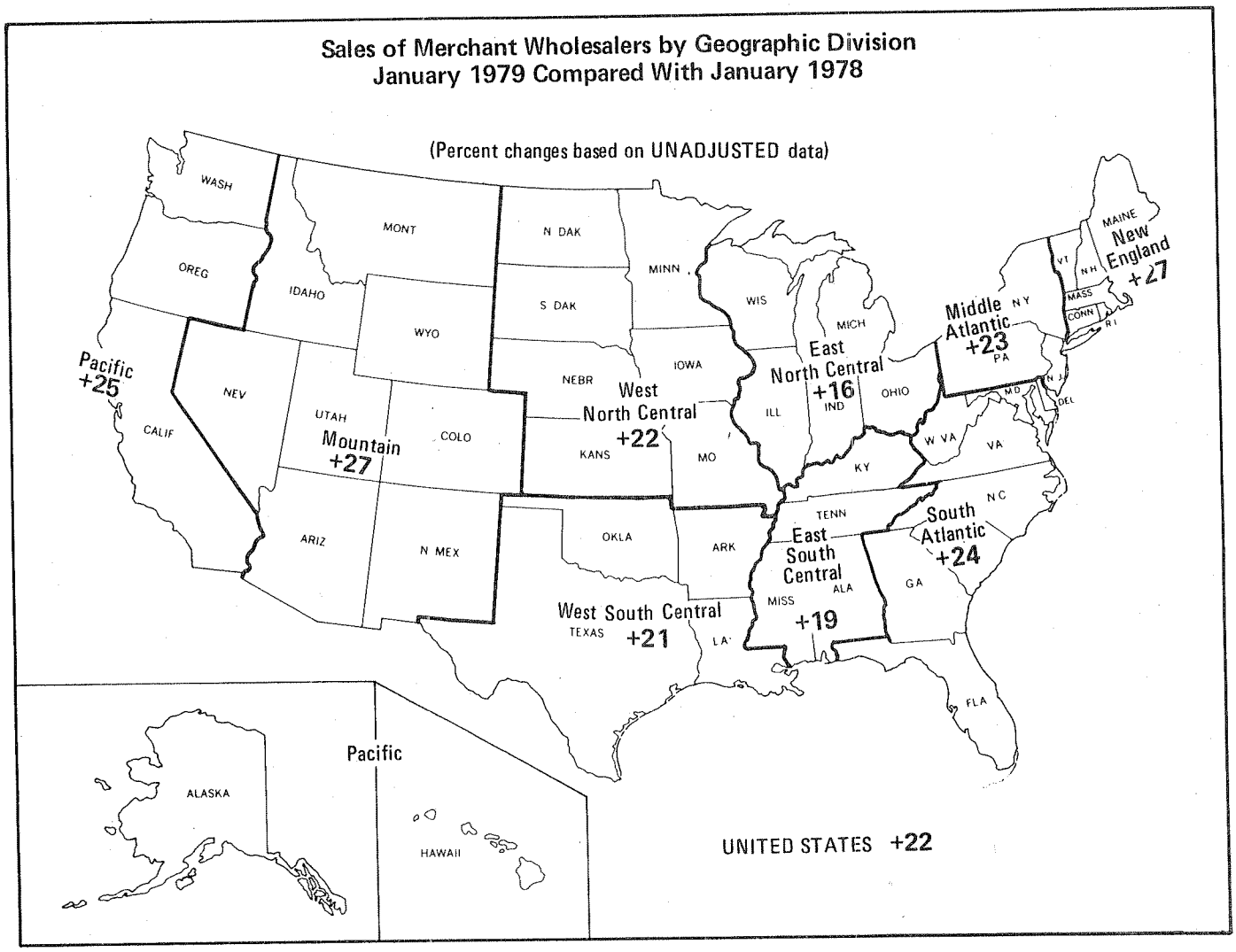


Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1979 and 1978

(Sales, in millions of dollars, are NOT ADJUSTED for seasonal variations or trading-day differences; sampling errors in percent)

1972 SIC code	Kind of business and geographic division[1]	1979	1978											Total 12 mos. 1978	Sampling error of the estimate	
		Jan.[p]	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.		Range[2]	Median
	Merchant wholesalers, total	63,680	52,143	52,766	62,900	60,613	66,249	65,834	60,651	67,702	63,933	69,086	67,699	64,527	754,105	0.8-0.9	0.9
	New England	3,429	2,693	2,657	3,191	2,913	3,231	3,451	3,206	3,654	3,472	3,638	3,678	3,652	39,435	5-6	6
	Middle Atlantic	14,513	11,846	11,840	14,206	13,114	14,345	14,752	13,281	15,382	14,387	15,123	15,304	14,529	168,111	2-2	2
	East North Central	10,431	8,929	9,269	10,680	10,708	11,787	11,510	10,461	11,636	10,821	12,195	11,757	10,882	130,634	2-3	3
	West North Central	6,765	5,566	5,390	6,419	6,522	7,583	6,999	6,513	7,373	6,836	7,790	7,471	6,894	81,356	2-3	2
	South Atlantic	7,051	5,666	5,686	6,792	6,533	6,858	7,044	6,523	7,139	6,877	7,449	7,106	6,979	80,653	2-3	2
	East South Central	2,875	2,421	2,534	3,201	3,318	3,453	3,132	2,962	3,127	2,938	3,213	3,075	2,922	36,297	4-5	4
	West South Central	6,738	5,582	5,843	6,878	6,433	6,857	6,744	6,382	6,890	6,717	7,036	6,885	6,680	78,927	3-4	4
	Mountain	2,462	1,934	1,900	2,536	2,412	2,537	2,777	2,456	2,620	2,693	2,583	2,477	2,540	29,465	5-5	5
	Pacific	9,418	7,506	7,649	8,994	8,659	9,600	9,426	8,868	9,881	9,191	10,058	9,946	9,448	109,228	2-3	3
50	Durable goods, total	28,374	22,869	23,880	28,985	28,784	30,405	30,991	28,701	32,279	30,404	32,242	31,037	29,340	349,916	0.8-1.0	0.9
	Middle Atlantic	6,057	4,973	5,138	6,295	5,952	6,181	6,464	5,808	6,765	6,303	6,618	6,516	6,094	73,109	4-5	4
	East North Central	4,745	3,935	4,363	5,081	5,128	5,495	5,407	4,958	5,793	5,342	5,801	5,674	5,177	62,153	3-4	4
	West North Central	2,147	1,776	1,805	2,228	2,378	2,548	2,446	2,383	2,695	2,504	2,740	2,652	2,379	28,534	5-6	5
	South Atlantic	3,515	2,809	2,768	3,414	3,455	3,538	3,817	3,480	3,738	3,689	3,869	3,608	3,513	41,697	4-5	4
	West South Central	3,036	2,413	2,626	3,180	3,097	3,303	3,366	3,135	3,403	3,224	3,438	3,160	3,144	37,487	4-4	4
	Mountain	1,110	923	893	1,192	1,208	1,247	1,412	1,303	1,372	1,340	1,283	1,172	1,207	14,553	6-7	7
	Pacific	5,191	4,115	4,283	5,007	4,901	5,316	5,256	5,026	5,641	5,214	5,597	5,524	5,250	61,129	2-3	3
51	Nondurable goods, total	35,306	29,274	28,886	33,915	31,829	35,844	34,843	31,950	35,423	33,529	36,844	36,662	35,187	404,189	1.0-1.2	1.0
	New England	2,154	1,735	1,735	2,017	1,747	2,014	2,151	1,988	2,293	2,117	2,245	2,316	2,349	24,708	5-7	6
	Middle Atlantic	8,455	6,873	6,701	7,912	7,162	8,164	8,288	7,473	8,617	8,084	8,505	8,788	8,435	95,002	3-3	3
	East North Central	5,686	4,994	4,906	5,599	5,580	6,292	6,103	5,504	5,843	5,479	6,394	6,083	5,704	68,482	3-4	3
	West North Central	4,618	3,790	3,584	4,191	4,145	5,035	4,554	4,129	4,678	4,331	5,050	4,820	4,515	52,822	3-4	3
	South Atlantic	3,537	2,857	2,918	3,378	3,078	3,320	3,227	3,044	3,400	3,188	3,580	3,498	3,466	38,955	3-5	3
	East South Central	1,575	1,453	1,451	1,788	1,819	1,892	1,609	1,572	1,616	1,505	1,710	1,706	1,650	19,770	3-4	4
	West South Central	3,702	3,169	3,217	3,699	3,336	3,554	3,378	3,248	3,487	3,493	3,598	3,725	3,536	41,440	5-5	5
	Pacific	4,227	3,392	3,367	3,987	3,757	4,284	4,170	3,842	4,241	3,978	4,461	4,422	4,199	48,099	4-5	4

Note: Detail may not add to totals due to rounding and minor revisions.

[p]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]See map on page 7.

[2]The range of sampling error of the estimate is based on data for August, September, and October 1977.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: January 1979

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in-- Sales: January 1979 from December 1978	Sales: January 1979 from January 1978	Inventories: January 1979 from December 1978	Inventories: January 1979 from January 1978	Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		A	B	D	E	A	D
	Merchant wholesalers, total	-1	+22	+2	+18	0.4	0.2
	New England	-6	+27	+1	+21	2.0	1.9
	Middle Atlantic	0	+23	0	+15	1.1	0.6
	East North Central	-4	+16	+2	+13	1.2	0.8
	West North Central	-2	+22	+2	+13	1.3	1.1
	South Atlantic	+1	+24	+1	+17	1.6	1.0
	East South Central	-2	+19	+1	+24	1.7	1.4
	West South Central	+1	+21	+1	+16	1.4	0.8
	Mountain	-3	+27	+1	+29	2.4	1.3
	Pacific	0	+25	+1	+24	1.2	0.5
50	Durable goods, total	-3	+24	+1	+18	0.6	0.3
	New England	-2	+33	+3	+24	2.4	1.3
	Middle Atlantic	-1	+22	-1	+12	1.7	1.0
	East North Central	-8	+18	+1	+10	1.9	1.0
	West North Central	-10	+21	0	+11	3.3	1.7
	South Atlantic	0	+25	+1	+16	1.9	1.2
	East South Central	+2	+34	-1	+22	3.9	2.5
	West South Central	-3	+26	+1	+18	2.1	1.2
	Mountain	-8	+20	+1	+30	2.9	1.7
	Pacific	-1	+26	0	+26	1.9	0.7
51	Nondurable goods, total	0	+21	+3	+19	0.6	0.4
	New England	-8	+24	-1	+17	1.9	2.7
	Middle Atlantic	0	+23	+1	+19	1.9	0.9
	East North Central	0	+15	+6	+19	1.4	1.1
	West North Central	+2	+22	+4	+14	1.6	1.4
	South Atlantic	+2	+24	-1	+18	2.4	1.8
	East South Central	-5	+8	+4	+27	1.7	2.4
	West South Central	+5	+17	+2	+13	2.2	1.3
	Mountain	+1	+34	+2	+27	3.2	1.2
	Pacific	+1	+23	+2	+20	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	+5	+22	+2	+19	2	1
	New England	-2	+24	0	+6	7	4
	Middle Atlantic	+13	+35	-2	+8	4	2
	East North Central	+8	+31	+2	+21	7	1
	West North Central	+4	+31	-2	+25	5	2
	South Atlantic	+12	+32	+1	+25	4	2
	East South Central	+8	+32	+5	+26	4	3
	West South Central	+7	+21	-1	+6	5	2
	Mountain	(S)	+7	+14	+31	7	3
	Pacific	0	+2	0	+21	3	2
502	Furniture and home furnishings	-9	+20	+3	+17	2	1
	Middle Atlantic	-4	+24	0	+14	4	2
	East North Central	-10	+57	-2	+23	7	2
	West North Central	-30	+11	+7	+9	5	4
	West South Central	-4	+27	+14	+2	5	7
	Pacific	-11	+4	+3	+7	5	3
503	Lumber and other construction materials	-6	+28	+1	+18	2	1
	New England	-6	+34	+10	+18	4	5
	Middle Atlantic	-6	+24	+1	+4	4	2
	East North Central	-13	+20	-3	+8	3	2
	West North Central	-5	+24	+3	+7	7	7
	South Atlantic	-4	+30	+2	+11	4	2
	East South Central	-7	+40	+2	+12	4	3
	West South Central	-11	+23	-1	+36	6	5
	Pacific	-3	+34	+1	+29	5	1
5051 pt.	Ferrous metals service centers	+3	+25	+3	+30	2	1
	New England	+35	+58	+20	+57	6	2
	Middle Atlantic	+13	+12	+2	+16	5	2
	East North Central	-5	+22	-1	+18	3	2
	West North Central	+17	+33	-1	+22	5	2
	South Atlantic	-3	+17	+9	+49	3	2
	East South Central	+22	+56	-1	+25	4	4
	West South Central	-5	+34	+5	+55	4	2
	Mountain	(S)	(S)	+3	(S)	2	2
	Pacific	-7	+53	-5	+25	2	3
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-8	+20	-1	+19	2	1
	New England	-13	+2	-3	+3	3	2
	Middle Atlantic	-12	+11	-2	+7	5	2
	East North Central	-2	+37	-1	+14	3	2
	West North Central	-12	(S)	-5	+9	5	3
	South Atlantic	-5	+31	-1	+28	3	2
	East South Central	-4	+19	-1	+49	3	5
	West South Central	-11	+41	-3	+36	4	2
	Mountain	-12	+14	+3	+3	4	2
	Pacific	-11	+23	-3	+23	4	2

See footnotes at end of table.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: January 1979—Continued

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in-- Sales: January 1979 from December 1978	Sales: January 1979 from January 1978	Inventories: January 1979 from December 1978	Inventories: January 1979 from January 1978	Sampling errors of the ratio coreesponding to the percent change in columns[2]-- A	D
		A	B	D	E	A	D
5064.5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-11	+16	0	+23	3	1
	Middle Atlantic	-16	+20	+5	+35	3	2
	East North Central	-11	+12	-1	+17	4	1
	West North Central	-27	-5	-4	-4	4	4
	South Atlantic	-11	+4	0	+22	6	4
	West South Central	-7	+15	-5	+21	4	4
	Mountain	+20	+47	+6	+16	6	3
	Pacific	-2	+28	-5	+19	3	2
5072	Hardware	+9	+14	+1	+4	1	1
	New England	+3	+5	+2	-10	6	3
	Middle Atlantic	+5	+18	-3	+2	6	2
	East North Central	+1	+1	+4	+13	4	2
	West North Central	+6	+9	+2	-7	3	3
	South Atlantic	+15	+21	+1	-2	4	2
	East South Central	+24	+22	+4	-16	4	1
	Pacific	+23	+28	0	+18	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	-1	+16	+2	+13	2	1
	Middle Atlantic	+8	+28	+2	0	6	3
	East North Central	-16	-6	-1	+16	3	3
	South Atlantic	-7	+20	+2	+3	3	2
	Mountain	-4	-20	+7	+24	7	4
	Pacific	-7	+22	+2	+26	5	4
5084,5	Industrial machinery, equipment, and supplies	-3	+38	+2	+21	2	1
	Middle Atlantic	-14	+22	+4	+14	7	2
	East North Central	-3	+22	0	+8	3	2
	West South Central	-4	+49	-1	+21	4	3
	Pacific	+2	+46	+2	+45	5	2
512	Drugs, drug proprietaries, and druggists' sundries	+1	+12	+5	+24	1	1
	New England	+9	+28	+12	+42	5	3
	Middle Atlantic	-11	+7	+10	+19	3	2
	East North Central	+2	+5	-5	+15	6	3
	West North Central	+8	+2	-1	+19	2	2
	South Atlantic	+3	+18	+1	+23	6	5
	East South Central	-3	-6	+3	+65	6	5
	West South Central	+4	+20	-1	+10	3	2
	Mountain	+8	+12	-1	+27	3	2
	Pacific	+8	+26	+8	+21	3	3
5141	Groceries, general-line	+1	+16	-1	+17	1	1
	New England	+13	+21	-7	+13	2	1
	Middle Atlantic	+2	+19	+7	+32	1	2
	East North Central	-1	+15	-4	+11	3	1
	West North Central	+2	+6	-4	+1	1	1
	South Atlantic	+6	+26	-1	+29	2	1
	West South Central	+2	+11	0	+7	2	1
	Mountain	0	+38	-3	+37	2	2
	Pacific	-6	+13	-2	+17	1	1
5142,3,6,9	Specialty-line groceries	+4	+16	0	+18	1	1
	Middle Atlantic	+6	+21	-3	+18	4	2
	East North Central	-2	+11	-2	+7	3	2
	West North Central	-1	+10	0	+16	3	1
	South Atlantic	+9	+10	-3	+23	5	6
	East South Central	+2	-4	0	-10	2	2
5148	Fresh fruits and vegetables	+5	+22	+6	+46	2	4
	Middle Atlantic	+3	+21	-1	+29	7	5
	East North Central	-1	+3	-10	+4	6	6
	West North Central	0	+21	+4	+24	6	3
	West South Central	-14	+17	+7	+52	5	3
	Pacific	+6	+15	-2	+61	4	4
5194	Tobacco and tobacco products	-5	+11	+2	+16	1	1
	New England	-13	-18	+4	-6	5	3
	Middle Atlantic	-8	+5	0	+17	4	3
	East North Central	+1	+34	+4	+23	4	3
	West North Central	-5	-15	+1	0	4	2
	South Atlantic	-7	(S)	-3	(S)	6	6
	East South Central	-11	+1	+4	+28	7	4
	West South Central	-10	-27	-10	-4	7	6
	Mountain	-10	-25	-19	(S)	6	2
	Pacific	+2	+23	+10	+25	2	5

Note: Data at the United States level are generally more reliable than data by geographic division. In those kinds of business where the geographic division trends are subject to a high sampling error, it may be desirable to use the United States total trends for the kinds of business rather than the geographic division trends.

S Does not meet publication standards because of extreme variability or high nonresponse rate.

[1]See map on page 7.

[2]The sampling errors (in percent) shown in columns A and D are based on medians of measurements on data for August, September, and October 1977. For SIC's 5051 pt., and 5063 the medians of measurements in columns A and D are based on data for June, July, and August 1978.

APPENDIX A. Reliability of Data

There are two types of errors possible in an estimate based on a sample survey—sampling and nonsampling. Sampling errors occur because observations are made only on a sample, not on the entire population. Nonsampling errors can be attributed to many sources in the collection and processing of data. The accuracy of a survey result is determined by the joint effects of sampling and nonsampling errors.

Measures of sampling variability—The particular sample used in this survey is one of a large number of all possible samples of the same size that could have been selected using the same design. Estimates derived from the different samples would differ from each other. The average of these estimates would be close to the estimate derived from a complete enumeration of the population (assuming that a complete enumeration has the same nonsampling errors as the sample survey). The average of the estimates differs from the estimate from a complete census because of the composite estimation technique. Disregarding this difference, the sampling error or standard error of the estimate is a measure of the variability among the estimates from all possible samples of the same size and design and, thus, is a measure of the precision with which an estimate from a particular sample approximates the results of a complete enumeration. The coefficient of variation (expressed as a percent) is the standard error of the estimate times 100 percent, divided by the value being estimated. Note that any measures of sampling variability, such as the standard error or coefficient of variation, are estimates derived from the sample and are also subject to sampling variability.

Estimates of sampling variability (the coefficients of variation in percent) for sales and inventories at the kind-of-business detail provided in this publication are shown in table A-1. These coefficients of variation permit certain confidence statements about the sample estimates. As noted above, the particular sample used in this survey is one of a large number of all possible samples of about the same size that could have been selected using the same design. In about two out of three (67 percent) of these samples, the estimate would differ from a complete enumeration by less than the corresponding percent for that estimate shown in the sampling variability table. In about 19 out of 20 (95 percent) of these samples, the estimate would differ from the results of a complete enumeration by less than twice the percentages shown.

To illustrate the computations involved in the above confidence statements for monthly dollar volume estimates, assume that an estimate for a kind of business published in table 1 for a particular month is $5,000 million and that the median coefficient of variation for this statistic, is 0.9 percent or .009. Multiplying $5,000 million by .009 yields $45 million. Therefore, a 67 percent confidence interval is $4,955 million to $5,045 million (i.e. $5,000 million plus or minus $45 million). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately two out of three (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Similarly a 95 percent confidence interval is $4,910 million to $5,090 million (i.e., $5,000 million plus or minus $90 million).

As an example of the use of the coefficients of variation with ratios, assume that an estimated month-to-month percent change published in table 5 is -1.0 percent for a particular kind of business. This is equivalent to a month-to-month ratio of .990. Assume the median coefficient of variation for this ratio as shown in table A-1 is 0.5 percent (or .005). Multiplying .990 by .005 yields .005. Therefore, a 67 percent confidence interval is .985 to .995 (i.e., .990 plus or minus .005) and a 95 percent confidence interval is .980 to 1.000 (i.e., .990 plus or minus .010).

Nonsampling errors—As calculated for this report, the coefficient of variation measures certain nonsampling errors but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples of the same size and design, between the estimate and the true value being estimated. The accuracy of the tabulated data is determined by the joint effects of the sampling and nonsampling errors.

Nonsampling errors can be attributed to many sources: (1) inability to obtain information about all cases in the sample, (2) response errors, (3) definitional difficulties, (4) differences in the interpretation of questions, (5) mistakes in recording or coding the data obtained, and (6) other errors of collection, response, coverage, and estimation for missing data. These nonsampling errors also occur in complete censuses.

Although no direct measurement of the biases due to nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is due to imputing data for nonrespondents, for late reporters, and for data which fail edit. For all kinds of business combined, imputed data amount to about 15 percent of the sales estimates and 25 percent for inventories.

Table A-1. Estimated Sampling Variability of Sales and Inventories by Kind of Business for the United States

1972 SIC code	Kind of business	Sales						Inventories					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total	0.8-1.1	0.9	0.8-0.9	0.9	0.4-0.5	0.5	0.8-1.0	0.9	0.7-1.0	0.9	0.2-0.5	0.4
	Total (excluding farm-product raw materials)	0.9-1.2	1.1	0.9-1.0	1.0	0.4-0.6	0.5	0.9-1.0	1.0	0.8-1.0	0.9	0.2-0.5	0.3
50	Durable goods, total	1.1-1.3	1.2	0.9-1.0	1.0	0.6-0.6	0.6	1.1-1.2	1.2	1.0-1.2	1.1	0.3-0.7	0.5
501	Motor vehicles and automotive parts and supplies	2.3-3.3	3.1	1.9-2.8	2.2	1.4-1.9	1.7	2.5-3.3	2.9	2.6-3.1	3.0	0.6-1.3	1.0
5012	Automobiles and other motor vehicles	(*)	(*)	(*)	(*)	1.7-3.9	3.1	(*)	(*)	(*)	(*)	1.7-3.0	2.8
5013,4	Automotive parts and supplies, tires and tubes	2.9-3.7	3.1	2.9-3.2	3.1	1.5-2.0	1.6	4.0-4.5	4.3	3.9-4.4	4.0	0.4-1.4	0.7
5013	Automotive parts and supplies	3.3-4.0	3.9	3.1-3.8	3.7	1.9-2.2	2.0	4.7-5.3	5.2	4.7-5.2	5.0	0.5-1.5	0.9
502	Furniture and home furnishings	4.2-5.8	4.6	4.2-4.4	4.3	1.7-2.9	2.0	3.2-4.9	3.7	3.4-4.2	3.7	0.8-2.3	2.0
5021	Furniture--household and office	6.6-7.6	6.9	5.6-7.1	6.9	4.0-5.7	4.3	(*)	(*)	(*)	(*)	1.4-3.4	2.2
5021 pt.	Household furniture	(*)	(*)	(*)	(*)	5.0-5.8	5.1	(*)	(*)	(*)	(*)	1.4-4.3	2.0
5021 pt.	Office furniture	(*)	(*)	(*)	(*)	5.7-8.0	5.9	(*)	(*)	(*)	(*)	0.7-3.7	2.1
5023	Home furnishings	5.1-7.5	6.1	5.1-6.1	5.5	1.6-3.6	2.2	4.8-6.9	5.6	4.9-6.0	5.0	1.0-3.1	2.6
503	Lumber and other construction materials	2.8-4.4	3.1	2.9-3.9	3.1	1.6-2.5	1.9	4.5-6.5	4.9	4.8-5.8	4.9	0.7-1.8	0.9
5031	Lumber, plywood, and millwork	4.1-4.6	4.3	3.3-4.6	4.0	2.1-2.5	2.4	5.9-8.2	6.5	6.0-6.9	6.5	1.0-2.6	1.8
5039	Construction materials, n.e.c.	4.2-7.2	4.9	4.5-5.9	4.9	2.0-3.4	2.2	(*)	(*)	(*)	(*)	1.1-2.0	1.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(*)	(*)	(*)	(*)	2.2-2.4	2.3	(*)	(*)	(*)	(*)	1.0-2.5	1.4
505	Metals and minerals, except petroleum	4.4-6.0	4.7	4.0-5.1	4.0	1.5-3.0	2.8	3.2-3.8	3.7	3.7-4.1	4.0	0.8-1.4	1.3
5051 pt.	Ferrous metals service centers and offices	5.0-5.8	5.7	4.1-5.2	4.7	1.2-3.8	3.1	3.8-4.2	4.1	4.1-4.3	4.2	0.5-1.6	1.4
5051 pt.	Ferrous metals service centers	6.7-8.0	6.8	5.0-6.8	5.8	1.1-5.3	3.5	2.9-4.4	3.4	3.4-4.0	3.5	0.6-2.2	2.1
5051 pt.	Nonferrous metals service centers and offices	(*)	(*)	(*)	(*)	4.5-7.0	6.1	(*)	(*)	(*)	(*)	2.8-5.4	4.7
506	Electrical goods	1.9-2.6	2.3	1.6-2.1	1.7	1.3-1.6	1.4	2.5-2.9	2.6	2.2-2.8	2.4	0.5-1.0	0.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2.2-3.1	2.6	2.3-2.7	2.4	1.4-1.7	1.6	2.9-3.5	3.2	3.0-3.2	3.1	0.6-1.2	0.7
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3.4-4.0	3.8	3.0-3.2	3.1	1.6-2.8	2.5	2.9-4.2	3.2	2.7-3.8	3.0	0.7-1.6	0.9
5064	Electrical appliances, TV and radio sets	3.0-3.8	3.6	2.6-3.7	3.1	1.7-2.7	2.5	(*)	(*)	(*)	(*)	0.9-1.7	1.4
507	Hardware, plumbing, heating equipment, and supplies	2.7-3.0	2.9	2.4-2.6	2.5	1.1-1.9	1.5	2.4-2.8	2.6	2.4-2.9	2.7	0.3-1.4	0.6
5072	Hardware	3.6-4.2	3.8	2.6-3.1	3.0	1.3-2.4	1.9	2.0-4.1	2.7	2.2-3.5	2.8	0.4-2.1	0.8
5074	Plumbing and heating equipment and supplies (hydronics)	4.1-5.3	4.2	3.9-5.1	4.2	1.6-3.8	2.1	5.0-7.0	6.0	4.5-7.1	5.3	0.5-3.1	0.9
5075	Warm air heating and air conditioning equipment and supplies	(*)	(*)	(*)	(*)	2.0-4.4	2.7	(*)	(*)	(*)	(*)	1.1-4.3	1.4
508	Machinery, equipment, and supplies	2.3-2.7	2.6	1.8-2.5	2.1	1.2-1.5	1.4	2.0-2.6	2.3	1.7-2.1	1.9	0.4-1.8	1.1
5081	Commercial machines and equipment	(*)	(*)	(*)	(*)	2.9-4.3	4.1	(*)	(*)	(*)	(*)	1.6-8.5	1.9
5082	Construction and mining machinery and equipment	5.0-7.3	5.8	3.3-5.8	4.9	3.9-4.6	4.4	2.9-7.0	4.0	3.2-4.1	3.3	0.7-5.3	1.0
5083	Farm and garden machinery and equipment	(*)	(*)	(*)	(*)	4.1-6.6	6.0	(*)	(*)	(*)	(*)	1.1-2.9	1.2
5084,5	Industrial machinery, equipment, and supplies	3.1-3.4	3.2	2.8-3.0	2.9	1.1-2.3	1.6	2.4-3.0	2.9	2.4-3.0	2.7	0.5-1.6	0.6
5086	Professional equipment and supplies	3.7-7.5	4.3	4.0-5.5	5.2	1.8-3.3	2.0	(*)	(*)	(*)	(*)	0.6-5.2	0.7
5086 pt.	Surgical, medical, hospital, and supplies	(*)	(*)	(*)	(*)	1.7-3.8	2.5	(*)	(*)	(*)	(*)	0.7-5.4	1.0
5087	Service establishment equipment and supplies	(*)	(*)	(*)	(*)	1.8-11.0	2.9	(*)	(*)	(*)	(*)	1.0-3.4	1.3
5093	Scrap and waste materials	4.6-13.3	9.0	4.6-8.8	5.0	2.2-4.9	2.7	(*)	(*)	(*)	(*)	0.7-3.8	0.9
5093 pt.	Iron and steel scrap	(*)	(*)	(*)	(*)	2.6-3.5	3.1	(*)	(*)	(*)	(*)	0.8-1.4	1.0
5093 pt.	Waste materials	(*)	(*)	(*)	(*)	2.6-8.8	4.8	(*)	(*)	(*)	(*)	1.2-9.1	1.6
51	Nondurable goods, total	1.0-1.3	1.1	1.0-1.1	1.1	0.4-0.7	0.6	1.5-1.7	1.6	1.4-1.6	1.5	0.3-0.7	0.4
	Total (excluding farm-product raw materials)	1.0-1.6	1.2	1.3-1.4	1.4	0.5-0.8	0.6	1.7-2.0	1.9	1.6-1.8	1.7	0.3-0.7	0.4
511	Paper and paper products	2.6-4.0	3.7	2.4-4.1	3.1	1.0-1.4	1.3	2.5-3.4	2.7	2.4-3.2	2.8	0.4-1.5	0.6
5111,3	Printing, writing, industrial, and personal service paper	2.4-3.1	2.7	2.3-2.8	2.4	1.3-1.5	1.4	2.9-3.4	3.1	2.7-3.2	2.8	0.4-1.3	0.9
5112	Stationery supplies	(*)	(*)	(*)	(*)	2.4-3.4	2.5	3.2-6.1	5.8	3.6-5.1	4.4	0.9-4.8	1.4
512	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	5.6-6.3	5.7	5.6-5.7	5.7	0.6-2.2	0.7
5122	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	(*)	(*)	(*)	(*)	0.6-2.2	0.7
5122 pt.	General-line drugs	7.2-9.8	7.9	7.5-8.5	7.6	0.7-3.0	1.0	(*)	(*)	(*)	(*)	05.-3.1	1.0
513	Apparel, piece goods, and notions	8.3-12.4	8.8	8.6-9.3	9.1	2.6-4.0	3.3	(*)	(*)	(*)	(*)	(*)	(*)
514	Groceries and related products	1.7-2.2	2.0	1.6-2.0	1.9	0.4-1.2	0.5	1.5-2.5	1.8	1.8-2.1	1.9	0.4-1.3	0.6
5141	Groceries, general-line	1.9-2.7	2.1	1.7-2.7	2.0	0.4-1.5	0.7	1.8-2.7	2.3	1.7-2.0	1.8	0.3-1.2	0.8
5141 pt.	Voluntary groups	(*)	(*)	(*)	(*)	0.5-1.7	0.6	(*)	(*)	(*)	(*)	0.4-1.7	0.5
5141 pt.	Retailer cooperatives	(*)	(*)	(*)	(*)	0.6-1.6	1.1	(*)	(*)	(*)	(*)	0.4-2.4	0.7
5141 pt.	Other general-lines	(*)	(*)	(*)	(*)	0.9-3.1	1.8	(*)	(*)	(*)	(*)	0.5-1.3	0.7
5142,3,6,9	Specialty-line groceries	(*)	(*)	(*)	(*)	0.7-3.4	1.3	(*)	(*)	(*)	(*)	0.9-2.4	1.0
5144	Poultry and poultry products	3.4-5.5	4.4	4.0-4.4	4.2	0.6-2.2	1.5	(*)	(*)	(*)	(*)	2.1-4.1	2.3
5145	Confectionery	4.7-6.3	4.7	3.6-5.4	4.3	2.0-3.2	2.2	(*)	(*)	(*)	(*)	0.8-2.4	2.3
5147	Meats and meat products	4.5-4.8	4.7	4.6-4.6	4.6	1.4-2.9	1.7	(*)	(*)	(*)	(*)	1.7-3.9	2.2
5148	Fresh fruits and vegetables	4.7-5.4	4.9	3.9-4.1	4.0	1.9-4.2	2.7	(*)	(*)	(*)	(*)	2.9-4.4	3.9
515	Farm-product raw materials	1.8-2.2	2.0	1.6-2.0	1.7	1.1-1.7	1.3	(*)	(*)	(*)	(*)	1.1-2.8	2.4
5152	Cotton	(*)	(*)	(*)	(*)	1.8-4.9	2.8	(*)	(*)	(*)	(*)	1.3-2.9	2.4
5153	Grain	2.4-2.7	2.6	2.2-2.4	2.3	1.0-1.7	1.3	(*)	(*)	(*)	(*)	1.6-3.3	1.9
517	Petroleum and petroleum products	4.0-5.0	4.7	4.2-4.6	4.5	1.1-1.9	1.5	4.1-5.2	5.0	4.4-5.4	4.7	1.6-3.0	2.3
5171	Petroleum bulk stations and terminals	2.8-3.3	2.9	2.8-3.0	2.9	0.9-1.4	1.2	(*)	(*)	(*)	(*)	1.7-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages	3.4-3.9	3.7	3.1-3.7	3.2	0.8-1.8	1.7	3.9-4.2	4.1	4.0-4.3	4.2	1.0-2.0	1.3
5181	Beer and ale	2.2-4.4	3.1	2.8-3.2	2.9	1.0-2.5	2.0	3.6-5.5	3.8	3.6-4.1	3.8	1.7-2.7	2.1
5182	Wines and distilled alcoholic beverages	5.2-6.3	5.4	4.6-5.6	4.7	1.2-3.4	1.7	4.6-5.4	4.8	5.0-5.6	5.3	1.4-2.3	1.6
519	Miscellaneous nondurable goods	2.4-3.2	2.9	2.4-2.7	2.5	1.4-2.3	1.6	(*)	(*)	(*)	(*)	0.8-1.7	1.4
5191	Farm supplies	(*)	(*)	(*)	(*)	3.2-3.6	3.3	(*)	(*)	(*)	(*)	1.7-3.9	2.0
5194	Tobacco and tobacco products	4.0-5.2	4.1	3.4-4.5	4.2	1.3-2.4	1.7	(*)	(*)	(*)	(*)	0.8-4.3	1.0
5198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.8-3.8	3.0	(*)	(*)	(*)	(*)	1.5-3.1	2.9
5199 pt.	Books, magazines, newspapers	(*)	(*)	(*)	(*)	3.2-8.0	5.6	(*)	(*)	(*)	(*)	2.0-6.5	5.1

Note: Measures of sampling variability are based on data unadjusted for seasonal variations or trading-day differences. The range of sampling error of the monthly dollar estimates and the ratio of current month to previous month for sales and inventories is based on data for July, August, and September 1977.

*Measures of sampling variability are not shown since sales and/or inventory estimates for these kinds of business are not published.

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

Seasonal factors for adjusting data in this historical publication have been developed by the method described in the **X-11 Variant of the Census Method II Seasonal Adjustment Program**, U.S. Bureau of the Census Technical Paper No. 15, Revised 1967. Trading-day factors for adjusting sales were also derived from the X-11 program.

Adjustment of estimates is an approximation based on past experiences, and therefore, will be less precise to the extent that current competitive pressures, changes in economic condition, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of trading-day adjustment factors may be found in **Estimating Trading-Day Variation in Monthly Economic Time Series**, Bureau of the Census Technical Paper No. 12, 1965. Additional details concerning the adjustment factors may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.7	91.8	107.1	97.7	104.3	104.7	95.6	104.7	98.3	102.2	100.6	96.3
	Total (excluding farm-product raw materials)	91.6	91.6	106.6	97.8	105.1	105.8	95.8	106.1	100.3	102.3	99.3	95.0
50	Durable goods, total	89.6	89.0	105.7	99.0	106.5	107.3	96.4	107.7	101.9	104.1	98.6	91.5
501	Motor vehicles and automotive parts and supplies	93.3	89.8	107.6	107.7	108.4	107.5	98.6	106.9	96.1	98.3	93.3	90.5
502	Furniture and home furnishings	84.8	89.8	105.2	96.8	101.6	106.6	89.2	105.2	103.9	112.1	107.2	95.2
503	Lumber and other construction materials	80.6	80.2	100.9	94.6	109.8	112.2	102.4	117.4	106.2	109.9	100.0	84.0
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	78.7	88.7	104.5	101.5	109.3	97.0	96.1	105.2	105.4	106.0	108.0	95.5
505	Metals and minerals, except petroleum	98.2	91.4	108.2	98.6	107.6	104.4	91.2	108.6	103.1	100.0	97.1	90.3
506	Electrical goods	89.3	89.1	102.0	96.0	99.4	106.5	99.0	104.8	100.8	107.5	103.5	98.8
507	Hardware, plumbing, heating equipment, and supplies	89.2	87.4	99.9	97.9	106.7	108.0	100.7	109.2	102.4	107.2	100.6	88.3
508	Machinery, equipment, and supplies	88.1	88.6	107.9	99.9	107.7	108.8	95.4	104.6	103.3	103.5	96.5	92.3
509	Miscellaneous durable goods	86.2	89.8	106.2	96.2	100.2	110.7	88.4	109.5	101.9	108.1	103.7	96.0
51	Nondurable goods, total	96.4	93.8	108.5	97.1	103.5	102.3	94.9	102.1	96.1	100.2	101.8	100.1
	Total (excluding farm-product raw materials)	94.3	94.0	106.8	96.6	103.2	104.5	95.5	104.5	97.6	100.6	100.6	98.4
511	Paper and paper products	95.5	92.6	106.3	93.4	103.3	103.6	95.6	107.3	102.6	104.0	99.4	92.6
512	Drugs, drug proprietaries, and druggists' sundries	97.8	92.6	106.0	96.3	100.3	99.8	92.9	104.7	100.8	108.1	101.0	96.6
513	Apparel, piece goods, and notions	90.1	94.4	107.1	91.8	101.2	98.8	93.7	115.6	106.3	107.7	103.4	87.1
514	Groceries and related products	94.7	91.1	104.2	97.2	105.4	105.0	99.0	105.3	98.9	101.0	99.8	95.0
515	Farm-product raw materials[1]	103.1	94.7	112.6	98.0	103.9	96.9	93.0	92.4	91.5	100.8	108.3	99.9
516	Chemicals and allied products	90.2	89.2	106.3	98.0	107.1	108.3	96.1	108.0	97.8	105.0	98.8	93.3
517	Petroleum and petroleum products	99.7	102.3	107.7	96.2	95.9	100.0	96.5	100.2	93.1	100.9	100.3	104.8
518	Beer, wine, and distilled alcoholic beverages	77.8	81.4	102.2	90.7	106.8	113.9	97.6	107.8	97.8	100.6	106.9	113.5
519	Miscellaneous nondurable goods	96.0	100.5	116.6	102.4	107.4	105.2	88.2	95.5	95.4	96.8	99.6	96.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.8	101.2	101.7	100.7	99.4	99.3	98.6	98.1	98.7	100.1	100.9	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.0	100.3	100.6	100.7	100.2	99.4	99.6	99.9	99.7	99.1
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.5
501	Motor vehicles and automotive parts and supplies	101.3	103.0	101.6	100.6	102.0	100.5	99.2	97.0	97.4	98.1	99.0	99.9
502	Furniture and home furnishings	99.1	99.3	99.7	99.5	100.8	101.9	100.5	100.6	101.2	100.2	99.5	97.3
503	Lumber and other construction materials	98.4	99.1	103.6	102.7	103.6	101.7	101.4	99.8	99.2	96.7	96.2	97.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.6	99.8	100.7	102.4	106.5	105.3	100.9	101.5	100.9	93.9	89.9
505	Metals and minerals, except petroleum	99.4	98.2	100.2	100.8	100.2	100.2	102.8	102.8	99.9	96.7	98.9	99.7
506	Electrical goods	96.7	96.8	99.0	99.6	101.2	102.6	101.4	100.7	101.3	101.2	100.5	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.4	103.2	102.6	101.6	100.6	98.4	98.7	97.1	96.1
508	Machinery, equipment, and supplies	99.0	101.0	101.6	100.1	101.0	102.1	100.3	99.0	99.4	99.0	98.7	98.7
509	Miscellaneous durable goods	97.0	97.6	96.0	97.5	96.4	100.8	102.4	102.6	102.9	103.8	102.4	100.5
51	Nondurable goods, total	104.1	103.2	103.3	99.4	96.7	95.1	94.7	95.3	97.4	102.1	104.6	103.4
	Total (excluding farm-product raw materials)	100.0	100.0	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.6	100.5
511	Paper and paper products	97.8	98.3	99.1	101.1	100.4	102.6	100.0	100.2	100.7	100.0	99.6	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.1	99.8	100.6	97.9	100.6	99.0	100.0	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.0	100.2	101.9	101.5	99.8	99.0	98.6	99.3
514	Groceries and related products	98.7	100.2	102.1	100.5	99.2	98.7	98.5	98.0	99.9	102.0	100.9	101.0
515	Farm-product raw materials[1]	118.8	115.2	112.2	100.3	88.9	84.6	78.8	79.4	83.8	103.8	117.4	115.3
516	Chemicals and allied products	98.0	100.0	101.9	101.6	102.4	100.9	101.6	100.2	100.4	96.9	97.0	98.7
517	Petroleum and petroleum products	104.4	99.3	99.2	94.2	96.0	94.3	96.3	100.7	102.9	104.8	104.2	103.4
518	Beer, wine, and distilled alcoholic beverages	96.3	95.8	97.4	99.1	102.3	102.9	99.9	97.9	100.3	107.0	105.7	95.3
519	Miscellaneous nondurable goods	103.6	104.6	105.0	102.1	97.2	93.2	95.1	96.0	97.4	99.7	101.9	104.0

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979—Continued

1972 SIC code	Kind of business	1979											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	95.9	91.8	104.7	100.0	105.3	101.5	98.4	104.2	95.8	104.5	100.4	96.2
	Total (excluding farm-product raw materials)	94.0	91.6	103.9	99.8	106.1	102.9	98.6	105.7	97.6	104.9	99.2	94.5
50	Durable goods, total	91.9	89.1	103.2	101.1	107.3	104.3	99.4	107.0	99.3	106.8	98.4	91.2
501	Motor vehicles and automotive parts and supplies	94.0	89.9	106.2	108.4	110.5	104.7	102.9	104.4	94.7	99.1	93.7	89.3
502	Furniture and home furnishings	87.1	89.8	101.8	98.4	102.6	104.0	91.2	105.5	101.7	115.1	106.5	94.2
503	Lumber and other construction materials	83.0	80.2	97.3	98.0	110.4	107.7	107.0	117.2	102.4	113.5	100.3	83.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	84.3	88.7	102.1	101.4	107.8	98.7	95.0	103.6	103.6	113.3	102.3	97.8
505	Metals and minerals, except petroleum	100.7	91.4	102.7	101.4	107.6	101.3	95.4	108.3	101.3	102.6	96.1	89.0
506	Electrical goods	92.0	89.1	99.9	99.3	98.8	103.9	100.6	104.5	98.2	110.6	102.9	100.1
507	Hardware, plumbing, heating equipment, and supplies	91.0	87.4	97.8	100.1	108.1	104.5	103.4	108.6	100.5	109.2	100.3	88.6
508	Machinery, equipment, and supplies	90.9	88.7	106.1	102.1	108.9	105.2	97.1	104.4	100.1	106.7	96.3	92.9
509	Miscellaneous durable goods	86.8	89.8	105.0	99.4	101.6	105.4	92.6	109.0	98.1	109.1	106.2	95.5
51	Nondurable goods, total	93.8	93.7	106.2	99.2	104.4	99.5	97.2	101.8	93.9	102.7	101.5	99.8
	Total (excluding farm-product raw materials)	96.8	94.0	104.0	99.0	104.1	101.2	98.0	104.7	94.9	103.2	100.7	98.0
511	Paper and paper products	100.0	92.7	103.2	94.8	103.3	102.4	97.4	107.1	99.3	108.7	97.7	92.2
512	Drugs, drug proprietaries, and druggists' sundries	99.7	92.6	104.0	98.9	100.6	96.9	96.6	103.9	97.6	110.1	101.8	96.1
513	Apparel, piece goods, and notions	93.9	94.4	103.7	92.4	101.8	97.8	95.7	115.5	102.9	112.3	102.1	85.9
514	Groceries and related products	97.5	91.0	103.1	98.3	106.3	103.0	100.0	105.0	96.2	104.0	99.5	95.1
515	Farm-product raw materials[1]	106.7	94.5	111.9	100.2	102.7	97.1	94.1	91.8	87.9	104.3	108.3	100.5
516	Chemicals and allied products	92.5	89.2	101.9	100.8	107.7	105.0	100.2	108.2	94.8	107.6	98.9	91.7
517	Petroleum and petroleum products	99.2	102.1	106.6	99.2	95.9	96.9	100.0	100.7	90.7	100.1	103.6	103.5
518	Beer, wine, and distilled alcoholic beverages	81.1	81.5	98.0	93.8	107.9	109.4	101.0	108.2	94.0	104.8	106.4	112.3
519	Miscellaneous nondurable goods	97.5	100.5	114.0	106.1	108.2	101.4	90.4	96.3	92.4	98.3	96.6	96.6
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.7	101.2	101.7	100.8	99.5	99.3	98.6	98.1	98.7	100.1	100.8	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.1	100.4	100.6	100.7	100.2	99.4	99.6	99.9	99.6	99.0
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.4
501	Motor vehicles and automotive parts and supplies	101.3	103.1	101.6	100.6	102.0	100.5	99.3	97.0	97.4	98.2	99.0	99.8
502	Furniture and home furnishings	99.2	99.3	99.7	99.5	100.9	102.0	100.4	100.6	101.2	100.2	99.5	97.2
503	Lumber and other construction materials	98.5	99.1	103.7	102.7	103.4	101.5	101.3	99.8	99.2	96.8	96.2	97.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.7	99.8	100.7	102.3	106.4	105.3	100.9	101.6	100.9	93.8	90.0
505	Metals and minerals, except petroleum	99.3	98.3	100.2	100.8	100.2	100.2	102.8	102.9	100.0	96.6	98.8	99.6
506	Electrical goods	96.7	96.7	99.0	99.7	101.3	102.7	101.4	100.7	101.4	101.1	100.4	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.6	103.3	102.6	101.6	100.6	98.4	98.7	97.0	96.0
508	Machinery, equipment, and supplies	99.0	101.0	101.5	100.1	101.0	102.1	100.3	99.1	99.4	98.9	98.6	98.7
509	Miscellaneous durable goods	97.1	97.5	96.0	97.4	96.4	100.9	102.4	102.6	103.0	103.8	102.4	100.5
51	Nondurable goods, total	103.9	103.2	103.4	99.5	96.9	95.3	94.7	95.3	97.4	102.0	104.5	103.4
	Total (excluding farm-product raw materials)	100.0	99.9	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.5	100.5
511	Paper and paper products	97.7	98.3	99.1	101.1	100.5	102.7	99.9	100.1	100.7	100.0	99.5	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.0	99.8	100.5	97.8	100.6	99.0	100.1	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.1	100.2	101.8	101.6	99.8	99.1	98.5	99.2
514	Groceries and related products	98.7	100.2	102.1	100.5	99.3	98.7	98.5	98.0	99.9	102.0	100.8	101.0
515	Farm-product raw materials[1]	118.5	115.2	112.3	100.8	89.6	85.4	78.5	79.2	83.5	103.3	117.1	115.1
516	Chemicals and allied products	98.0	100.0	102.0	101.6	102.4	101.0	101.6	100.2	100.5	96.9	96.8	98.6
517	Petroleum and petroleum products	104.4	99.4	99.4	94.2	95.9	94.2	96.2	100.9	102.9	104.7	104.2	103.2
518	Beer, wine, and distilled alcoholic beverages	96.3	95.7	97.4	99.1	102.3	102.8	99.9	97.9	100.3	106.9	105.7	95.3
519	Miscellaneous nondurable goods	103.7	104.6	105.1	102.1	97.2	93.1	95.1	95.9	97.3	99.7	101.8	104.0

Note: The adjustment factors shown above for sales are a combination of the seasonal and trading-day factors. These are separately available, however, upon request. Adjustment factors are included in this table for some kinds of business for which adjusted data are not published separately.

Adjusted sales and inventory data shown in table 4 are obtained by dividing the unadjusted data shown in tables 1 and 2 by the adjustment factors shown above for the corresponding kinds of business. Adjusted data for the summary trade totals are obtained by summarizing the adjusted data for the individual kinds of business. Seasonal factors shown for the summary trade totals provide an approximation to these totals but may show small differences from the published data. The seasonally adjusted data for 1978 may vary slightly from the method shown above because of insignificant rounding differences.

[1]There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table B-2. Average Month-to-Month Percent Changes and Related Summary Measures for Sales and Inventories of Merchant Wholesalers

1972 SIC code	Kind of business	$\bar{O}$	$\bar{S}$	$\overline{CI}$	$\bar{I}$	$\bar{C}$	$\bar{I}/\bar{C}$	MCD	Average duration of run			
									CI	I	C	MCD
		Sales										
	Merchant wholesalers, total	4.74	3.10	1.31	.82	.96	.86	1	3.10	1.57	14.11	3.10
50	Durable goods, total	5.30	4.84	1.43	.89	1.08	.82	1	3.53	1.63	15.87	3.53
501	Motor vehicles and automotive parts and supplies	5.53	4.22	2.67	2.33	1.24	1.87	3	2.05	1.59	25.40	5.43
502	Furniture and home furnishings	6.00	7.29	2.06	1.68	1.07	1.57	2	2.27	1.55	9.07	3.00
503	Lumber and other construction materials	7.40	6.25	2.67	1.72	1.76	.98	1	2.76	1.51	14.11	2.76
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	9.79	9.32	4.02	3.74	1.20	3.12	4	1.81	1.67	7.06	3.44
505	Metals and minerals, except petroleum	6.79	3.78	3.10	2.38	1.63	1.46	2	2.19	1.41	9.07	3.71
506	Electrical goods	5.79	5.17	1.89	1.52	1.04	1.47	2	2.08	1.46	10.58	3.32
507	Hardware, plumbing, heating equipment, and supplies	5.42	4.86	1.78	1.33	1.09	1.22	2	1.98	1.41	12.70	3.94
508	Machinery, equipment, and supplies	6.10	5.41	1.87	1.51	.97	1.56	2	1.92	1.46	7.94	3.32
509	Miscellaneous durable goods	7.66	6.11	3.51	2.79	1.79	1.56	2	1.87	1.48	9.77	2.93
51	Nondurable goods, total	5.07	2.80	1.58	1.10	.95	1.16	2	2.59	1.43	9.07	3.60
511	Paper and paper products	5.41	3.16	1.99	1.44	1.10	1.30	2	1.98	1.48	7.94	3.60
512	Drugs, drug proprietaries, and druggists' sundries	5.97	3.89	1.90	1.64	.76	2.15	3	1.95	1.57	9.77	4.31
513	Apparel, piece goods, and notions	7.73	6.91	2.70	2.36	1.01	2.34	3	1.72	1.38	10.58	4.17
514	Groceries and related products	4.44	2.01	1.67	1.41	.82	1.72	2	1.92	1.51	12.70	3.15
515	Farm-product raw materials	9.27	5.04	4.87	4.29	1.59	2.70	4	1.90	1.53	6.68	3.54
516	Chemicals and allied products	6.21	4.53	2.47	1.93	1.46	1.32	2	2.19	1.49	8.47	3.32
517	Petroleum and petroleum products	7.38	4.71	4.81	4.47	1.35	3.30	4	1.67	1.55	9.07	2.70
518	Beer, wine, and distilled alcoholic beverages	10.94	8.71	1.86	1.64	.69	2.39	3	1.76	1.59	21.17	3.68
519	Miscellaneous nondurable goods	5.89	4.84	2.53	2.23	.96	2.32	3	1.92	1.63	8.47	3.47
		Inventories										
	Merchant wholesalers, total	1.10	.72	.94	.39	.83	.47	1	4.88	1.79	18.14	4.88
50	Durable goods, total	1.07	.57	.89	.35	.86	.41	1	7.94	1.46	31.75	7.94
501	Motor vehicles and automotive parts and supplies	2.20	1.22	1.69	1.13	1.21	.93	1	2.54	1.63	12.70	2.54
502	Furniture and home furnishings	2.13	1.28	1.60	1.19	1.00	1.19	2	2.40	1.57	21.17	5.25
503	Lumber and other construction materials	2.60	1.77	1.83	1.28	1.09	1.17	2	2.54	1.67	15.87	4.20
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	3.60	2.92	2.17	1.80	1.20	1.50	2	2.27	1.48	25.40	3.60
505	Metals and minerals, except petroleum	3.14	2.53	1.79	1.01	1.33	.76	1	3.26	1.72	8.47	3.26
506	Electrical goods	1.75	1.08	1.32	.90	.92	.98	1	2.49	1.31	42.33	2.4
507	Hardware, plumbing, heating equipment, and supplies	1.69	1.10	1.23	.87	.89	.98	1	2.70	1.53	18.14	2.70
508	Machinery, equipment, and supplies	1.36	.92	1.03	.66	.82	.82	1	2.65	1.65	31.75	2.65
509	Miscellaneous durable goods	2.29	1.47	1.85	1.28	1.18	1.08	2	1.95	1.53	25.40	4.34
51	Nondurable goods, total	2.49	2.19	1.44	.83	1.07	.78	1	3.74	1.74	7.06	3.74
511	Paper and paper products	1.82	.94	1.38	1.04	.75	.94	2	2.12	1.44	9.07	4.20
512	Drugs, drug proprietaries, and druggists' sundries	2.39	1.46	1.60	1.37	.67	2.04	3	1.81	1.51	31.75	3.38
513	Apparel, piece goods, and notions	2.28	1.43	1.86	1.43	1.05	1.35	2	2.40	1.74	9.07	3.15
514	Groceries and related products	1.87	1.29	1.43	.92	1.01	.91	1	2.54	1.38	11.55	2.54
515	Farm-product raw materials	8.88	8.22	4.86	3.99	2.03	1.96	3	2.49	1.90	8.47	3.91
516	Chemicals and allied products	3.14	1.58	1.36	1.89	1.39	1.36	2	2.35	1.49	12.70	3.71
517	Petroleum and petroleum products	6.09	3.19	5.01	4.34	2.00	2.17	3	1.87	1.59	15.87	3.68
518	Beer, wine, and distilled alcoholic beverages	4.28	3.68	1.76	1.46	.74	1.98	3	2.85	1.63	9.77	4.03
519	Miscellaneous nondurable goods	2.53	1.52	1.88	1.48	.84	1.75	2	2.19	1.59	7.06	3.15

Description of Measures Shown Above

The following are brief descriptions of the measures shown in this table. More complete explanations appear in "Electronic Computers and Business Indicators," Occasional Paper 57, National Bureau of Economic Research, Inc., New York, 1957.

$\bar{O}$ is the average month-to-month percentage change, without regard to sign, in the original series before seasonal or trading-day adjustment.

$\bar{S}$ is the average month-to-month percentage change, without regard to sign, in the seasonal component. It is a measure of the average monthly seasonal change in the unadjusted series.

$\overline{CI}$ is the average month-to-month percentage change, without regard to sign, in the seasonally adjusted series.

$\bar{I}$ is the average month-to-month percentage change without regard to sign, for the irregular component. The irregular component is obtained by dividing the seasonally adjusted series by the cyclical component.

$\bar{C}$ is the average month-to-month percentage change, without regard to sign, for the cyclical component, which is a smooth, flexible moving average.

$\bar{I}/\bar{C}$ is a measure of the relative smoothness (small values) or irregularity (large values) of the seasonally adjusted series.

MCD (months for cyclical dominance) gives an estimate of the appropriate time span over which to observe cyclical movements in a monthly series. In deriving MCD, the average (without regard to sign) percentage changes in the irregular and cyclical components are computed for 1-month spans (Jan.-Feb., Feb.-Mar., etc.) 2-months spans (Jan.-Mar., Feb.-Apr., etc.), and so on. MCD is the shortest span for which the average change (without regard to sign) in the cyclical component is larger than the average change (without regard to sign) in the irregular component; that is, it indicates the point at which fluctuations begin to be more attributable to cyclical than to irregular movements. MCD is small for smooth series and large for erratic series.

Average duration of run (ADR) is a measure of smoothness, and is equal to the average number of consecutive monthly changes in the same direction in any series of observations. When there is no change between 2 months, a change in the same direction as the preceding change is assumed. The ADR is shown for the seasonally adjusted series CI, irregular component I, cyclical component C, and the MCD moving average. The MCD moving average is an unweighted moving average (with the number of terms equal to MCD) of the seasonally adjusted series.

A comparison of these measures with the expected ADR of a random series gives an indication of whether the changes approximate those of a random series. (The expected value of ADR for a random series is 1.5 and it falls between 1.36 and 1.75 about 95 percent of the time. For a moving average of a random series the expected value is 2.0). For example, the ADR of CI is 2.08 for electrical goods sales. This indicates that 1-month changes in the seasonally adjusted series, on the average, reverse sign slightly less often than a random series. In the next two columns, 1.46 for I and 10.58 for C indicate the separation of the seasonally adjusted series into an essentially random component and the cyclical (nonrandom) component. Finally, 3.32 for MCD indicates that a 2-month moving average of the seasonally adjusted series (2 months being the MCD span) reverses direction on the average about every 3 months. The increase in the average duration of run from 2.08 for CI to 3.32 for the MCD moving average indicates that for this series the use of MCD spans reduces the effect of the irregular component upon the seasonally adjusted series.

These averages are based on a seasonally adjusted series which is adjusted historically; that is, the months used to compute the measures were the same months used to estimate the seasonal factors. Current data, however, are adjusted by use of factors projected 1 year ahead, and are thus subject to additional error. Therefore, current data are probably somewhat more irregular and subject to larger MCD than shown above.

APPENDIX C. Explanatory Material

I. SCOPE OF THE SURVEY

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the Standard Industrial Classification (SIC) Manual[1] and as covered in the 1972 census, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm or professional business users; or to other wholesalers; or acting as agents or brokers in buying merchandise for or selling merchandise to such persons or companies.

The principal types of establishments included are: (1) merchant wholesalers who take title to the goods they sell, such as wholesale merchants or jobbers, industrial distributors, voluntary group wholesalers, exporters, importers, cash-and-carry wholesalers, drop shippers, major distributors, retailer cooperative warehouses, terminal elevators, and cooperative buying associations; (2) sales branches and sales offices (but not retail stores) maintained by domestic manufacturing or mining enterprises apart from their plants or mines for the purpose of marketing their products; (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), which constitute the major portion of the broad field of wholesale trade, and excludes the other types of wholesale trade. All kinds of business in which merchant wholesalers operate are represented in this survey.

Kind-of-business classifications are not interchangeable with commodity classifications. Most businesses sell several kinds of commodities. The kind-of-business code assigned generally reflects either the individual commodity or the commodity group which is the primary source of the establishments receipts, or some mixture of commodities which characterizes the establishment's business. Thus, the classification of establishments by kind of business generally does not make it possible to determine either the number of establishments handling a particular commodity or the sales of that commodity. For example, the "grocery" classification excludes establishments selling groceries if the sale of groceries is not the primary source of receipts; moreover, even though establishments are classified as "grocery wholesalers" some of their sales may be derived from the sale of nonfood products.

A description of each kind of business included in the accompanying statistical data is shown in appendix D.

II. SAMPLE DESIGN AND ESTIMATION PROCEDURES

Framework of old series–The first publication in this series based on probability sampling, was the January 1954 report. Effective with the July 1956 publication an entirely new sample was selected from the 1954 Census of Business. Other changes in the sample have been made since 1956, representing, for the most part, revisions to reflect the findings of successive censuses of wholesale trade.

Selection of sample for new series–The new sample[2] like the old is a probability sample, and the estimating procedures used are similar in many respects to the old sample.

The new sample originally was drawn from the Standard Statistical Establishment List (SSEL) as updated to December 31, 1974. The initial SSEL consisted of two lists. One list was composed of all Employer Identification (EI) numbers issued by the Internal Revenue Service (IRS) with reported payroll in at least one quarter of 1973 or 1974, with payroll in the 1972 census, or with sales/receipts greater than $100,000 in the 1972 census. The second list consisted of all establishments of known multiestablishment companies as of December 31, 1974. These lists contained information on sales/receipts, payroll, employment, name and address, kind-of-business classification, etc.

Before the 1974 SSEL was available, a study was made, using files from the 1972 Census of Wholesale Trade. This study determined the stratification of the sampling units based on 1972 sales, inventories, and kind of business, and also determined the optimal allocation of the sample necessary to meet specified variance objectives for sales and inventory estimates for different kind-of-business groups. The primary stratum boundary determined in the study was the certainty cutoff to be used for each kind of business. The cutoff was particularly important since it also determined the type of sampling unit.

The sampling units for the new sample consisted of both companies and EI's. To be eligible for the initial sampling, an EI had to be active, i.e., had payroll in 1974 and was on the Internal Revenue Service mailing list for Federal Insurance Contribution Act (FICA) taxpayers. If a known multiestablishment company had total merchant wholesale sales (on a 1972 basis) above the cutoff for its major kind of business, the company was selected for the sample with certainty. Single establishment companies, whether or not selected with certainty, were considered as EI sampling units.

All merchant wholesale companies below the certainty cutoff were treated on an EI basis; that is, the EI was the sampling unit. The EI's were then stratified according to their major kind of business and their estimated sales (on a 1972

[1] Executive Office of the President, Office of Management and Budget, **Standard Industrial Classification Manual**, 1972.

[2] For a complete exposition of the new sample, see C. T. Isaki et al., "Sample Redesign Aspects of the Census Bureau's Monthly Business Surveys" and K. M. Wolter et al., "Sample Selection and Estimation Aspects of the Census Bureau's Monthly Business Surveys," **Proceedings of the Business and Economic Statistics Section: American Statistical Association**, 1976.

basis). Within each stratum, a simple random sample of EI's was selected. The sampling rates for these EI's varied between 1 in 3 and 1 in 600.

For those EI's in the inital sample that did not have kind-of-business classifications and for all EI "births" after the initial selection, a two-phase selection procedure was used. EI "births," as used here, are new EI's recently assigned by SSA and currently on the IRS mailing list for FICA taxpayers. In the first phase, "births" were stratified by kind of business and size (expected employment or quarterly payroll). A relatively large sample was drawn and canvassed in order to obtain a more reliable measure of size (sales in two recent months) and a more detailed kind-of-business code, if needed.

Using this more reliable information, the cases were re-stratified and the final sample drawn with overall probabilities equivalent to those used in drawing the initial sample from the 1974 SSEL. Because of the lag in reporting "births" to the IRS and Social Security Administration (SSA) and the time needed to accomplish the two-phase birth-selection procedure, "births" are actually added to the sample about eight or nine months after they begin operation. The ongoing birth-selection procedure is carried out quarterly.

Since "births" are not represented in the sample, until they go through the selection procedure described above, an interium procedure is required to account for "births" during the period between the onset of activity and the time of birth selection. This consists of imputing for all cases which go out of business, but which are still on the IRS mailing list. This imputation procedure was also used in the old series. However, because of recent delays in obtaining "births," this procedure now accounts for a larger percentage of the estimates.

To be eligible for the sample canvass and tabulation in a given month, a merchant wholesale business must meet both of the following requirements:

1. It must be on the IRS mailing list for FICA taxpayers from the previous quarter.

2. It must have been selected from either the SSEL or the file of employer "births." For this purpose, a universe file of all businesses ever given a chance of selection is maintained. This file shows, among other things, which EI numbers actually have been selected.

In the case of businesses that were selected into the sample with certainty, the first requirement is changed. These certainty sampling units are not dropped from canvass and tabulation if they are no longer on the IRS mailing list. If there are successor businesses, they are added to the survey. This is a tighter form of control used for these larger businesses.

Use of the rotating sample and composite estimating procedures–Rotating samples or panels are used except for very large businesses which are selected with certainty. For sampling units in the rotating panels, two months of data are obtained at each enumeration. For example, February rotating panel cases report data for February (the current month) and January (the previous month). In the following month, a different rotating panel (the March panel) reports figures for March and February. Three sample panels are used. This permits the use of a composite estimating procedure which provides estimates more reliable than those which would be obtained from a completely fixed sample of about twice the size. In addition, this procedure reduces the reporting burden of selected businesses.

The first estimate issued each month, based on the full sample, is called the preliminary estimate. The preliminary composite estimate for the current month is a weighted average of two estimates: (1) the current month unbiased estimate (weight .35), and (2) a ratio estimate (weight .65) obtained by multiplying the preliminary composite estimate for the previous month by the current-to-previous-month ratio obtained from the current month reports. Preliminary inventory estimates have been modified, prior to publication, based on past relationships between preliminary and final estimates.

A final estimate is developed one month later using information available from the following month's enumeration. The final composite estimate is also a weighted average of two estimates: (1) the preliminary composite estimate for a given month (weight .7), and (2) the unbiased estimate (weight .3) for the same month as obtained from the next month's reporting panel.

The preliminary composite estimates provide a measure of the dollar volume level that is considerably more reliable than the unbiased estimates, and the final composite estimates are generally more reliable than the preliminary composite estimates. The indication of the month-to-month trend considered to be most reliable is the ratio of the current month's preliminary composite estimate divided by the previous month's final composite estimate. This is true because the numerator and denominator of this ratio are more highly correlated than would be the case if the numerator and denominator were two preliminary estimates or two final estimates. The trend of the preliminary/final ratio, therefore, has less variability than one based on two preliminary figures or two final figures.

Another advantage of the use of the rotating panel system is that the frequency of canvass of very large noncertainty cases can be increased with a consequent reduction, in an unbiased manner, of their statistical weight. This increases the reliability of the estimates, particularly the measure of month-to-month change.

III. PREVIOUSLY PUBLISHED DATA

Data developed from the new sample are not comparable with data previously published in this series. Sales and inventory estimates prior to September 1977 have been revised to reflect: (1) a new sample design; (2) benchmarking of sales to the results of the 1967 and 1972 censuses of wholesale trade; (3) conversion of classifications based on the 1967 SIC manual to classifications based on the 1972 SIC manual (4) addition

of farm assemblers and bulk petroleum establishments; and (5) revision and updating of seasonal adjustment factors.

The revised historical sales series were derived in a manner designed to minimize the changes to the month-to-month trends in the old series. The inventory series were revised by applying the stock-sales ratios from the old series to the revised sales series to obtain the preliminary revised inventory series. These preliminary series were then revised slightly so that August 1977 estimates would equal the new sample estimates.

Although the month-to-month movements in the old and new series show very little change, the level of the revised series show substantial change from the old series for some kinds of business. The change in levels depends on the difference between the old series for census years and the benchmark levels and on the difference between the new series level and the old series level for the link month, August 1977.

Additional details concerning the sample design, and revised estimates of merchant wholesale sales and inventories from January 1967 through August 1977, have been provided in a special supplementary publication **Monthly Wholesale, Sales and Inventories: January 1967-August 1977, Revised BW-13-77S.** This report may be obtained from Subscriber Services (Publications), Bureau of the Census, Washington, D.C. 20233 at $.90 per copy.

IV. UNPUBLISHED DATA

Additional data, such as dollar volume estimates for some kinds of business not separately shown in this report, are produced as a byproduct of the regularly published statistics. These additional data have not been included in this publication because the sampling variability associated with these data does not meet the Census Bureau's publication criteria. The Census Bureau, on written request will release these data for individual use, though not for publication.

V. DEFINITION OF TERMS

Sales—Sales include the following: merchandise sold for cash or credit at wholesale and retail by establishments primarily engaged in merchant wholesale trade; receipts from customers for rental or leasing of equipment, instruments, tools, etc.; receipts for delivery, installation, alteration, maintenance, repair, storage, and other services; and gasoline, liquor, tobacco and other excise taxes which are paid by the manufacturer and passed along to the wholesaler. Sales are net after deductions for refunds and allowances for merchandise returned by customers. Sales which are made on an agency basis for others are included as gross sales. Direct shipments on orders from wholesalers are also included in sales. Total sales do not include nonoperating income from such sources as investments, rental or sale of real estate, etc.

In the new series, sales exclude sales and excise taxes collected directly from customers and paid directly to a local, State, or Federal tax agency. Also excluded are receipts from customers for carrying or other credit charges. In the old series respondents were requested to include these taxes and credit charges in the reported sales. The impact of this change is considered minimal.

Inventories—Inventories represent stocks, at cost, of merchandise on hand for sale at the end of the month regardless of location, except for goods outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included.

Stock-sales ratios—The stock-sales ratios are percentages derived by dividing the dollar value of inventories, at cost, by the dollar value of sales. No adjustment is made in these ratios for the markup in sales which may vary from trade to trade.

The sales and inventory figures represent total sales and inventories of all establishments primarily engaged in merchant wholesale trade. Also included are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments.

APPENDIX D. Kind-of-Business Classifications

DURABLE GOODS (SIC Major Group 50)

This major group includes establishments primarily engaged in the wholesale distribution of durable goods.

MOTOR VEHICLES AND AUTOMOTIVE PARTS AND SUPPLIES (SIC 501)

Automobiles and Other Motor Vehicles (SIC 5012)[1]—Establishments primarily engaged in the wholesale distribution of new and used passenger automobiles, trucks, and other motor vehicles. Automotive distributors primarily engaged in selling at retail to individual consumers for personal use, and also selling a limited amount of new and used passenger automobiles and trucks at wholesale to dealers, are classified in retail trade, industry 5511.

Automotive Parts and Supplies (SIC 5013)—Establishments primarily engaged in the wholesale distribution of automotive parts, supplies, accessories, tools and equipment.

Tires and Tubes (SIC 5014)[1]—Establishments primarily engaged in the wholesale distribution of rubber tires and tubes for passenger and commercial vehicles.

FURNITURE AND HOME FURNISHINGS (SIC 502)

Furniture (SIC 5021)—Establishments primarily engaged in the wholesale distribution of furniture, including bedsprings, mattresses, and other household furniture; office furniture; and furniture for public parks, buildings, etc.

SIC 5021 is subdivided into—

1. Household and lawn furniture.
2. Office and business furniture.

Home Furnishings (SIC 5023)—Establishments primarily engaged in the wholesale distribution of home furnishings and homewares, including antiques; china; glassware and earthenware; lamps; curtains and draperies; linens and towels; carpets, linoleum, and all other types of hard and soft surface floor coverings. Establishments primarily engaged in the wholesale distribution of electrical household goods are classified in industry 5064.

LUMBER AND OTHER CONSTRUCTION MATERIALS (SIC 503)

Lumber, Plywood, and Millwork (SIC 5031)—Establishments, with or without yards, primarily engaged in the wholesale distribution of rough, dressed, and finished lumber (but not timber); plywood; door and window frames (wood or metal); and other wood and metal millwork. Establishments selling lumber, plywood and millwork to the general public and known as "retail" in the trade are classified in industry 521.

Construction Materials, Not Elsewhere Classified (SIC 5039)—Establishments primarily engaged in the wholesale distribution of such building materials as brick, building stone, cement, granite, gravel, lime, marble, plaster, building glass, roofing materials, sand, and tile. Establishments selling construction materials to the general public and known as "retail" in the trade are classified in industry 521. Establishments primarily engaged in marketing heavy structural metal products are classified in industry 5051. Establishments primarily selling readymade concrete are classified in manufacturing.

SPORTING, RECREATIONAL, PHOTOGRAPHIC, AND HOBBY GOODS, TOYS, AND SUPPLIES (SIC 504)[1]

Establishments primarily engaged in the wholesale distribution of all types of amusement and sporting goods and accessories—billiard and pool supplies; cameras and photographic equipment; coin-operated game machines; games, toys; ammunition and fireworks; etc.

METALS AND MINERALS, EXCEPT PETROLEUM (SIC 505)

Ferrous Metals Service Centers and Offices (SIC 5051 pt.)—Establishments primarily engaged in marketing ferrous metal semifinished products such as nails, pig iron, steel and tin bars. Establishments in this industry may operate with warehouses (ferrous metals service centers) or without warehouses (ferrous metals sales offices).

Sales branches of domestic manufacturers are included in this category if the establishment is separate from the manufacturing plant and has warehouse space greater than 5,000 square feet.

[1] Data for this kind of business are not shown separately but are included in the group total.

Nonferrous Metals Service Centers and Offices and Other Minerals and Ores (SIC 5051 pt. and SIC 5052 pt.)[1]—Establishments primarily engaged in marketing nonferrous metal semifinished products such as aluminum bars and copper rods. Establishments in this industry may operate with warehouses (nonferrous metals service centers) or without warehouses (nonferrous metals sales offices). Also included are establishments primarily engaged in the wholesale distribution of copper, iron, lead, and other metallic ores except precious; and crude nonmetallic minerals (including concentrates) except crude petroleum. Establishments primarily engaged in the wholesale distribution of nonmetallic minerals used in construction, such as sand and gravel, are included in industry 5039.

Coal (SIC 5052 pt.)[1]—Establishments primarily engaged in the wholesale distribution of coal and coke. Included are establishments which have products shipped direct from mine to customer, and establishments operating yards and dock space and making deliveries therefrom at wholesale as well as other coal merchants.

ELECTRICAL GOODS (SIC 506)

Electrical Apparatus and Equipment, Wiring Supplies, and Construction Materials (SIC 5063)—Establishments primarily engaged in the wholesale distribution of electrical power equipment for the generation, transmission, or utilization of electric energy; and electrical construction materials for outside power transmission lines and for electrical systems. Construction contractors primarily engaged in installing electrical systems and equipment from their own stock are classified in industry 1731.

Electrical Appliances, TV and Radio Sets (SIC 5064)—Establishments primarily engaged in the wholesale distribution of radio and television sets and household electrical appliances.

Electronic Parts and Equipment (SIC 5065)[1]—Establishments primarily engaged in the wholesale distribution of electronic parts and equipment, such as industrial and radio and television receiving and transmitting electronic tubes; electronic intercommunication equipment; radio parts and accessories; and electronic sound equipment. Establishments primarily engaged in the wholesale distribution of radio and television receiving sets and phonographs are classified in industry 5064.

HARDWARE, PLUMBING, HEATING EQUIPMENT, AND SUPPLIES (SIC 507)

Hardware (SIC 5072)—Establishments primarily engaged in the wholesale distribution of hardware, such as builders; shelf or light hardware; handtools (except automotive and machinists' precision); handsaws and cutlery; brads, staples, and tacks; and bolts, nuts, rivets, and screws. Establishments primarily engaged in the wholesale distribution of nails, noninsulated wire, and screening are classified in industry 5051.

Plumbing and Heating Equipment and Supplies (Hydronics) (SIC 5074)—Establishments primarily engaged in the wholesale distribution of hydronic plumbing and heating equipment and supplies. Construction contractors primarily engaged in installing plumbing and heating equipment from their own stock are classified in industry 1711.

Warm Air Heating and Air-Conditioning Equipment and Supplies (SIC 5075)[1]—Establishments primarily engaged in the distribution of warm air heating and air-conditioning equipment and supplies. Construction contractors primarily engaged in installing warm air heating and air-conditioning equipment are classified in industry 1711.

Refrigeration Equipment and Supplies (SIC 5078)[1]—Establishments primarily engaged in the distribution of refrigeration equipment and supplies. Construction contractors primarily engaged in installing refrigeration equipment from their own stock are classified in industry 1711.

MACHINERY, EQUIPMENT, AND SUPPLIES (SIC 508)

Commercial Machines and Equipment (SIC 5081)[1]—Establishments primarily engaged in wholesaling commercial machines and equipment, such as office, store, and business machines and equipment; commercial food service equipment; and fountain and store fixtures.

Construction and Mining Machinery and Equipment (SIC 5082)—Establishments primarily engaged in marketing cranes, excavating machinery and equipment, power shovels, road construction and maintenance machinery, tractor-mounting equipment and other specialized machinery and equipment used in the construction, mining, and logging industries. Establishments engaged in marketing oil well machinery and equipment are classified in industry 5084.

Farm and Garden Machinery and Equipment (SIC 5083)[1]—Establishments primarily engaged in marketing agricultural machinery and equipment for use in the preparation and maintenance of the soil, the planting and harvesting of crops, and other operations and processes pertaining to work on the farm or the lawn or garden; and dairy and other livestock equipment.

Industrial Machinery and Equipment (SIC 5084)[1]—Establishments primarily engaged in marketing industrial machinery and equipment, such as metal working tools, food industries machinery, oil well and oil refining machinery, industrial

[1] Data for this kind of business are not shown separately but are included in the group total.

trucks and tractors (except over-the-road types), printing machinery, and machinery and equipment for other manufacturing industries.

Industrial Supplies (SIC 5085)[1]—Establishments primarily engaged in marketing industrial supplies, such as abrasives and materials, rope and cordage, and mechanical rubber goods; welding supplies; mechanical power transmission supplies, including bearings; industrial valves and fittings; metal containers; industrial leather; and reconditioned barrels and drums.

Professional Equipment and Supplies (SIC 5086)—Establishments primarily engaged in the wholesale distribution of mechanical devices and other equipment used by architects, dentists, engineers, physicians, surgeons, veterinarians, optometrists, osteopaths, and other professional groups.

Surgical, Medical, Hospital Supplies (SIC 5086 pt.)[1]—Establishments primarily engaged in selling surgical and medical instruments; doctors' apparatus and equipment; orthopedic appliances; artifical limbs; operating room and other hospital equipment, X-ray machines and accessories and other scientific instruments used by physicians and in hospitals.

Service Establishment Equipment and Supplies (SIC 5087)[1]—Establishments primarily engaged in the wholesale distribution of equipment and supplies for barber shops, beauty parlors power laundries, dry-cleaning plants, upholsterers, undertakers, and related personal service establishments.

Transportation Equipment and Supplies, Except Motor Vehicles (SIC 5088)[1]—Establishments primarily engaged in the wholesale distribution of transportation equipment and supplies. Establishments primarily engaged in the wholesale distribution of motor vehicles and motor vehicle parts are classified in group 501.

MISCELLANEOUS DURABLE GOODS (SIC 509)[1]

Scrap and Waste Materials (SIC 5093)—Establishments primarily engaged in assembling, breaking up, sorting and wholesale distribution of scrap and waste materials. This industry includes auto wreckers engaged in dismantling automobiles for scrap. However, those engaged in dismantling cars for the purpose of selling secondhand parts at retail are classified in industry 5931.

SIC 5093 is subdivided into—

1. *Iron and Steel scrap.*
2. *Waste and secondary materials dealers.*

[1] Data for this kind of business are not shown separately but are included in the group total.

Jewelry, Watches, Diamonds, and Other Precious Stones (SIC 5094)[1]—Establishments primarily engaged in the wholesale distribution of jewelry, precious stones and metals, costume jewelry, watches, clocks, silverware, and jewelers' findings.

Durable Goods, Not Elsewhere Classified (SIC 5099)[1]—Establishments primarily engaged in the wholesale distribution of durable goods, not elsewhere classified, such as musical instruments and forest products, except lumber.

NONDURABLE GOODS (SIC Major Group 51)

This major group includes establishments primarily engaged in the wholesale distribution of nondurable goods.

PAPER AND PAPER PRODUCTS (SIC 511)

Printing and Writing Paper (SIC 5111)[1]—Establishments primarily engaged in the wholesale distribution of writing paper, including envelope paper, fine paper, and ground wood, printing, and rotogravure paper.

Stationery Supplies (SIC 5112)[1]—Establishments primarily engaged in the wholesale distribution of stationery and office supplies, including envelopes, typewriter and mimeograph paper, file cards and folders, pens, social stationery, and greeting cards.

Industrial and Personal Service Paper (SIC 5113)[1]—Establishments primarily engaged in the wholesale distribution of wrapping and other coarse paper, paperboard, cellophane, and converted paper products, such as bags, boxes, dishes, napkins, and shipping supplies.

DRUGS, DRUG PROPRIETARIES, AND DRUGGISTS' SUNDRIES (SIC 512)

Drugs, Drug Proprietaries, and Druggists' Sundries (SIC 5122)—Establishments primarily engaged in the wholesale distribution of drugs, drug proprietaries, druggists' sundries, and toiletries. Establishments primarily engaged in the wholesale distribution of surgical, dental, and hospital equipment are classified in industry 5086.

SIC 5122 is subdivided into—

1. *General-line drugs*—These are distinguished from specialty-line drug and toiletries wholesalers on the basis of their commodity-line mix. Drug wholesalers were classified as general line if they reported a substantial portion of their sales in "pharmaceuticals, antibiotics, druggists' chemicals, biologicals, botanicals" and "proprietary products, toilet-

ries, druggists' sundries," and if annual sales volume was $1 million or more.

2. *Specialty-line pharmaceuticals, cosmetics, and toiletries.*

APPAREL, PIECE GOODS, AND NOTIONS (SIC 513)

Piece Goods (SIC 5133)[1]—Establishments primarily engaged in the wholesale distribution of woven piece goods or yard goods of natural or manmade fibers. "Converters" who buy goods in the grey, have them finished on contract, and sell at wholesale are included here. This industry does not include establishments primarily engaged in the wholesale distribution of home furnishings, which are classified in industry 5023.

Notions and Other Dry Goods (SIC 5134)[1]—Establishments primarily engaged in the wholesale distribution of notions (sewing and hair accessories, etc.), knit goods, and other dry goods, except piece goods.

Men's and Boys' Clothing and Furnishings (SIC 5136)[1]—Establishments primarily engaged in the wholesale distribution of men's and boys' apparel and furnishings, sportswear, hosiery, underwear, nightwear, and work clothing.

Women's Children's, and Infants' Clothing and Accessories (SIC 5137)[1]—Establishments primarily engaged in the wholesale distribution of women's, children's, and infants' clothing and accessories, including hosiery, lingerie, millinery and millinery supplies, and furs.

Footwear (SIC 5139)[1]—Establishments primarily engaged in the wholesale distribution of footwear of leather, rubber, and other materials.

GROCERIES AND RELATED PRODUCTS (SIC 514)

Groceries, General-Line (SIC 5141)—Establishments primarily engaged in the wholesale distribution of a general line of groceries. Establishments primarily engaged in roasting coffee and establishments primarily engaged in blending tea or grinding and packaging spices are classified in major group 20.

SIC 5141 is subdivided into—

1. *Voluntary group wholesalers.*
2. *Retailer cooperative wholesalers.*
3. *Other general-line wholesalers.*

Frozen Foods (SIC 5142)[1]—Establishments primarily engaged in the wholesale distribution of packaged quick-frozen vegetables, juices, meats, fish, poultry, pastries, and other "deep freeze" products. Establishments primarily engaged in the wholesale distribution of frozen dairy products are classified in industry 5143. Frozen poultry, fish, and meat which are not packaged are classified in industries 5144, 5146, and 5147, respectively.

Dairy Products (SIC 5143)[1]—Establishments primarily engaged in the wholesale distribution of dairy products, such as butter, cheese, ice cream and ices, and fluid milk and cream. This industry does not include establishments primarily engaged in pasteurizing and bottling milk, which are classified in group 202.

Poultry and Poultry Products (SIC 5144)—Establishments primarily engaged in the wholesale distribution of poultry and poultry products, except canned and packaged frozen products. This industry does not include establishments primarily engaged in the killing and dressing of poultry, which are classified in industry 2016. Establishments primarily engaged in the wholesale distribution of packaged frozen poultry are classified in industry 5142, and of canned poultry in industry 5149.

Confectionery (SIC 5145)—Establishments primarily engaged in the wholesale distribution of confectionery, such as candy, chewing gum, fountain fruits, salted or roasted nuts, popcorn, and fountain syrups; and potato, corn, and similar chips.

Fish and Seafoods (SIC 5146)[1]—Establishments primarily engaged in the wholesale distribution (not packaging) of fresh, cured, and frozen fish and seafoods, except canned (industry 5149) or packaged frozen (industry 5142). The preparation, packaging, and freezing of fresh fish and other seafood, and the shucking and packing of fresh oysters in nonsealed containers, are classified in industry 2092.

Meats and Meat Products (SIC 5147)—Establishments primarily engaged in the wholesale distribution of fresh, cured, and processed (but not canned) meats and lard. The wholesale distribution of frozen packaged meats is classified in industry 5142 and canned meats in industry 5149.

Fresh Fruits and Vegetables (SIC 5148)—Establishments primarily engaged in the wholesale distribution of fresh fruits and vegetables.

Groceries and Related Products, Not Elsewhere Classified (SIC 5149)[1]—Establishments primarily engaged in the wholesale distribution of groceries and related products, not elsewhere classified. Establishments primarily engaged in the wholesale distribution of soft drinks, and in bottling and distributing natural spring and mineral waters, are classified in this industry, but establishments primarily engaged in bottling soft drinks are classified in major group 20. This industry does not include farm-product raw materials (group 515), or beer, wine, and distilled alcholic beverages (group 518).

[1] Data for this kind of business are not shown separately but are included in the group total.

FARM-PRODUCT RAW MATERIALS (SIC 515)

Cotton (SIC 5152)[1]—Establishments primarily engaged in buying and/or marketing cotton and cotton linters.

Grain (SIC 5153)—Establishments primarily engaged in buying and/or marketing grain (such as corn, wheat, oats, barley, and unpolished rice); dry beans; soybeans, and other inedible beans. Country grain elevators primarily engaged in buying or receiving grain from farmers are included as are terminal elevators and other merchants marketing grain.

Livestock (SIC 5154)[1]—Establishments primarily engaged in buying and/or marketing cattle, hogs, sheep, and goats.

Farm-Product Raw Materials, Not Elsewhere Classified (SIC 5159)[1]—Establishments primarily engaged in buying and/or marketing farm products not elsewhere classified, such as horses and mules, leaf tobacco, hides, skins, furs, wool, mohair, raw silk, hops, and nuts, except roasted or salted (industry 5145). Establishments primarily engaged in the wholesale distribution of milk are classified in industry 5143 and live poultry in industry 5144.

CHEMICALS AND ALLIED PRODUCTS (SIC 516)[1]

Chemicals and Allied Products (SIC 5161)[1]—Establishments primarily engaged in the wholesale distribution of chemicals and allied products, not elsewhere classified, such as acids, industrial and heavy chemicals, dyestuffs, industrial salts, naval stores, plastics materials, rosin, and turpentine. Establishments primarily engaged in the wholesale distribution of ammunition are classified in industry 5041; agricultural chemicals and pesticides in industry 5191; drugs in industry 5122; and paints and varnishes in industry 5198.

PETROLEUM AND PETROLEUM PRODUCTS (SIC 517)

Petroleum Bulk Stations and Terminals (SIC 5171)—Establishments primarily engaged in wholesaling petroleum products, including liquefied petroleum gas, from bulk liquid storage facilities.

Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals (SIC 5172)[1]—Establishments primarily engaged in wholesaling petroleum and petroleum products, except those with bulk liquid storage facilities. Included are packaged and bottled petroleum products distributors, truck jobbers, and others marketing petroleum and products at wholesale but without bulk liquid storage facilities.

[1] Data for this kind of business are not shown separately but are included in the group total.

BEER, WINE, AND DISTILLED ALCOHOLIC BEVERAGES (SIC 518)

Beer and Ale (SIC 5181)—Establishments primarily engaged in the wholesale distribution of beer, ale, porter, and other fermented malt beverages.

Wines and Distilled Alcoholic Beverages (SIC 5182)—Establishments primarily engaged in the wholesale distribution of distilled spirits, including neutral spirits and ethyl alcohol used in blending wines and distilled liquors.

MISCELLANEOUS NONDURABLE GOODS (SIC 519)

Farm Supplies (SIC 5191)[1]—Establishments primarily engaged in the wholesale distribution of animal feeds, fertilizers, agricultural chemicals, pesticides, seeds, and other farm supplies, except grains.

Tobacco and Tobacco Products (SIC 5194)—Establishments primarily engaged in the wholesale distribution of tobacco and tobacco products. Leaf tobacco wholesalers are classified in industry 5159 and establishments primarily engaged in stemming and redrying tobacco in industry 2141.

Paints, Varnishes, and Supplies (SIC 5198)[1]—Establishments primarily engaged in the wholesale distribution of paints, varnishes, wallpaper, and supplies, and sometimes glass. Establishments selling to the general public and known as "retail" in the trade are classified in industry 5231.

Books, Periodicals, Newspapers (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of books, lithographed matter, magazines, newspapers, and all other forms of reading material.

Nondurable Goods, Not Elsewhere Classified (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of nondurable goods, not elswhere classified, such as art goods, flowers and florist supplies, industrial yarn, textile bags, bagging and burlap.

CHANGES IN WHOLESALE KIND-OF-BUSINESS CLASSIFICATIONS IN 1972 FROM 1967

The wholesale trade kind-of-business structure was expanded from one SIC major group (SIC 50) in 1967 to two major groups in 1972, "durable goods" (SIC 50) and "nondurable goods" (SIC 51). There were 61 four-digit industries in 1972 compared to 48 four-digit industries in 1967.

The definitions of some kinds of business also were changed in 1972. Establishments primarily selling farm supplies and equipment to farmers, and establishments primarily selling

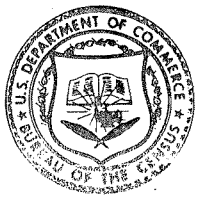
plumbing, heating, and air-conditioning equipment and electrical supplies were classified in wholesale trade rather than retail trade. However, establishments primarily selling lumber and other building materials and paint, glass, and wallpaper were classified in retail trade if they sell to the public, even though sales to contractors account for a larger portion of the total. The change resulted in moving to wholesale trade those establishments primarily selling plumbing, heating, and air-conditioning equipment; electrical supplies; farm equipment; hay, grain, and feed; and other farm supplies. The change also theoretically could have shifted to wholesale trade some establishments primarily selling lumber and paint, glass and wallpaper to contractors, but not to the public.

In addition to the kind-of-business changes noted above the special nonmerchant classifications of farm assemblers and bulk petroleum were eliminated in the 1972 census. These establishments were classified in the appropriate merchant, or sales branch category.

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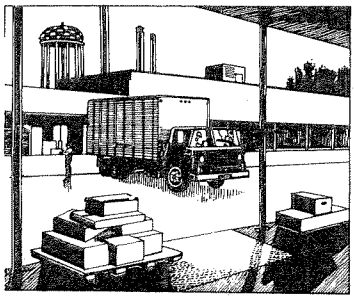
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued April 1979

February 1979

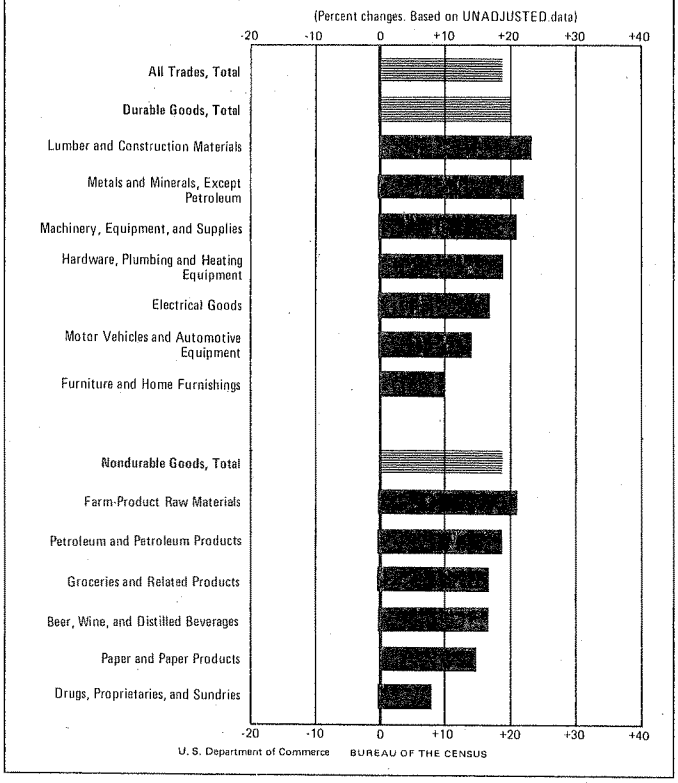
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Sales—February 1979 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences, but not for price changes, were $67.3 billion, virtually unchanged from the previous month, but were 17 percent above February 1978. Adjusted December-through-February total sales were up 1 percent from the September-through-November period and were 18 percent above the total sales for the comparable months a year ago.

After adjustment, February sales in the durable goods trades were up 2 percent from the previous month and were 17 percent above February 1978. Nondurable goods sales were down 1 percent from January, but were 17 percent above the same month a year ago. Total monthly sales in the durable goods group during the December-through-February period were up 2 percent above the prior three months and were 19 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were 1 percent above the September-through-November period and were 17 percent above sales for the same period a year ago.

Based on adjusted data, comparisons with previous month sales levels showed mixed results with 6 trade groups showing gains, 7 indicating declines, and 2 with no change. The larger increases were shown in motor vehicles and automotive equipment; electrical goods; and machinery, equipment, and supplies, all up 4 percent. The most notable decrease was shown in furniture and home furnishings (-8%). Compared with sales of a year ago all trade groups showed increases with the sharper increases reported in petroleum and petroleum products (23%) and hardware, plumbing and heating equipment (19%).

Percent Change in Sales of Merchant Wholesalers in Selected Kinds of Business
2 Months 1979 Compared With 2 Months 1978



Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variations, but not for price changes, were $83.2 billion at the end of February, up 2 percent from last month and 18 percent above the same month a year ago. Stocks in both the durable and nondurable goods trades were up 2 percent from the previous month. However, durable goods stocks were up 17 percent above February 1978, while nondurable goods stocks increased 20 percent in the same period.

Based on adjusted data, most trade groups showed increases from their previous month inventory levels with the larger increases reported in motor vehicles and automotive equipment (5%) and farm-product raw materials (4%). The most substantial decrease was shown in drug, proprietaries, and sundries (-2%). Compared with year-ago inventories, all trade groups showed increases with the most substantial increase reported in beer, wine, and distilled beverages (34%).

Stock-Sales Ratios—The February stock-sales ratio for merchant wholesalers, based on seasonally adjusted data, was 124, up 3 points from last month and 2 points above the year-ago ratio. The stock-sales ratio for durable goods was 170, 1 point above January, but virtually unchanged from the February 1978 ratio. The ratio for nondurable goods was 82, up 2 points from both the January and the year-ago ratios.

An advance release of the February 1979 data was issued on April 9, 1979

U.S. Department of Commerce
BUREAU OF THE CENSUS

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Table 1. Estimated Monthly Sales of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979		1978											Total 2 months	
		Jan.	Feb.P	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1979	1978
	Merchant wholesalers, total	63,739	61,565	52,766	62,900	60,613	66,249	65,834	60,651	67,702	63,933	69,086	67,699	64,527	125,304	104,909
	Total (excluding farm-product raw materials)	56,481	54,964	47,112	55,848	54,095	58,061	58,658	54,411	60,838	57,342	61,033	59,923	57,237	111,445	93,455
50	Durable goods, total	28,284	27,883	23,880	28,985	28,784	30,405	30,991	28,701	32,279	30,404	32,242	31,037	29,340	56,167	46,749
501	Motor vehicles and automotive parts and supplies	5,634	5,588	5,065	5,870	5,956	6,083	5,929	5,552	6,134	5,381	6,009	6,013	5,510	11,223	9,862
5013,4	Automotive parts and supplies, tires and tubes	3,120	3,018	2,666	3,128	3,217	3,403	3,227	2,935	3,440	2,998	3,344	3,298	2,927	6,138	5,183
5013	Automotive parts and supplies	2,594	2,536	2,286	2,602	2,706	2,828	2,660	2,432	2,872	2,496	2,761	2,752	2,413	5,129	4,452
502	Furniture and home furnishings	1,012	959	921	1,111	1,046	1,077	1,104	1,013	1,133	1,162	1,174	1,218	1,140	1,971	1,788
5021	Furniture--household and office	343	321	311	356	352	368	370	328	366	379	379	411	422	664	615
5023	Home furnishings	669	638	610	755	695	710	735	685	767	783	795	807	718	1,307	1,174
503	Lumber and other construction materials	2,387	2,225	1,891	2,368	2,517	2,889	3,067	2,771	3,208	3,056	3,173	2,874	2,542	4,611	3,758
5031	Lumber, plywood, and millwork	1,672	1,581	1,288	1,582	1,676	1,947	2,037	1,845	2,105	1,949	2,083	1,915	1,682	3,253	2,578
5039	Construction materials, n.e.c	715	644	603	786	841	942	1,031	927	1,103	1,107	1,089	959	860	1,359	1,179
505	Metals and minerals, except petroleum	3,206	2,986	2,557	3,040	2,942	3,153	3,169	2,817	3,306	3,037	3,186	3,209	2,942	6,192	5,062
5051 pt.	Ferrous metals service centers and offices	2,455	2,297	1,970	2,344	2,190	2,360	2,380	2,158	2,515	2,339	2,446	2,448	2,260	4,709	3,892
5051 pt.	Ferrous metals service centers	1,652	1,599	1,443	1,713	1,629	1,755	1,778	1,580	1,833	1,721	1,801	1,768	1,678	3,208	2,829
506	Electrical goods	3,017	3,048	2,627	3,096	2,980	3,239	3,385	3,193	3,540	3,338	3,590	3,474	3,322	6,066	5,168
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,533	1,588	1,354	1,561	1,556	1,698	1,725	1,663	1,812	1,663	1,832	1,722	1,655	3,121	2,616
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,484	1,460	1,273	1,535	1,424	1,541	1,660	1,530	1,728	1,675	1,758	1,751	1,667	2,944	2,552
5064	Electrical appliances, TV and radio sets	834	840	762	939	841	931	994	912	1,064	1,057	1,040	1,090	1,006	1,674	1,525
507	Hardware, plumbing, heating equipment, and supplies	2,142	2,031	1,708	2,021	2,102	2,306	2,360	2,247	2,412	2,159	2,455	2,250	2,057	4,173	3,498
5072	Hardware	802	751	679	793	797	856	836	760	864	771	859	830	721	1,553	1,372
5074	Plumbing and heating equipment and supplies (hydronics)	854	849	675	801	834	904	902	916	988	928	1,047	918	854	1,703	1,401
508	Machinery, equipment, and supplies	7,691	7,816	6,632	8,301	8,296	8,616	8,790	7,827	8,757	8,655	8,909	8,421	8,485	15,507	12,822
5082	Construction and mining machinery and equipment	895	897	875	1,130	1,254	1,276	1,229	1,122	1,196	1,115	1,155	1,126	1,125	1,792	1,70
5084,5	Industrial machinery, equipment, and supplies	3,390	3,426	2,790	3,294	3,077	3,388	3,505	3,049	3,532	3,450	3,573	3,474	3,623	6,817	5,335
5086	Professional equipment, supplies	907	937	732	863	816	873	952	888	990	949	941	949	975	1,843	1,442
5093	Scrap and waste materials	1,132	1,137	815	979	958	1,058	1,057	940	1,073	978	1,007	1,103	1,079	2,267	1,571
51	Nondurable goods, total	35,455	33,682	28,886	33,915	31,829	35,844	34,843	31,950	35,423	33,529	36,844	36,662	35,187	69,136	58,160
	Total (excluding farm-product raw materials)	28,197	27,081	23,232	26,863	25,311	27,656	27,667	25,710	28,559	26,937	28,791	28,885	27,897	55,277	46,706
511	Paper and paper products	1,540	1,457	1,284	1,506	1,395	1,508	1,498	1,384	1,581	1,456	1,598	1,569	1,489	2,997	2,601
5111,3	Printing, writing, industrial, and personal services paper	1,133	1,100	926	1,100	1,032	1,126	1,125	1,046	1,177	1,088	1,191	1,177	1,140	2,233	1,876
512	Drugs, drug proprietaries, and druggists' sundries	r950	r899	824	994	912	943	950	902	1,026	973	r1,082	r1,017	r963	1,849	1,711
5122	Drugs, drug proprietaries, and druggists' sundries	r950	r899	824	994	912	943	950	902	1,026	973	r1,082	r1,017	r963	1,849	1,711
5122 pt.	General-line drugs	423	402	393	470	423	447	448	409	482	464	r494	r465	r445	826	816
513	Apparel, piece goods, and notions[1]	2,094	1,950	1,615	2,063	1,818	2,099	2,066	2,036	2,658	2,313	2,443	2,369	1,976	4,044	3,234
514	Groceries and related products	11,122	10,395	9,093	10,398	9,916	10,873	10,685	10,237	11,002	10,489	11,150	11,155	10,830	21,518	18,355
5141	Groceries, general-line	3,965	r3,696	3,333	3,740	3,547	3,791	3,724	3,649	3,965	3,767	3,999	4,120	3,914	7,662	6,758
5144	Poultry and poultry products	518	470	397	486	468	507	503	482	539	505	525	569	536	988	798
5145	Confectionery	184	174	163	191	173	191	189	171	187	190	218	211	197	358	317
5147	Meats and meat products	1,979	1,932	1,462	1,651	1,688	1,871	1,826	1,800	r1,974	r1,840	1,928	1,911	1,885	3,911	2,922
5148	Fresh fruits and vegetables	1,020	949	824	986	1,035	1,184	1,198	1,044	r985	r890	980	974	973	1,969	1,663
515	Farm-product raw materials	7,258	6,601	5,654	7,052	6,518	8,188	7,176	6,240	6,864	6,591	8,053	7,777	7,290	13,859	11,454
5153	Grain	5,859	5,329	4,503	5,718	5,358	6,890	6,078	5,317	5,760	5,448	6,623	6,391	5,912	11,188	9,052
517	Petroleum and petroleum products	4,837	4,997	4,085	4,249	3,830	4,178	4,111	4,000	4,441	4,136	4,431	4,554	4,598	9,834	8,294
5171	Petroleum bulk stations and terminals	2,738	2,756	2,293	2,384	2,188	2,425	2,358	2,190	2,378	2,280	2,449	2,507	2,678	5,494	4,680
518	Beer, wine, and distilled alcoholic beverages	2,020	1,981	1,770	2,299	1,993	2,295	2,506	2,191	2,463	2,254	2,347	2,547	2,709	4,000	3,424
5181	Beer and ale	999	963	839	1,094	998	1,219	1,372	1,217	1,328	1,119	1,105	1,088	1,108	1,962	1,633
5182	Wine and distilled alcoholic beverages[2]	1,021	1,018	931	1,204	996	1,076	1,134	974	1,134	1,135	1,242	1,459	1,601	2,038	1,790
519	Miscellaneous nondurable goods	4,529	4,460	3,782	4,434	4,568	4,730	4,819	4,040	4,297	4,311	4,510	4,486	4,425	8,989	7,505
5194	Tobacco and tobacco products	823	781	692	782	765	812	849	838	871	814	848	831	846	1,604	1,413

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. PPreliminary estimate. See p. 15, Sample Design and Estimation Procedures. rRevised.

[1]The apparel piece goods and notions group is subject to a sampling variability of 14 percent for February 1979.
[2]The wine and distilled alcoholic beverages group is subject to a sampling variability of 9 percent for February 1979

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations)

1972 SIC code	Kind of business	1979		1978										
		Jan.	Feb.P	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	81,896	84,117	71,156	73,931	74,635	74,634	74,882	74,874	74,943	76,074	78,715	80,100	80,922
	Total (excluding farm-product raw materials)	75,593	77,746	65,682	67,973	69,060	69,883	70,513	71,073	71,138	71,889	73,327	73,947	74,898
50	Durable goods, total	51,860	53,719	45,757	47,275	47,957	49,918	49,627	49,900	49,841	49,944	50,462	50,971	51,646
501	Motor vehicles and automotive parts and supplies	9,512	10,195	8,189	7,995	7,973	8,246	8,218	8,367	8,378	8,099	8,701	9,326	9,227
5013,4	Automotive parts and supplies, tires and tubes	5,758	5,863	4,962	4,856	4,901	5,149	5,035	5,034	5,206	5,172	5,298	5,635	5,552
5013	Automotive parts and supplies	4,881	4,981	4,163	4,041	4,171	4,382	4,241	4,288	4,415	4,345	4,489	4,792	4,674
502	Furniture and home furnishings	1,764	1,769	1,606	1,633	1,669	1,730	1,781	1,764	1,760	1,810	r1,780	r1,774	r1,752
5023	Home furnishings	1,292	1,297	1,184	1,182	1,233	1,279	1,305	1,305	1,306	1,326	r1,315	r1,305	r1,251
503	Lumber and other construction materials	3,113	3,191	2,761	2,919	2,966	3,030	3,071	3,095	3,007	3,076	3,076	2,995	3,117
5031	Lumber, plywood, and millwork	2,030	2,080	1,775	1,870	1,882	1,963	1,949	1,967	1,929	1,932	1,946	1,918	2,009
505	Metals and minerals, except petroleum	5,106	5,209	4,660	4,953	4,976	5,356	5,307	5,305	5,437	5,285	5,095	5,208	5,151
5051 pt.	Ferrous metals service centers and offices	4,191	4,223	3,591	3,820	3,823	4,116	4,108	4,104	4,232	4,148	3,976	4,150	4,191
5051 pt.	Ferrous metals service centers	3,241	3,292	2,760	3,039	2,971	3,220	3,268	3,191	3,308	3,299	3,098	3,236	3,336
506	Electrical goods	5,509	5,579	4,594	4,867	4,951	5,129	5,312	5,266	5,264	5,416	5,500	5,526	5,577
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2,542	2,616	2,214	2,226	2,286	2,417	2,358	2,283	2,367	2,356	2,399	2,534	2,558
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,966	2,963	2,380	2,640	2,665	2,712	2,954	2,983	2,899	3,059	3,101	3,016	3,023
507	Hardware, plumbing, heating equipment, and supplies	4,251	4,438	3,876	4,058	4,231	4,222	4,201	4,215	4,117	4,032	4,152	4,033	4,063
5072	Hardware	1,476	1,542	1,384	1,421	1,428	1,445	1,423	1,410	1,369	1,417	1,466	1,382	1,407
5074	Plumbing and heating equipment and supplies (hydronics)[1]	1,819	1,888	1,678	1,784	1,861	1,815	1,818	1,839	1,800	1,805	1,738	1,737	1,760
508	Machinery, equipment, and supplies	17,748	18,292	16,005	16,511	16,762	16,796	17,061	17,057	17,183	17,405	17,352	17,428	18,012
5082	Construction and mining machinery and equipment	3,932	4,155	3,396	3,505	3,516	3,589	3,636	3,637	3,793	3,899	3,937	4,002	4,109
5084,5	Industrial machinery, equipment, and supplies	5,728	5,750	4,912	4,996	5,055	5,160	5,328	5,301	5,317	5,519	5,508	5,570	5,752
51	Nondurable goods, total	30,036	30,398	25,399	26,656	26,678	25,716	25,255	24,974	25,102	26,130	28,253	29,129	29,276
	Total (excluding farm-product raw materials)	23,733	24,027	19,925	20,699	21,103	20,966	20,887	21,173	21,297	21,946	22,865	22,976	23,252
511	Paper and paper products	1,424	1,450	1,259	1,310	1,349	1,343	1,376	1,341	1,361	1,414	1,419	1,441	1,482
5111,3	Printing, writing, industrial, and personal service paper	986	1,010	877	910	911	929	955	938	921	976	969	967	1,025
512	Drugs, drug proprietaries, and druggists' sundries	r1,465	r1,452	1,292	1,330	1,345	1,350	1,401	1,368	1,410	1,489	r1,502	r1,476	r1,440
514	Groceries and related products	6,408	6,430	5,376	5,710	5,740	5,752	5,871	5,833	5,803	6,186	6,469	6,412	6,497
5141	Groceries, general-line	2,696	2,816	2,366	2,562	2,500	2,495	2,512	2,480	2,505	2,641	2,811	2,814	2,761
517	Petroleum and petroleum products	2,106	2,070	1,936	1,953	1,872	1,938	1,837	1,974	2,093	2,098	2,151	2,151	2,153
518	Beer, wine, and distilled alcoholic beverages	2,462	2,521	1,889	2,017	2,133	2,135	2,148	2,178	2,158	2,221	2,453	2,513	2,290
5181	Beer and ale[2]	800	855	641	707	758	730	717	709	679	720	769	777	729
5182	Wines and distilled alcoholic beverages	1,662	1,666	1,248	1,311	1,375	1,405	1,431	1,469	1,480	1,501	1,684	1,736	1,561

See footnotes at end of table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Percent. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979		1978										
		Jan.	Feb.P	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	128	137	135	118	123	113	114	123	111	119	114	118	125
	Total (excluding farm-product raw materials)	134	141	139	122	128	120	120	131	117	125	120	123	131
50	Durable goods, total	183	193	192	163	167	161	160	174	154	164	157	164	176
501	Motor vehicles and automotive parts and supplies	169	182	162	136	134	136	139	151	137	151	145	155	167
5013,4	Automotive parts and supplies, tires and tubes	185	194	186	155	152	151	156	172	151	173	158	171	190
5013	Automotive parts and supplies	188	196	182	155	154	155	159	176	154	174	163	174	194
502	Furniture and home furnishings	174	184	174	147	159	161	161	174	155	156	r152	r146	r154
5023	Home furnishings	193	203	194	157	178	180	178	190	170	169	r165	r162	r174
503	Lumber and other construction materials	130	143	146	123	118	105	100	112	94	101	97	104	123
5031	Lumber, plywood, and millwork	121	132	138	118	112	101	96	107	92	99	93	100	119
505	Metals and minerals, except petroleum	159	174	182	163	169	170	167	188	164	174	160	162	175
5051 pt.	Ferrous metals service centers and offices	171	184	182	163	175	174	173	190	168	177	163	170	185
5051 pt.	Ferrous metals service centers	196	206	191	177	182	184	184	202	181	192	172	183	199
506	Electrical goods	183	183	175	157	166	158	157	165	149	162	153	159	168
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	166	165	163	143	147	142	137	137	131	142	131	147	155
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	200	203	187	172	187	176	178	195	168	183	176	171	181
507	Hardware, plumbing, heating equipment, and supplies	198	219	227	201	201	183	178	188	171	187	169	179	198
5072	Hardware	184	205	204	179	179	169	170	185	158	179	171	167	195
5074	Plumbing and heating equipment and supplies (hydronics)	213	222	249	223	223	201	202	201	182	188	166	189	206
508	Machinery, equipment, and supplies	231	234	241	199	202	195	194	218	196	201	195	207	212
5082	Construction and mining machinery and equipment	439	463	388	310	280	281	296	324	317	350	341	356	365
5084,5	Industrial machinery, equipment, and supplies	168	168	176	152	164	152	152	174	151	160	154	160	159
51	Nondurable goods, total	85	90	88	79	84	72	72	78	71	78	77	79	83
	Total (excluding farm-product raw materials)	84	89	86	77	83	76	75	82	75	81	79	80	83
511	Paper and paper products	92	r100	98	87	97	89	92	97	86	97	89	92	100
5111,3	Printing, writing, industrial, and personal service paper	87	92	95	83	88	82	85	90	78	90	81	82	90
512	Drugs, drug proprietaries, and druggists' sundries	r154	r161	157	134	147	143	147	152	137	153	139	r145	r150
514	Groceries and related products	58	62	59	55	58	53	55	57	53	59	58	57	60
5141	Groceries, general-line	68	76	71	68	70	66	67	68	63	70	70	68	71
517	Petroleum and petroleum products	44	41	47	46	49	46	45	49	47	51	49	47	47
518	Beer, wine, and distilled alcoholic beverages	122	127	107	88	107	93	86	99	88	99	105	99	85
1	Beer and ale	80	89	76	65	76	60	52	58	51	64	70	71	66
32	Wines and distilled alcoholic beverages	163	164	134	109	138	131	126	151	130	132	136	119	97

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. PPreliminary estimate. See p. 15, Sample Design and Estimation Procedures. rRevised.

[1]The plumbing and heating equipment and supplies (hydronics) group is subject to a sampling variability of 9 percent for February 1979.

[2]The beer and ale group is subject to a sampling variability of 9 percent for February 1979.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1979 and 1978

(Sales and inventories in millions of dollars. Stock-sales ratios in percent)

1972 SIC code	Kind of business	1979		1978										
		Jan.	Feb.[p]	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Sales ADJUSTED for seasonal variations and trading-day differences												
	Merchant wholesalers, total	67,148	67,322	57,729	58,803	61,640	63,171	62,656	63,425	64,894	64,531	67,338	67,552	67,823
	Total (excluding farm-product raw materials)	60,346	60,337	51,757	52,539	54,992	55,288	55,252	56,716	57,461	57,326	59,349	60,373	60,526
50	Durable goods, total	31,012	31,487	26,981	27,419	28,831	28,627	28,741	29,859	30,043	29,863	30,953	31,498	31,939
501	Motor vehicles and automotive parts and supplies	5,994	6,216	5,641	5,454	5,530	5,614	5,516	5,631	5,739	5,598	6,113	6,442	6,088
502	Furniture and home furnishings	1,162	1,068	1,026	1,056	1,080	1,060	1,036	1,136	1,077	1,118	1,047	1,136	1,197
503	Lumber and other construction materials	2,876	2,774	2,357	2,347	2,661	2,630	2,733	2,705	2,732	2,878	2,887	2,874	3,026
505	Metals and minerals, except petroleum	3,184	3,267	2,799	2,811	2,984	2,930	3,036	3,090	3,045	2,947	3,188	3,305	3,258
506	Electrical goods	3,279	3,421	2,950	3,034	3,103	3,259	3,179	3,225	3,377	3,311	3,340	3,356	3,362
507	Hardware, plumbing, heating equipment, and supplies	2,354	2,324	1,954	2,022	2,148	2,161	2,185	2,232	2,209	2,108	2,290	2,237	2,330
508	Machinery, equipment, and supplies	8,461	8,812	7,486	7,690	8,305	7,997	8,082	8,201	8,372	8,382	8,607	8,730	9,193
51	Nondurable goods, total	36,136	35,835	30,748	31,384	32,809	34,544	33,915	33,566	34,851	34,668	36,385	36,054	35,884
	Total (excluding farm-product raw materials)	29,334	28,850	24,776	25,120	26,161	26,661	26,511	26,857	27,418	27,463	28,396	28,875	28,587
511	Paper and paper products	1,540	1,572	1,386	1,416	1,494	1,459	1,446	1,447	1,473	1,419	1,536	1,579	1,608
512	Drugs, drug proprietaries, and druggists' sundries	r953	r971	890	938	947	940	952	971	980	965	r1,000	r1,007	r997
513	Apparel, piece goods, and notions	2,230	2,066	1,711	1,926	1,981	2,075	2,091	2,173	2,299	2,177	2,268	2,291	2,269
514	Groceries and related products	11,407	11,423	9,984	9,978	10,199	10,319	10,176	10,340	10,443	10,607	11,039	11,178	11,400
515	Farm-product raw materials[1]	6,802	6,985	5,972	6,264	6,648	7,883	7,404	6,709	7,433	7,205	7,989	7,179	7,297
517	Petroleum and petroleum products	4,876	4,894	3,993	3,944	3,982	4,354	4,111	4,144	4,430	4,442	4,390	4,542	4,387
518	Beer, wine, and distilled alcoholic beverages	2,491	2,431	2,174	2,250	2,198	2,149	2,199	2,245	2,284	2,305	2,333	2,383	2,387
519	Miscellaneous nondurable goods	4,645	4,438	3,765	3,802	4,463	4,403	4,583	4,580	4,499	4,521	4,657	4,693	4,567
		Inventories ADJUSTED for seasonal variations												
	Merchant wholesalers, total	81,543	83,187	70,325	72,629	74,327	74,779	75,191	75,744	76,338	77,113	78,625	79,526	80,771
	Total (excluding farm-product raw materials)	76,224	77,657	65,573	67,319	68,769	69,436	70,028	70,920	71,546	72,119	73,434	74,285	75,546
50	Durable goods, total	52,490	53,679	45,738	46,871	47,677	48,319	48,756	49,414	49,972	50,160	50,948	51,625	52,460
501	Motor vehicles and automotive parts and supplies	9,390	9,888	7,950	7,869	7,925	8,084	8,177	8,434	8,637	8,315	8,870	9,420	9,236
502	Furniture and home furnishings	1,778	1,781	1,617	1,638	1,677	1,716	1,748	1,755	1,750	1,789	r1,776	r1,782	r1,801
503	Lumber and other construction materials	3,160	3,220	2,786	2,818	2,888	2,925	3,020	3,052	3,013	3,101	3,181	3,113	3,
505	Metals and minerals, except petroleum	5,142	5,299	4,745	4,943	4,937	5,345	5,296	5,161	5,289	5,290	5,269	5,266	5,1
506	Electrical goods	5,697	5,769	4,746	4,916	4,971	5,068	5,177	5,193	5,227	5,346	5,435	5,499	5,650
507	Hardware, plumbing, heating equipment, and supplies	4,382	4,519	3,947	3,990	4,053	4,091	4,095	4,149	4,092	4,098	4,207	4,153	4,228
508	Machinery, equipment, and supplies	17,927	18,111	15,847	16,251	16,745	16,630	16,710	17,006	17,357	17,510	17,527	17,658	18,249
51	Nondurable goods, total	29,053	29,508	24,587	25,758	26,650	26,460	26,435	26,330	26,366	26,953	27,677	27,901	28,311
	Total (excluding farm-product raw materials)	23,734	23,978	19,835	20,448	21,092	21,117	21,272	21,506	21,574	21,959	22,486	22,660	23,086
511	Paper and paper products	1,458	1,475	1,280	1,323	1,334	1,338	1,341	1,341	1,358	1,404	1,419	1,447	1,482
512	Drugs, drug proprietaries, and druggists' sundries	r1,528	r1,497	1,331	1,333	1,337	1,379	1,393	1,382	1,410	1,453	r1,435	r1,446	r1,444
514	Groceries and related products	6,492	6,417	5,365	5,593	5,711	5,798	5,948	5,922	5,921	6,192	6,342	6,355	6,433
517	Petroleum and petroleum products	2,017	2,082	1,950	1,969	1,987	2,019	1,948	2,050	2,078	2,039	2,052	2,064	2,082
518	Beer, wine, and distilled alcoholic beverages	2,557	2,634	1,972	2,071	2,152	2,087	2,087	2,180	2,204	2,214	2,293	2,377	2,403
		Stock-sales ratios based on ADJUSTED data												
	Merchant wholesalers, total	121	124	122	124	121	118	120	119	118	119	117	118	119
	Total (excluding farm-product raw materials)	126	129	127	128	125	126	127	125	125	126	123	123	125
50	Durable goods, total	169	170	170	171	165	169	170	165	166	168	165	164	164
501	Motor vehicles and automotive parts and supplies	157	159	141	144	143	144	148	150	150	149	r145	r146	r152
502	Furniture and home furnishings	153	167	158	155	155	162	169	154	162	160	r170	r157	r150
503	Lumber and other construction materials	110	116	118	120	109	111	111	113	110	108	110	108	105
505	Metals and minerals, except petroleum	161	162	177	176	165	182	174	167	174	179	165	159	159
506	Electrical goods	174	169	161	162	160	156	163	161	155	161	163	164	168
507	Hardware, plumbing, heating equipment, and supplies	186	194	202	197	189	189	187	186	185	194	184	186	181
508	Machinery, equipment, and supplies	212	206	212	211	202	208	207	207	207	209	204	202	199
51	Nondurable goods, total	80	82	80	82	81	77	78	78	76	78	76	77	79
	Total (excluding farm-product raw materials)	81	83	80	81	81	79	80	80	79	80	79	78	81
511	Paper and paper products	95	94	92	93	89	92	93	92	92	99	92	92	92
512	Drugs, drug proprietaries, and druggists' sundries	r160	r154	150	142	141	147	146	142	144	151	144	r144	r145
514	Groceries and related products	57	56	54	56	56	56	58	57	57	58	57	57	56
517	Petroleum and petroleum products	41	43	49	50	50	46	47	49	47	46	47	45	47
518	Beer, wine, and distilled alcoholic beverages	103	108	91	92	98	97	95	97	97	96	98	100	10

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions. All data for 1978 have been revised to reflect recomputed factors for seasonal adjustment.

NA Not available. [p]Preliminary estimates. See p. 15, Sample Design and Estimation Procedures. [r]Revised.

[1]There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table 4B. Percent Change Between Selected 3-Month Periods Sales of Merchant Wholesalers, United States

(Based on seasonally-adjusted data)

Item	3 month period, Dec. 1978-Feb. 1979 from--			
	Sept. 1978-Nov. 1978 (3 months ago)	June 1978-Aug. 1978 (6 months ago)	Mar. 1978-May 1978 (9 months ago)	Dec. 1977-Feb. 1978 (12 months ago)
Merchant wholesalers, total	+1	+6	+10	+18
Durable goods, total	+2	+7	+11	+19
Nondurable goods, total	+1	+5	+9	+17

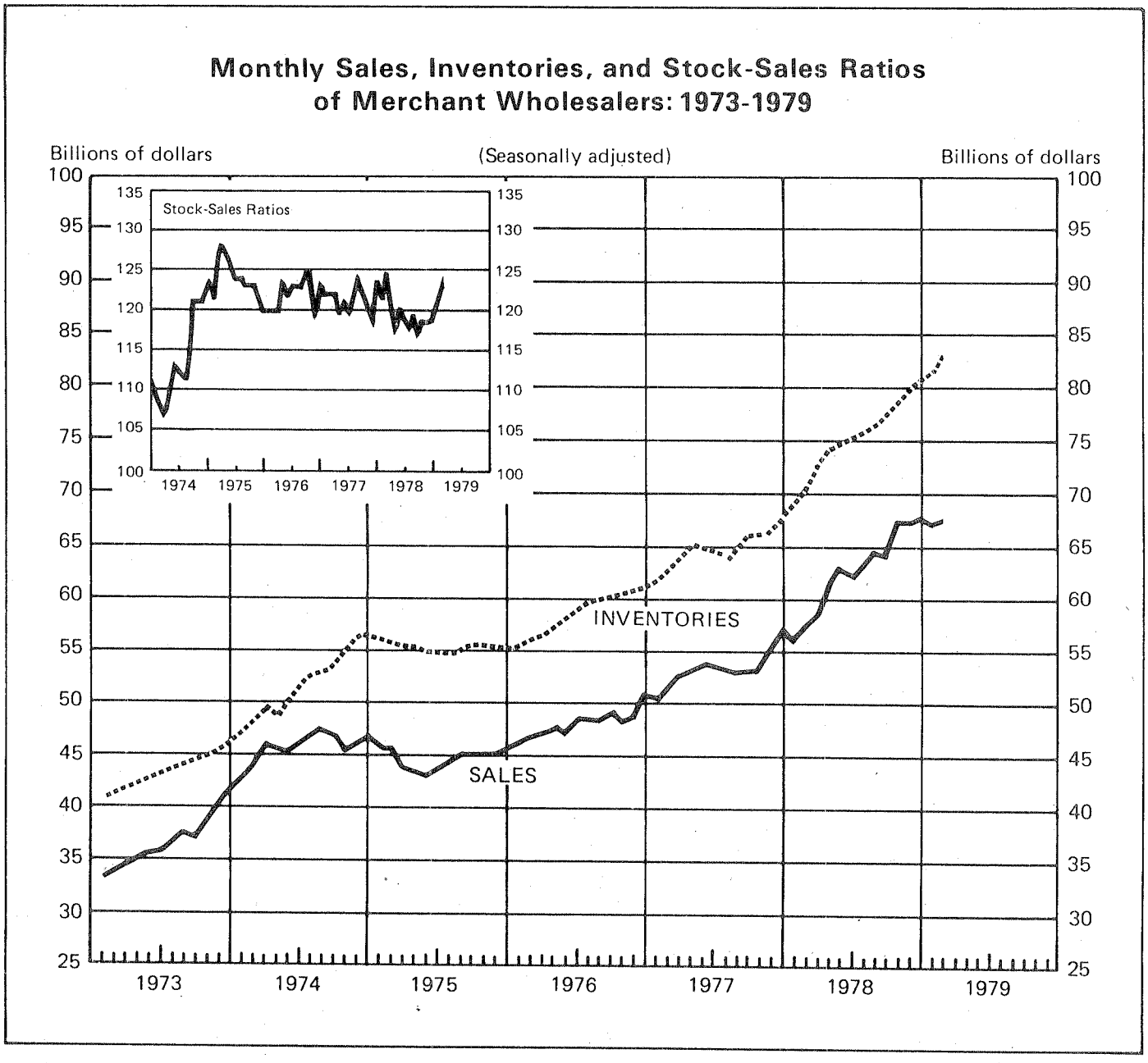


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: February 1979

1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		February 1979 from January 1979	February 1979 from February 1978	2 months 1979 from 2 months 1978	February 1979 from January 1979	February 1979 from February 1978	February 1979 from January 1979	February 1979 from February 1978	February 1979 from January 1979	February 1979 from February 1978
	Merchant wholesalers, total	-3	+17	+19	+3	+18	0	+17	+2	+18
	Total (excluding farm-product raw materials)	-3	+17	+19	+3	+18	0	+17	+2	+18
50	Durable goods, total	-1	+17	+20	+4	+17	+2	+17	+2	+17
501	Motor vehicles and automotive parts and supplies	-1	+10	+14	+7	+24	+4	+10	+5	+24
5012	Automobiles and other motor vehicles	+2	+7	+9	+15	+34	(X)	(X)	(X)	(X)
5013,4	Automotive parts and supplies, tires and tubes	-3	+13	+18	+2	+18	(X)	(X)	(X)	(X)
5013	Automotive parts and supplies	-2	+11	+15	+2	+20	(X)	(X)	(X)	(X)
502	Furniture and home furnishings	-5	+4	+10	0	+10	-8	+4	0	+10
5021	Furniture--household and office	-6	+3	+8	0	+12	(X)	(X)	(X)	(X)
5021 pt.	Household furniture	+2	+4	+6	0	+13	(X)	(X)	(X)	(X)
5021 pt.	Office furniture	-10	+3	+9	0	+11	(X)	(X)	(X)	(X)
5023	Home furnishings	-5	+5	+11	0	+10	(X)	(X)	(X)	(X)
503	Lumber and other construction materials	-7	+18	+23	+3	+16	-4	+18	+2	+16
5031	Lumber, plywood, and millwork	-5	+23	+26	+2	+17	(X)	(X)	(X)	(X)
5039	Construction materials, n.e.c.	-10	+7	+15	+3	+13	(X)	(X)	(X)	(X)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	+4	+12	+16	+6	+21	-1	+12	-1	+21
505	Metals and minerals, except petroleum	-7	r+17	+22	+2	+12	+3	+17	+3	+12
5051 pt.	Ferrous metals service centers and offices	-6	+17	+21	+1	+18	(X)	(X)	(X)	(X)
5051 pt.	Ferrous metals service centers	-3	+11	+13	+2	+19	(X)	(X)	(X)	(X)
5051 pt.	Nonferrous metals service centers and offices	-1	+22	+23	+8	-6	(X)	(X)	(X)	(X)
506	Electrical goods	+1	+16	+17	+1	+21	+4	+16	+1	+22
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+4	+17	+19	+3	+18	(X)	(X)	(X)	(X)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-2	+15	+15	0	+24	(X)	(X)	(X)	(X)
5064	Electrical appliances, TV and radio sets	+1	+10	+10	+1	+23	(X)	(X)	(X)	(X)
507	Hardware, plumbing, heating equipment, and supplies	-5	+19	+19	+4	+14	-1	+19	+3	+14
5072	Hardware	-6	+11	+13	+4	+11	(X)	(X)	(X)	(X)
5074	Plumbing and heating equipment and supplies (hydronics)	-1	+26	+22	+4	+12	(X)	(X)	(X)	(X)
5075	Warm air heating and air conditioning equipment and supplies	-13	+17	+25	+7	+25	(X)	(X)	(X)	(
508	Machinery, equipment, and supplies	+2	+18	+21	+3	+14	+4	+18	+1	+14
5081	Commercial machines and equipment	-3	0	+2	-1	+6	(X)	(X)	(X)	(X)
5082	Construction and mining machinery and equipment	0	+3	+5	+6	+22	(X)	(X)	(X)	(X)
5083	Farm and garden machinery and equipment	+4	+19	+24	+4	+4	(X)	(X)	(X)	(X)
5084,5	Industrial machinery, equipment, and supplies	+1	+23	+28	0	+17	(X)	(X)	(X)	(X)
5086	Professional equipment and supplies	+3	+28	+28	+8	+27	(X)	(X)	(X)	(X)
5093	Scrap and waste materials	0	+40	+44	+1	+14	(X)	(X)	(X)	(X)
5093 pt.	Iron and steel scrap	+4	+50	+55	0	+13	(X)	(X)	(X)	(X)
5093 pt.	Waste materials	-5	+24	+30	+5	+16	(X)	(X)	(X)	(X)
51	Nondurable goods, total	-5	+17	+19	+1	+20	-1	+17	+2	+20
	Total (excluding farm-product raw materials)	-4	+17	+18	+1	+21	-2	+16	+1	+21
511	Paper and paper products	-5	+13	+15	+2	+15	+2	+13	+1	+15
5111, 3	Printing, writing, industrial, and personal service paper	-3	+19	+19	+2	+15	(X)	(X)	(X)	(X)
512	Drugs, drug proprietaries, and druggists' sundries	r-5	r+9	r+8	-1	r+12	r-2	r+9	-2	r+12
5122	Drugs, drug proprietaries, and druggists' sundries	-5	+9	+8	-1	+12	(X)	(X)	(X)	(X)
5122 pt.	General-line drugs	-5	+2	+1	-2	0	(X)	(X)	(X)	(X)
514	Groceries and related products	-7	+14	+17	0	+20	0	+14	-1	+20
5141	Groceries, general-line	-7	+11	+13	+4	+19	(X)	(X)	(X)	(X)
5141 pt.	Voluntary groups	-8	+10	+13	+5	+14	(X)	(X)	(X)	(X)
5141 pt.	Retailer cooperatives	-7	+6	+10	+6	+18	(X)	(X)	(X)	(X)
5141 pt.	Other general-lines	-5	+17	+16	+3	+24	(X)	(X)	(X)	(X)
5142,3,6,9	Specialty-line groceries	-8	+9	+12	-3	+15	(X)	(X)	(X)	(X)
5144	Poultry and poultry products	-9	+19	+24	+1	+20	(X)	(X)	(X)	(X)
5145	Confectionery	-6	+6	+13	0	+5	(X)	(X)	(X)	(X)
5147	Meats and meat products	-2	+32	+34	-5	+35	(X)	(X)	(X)	(X)
5148	Fresh fruits and vegetables	-7	+15	+18	+3	+46	(X)	(X)	(X)	(X)
515	Farm-product raw materials[2]	-9	+17	+21	+1	+16	+3	+17	+4	+16
5152	Cotton	-15	+14	+11	+1	+1	(X)	(X)	(X)	(X)
5153	Grain	-9	+18	+24	+3	+22	(X)	(X)	(X)	(X)
517	Petroleum and petroleum products	+3	+22	+19	-2	+7	0	+23	+3	+7
5171	Petroleum bulk stations and terminals	+1	+20	+17	-4	+11	(X)	(X)	(X)	(X)
518	Beer, wine, and distilled alcoholic beverages	-2	+12	+17	+2	+33	-2	+12	+3	+34
5181	Beer and ale	-4	+15	+20	+7	+33	(X)	(X)	(X)	(X)
5182	Wines and distilled alcoholic beverages	0	+9	+14	0	+33	(X)	(X)	(X)	(X)
519	Miscellaneous nondurable goods	-2	+18	+20	+4	+20	-4	+18	+3	+20
5191	Farm supplies	-4	+18	+24	+6	+23	(X)	(X)	(X)	(X)
5194	Tobacco and tobacco products	-5	+13	+13	-2	+13	(X)	(X)	(X)	(X)
5198	Paints, varnishes, and supplies	-1	+25	+20	+2	+32	(X)	(X)	(X)	(
5199 pt.	Books, periodicals, newspapers	+1	+8	+9	+3	+10	(X)	(X)	(X)	(

*Adjusted data are available only for summary group totals.
S Does not meet publication standards because of extreme variability or high nonresponse rate.

[1]Adjusted for seasonal variations and, in the case of sales, also for trading-day differences. Adjusted data are only available for the summary kind-of-business groups shown.
[2]There are indications that the seasonal adjustment factors for this trade group may not reflect recent trends. The seasonally adjusted data for this trade group and also for the summary group totals should, therefore, be used with caution.

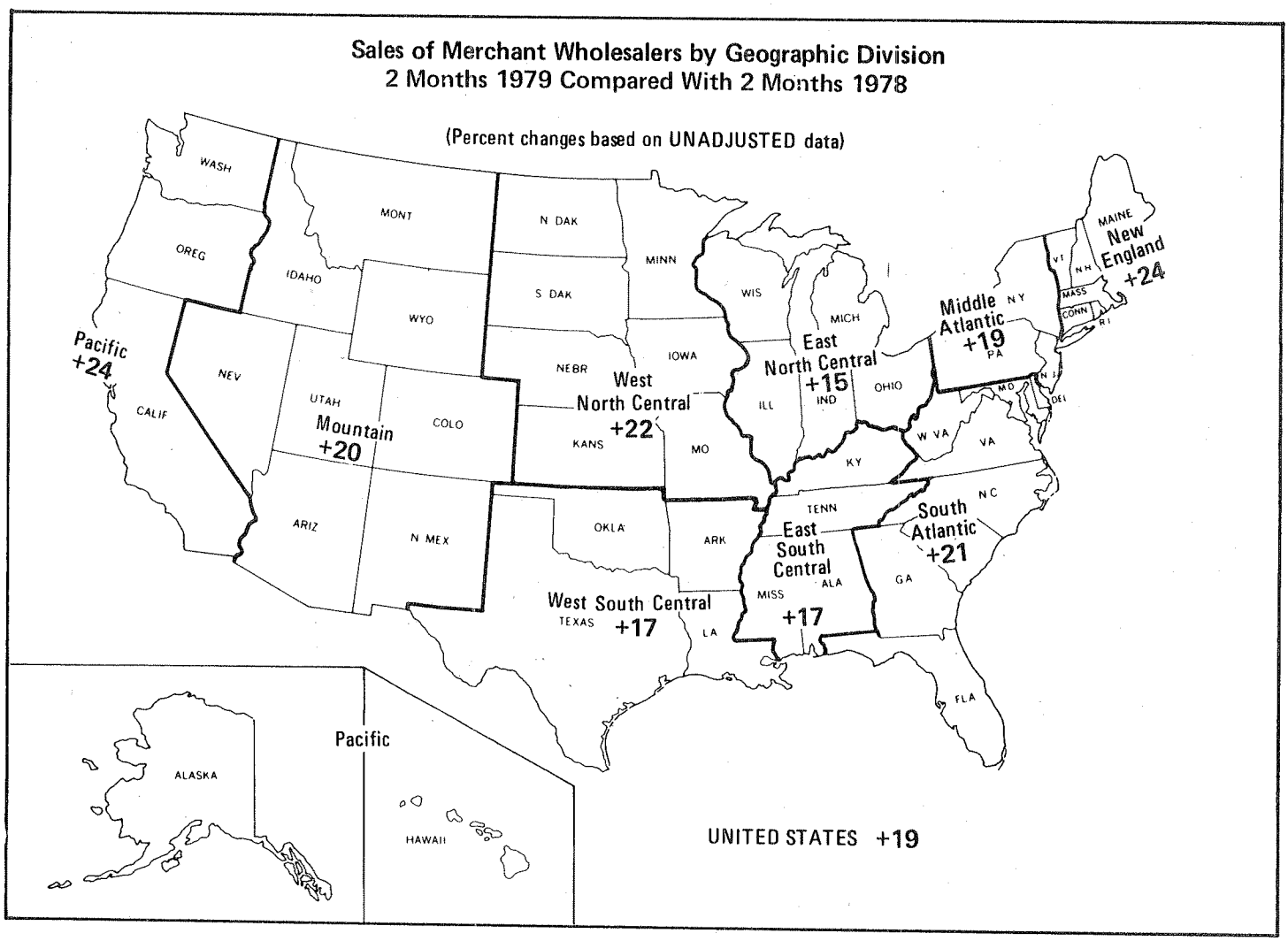


Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1979 and 1978

(Sales, in millions of dollars, are NOT ADJUSTED for seasonal variations or trading-day differences; sampling errors in percent)

1972 SIC code	Kind of business and geographic division[1]	1979		1978											Total 2 months		Sampling error of the estimate	
		Jan.	Feb.[p]	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1979	1978	Range[2]	Median
	Merchant wholesalers, total	63,739	61,565	52,766	62,900	60,613	66,249	65,834	60,651	67,702	63,933	69,086	67,699	64,527	125,304	104,909	0.8-0.9	0.9
	New England	3,393	3,246	2,657	3,191	2,913	3,231	3,451	3,206	3,654	3,472	3,638	3,678	3,652	6,639	5,350	5-6	6
	Middle Atlantic	14,513	13,673	11,840	14,206	13,114	14,345	14,752	13,531	15,382	14,387	15,123	15,304	14,529	28,186	23,686	2-2	2
	East North Central	10,573	10,332	9,269	10,680	10,708	11,787	11,510	10,461	11,636	10,821	12,195	11,757	10,882	20,905	18,197	2-3	3
	West North Central	6,695	6,629	5,390	6,419	6,522	7,583	6,999	6,513	7,373	6,836	7,790	7,471	6,894	13,324	10,955	2-3	2
	South Atlantic	7,023	6,701	5,686	6,792	6,533	6,858	7,044	6,523	7,139	6,877	7,449	7,106	6,979	13,724	11,352	2-3	2
	East South Central	2,961	2,820	2,534	3,201	3,318	3,453	3,132	2,962	3,127	2,938	3,213	3,075	2,922	5,781	4,955	4-5	4
	West South Central	6,703	6,660	5,843	6,878	6,433	6,857	6,744	6,382	6,890	6,717	7,036	6,885	6,680	13,363	11,425	3-4	4
	Mountain	2,337	2,259	1,900	2,536	2,412	2,537	2,777	2,456	2,620	2,693	2,583	2,477	2,540	4,596	3,833	5-5	5
	Pacific	9,540	9,245	7,649	8,994	8,659	9,600	9,426	8,868	9,881	9,191	10,058	9,946	9,448	18,785	15,156	2-3	3
50	Durable goods, total	28,284	27,883	23,880	28,985	28,784	30,405	30,991	28,701	32,279	30,404	32,242	31,037	29,340	56,167	46,749	0.8-1.0	0.9
	Middle Atlantic	5,936	5,806	5,138	6,295	5,952	6,181	6,464	5,808	6,765	6,303	6,618	6,516	6,094	11,742	10,112	4-5	4
	East North Central	4,818	4,798	4,363	5,081	5,128	5,495	5,407	4,958	5,793	5,342	5,801	5,674	5,177	9,616	8,298	3-4	4
	West North Central	2,157	2,162	1,805	2,228	2,378	2,548	2,446	2,383	2,695	2,504	2,740	2,652	2,379	4,319	3,581	5-6	5
	South Atlantic	3,515	3,331	2,768	3,414	3,455	3,538	3,817	3,480	3,738	3,689	3,869	3,608	3,513	6,846	5,577	4-5	4
	West South Central	3,020	3,044	2,626	3,180	3,097	3,303	3,366	3,135	3,403	3,224	3,438	3,160	3,144	6,064	5,039	4-4	4
	Mountain	1,076	1,084	893	1,192	1,208	1,247	1,412	1,303	1,372	1,340	1,283	1,172	1,207	2,160	1,816	6-7	7
	Pacific	5,259	5,187	4,283	5,007	4,901	5,316	5,256	5,026	5,641	5,214	5,597	5,524	5,250	10,445	8,398	2-3	3
51	Nondurable goods, total	35,455	33,682	28,886	33,915	31,829	35,844	34,843	31,950	35,423	33,529	36,844	36,662	35,187	69,137	58,160	1.0-1.2	1.0
	New England	2,166	2,034	1,735	2,017	1,747	2,014	2,151	1,988	2,293	2,117	2,245	2,316	2,349	4,200	3,470	5-7	6
	Middle Atlantic	8,577	7,867	6,701	7,912	7,162	8,164	8,288	7,473	8,617	8,084	8,505	8,788	8,435	16,444	13,575	3-3	3
	East North Central	5,755	5,534	4,906	5,599	5,580	6,292	6,103	5,504	5,843	5,479	6,394	6,083	5,704	11,289	9,900	3-4	3
	West North Central	4,538	4,467	3,584	4,191	4,145	5,035	4,554	4,129	4,678	4,331	5,050	4,820	4,515	9,005	7,375	3-4	3
	South Atlantic	3,508	3,369	2,918	3,378	3,078	3,320	3,227	3,044	3,400	3,188	3,580	3,498	3,466	6,878	5,775	3-5	3
	East South Central	1,685	1,561	1,451	1,788	1,819	1,892	1,609	1,572	1,616	1,505	1,710	1,706	1,650	3,246	2,905	3-4	4
	West South Central	3,683	3,616	3,217	3,699	3,336	3,554	3,378	3,248	3,487	3,493	3,598	3,725	3,536	7,299	6,386	5-5	5
	Pacific	4,281	4,059	3,367	3,987	3,757	4,284	4,170	3,842	4,241	3,978	4,461	4,422	4,199	8,340	6,758	4-5	4

Note: Detail may not add to totals due to rounding and minor revisions.

[p]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]See map on page 7.

[2]The range of sampling error of the estimate is based on data for August, September, and October 1977.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: February 1979

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in--					Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		Sales			Inventories			
		February 1979 from January 1979	February 1979 from February 1978	2 months 1979 from 2 months 1978	February 1979 from January 1979	February 1979 from February 1978		
		A	B	C[1]	D	E	A	D
	Merchant wholesalers, total	-3	+17	+19	+3	+18	0.4	0.2
	New England	-5	+22	+24	+1	+25	2.0	1.9
	Middle Atlantic	-6	+15	+19	+1	+15	1.1	0.6
	East North Central	-2	+11	+15	+2	+13	1.2	0.8
	West North Central	-1	+23	+22	+4	+15	1.3	1.1
	South Atlantic	-5	+18	+21	+3	+19	1.6	1.0
	East South Central	-5	+11	+17	+1	+17	1.7	1.4
	West South Central	-1	+14	+17	0	+14	1.4	0.8
	Mountain	-3	+19	+20	0	+18	2.4	1.3
	Pacific	-3	+21	+24	+1	+25	1.2	0.5
50	Durable goods, total	-1	+17	+20	+4	+17	0.6	0.3
	New England	-1	+32	+30	+2	+26	2.4	1.3
	Middle Atlantic	-2	+13	+16	+3	+13	1.7	1.0
	East North Central	0	+10	+16	+2	+10	1.9	1.0
	West North Central	0	+20	+21	+5	+12	3.3	1.7
	South Atlantic	-5	+20	+23	+4	+20	1.9	1.2
	East South Central	-1	+16	+24	+1	+8	3.9	2.5
	West South Central	+1	+16	+20	+1	+16	2.1	1.2
	Mountain	+1	+21	+19	0	+20	2.9	1.7
	Pacific	-1	+21	+24	+2	+26	1.9	0.7
51	Nondurable goods, total	-5	+17	+19	+1	+20	0.6	0.4
	New England	-6	+17	+21	0	+23	1.9	2.7
	Middle Atlantic	-8	+17	+21	-1	+19	1.9	0.9
	East North Central	-4	+13	+14	+2	+19	1.4	1.1
	West North Central	-2	+25	+22	+3	+18	1.6	1.4
	South Atlantic	-4	+15	+19	+1	+16	2.4	1.8
	East South Central	-7	+8	+12	+2	+30	1.7	2.4
	West South Central	-2	+12	+14	-1	+9	2.2	1.3
	Mountain	-7	+17	+21	-1	+14	3.2	1.2
	Pacific	-5	+21	+23	-1	+23	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	-3	+13	+18	+2	+18	2	1
	New England	0	+31	+33	+2	+31	7	4
	Middle Atlantic	+4	-5	+13	+5	+8	4	2
	East North Central	-5	+19	+25	+1	+14	7	1
	West North Central	-5	-6	+4	-1	-3	5	2
	South Atlantic	-9	+24	+28	+2	+24	4	2
	East South Central	-3	+25	+26	0	+12	4	3
	West South Central	-7	+16	+19	-4	+8	5	2
	Mountain	-9	+1	+5	+3	+35	7	3
	Pacific	+4	+23	+16	+1	+32	3	2
502	Furniture and home furnishings	-5	+4	+10	0	+10	2	1
	Middle Atlantic	+1	+22	+24	0	+13	4	2
	East North Central	-7	(S)	(S)	-2	+9	7	2
	West North Central	+1	(S)	-9	-2	-6	5	4
	West South Central	-16	-6	+15	+1	+4	5	7
	Pacific	-2	-3	-2	+1	+10	5	3
503	Lumber and other construction materials	-7	+18	+23	+2	+16	2	1
	New England	+4	+29	+28	+5	+12	4	5
	Middle Atlantic	-10	+23	+22	+2	+8	4	2
	East North Central	-9	-11	+2	-2	-8	3	2
	West North Central	-9	+29	+27	+5	+23	7	7
	South Atlantic	-12	+10	+21	+3	+21	4	2
	East South Central	-11	+21	+31	+6	+8	4	3
	West South Central	-13	+16	+18	+2	+38	6	5
	Pacific	-1	+31	+34	0	+19	5	1
5051 pt.	Ferrous metals service centers	-3	+11	+13	+2	+19	2	1
	New England	-6	(S)	+48	-2	+23	6	2
	Middle Atlantic	-12	+5	+3	-7	-3	5	2
	East North Central	-5	0	+10	-7	+5	3	2
	West North Central	-7	+38	+34	+1	+16	5	2
	South Atlantic	-2	+19	+16	+4	+36	3	2
	East South Central	-7	+10	+26	+1	+2	4	4
	West South Central	+5	+14	+23	-2	+41	4	2
	Mountain	-4	(S)	(S)	-6	(S)	2	2
	Pacific	-8	(S)	+17	+5	+20	2	3
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+4	+17	+19	+3	+18	2	1
	New England	-2	+46	+34	+5	+46	3	2
	Middle Atlantic	+17	+22	+14	-2	+5	5	2
	East North Central	-2	+25	+28	+6	+14	3	2
	West North Central	+19	+21	+7	+4	+26	5	3
	South Atlantic	-10	+5	+18	+3	+16	3	2
	East South Central	-7	+2	+7	+2	+29	3	5
	West South Central	+13	+23	+32	0	+37	4	2
	Mountain	+6	+15	+17	+3	+20	4	2
	Pacific	+1	+15	+23	0	+9	4	2

See footnotes at end of table.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: February 1979—Continued

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in-- Sales: February 1979 from January 1979	Sales: February 1979 from February 1978	Sales: 2 months 1979 from 2 months 1978	Inventories: February 1979 from January 1979	Inventories: February 1979 from February 1978	Sampling errors of the ratio corresponding to the percent change in columns[2]-- A	D
		A	B	C[1]	D	E		
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-2	+15	+15	0	+24	3	1
	Middle Atlantic	+1	+21	+19	0	+45	3	2
	East North Central	+5	+29	+27	0	+19	4	1
	West North Central	-7	(S)	-16	-1	(S)	4	4
	South Atlantic	-16	+2	+6	-2	+17	6	4
	West South Central	-8	+29	+21	-5	+19	4	4
	Mountain	-3	+52	+45	-5	+26	6	3
	Pacific	0	+11	+17	-1	+34	3	2
5072	Hardware	-6	+11	+13	+4	+11	1	1
	New England	-4	+6	+14	+14	+12	6	3
	Middle Atlantic	-19	0	+8	+2	+4	6	2
	East North Central	-8	0	+4	+2	+30	4	2
	West North Central	-1	+24	+21	+9	+5	3	3
	South Atlantic	-5	+15	+15	+7	+8	4	2
	East South Central	-10	+17	+21	+2	+1	4	1
	Pacific	-4	+22	+23	+3	+10	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	-1	+26	+22	+4	+12	2	1
	Middle Atlantic	-2	+33	+28	+5	+2	6	3
	East North Central	+9	+17	+10	+5	+15	3	3
	South Atlantic	-7	+17	+20	+4	+10	3	2
	Mountain	+18	+10	-5	-3	+45	7	4
	Pacific	-4	+19	+20	-5	+9	5	4
5084,5	Industrial machinery, equipment, and supplies	+1	+23	+28	0	+17	2	1
	Middle Atlantic	+2	+11	+14	-3	+17	7	2
	East North Central	+6	+20	+24	+2	+18	3	2
	West South Central	+16	+37	+40	-1	+6	4	3
	Pacific	-7	+24	+33	-2	+26	5	2
512	Drugs, drug proprietaries, and druggists' sundries	-5	+9	+8	-1	+12	1	1
	New England	-10	+18	+17	-3	+19	5	3
	Middle Atlantic	0	+17	+14	-3	+13	3	2
	East North Central	-7	+15	+13	-2	+27	6	3
	West North Central	-10	-1	-1	0	+1	2	2
	South Atlantic	-8	+1	+5	-2	+2	6	5
	East South Central	+7	+12	+2	-1	+14	6	5
	West South Central	-17	-4	+5	+3	+3	3	2
	Mountain	-20	+1	+9	-7	+12	3	2
	Pacific	-2	+9	+3	-1	+10	3	3
5141	Groceries, general-line	-7	+11	+13	+4	+19	1	1
	New England	-11	+21	+22	+1	+23	2	1
	Middle Atlantic	-10	+9	+12	+4	+25	1	2
	East North Central	-6	0	+5	+3	+10	3	1
	West North Central	-6	+15	+15	+7	+24	1	1
	South Atlantic	-4	+23	+25	+4	+28	2	1
	West South Central	-9	+10	+13	+4	+8	2	1
	Mountain	-7	+5	+13	+4	+13	2	2
	Pacific	-4	+22	+20	0	+23	1	1
5142,3,6,9	Specialty-line groceries	-8	+9	+12	-3	+15	1	1
	Middle Atlantic	-9	+6	+13	-7	+8	4	2
	East North Central	-7	+12	+14	0	+21	3	2
	West North Central	-6	+1	+4	-2	+19	3	1
	South Atlantic	-10	+10	+10	-1	+11	5	6
	East South Central	-9	+30	+24	+4	+29	2	2
5148	Fresh fruits and vegetables	-7	+15	+18	+3	+46	2	4
	Middle Atlantic	-7	+23	+26	+1	+13	7	5
	East North Central	-4	+5	+7	+5	+23	6	6
	West North Central	-3	+14	+12	-4	+44	6	3
	West South Central	-2	+10	+15	+2	+45	5	3
	Pacific	-8	+23	+19	-1	+65	4	4
5194	Tobacco and tobacco products	-5	+13	+13	-2	+13	1	1
	New England	-13	+5	+3	+1	+28	5	3
	Middle Atlantic	-3	+11	+13	-3	0	4	3
	East North Central	-11	+25	+26	-5	+9	4	3
	West North Central	+7	+25	+6	+9	+8	4	2
	South Atlantic	-7	-8	+12	-8	+1	6	6
	East South Central	-6	-4	-1	-13	+5	7	4
	West South Central	+6	-2	-1	+1	+14	7	6
	Mountain	+8	+28	+8	+15	+4	6	2
	Pacific	-6	+34	+25	+1	+53	2	5

Note: Data at the United States level are generally more reliable than data by geographic division. In those kinds of business where the geographic division trends are subject to a high sampling error, it may be desirable to use the United States total trends for the kinds of business rather than the geographic division trends.

S Does not meet publication standards because of extreme variability or high nonresponse rate.

[1] See map on page 7.

[2] The sampling errors (in percent) shown in columns A and D are based on medians of measurements on data for August, September, and October 1977. For SIC's 5051 pt., and 5063 the medians of measurements in columns A and D are based on data for June, July, and August 1978.

APPENDIX A. Reliability of Data

There are two types of errors possible in an estimate based on a sample survey—sampling and nonsampling. Sampling errors occur because observations are made only on a sample, not on the entire population. Nonsampling errors can be attributed to many sources in the collection and processing of data. The accuracy of a survey result is determined by the joint effects of sampling and nonsampling errors.

Measures of sampling variability—The particular sample used in this survey is one of a large number of all possible samples of the same size that could have been selected using the same design. Estimates derived from the different samples would differ from each other. The average of these estimates would be close to the estimate derived from a complete enumeration of the population (assuming that a complete enumeration has the same nonsampling errors as the sample survey). The average of the estimates differs from the estimate from a complete census because of the composite estimation technique. Disregarding this difference, the sampling error or standard error of the estimate is a measure of the variability among the estimates from all possible samples of the same size and design and, thus, is a measure of the precision with which an estimate from a particular sample approximates the results of a complete enumeration. The coefficient of variation (expressed as a percent) is the standard error of the estimate times 100 percent, divided by the value being estimated. Note that any measures of sampling variability, such as the standard error or coefficient of variation, are estimates derived from the sample and are also subject to sampling variability.

Estimates of sampling variability (the coefficients of variation in percent) for sales and inventories at the kind-of-business detail provided in this publication are shown in table A-1. These coefficients of variation permit certain confidence statements about the sample estimates. As noted above, the particular sample used in this survey is one of a large number of all possible samples of about the same size that could have been selected using the same design. In about two out of three (67 percent) of these samples, the estimate would differ from a complete enumeration by less than the corresponding percent for that estimate shown in the sampling variability table. In about 19 out of 20 (95 percent) of these samples, the estimate would differ from the results of a complete enumeration by less than twice the percentages shown.

To illustrate the computations involved in the above confidence statements for monthly dollar volume estimates, assume that an estimate for a kind of business published in table 1 for a particular month is $5,000 million and that the median coefficient of variation for this statistic, is 0.9 percent or .009. Multiplying $5,000 million by .009 yields $45 million. Therefore, a 67 percent confidence interval is $4,955 million to $5,045 million (i.e. $5,000 million plus or minus $45 million). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately two out of three (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Similarly a 95 percent confidence interval is $4,910 million to $5,090 million (i.e., $5,000 million plus or minus $90 million).

As an example of the use of the coefficients of variation with ratios, assume that an estimated month-to-month percent change published in table 5 is -1.0 percent for a particular kind of business. This is equivalent to a month-to-month ratio of .990. Assume the median coefficient of variation for this ratio as shown in table A-1 is 0.5 percent (or .005). Multiplying .990 by .005 yields .005. Therefore, a 67 percent confidence interval is .985 to .995 (i.e., .990 plus or minus .005) and a 95 percent confidence interval is .980 to 1.000 (i.e., .990 plus or minus .010).

Nonsampling errors—As calculated for this report, the coefficient of variation measures certain nonsampling errors but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples of the same size and design, between the estimate and the true value being estimated. The accuracy of the tabulated data is determined by the joint effects of the sampling and nonsampling errors.

Nonsampling errors can be attributed to many sources: (1) inability to obtain information about all cases in the sample, (2) response errors, (3) definitional difficulties, (4) differences in the interpretation of questions, (5) mistakes in recording or coding the data obtained, and (6) other errors of collection, response, coverage, and estimation for missing data. These nonsampling errors also occur in complete censuses.

Although no direct measurement of the biases due to nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is due to imputing data for nonrespondents, for late reporters, and for data which fail edit. For all kinds of business combined, imputed data amount to about 15 percent of the sales estimates and 25 percent for inventories.

Table A-1. Estimated Sampling Variability of Sales and Inventories by Kind of Business for the United States

1972 SIC code	Kind of business	Sales						Inventories					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total	0.8-1.1	0.9	0.8-0.9	0.9	0.4-0.5	0.5	0.8-1.0	0.9	0.7-1.0	0.9	0.2-0.5	0.4
	Total (excluding farm-product raw materials)	0.9-1.2	1.1	0.9-1.0	1.0	0.4-0.6	0.5	0.9-1.0	1.0	0.8-1.0	0.9	0.2-0.5	0.3
50	Durable goods, total	1.1-1.3	1.2	0.9-1.0	1.0	0.6-0.6	0.6	1.1-1.2	1.2	1.0-1.2	1.1	0.3-0.7	0.5
501	Motor vehicles and automotive parts and supplies	2.3-3.3	3.1	1.9-2.8	2.2	1.4-1.9	1.7	2.5-3.3	2.9	2.6-3.1	3.0	0.6-1.3	1.0
5012	Automobiles and other motor vehicles	(*)	(*)	(*)	(*)	1.7-3.9	3.1	(*)	(*)	(*)	(*)	1.7-3.0	2.8
5013,4	Automotive parts and supplies, tires and tubes	2.9-3.7	3.1	2.9-3.2	3.1	1.5-2.0	1.6	4.0-4.5	4.3	3.9-4.4	4.0	0.4-1.4	0.7
5013	Automotive parts and supplies	3.3-4.0	3.9	3.1-3.8	3.7	1.9-2.2	2.0	4.7-5.3	5.2	4.7-5.2	5.0	0.5-1.5	0.9
502	Furniture and home furnishings	4.2-5.8	4.6	4.2-4.4	4.3	1.7-2.9	2.0	3.2-4.9	3.7	3.4-4.2	3.7	0.8-2.3	2.0
5021	Furniture--household and office	6.6-7.6	6.9	5.6-7.1	6.9	4.0-5.7	4.3	(*)	(*)	(*)	(*)	1.4-3.4	2.2
5021 pt.	Household furniture	(*)	(*)	(*)	(*)	5.0-5.8	5.1	(*)	(*)	(*)	(*)	1.4-4.3	2.0
5021 pt.	Office furniture	(*)	(*)	(*)	(*)	5.7-8.0	5.9	(*)	(*)	(*)	(*)	0.7-3.7	2.1
5023	Home furnishings	5.1-7.5	6.1	5.1-6.1	5.5	1.6-3.6	2.2	4.8-6.9	5.6	4.9-6.0	5.0	1.0-3.1	2.6
503	Lumber and other construction materials	2.8-4.4	3.1	2.9-3.9	3.1	1.6-2.5	1.9	4.5-6.5	4.9	4.8-5.8	4.9	0.7-1.8	0.9
5031	Lumber, plywood, and millwork	4.1-4.6	4.3	3.3-4.6	4.0	2.1-2.5	2.4	5.9-8.2	6.5	6.0-6.9	6.5	1.0-2.6	1.8
5039	Construction materials, n.e.c.	4.2-7.2	4.9	4.5-5.9	4.9	2.0-3.4	2.2	(*)	(*)	(*)	(*)	1.1-2.0	1.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(*)	(*)	(*)	(*)	2.2-2.4	2.3	(*)	(*)	(*)	(*)	1.0-2.5	1.4
505	Metals and minerals, except petroleum	4.4-6.0	4.7	4.0-5.1	4.0	1.5-3.0	2.8	3.2-3.8	3.7	3.7-4.1	4.0	0.8-1.4	1.3
5051 pt.	Ferrous metals service centers and offices	5.0-5.8	5.7	4.1-5.2	4.7	1.2-3.8	3.1	3.8-4.2	4.1	4.1-4.3	4.2	0.5-1.6	1.4
5051 pt.	Ferrous metals service centers	6.7-8.0	6.8	5.0-6.8	5.8	1.1-5.3	3.5	2.9-4.4	3.4	3.4-4.0	3.5	0.6-2.2	2.1
5051 pt.	Nonferrous metals service centers and offices	(*)	(*)	(*)	(*)	4.5-7.0	6.1	(*)	(*)	(*)	(*)	2.8-5.4	4.7
506	Electrical goods	1.9-2.6	2.3	1.6-2.1	1.7	1.3-1.6	1.4	2.5-2.9	2.6	2.2-2.8	2.4	0.5-1.0	0.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2.2-3.1	2.6	2.3-2.7	2.4	1.4-1.7	1.6	2.9-3.5	3.2	3.0-3.2	3.1	0.6-1.2	0.7
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3.4-4.0	3.8	3.0-3.2	3.1	1.6-2.8	2.5	2.9-4.2	3.2	2.7-3.8	3.0	0.7-1.6	0.9
5064	Electrical appliances, TV and radio sets	3.0-3.8	3.6	2.6-3.7	3.1	1.7-2.7	2.5	(*)	(*)	(*)	(*)	0.9-1.7	1.4
507	Hardware, plumbing, heating equipment, and supplies	2.7-3.0	2.9	2.4-2.6	2.5	1.1-1.9	1.5	2.4-2.8	2.6	2.4-2.9	2.7	0.3-1.4	0.6
5072	Hardware	3.6-4.2	3.8	2.6-3.1	3.0	1.3-2.4	1.9	2.0-4.1	2.7	2.2-3.5	2.8	0.4-2.1	0.8
5074	Plumbing and heating equipment and supplies (hydronics)	4.1-5.3	4.2	3.9-5.1	4.2	1.6-3.8	2.1	5.0-7.0	6.0	4.5-7.1	5.3	0.5-3.1	0.9
5075	Warm air heating and air conditioning equipment and supplies	(*)	(*)	(*)	(*)	2.0-4.4	2.7	(*)	(*)	(*)	(*)	1.1-4.3	1.4
508	Machinery, equipment, and supplies	2.3-2.7	2.6	1.8-2.5	2.1	1.2-1.5	1.4	2.0-2.6	2.3	1.7-2.1	1.9	0.4-1.8	1.1
5081	Commercial machines and equipment	(*)	(*)	(*)	(*)	2.9-4.3	4.1	(*)	(*)	(*)	(*)	1.6-8.5	1.9
5082	Construction and mining machinery and equipment	5.0-7.3	5.8	3.3-5.8	4.9	3.9-4.6	4.4	2.9-7.0	4.0	3.2-4.1	3.3	0.7-5.3	1.0
5083	Farm and garden machinery and equipment	(*)	(*)	(*)	(*)	4.1-6.6	6.0	(*)	(*)	(*)	(*)	1.1-2.9	1.2
5084,5	Industrial machinery, equipment, and supplies	3.1-3.4	3.2	2.8-3.0	2.9	1.1-2.3	1.6	2.4-3.0	2.9	2.4-3.0	2.7	0.5-1.6	0.6
5086	Professional equipment and supplies	3.7-7.5	4.3	4.0-5.5	5.2	1.8-3.3	2.0	(*)	(*)	(*)	(*)	0.6-5.2	0.7
5086 pt.	Surgical, medical, hospital, and supplies	(*)	(*)	(*)	(*)	1.7-3.8	2.5	(*)	(*)	(*)	(*)	0.7-5.4	1.0
5087	Service establishment equipment and supplies	(*)	(*)	(*)	(*)	1.8-11.0	2.9	(*)	(*)	(*)	(*)	1.0-3.4	1.3
5093	Scrap and waste materials	4.6-13.3	9.0	4.6-8.8	5.0	2.2-4.9	2.7	(*)	(*)	(*)	(*)	0.7-3.8	0.9
5093 pt.	Iron and steel scrap	(*)	(*)	(*)	(*)	2.6-3.5	3.1	(*)	(*)	(*)	(*)	0.8-1.4	1.0
5093 pt.	Waste materials	(*)	(*)	(*)	(*)	2.6-8.8	4.8	(*)	(*)	(*)	(*)	1.2-9.1	1.6
51	Nondurable goods, total	1.0-1.3	1.1	1.0-1.1	1.1	0.4-0.7	0.6	1.5-1.7	1.6	1.4-1.6	1.5	0.3-0.7	0.4
	Total (excluding farm-product raw materials)	1.0-1.6	1.2	1.3-1.4	1.4	0.5-0.8	0.6	1.7-2.0	1.9	1.6-1.8	1.7	0.3-0.7	0.4
511	Paper and paper products	2.6-4.0	3.7	2.4-4.1	3.1	1.0-1.4	1.3	2.5-3.4	2.7	2.4-3.2	2.8	0.4-1.5	0.6
5111,3	Printing, writing, industrial, and personal service paper	2.4-3.1	2.7	2.3-2.8	2.4	1.3-1.5	1.4	2.9-3.4	3.1	2.7-3.2	2.8	0.4-1.3	0.9
5112	Stationery supplies	(*)	(*)	(*)	(*)	2.4-3.4	2.5	3.2-6.1	5.8	3.6-5.1	4.4	0.9-4.8	1.4
512	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	5.6-6.3	5.7	5.6-5.7	5.7	0.6-2.2	0.7
5122	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	(*)	(*)	(*)	(*)	0.6-2.2	0.7
5122 pt.	General-line drugs	7.2-9.8	7.9	7.5-8.5	7.6	0.7-3.0	1.0	(*)	(*)	(*)	(*)	0.5-3.1	1.0
513	Apparel, piece goods, and notions	8.3-12.4	8.8	8.6-9.3	9.1	2.6-4.0	3.3	(*)	(*)	(*)	(*)	(*)	(*)
514	Groceries and related products	1.7-2.2	2.0	1.6-2.0	1.9	0.4-1.2	0.5	1.5-2.5	1.8	1.8-2.1	1.9	0.4-1.3	0.6
5141	Groceries, general-line	1.9-2.7	2.1	1.7-2.7	2.0	0.4-1.5	0.7	1.8-2.7	2.3	1.7-2.0	1.8	0.3-1.2	0.8
5141 pt.	Voluntary groups	(*)	(*)	(*)	(*)	0.5-1.7	0.6	(*)	(*)	(*)	(*)	0.4-1.7	0.5
5141 pt.	Retailer cooperatives	(*)	(*)	(*)	(*)	0.6-1.6	1.1	(*)	(*)	(*)	(*)	0.4-2.4	0.7
5141 pt.	Other general-lines	(*)	(*)	(*)	(*)	0.9-3.1	1.8	(*)	(*)	(*)	(*)	0.5-1.3	0.7
5142,3,6,9	Specialty-line groceries	(*)	(*)	(*)	(*)	0.7-3.4	1.3	(*)	(*)	(*)	(*)	0.9-2.4	1.0
5144	Poultry and poultry products	3.4-5.5	4.4	4.0-4.4	4.2	0.6-2.2	1.5	(*)	(*)	(*)	(*)	2.1-4.1	2.3
5145	Confectionery	4.7-6.3	4.7	3.6-5.4	4.3	2.0-3.2	2.2	(*)	(*)	(*)	(*)	0.8-2.4	2.3
5147	Meats and meat products	4.5-4.8	4.7	4.6-4.6	4.6	1.4-2.9	1.7	(*)	(*)	(*)	(*)	1.7-3.9	2.2
5148	Fresh fruits and vegetables	4.7-5.4	4.9	3.9-4.1	4.0	1.9-4.2	2.7	(*)	(*)	(*)	(*)	2.9-4.4	3.9
515	Farm-product raw materials	1.8-2.2	2.0	1.6-2.0	1.7	1.1-1.7	1.3	(*)	(*)	(*)	(*)	1.1-2.8	2.4
5152	Cotton	(*)	(*)	(*)	(*)	1.8-4.9	2.8	(*)	(*)	(*)	(*)	1.3-2.9	2.4
5153	Grain	2.4-2.7	2.6	2.2-2.4	2.3	1.0-1.7	1.3	(*)	(*)	(*)	(*)	1.6-3.3	1.9
517	Petroleum and petroleum products	4.0-5.0	4.7	4.2-4.6	4.5	1.1-1.9	1.5	4.1-5.2	5.0	4.4-5.4	4.7	1.6-3.0	2.3
5171	Petroleum bulk stations and terminals	2.8-3.3	2.9	2.8-3.0	2.9	0.9-1.4	1.2	(*)	(*)	(*)	(*)	1.7-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages	3.4-3.9	3.7	3.1-3.7	3.2	0.8-1.8	1.7	3.9-4.2	4.1	4.0-4.3	4.2	1.0-2.0	1.3
5181	Beer and ale	2.2-4.4	3.1	2.8-3.2	2.9	1.0-2.5	2.0	3.6-5.5	3.8	3.6-4.1	3.8	1.7-2.7	2.1
5182	Wines and distilled alcoholic beverages	5.2-6.3	5.4	4.6-5.6	4.7	1.2-3.4	1.7	4.6-5.4	4.8	5.0-5.6	5.3	1.4-2.3	1.6
519	Miscellaneous nondurable goods	2.4-3.2	2.9	2.4-2.7	2.5	1.4-2.3	1.6	(*)	(*)	(*)	(*)	0.8-1.7	1.4
5191	Farm supplies	(*)	(*)	(*)	(*)	3.2-3.6	3.3	(*)	(*)	(*)	(*)	1.7-3.9	2.0
5194	Tobacco and tobacco products	4.0-5.2	4.1	3.4-4.5	4.2	1.3-2.4	1.7	(*)	(*)	(*)	(*)	0.8-4.3	1.0
5198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.8-3.8	3.0	(*)	(*)	(*)	(*)	1.5-3.1	2.9
5199 pt.	Books, magazines, newspapers	(*)	(*)	(*)	(*)	3.2-8.0	5.6	(*)	(*)	(*)	(*)	2.0-6.5	5.1

Note: Measures of sampling variability are based on data unadjusted for seasonal variations or trading-day differences. The range of sampling error of the monthly dollar estimates and the ratio of current month to previous month for sales and inventories is based on data for July, August, and September 1977.

*Measures of sampling variability are not shown since sales and/or inventory estimates for these kinds of business are not published.

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

Seasonal factors for adjusting data in this historical publication have been developed by the method described in the **X-11 Variant of the Census Method II Seasonal Adjustment Program**, U.S. Bureau of the Census Technical Paper No. 15, Revised 1967. Trading-day factors for adjusting sales were also derived from the X-11 program.

Adjustment of estimates is an approximation based on past experiences, and therefore, will be less precise to the extent that current competitive pressures, changes in economic condition, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of trading-day adjustment factors may be found in **Estimating Trading-Day Variation in Monthly Economic Time Series**, Bureau of the Census Technical Paper No. 12, 1965. Additional details concerning the adjustment factors may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.7	91.8	107.1	97.7	104.3	104.7	95.6	104.7	98.3	102.2	100.6	96.3
	Total (excluding farm-product raw materials)	91.6	91.6	106.6	97.8	105.1	105.8	95.8	106.1	100.3	102.3	99.3	95.0
50	Durable goods, total	89.6	89.0	105.7	99.0	106.5	107.3	96.4	107.7	101.9	104.1	98.6	91.5
501	Motor vehicles and automotive parts and supplies	93.3	89.8	107.6	107.7	108.4	107.5	98.6	106.9	96.1	98.3	93.3	90.5
502	Furniture and home furnishings	84.8	89.8	105.2	96.8	101.6	106.6	89.2	105.2	103.9	112.1	107.2	95.2
503	Lumber and other construction materials	80.6	80.2	100.9	94.6	109.8	112.2	102.4	117.4	106.2	109.9	100.0	84.0
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	78.7	88.7	104.5	101.5	109.3	97.0	96.1	105.2	105.4	106.0	108.0	95.5
505	Metals and minerals, except petroleum	98.2	91.4	108.2	98.6	107.6	104.4	91.2	108.6	103.1	100.0	97.1	90.3
506	Electrical goods	89.3	89.1	102.0	96.0	99.4	106.5	99.0	104.8	100.8	107.5	103.5	98.8
507	Hardware, plumbing, heating equipment, and supplies	89.2	87.4	99.9	97.9	106.7	108.0	100.7	109.2	102.4	107.2	100.6	88.3
508	Machinery, equipment, and supplies	88.1	88.6	107.9	99.9	107.7	108.8	95.4	104.6	103.3	103.5	96.5	92.3
509	Miscellaneous durable goods	86.2	89.8	106.2	96.2	100.2	110.7	88.4	109.5	101.9	108.1	103.7	96.0
51	Nondurable goods, total	96.4	93.8	108.5	97.1	103.5	102.3	94.9	102.1	96.1	100.2	101.8	100.1
	Total (excluding farm-product raw materials)	94.3	94.0	106.8	96.6	103.2	104.5	95.5	104.5	97.6	100.6	100.6	98.4
511	Paper and paper products	95.5	92.6	106.3	93.4	103.3	103.6	95.6	107.3	102.6	104.0	99.4	92.6
512	Drugs, drug proprietaries, and druggists' sundries	97.8	92.6	106.0	96.3	100.3	99.8	92.9	104.7	100.8	108.1	101.0	96.6
513	Apparel, piece goods, and notions	90.1	94.4	107.1	91.8	101.2	98.8	93.7	115.6	106.3	107.7	103.4	87.1
514	Groceries and related products	94.7	91.1	104.2	97.2	105.4	105.0	99.0	105.3	98.9	101.0	99.8	95.0
515	Farm-product raw materials[1]	103.1	94.7	112.6	98.0	103.9	96.9	93.0	92.4	91.5	100.8	108.3	99.9
516	Chemicals and allied products	90.2	89.2	106.3	98.0	107.1	108.3	96.1	108.0	97.8	105.0	98.8	93.3
517	Petroleum and petroleum products	99.7	102.3	107.7	96.2	95.9	100.0	96.5	100.2	93.1	100.9	100.3	104.8
518	Beer, wine, and distilled alcoholic beverages	77.8	81.4	102.2	90.7	106.8	113.9	97.6	107.8	97.8	100.6	106.9	113.5
519	Miscellaneous nondurable goods	96.0	100.5	116.6	102.4	107.4	105.2	88.2	95.5	95.4	96.8	95.6	96.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.8	101.2	101.7	100.7	99.4	99.3	98.6	98.1	98.7	100.1	100.9	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.0	100.3	100.6	100.7	100.2	99.4	99.6	99.9	99.7	99.1
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.5
501	Motor vehicles and automotive parts and supplies	101.3	103.0	101.6	100.6	102.0	100.5	99.2	97.0	97.4	98.1	99.0	99.9
502	Furniture and home furnishings	99.1	99.3	99.7	99.5	100.8	101.9	100.5	100.6	101.2	100.2	99.5	97.3
503	Lumber and other construction materials	98.4	99.1	103.6	102.7	103.6	101.7	101.4	99.8	99.2	96.7	96.2	97.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.6	99.8	100.7	102.4	106.5	105.3	100.9	101.5	100.9	93.9	89.9
505	Metals and minerals, except petroleum	99.4	98.2	100.2	100.8	100.2	100.2	102.8	102.8	99.9	96.7	98.9	99.7
506	Electrical goods	96.7	96.8	99.0	99.6	101.2	102.6	101.4	100.7	101.3	101.2	100.5	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.4	103.2	102.6	101.6	100.6	98.4	98.7	97.1	96.1
508	Machinery, equipment, and supplies	99.0	101.0	101.6	100.1	101.0	102.1	100.3	99.0	99.4	99.0	98.7	98.7
509	Miscellaneous durable goods	97.0	97.6	96.0	97.5	96.4	100.8	102.4	102.6	102.9	103.8	102.4	100.5
51	Nondurable goods, total	104.1	103.2	103.3	99.4	96.7	95.1	94.7	95.3	97.4	102.1	104.6	103.4
	Total (excluding farm-product raw materials)	100.0	100.0	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.6	100.5
511	Paper and paper products	97.8	98.3	99.1	101.1	100.4	102.6	100.0	100.2	100.7	100.0	99.6	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.1	99.8	100.6	97.9	100.6	99.0	100.0	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.0	100.2	101.9	101.5	99.8	99.0	98.6	99.3
514	Groceries and related products	98.7	100.2	102.1	100.5	99.2	98.7	98.5	98.0	99.9	102.0	100.9	101.0
515	Farm-product raw materials[1]	118.8	115.2	112.2	100.3	88.9	84.6	78.8	79.4	83.8	103.8	117.4	115.3
516	Chemicals and allied products	98.0	100.0	101.9	101.6	102.4	100.9	101.6	100.2	100.4	96.9	97.0	98.7
517	Petroleum and petroleum products	104.4	99.3	99.2	94.2	96.0	94.3	96.3	100.7	102.9	104.8	104.2	103.4
518	Beer, wine, and distilled alcoholic beverages	96.3	95.8	97.4	99.1	102.3	102.9	99.9	97.9	100.3	107.0	105.7	95.3
519	Miscellaneous nondurable goods	103.6	104.6	105.0	102.1	97.2	93.2	95.1	96.0	97.4	99.7	101.9	104.0

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979—Continued

1972 SIC code	Kind of business	1979											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	95.9	91.8	104.7	100.0	105.3	101.5	98.4	104.2	95.8	104.5	100.4	96.2
	Total (excluding farm-product raw materials)	94.0	91.6	103.9	99.8	106.1	102.9	98.6	105.7	97.6	104.9	99.2	94.5
50	Durable goods, total	91.9	89.1	103.2	101.1	107.3	104.3	99.4	107.0	99.3	106.8	98.4	91.2
501	Motor vehicles and automotive parts and supplies	94.0	89.9	106.2	108.4	110.5	104.7	102.9	104.4	94.7	99.1	93.7	89.3
502	Furniture and home furnishings	87.1	89.8	101.8	98.4	102.6	104.0	91.2	105.5	101.7	115.1	106.5	94.2
503	Lumber and other construction materials	83.0	80.2	97.3	98.0	110.4	107.7	107.0	117.2	102.4	113.5	100.3	83.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	84.3	88.7	102.1	101.4	107.8	98.7	95.0	103.6	103.6	113.3	102.3	97.8
505	Metals and minerals, except petroleum	100.7	91.4	102.7	101.4	107.6	101.3	95.4	108.3	101.3	102.6	96.1	89.0
506	Electrical goods	92.0	89.1	99.9	99.3	98.8	103.9	100.6	104.5	98.2	110.6	102,9	100.1
507	Hardware, plumbing, heating equipment, and supplies	91.0	87.4	97.8	100.1	108.1	104.5	103.4	108.6	100.5	109.2	100.3	88.6
508	Machinery, equipment, and supplies	90.9	88.7	106.1	102.1	108.9	105.2	97.1	104.4	100.1	106.7	96.3	92.9
509	Miscellaneous durable goods	86.8	89.8	105.0	99.4	101.6	105.4	92.6	109.0	98.1	109.1	106.2	95.5
51	Nondurable goods, total	93.8	93.7	106.2	99.2	104.4	99.5	97.2	101.8	93.9	102.7	101.5	99.8
	Total (excluding farm-product raw materials)	96.8	94.0	104.0	99.0	104.1	101.2	98.0	104.7	94.9	103.2	100.7	98.0
511	Paper and paper products	100.0	92.7	103.2	94.8	103.3	102.4	97.4	107.1	99.3	108.7	97.7	92.2
512	Drugs, drug proprietaries, and druggists' sundries	99.7	92.6	104.0	98.9	100.6	96.9	96.6	103.9	97.6	110.1	101.8	96.1
513	Apparel, piece goods, and notions	93.9	94.4	103.7	92.4	101.8	97.8	95.7	115.5	102.9	112.3	102.1	85.9
514	Groceries and related products	97.5	91.0	103.1	98.3	106.3	103.0	100.0	105.0	96.2	104.0	99.5	95.1
515	Farm-product raw materials[1]	106.7	94.5	111.9	100.2	102.7	97.1	94.1	91.8	87.9	104.3	108.3	100.5
516	Chemicals and allied products	92.5	89.2	101.9	100.8	107.7	105.0	100.2	108.2	94.8	107.6	98.9	91.7
517	Petroleum and petroleum products	99.2	102.1	106.6	99.2	95.9	96.9	100.0	100.7	90.7	100.1	103.6	103.5
518	Beer, wine, and distilled alcoholic beverages	81.1	81.5	98.0	93.8	107.9	109.4	101.0	108.2	94.0	104.8	106.4	112.3
519	Miscellaneous nondurable goods	97.5	100.5	114.0	106.1	108.2	101.4	90.4	96.3	92.4	98.3	96.6	96.6
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.7	101.2	101.7	100.8	99.5	99.3	98.6	98.1	98.7	100.1	100.8	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.1	100.4	100.6	100.7	100.2	99.4	99.6	99.9	99.6	99.0
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.4
501	Motor vehicles and automotive parts and supplies	101.3	103.1	101.6	100.6	102.0	100.5	99.3	97.0	97.4	98.2	99.0	99.8
502	Furniture and home furnishings	99.2	99.3	99.7	99.5	100.9	102.0	100.4	100.6	101.2	100.2	99.5	97.2
503	Lumber and other construction materials	98.5	99.1	103.7	102.7	103.4	101.5	101.3	99.8	99.2	96.8	96.2	97.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.7	99.8	100.7	102.3	106.4	105.3	100.9	101.6	100.9	93.8	90.0
505	Metals and minerals, except petroleum	99.3	98.3	100.2	100.8	100.2	100.2	102.8	102.9	100.0	96.6	98.8	99.6
506	Electrical goods	96.7	96.7	99.0	99.7	101.3	102.7	101.4	100.7	101.4	101.1	100.4	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.6	103.3	102.6	101.6	100.6	98.4	98.7	97.0	96.0
508	Machinery, equipment, and supplies	99.0	101.0	101.5	100.1	101.0	102.1	100.3	99.1	99.4	98.9	98.6	98.7
509	Miscellaneous durable goods	97.1	97.5	96.0	97.4	96.4	100.9	102.4	102.6	103.0	103.8	102.4	100.5
51	Nondurable goods, total	103.9	103.2	103.4	99.5	96.9	95.3	94.7	95.3	97.4	102.0	104.5	103.4
	Total (excluding farm-product raw materials)	100.0	99.9	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.5	100.5
511	Paper and paper products	97.7	98.3	99.1	101.1	100.5	102.7	99.9	100.1	100.7	100.0	99.5	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.0	99.8	100.5	97.8	100.6	99.0	100.1	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.1	100.2	101.8	101.6	99.8	99.1	98.5	99.2
514	Groceries and related products	98.7	100.2	102.1	100.5	99.3	98.7	98.5	98.0	99.9	102.0	100.8	101.0
515	Farm-product raw materials[1]	118.5	115.2	112.3	100.8	89.6	85.4	78.5	79.2	83.5	103.3	117.1	115.1
516	Chemicals and allied products	98.0	100.0	102.0	101.6	102.4	101.0	101.6	100.2	100.5	96.9	96.8	98.6
517	Petroleum and petroleum products	104.4	99.4	99.4	94.2	95.9	94.2	96.2	100.9	102.9	104.7	104.2	103.2
518	Beer, wine, and distilled alcoholic beverages	96.3	95.7	97.4	99.1	102.3	102.8	99.9	97.9	100.3	106.9	105.7	95.3
519	Miscellaneous nondurable goods	103.7	104.6	105.1	102.1	97.2	93.1	95.1	95.9	97.3	99.7	101.8	104.0

Note: The adjustment factors shown above for sales are a combination of the seasonal and trading-day factors. These are separately available, however, upon request. Adjustment factors are included in this table for some kinds of business for which adjusted data are not published separately.

Adjusted sales and inventory data shown in table 4 are obtained by dividing the unadjusted data shown in tables 1 and 2 by the adjustment factors shown above for the corresponding kinds of business. Adjusted data for the summary trade totals are obtained by summarizing the adjusted data for the individual kinds of business. Seasonal factors shown for the summary trade totals provide an approximation to these totals but may show small differences from the published data. The seasonally adjusted data for 1978 may vary slightly from the method shown above because of insignificant rounding differences.

[1]There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table B-2. Average Month-to-Month Percent Changes and Related Summary Measures for Sales and Inventories of Merchant Wholesalers

1972 SIC code	Kind of business	$\bar{O}$	$\bar{S}$	$\overline{CI}$	$\bar{I}$	$\bar{C}$	$\bar{I}/\bar{C}$	MCD	Average duration of run			
									CI	I	C	MCD
		Sales										
	Merchant wholesalers, total	4.74	3.10	1.31	.82	.96	.86	1	3.10	1.57	14.11	3.10
50	Durable goods, total	5.30	4.84	1.43	.89	1.08	.82	1	3.53	1.63	15.87	3.53
501	Motor vehicles and automotive parts and supplies	5.53	4.22	2.67	2.33	1.24	1.87	3	2.05	1.59	25.40	5.43
502	Furniture and home furnishings	6.00	7.29	2.06	1.68	1.07	1.57	2	2.27	1.55	9.07	3.00
503	Lumber and other construction materials	7.40	6.25	2.67	1.72	1.76	.98	1	2.76	1.51	14.11	2.76
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	9.79	9.32	4.02	3.74	1.20	3.12	4	1.81	1.67	7.06	3.44
505	Metals and minerals, except petroleum	6.79	3.78	3.10	2.38	1.63	1.46	2	2.19	1.41	9.07	3.71
506	Electrical goods	5.79	5.17	1.89	1.52	1.04	1.47	2	2.08	1.46	10.58	3.32
507	Hardware, plumbing, heating equipment, and supplies	5.42	4.86	1.78	1.33	1.09	1.22	2	1.98	1.41	12.70	3.94
508	Machinery, equipment, and supplies	6.10	5.41	1.87	1.51	.97	1.56	2	1.92	1.46	7.94	3.32
509	Miscellaneous durable goods	7.66	6.11	3.51	2.79	1.79	1.56	2	1.87	1.48	9.77	2.93
51	Nondurable goods, total	5.07	2.80	1.58	1.10	.95	1.16	2	2.59	1.43	9.07	3.60
511	Paper and paper products	5.41	3.16	1.99	1.44	1.10	1.30	2	1.98	1.48	7.94	3.60
512	Drugs, drug proprietaries, and druggists' sundries	5.97	3.89	1.90	1.64	.76	2.15	3	1.95	1.57	9.77	4.31
513	Apparel, piece goods, and notions	7.73	6.91	2.70	2.36	1.01	2.34	3	1.72	1.38	10.58	4.17
514	Groceries and related products	4.44	2.01	1.67	1.41	.82	1.72	2	1.92	1.51	12.70	3.15
515	Farm-product raw materials	9.27	5.04	4.87	4.29	1.59	2.70	4	1.90	1.53	6.68	3.54
516	Chemicals and allied products	6.21	4.53	2.47	1.93	1.46	1.32	2	2.19	1.49	8.47	3.32
517	Petroleum and petroleum products	7.38	4.71	4.81	4.47	1.35	3.30	4	1.67	1.55	9.07	2.70
518	Beer, wine, and distilled alcoholic beverages	10.94	8.71	1.86	1.64	.69	2.39	3	1.76	1.59	21.17	3.68
519	Miscellaneous nondurable goods	5.89	4.84	2.53	2.23	.96	2.32	3	1.92	1.63	8.47	3.47
		Inventories										
	Merchant wholesalers, total	1.10	.72	.94	.39	.83	.47	1	4.88	1.79	18.14	4.88
50	Durable goods, total	1.07	.57	.89	.35	.86	.41	1	7.94	1.46	31.75	7.94
501	Motor vehicles and automotive parts and supplies	2.20	1.22	1.69	1.13	1.21	.93	1	2.54	1.63	12.70	2.54
502	Furniture and home furnishings	2.13	1.28	1.60	1.19	1.00	1.19	2	2.40	1.57	21.17	5.25
503	Lumber and other construction materials	2.60	1.77	1.83	1.28	1.09	1.17	2	2.54	1.67	15.87	4.20
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	3.60	2.92	2.17	1.80	1.20	1.50	2	2.27	1.48	25.40	3.60
505	Metals and minerals, except petroleum	3.14	2.53	1.79	1.01	1.33	.76	1	3.26	1.72	8.47	3.26
506	Electrical goods	1.75	1.08	1.32	.90	.92	.98	1	2.49	1.31	42.33	2.49
507	Hardware, plumbing, heating equipment, and supplies	1.69	1.10	1.23	.87	.89	.98	1	2.70	1.53	18.14	2.70
508	Machinery, equipment, and supplies	1.36	.92	1.03	.66	.82	.82	1	2.65	1.65	31.75	2.65
509	Miscellaneous durable goods	2.29	1.47	1.85	1.28	1.18	1.08	2	1.95	1.53	25.40	4.34
51	Nondurable goods, total	2.49	2.19	1.44	.83	1.07	.78	1	3.74	1.74	7.06	3.74
511	Paper and paper products	1.82	.94	1.38	1.04	.75	.94	2	2.12	1.44	9.07	4.20
512	Drugs, drug proprietaries, and druggists' sundries	2.39	1.46	1.60	1.37	.67	2.04	3	1.81	1.51	31.75	3.38
513	Apparel, piece goods, and notions	2.28	1.43	1.86	1.43	1.05	1.35	2	2.40	1.74	9.07	3.15
514	Groceries and related products	1.87	1.29	1.43	.92	1.01	.91	1	2.54	1.38	11.55	2.54
515	Farm-product raw materials	8.88	8.22	4.86	3.99	2.03	1.96	3	2.49	1.90	8.47	3.91
516	Chemicals and allied products	3.14	1.58	1.36	1.89	1.39	1.36	2	2.35	1.49	12.70	3.71
517	Petroleum and petroleum products	6.09	3.19	5.01	4.34	2.00	2.17	3	1.87	1.59	15.87	3.68
518	Beer, wine, and distilled alcoholic beverages	4.28	3.68	1.76	1.46	.74	1.98	3	2.35	1.63	9.77	4.03
519	Miscellaneous nondurable goods	2.53	1.52	1.88	1.48	.84	1.75	2	2.19	1.59	7.06	3.15

Description of Measures Shown Above

The following are brief descriptions of the measures shown in this table. More complete explanations appear in "Electronic Computers and Business Indicators," Occasional Paper 57, National Bureau of Economic Research, Inc., New York, 1957.

$\bar{O}$ is the average month-to-month percentage change, without regard to sign, in the original series before seasonal or trading-day adjustment.

$\bar{S}$ is the average month-to-month percentage change, without regard to sign, in the seasonal component. It is a measure of the average monthly seasonal change in the unadjusted series.

CI is the average month-to-month percentage change, without regard to sign, in the seasonally adjusted series.

$\bar{I}$ is the average month-to-month percentage change without regard to sign, for the irregular component. The irregular component is obtained by dividing the seasonally adjusted series by the cyclical component.

$\bar{C}$ is the average month-to-month percentage change, without regard to sign, for the cyclical component, which is a smooth, flexible moving average.

$\bar{I}/\bar{C}$ is a measure of the relative smoothness (small values) or irregularity (large values) of the seasonally adjusted series.

MCD (months for cyclical dominance) gives an estimate of the appropriate time span over which to observe cyclical movements in a monthly series. In deriving MCD, the average (without regard to sign) percentage changes in the irregular and cyclical components are computed for 1-month spans (Jan.-Feb., Feb.-Mar., etc.) 2-months spans (Jan.-Mar., Feb.-Apr., etc.), and so on. MCD is the shortest span for which the average change (without regard to sign) in the cyclical component is larger than the average change (without regard to sign) in the irregular component; that is, it indicates the point at which fluctuations begin to be more attributable to cyclical than to irregular movements. MCD is small for smooth series and large for erratic series.

Average duration of run (ADR) is a measure of smoothness, and is equal to the average number of consecutive monthly changes in the same direction in any series of observations. When there is no change between 2 months, a change in the same direction as the preceding change is assumed. The ADR is shown for the seasonally adjusted series CI, irregular component I, cyclical component C, and the MCD moving average. The MCD moving average is an unweighted moving average (with the number of terms equal to MCD) of the seasonally adjusted series.

A comparison of these measures with the expected ADR of a random series gives an indication of whether the changes approximate those of a random series. (The expected value of ADR for a random series is 1.5 and it falls between 1.36 and 1.75 about 95 percent of the time. For a moving average of a random series the expected value is 2.0). For example, the ADR of CI is 2.08 for electrical goods sales. This indicates that 1-month changes in the seasonally adjusted series, on the average, reverse sign slightly less often than a random series. In the next two columns, 1.46 for I and 10.58 for C indicate the separation of the seasonally adjusted series into an essentially random component and the cyclical (nonrandom) component. Finally, 3.32 for MCD indicates that a 2-month moving average of the seasonally adjusted series (2 months being the MCD span) reverses direction on the average about every 3 months. The increase in the average duration of run from 2.08 for CI to 3.32 for the MCD moving average indicates that for this series the use of MCD spans reduces the effect of the irregular component upon the seasonally adjusted series.

These averages are based on a seasonally adjusted series which is adjusted historically; that is, the months used to compute the measures were the same months used to estimate the seasonal factors. Current data, however, are adjusted by use of factors projected 1 year ahead, and are thus subject to additional error. Therefore, current data are probably somewhat more irregular and subject to larger MCD than shown above.

APPENDIX C. Explanatory Material

I. SCOPE OF THE SURVEY

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the Standard Industrial Classification (SIC) Manual[1] and as covered in the 1972 census, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm or professional business users; or to other wholesalers; or acting as agents or brokers in buying merchandise for or selling merchandise to such persons or companies.

The principal types of establishments included are: (1) merchant wholesalers who take title to the goods they sell, such as wholesale merchants or jobbers, industrial distributors, voluntary group wholesalers, exporters, importers, cash-and-carry wholesalers, drop shippers, major distributors, retailer cooperative warehouses, terminal elevators, and cooperative buying associations; (2) sales branches and sales offices (but not retail stores) maintained by domestic manufacturing or mining enterprises apart from their plants or mines for the purpose of marketing their products; (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), which constitute the major portion of the broad field of wholesale trade, and excludes the other types of wholesale trade. All kinds of business in which merchant wholesalers operate are represented in this survey.

Kind-of-business classifications are not interchangeable with commodity classifications. Most businesses sell several kinds of commodities. The kind-of-business code assigned generally reflects either the individual commodity or the commodity group which is the primary source of the establishments receipts, or some mixture of commodities which characterizes the establishment's business. Thus, the classification of establishments by kind of business generally does not make it possible to determine either the number of establishments handling a particular commodity or the sales of that commodity. For example, the "grocery" classification excludes establishments selling groceries if the sale of groceries is not the primary source of receipts; moreover, even though establishments are classified as "grocery wholesalers" some of their sales may be derived from the sale of nonfood products.

A description of each kind of business included in the accompanying statistical data is shown in appendix D.

II. SAMPLE DESIGN AND ESTIMATION PROCEDURES

Framework of old series—The first publication in this series based on probability sampling, was the January 1954 report. Effective with the July 1956 publication an entirely new sample was selected from the 1954 Census of Business. Other changes in the sample have been made since 1956, representing, for the most part, revisions to reflect the findings of successive censuses of wholesale trade.

Selection of sample for new series—The new sample[2] like the old is a probability sample, and the estimating procedures used are similar in many respects to the old sample.

The new sample originally was drawn from the Standard Statistical Establishment List (SSEL) as updated to December 31, 1974. The initial SSEL consisted of two lists. One list was composed of all Employer Identification (EI) numbers issued by the Internal Revenue Service (IRS) with reported payroll in at least one quarter of 1973 or 1974, with payroll in the 1972 census, or with sales/receipts greater than $100,000 in the 1972 census. The second list consisted of all establishments of known multiestablishment companies as of December 31, 1974. These lists contained information on sales/receipts, payroll, employment, name and address, kind-of-business classification, etc.

Before the 1974 SSEL was available, a study was made, using files from the 1972 Census of Wholesale Trade. This study determined the stratification of the sampling units based on 1972 sales, inventories, and kind of business, and also determined the optimal allocation of the sample necessary to meet specified variance objectives for sales and inventory estimates for different kind-of-business groups. The primary stratum boundary determined in the study was the certainty cutoff to be used for each kind of business. The cutoff was particularly important since it also determined the type of sampling unit.

The sampling units for the new sample consisted of both companies and EI's. To be eligible for the initial sampling, an EI had to be active, i.e., had payroll in 1974 and was on the Internal Revenue Service mailing list for Federal Insurance Contribution Act (FICA) taxpayers. If a known multiestablishment company had total merchant wholesale sales (on a 1972 basis) above the cutoff for its major kind of business, the company was selected for the sample with certainty. Single establishment companies, whether or not selected with certainty, were considered as EI sampling units.

All merchant wholesale companies below the certainty cutoff were treated on an EI basis; that is, the EI was the sampling unit. The EI's were then stratified according to their major kind of business and their estimated sales (on a 1972

[1] Executive Office of the President, Office of Management and Budget, **Standard Industrial Classification Manual,** 1972.

[2] For a complete exposition of the new sample, see C. T. Isaki et al., "Sample Redesign Aspects of the Census Bureau's Monthly Business Surveys" and K. M. Wolter et al., "Sample Selection and Estimation Aspects of the Census Bureau's Monthly Business Surveys," **Proceedings of the Business and Economic Statistics Section: American Statistical Association,** 1976.

basis). Within each stratum, a simple random sample of EI's was selected. The sampling rates for these EI's varied between 1 in 3 and 1 in 600.

For those EI's in the inital sample that did not have kind-of-business classifications and for all EI "births" after the initial selection, a two-phase selection procedure was used. EI "births," as used here, are new EI's recently assigned by SSA and currently on the IRS mailing list for FICA taxpayers. In the first phase, "births" were stratified by kind of business and size (expected employment or quarterly payroll). A relatively large sample was drawn and canvassed in order to obtain a more reliable measure of size (sales in two recent months) and a more detailed kind-of-business code, if needed.

Using this more reliable information, the cases were re-stratified and the final sample drawn with overall probabilities equivalent to those used in drawing the initial sample from the 1974 SSEL. Because of the lag in reporting "births" to the IRS and Social Security Administration (SSA) and the time needed to accomplish the two-phase birth-selection procedure, "births" are actually added to the sample about eight or nine months after they begin operation. The ongoing birth-selection procedure is carried out quarterly.

Since "births" are not represented in the sample, until they go through the selection procedure described above, an interium procedure is required to account for "births" during the period between the onset of activity and the time of birth selection. This consists of imputing for all cases which go out of business, but which are still on the IRS mailing list. This imputation procedure was also used in the old series. However, because of recent delays in obtaining "births," this procedure now accounts for a larger percentage of the estimates.

To be eligible for the sample canvass and tabulation in a given month, a merchant wholesale business must meet both of the following requirements:

1. It must be on the IRS mailing list for FICA taxpayers from the previous quarter.

2. It must have been selected from either the SSEL or the file of employer "births." For this purpose, a universe file of all businesses ever given a chance of selection is maintained. This file shows, among other things, which EI numbers actually have been selected.

In the case of businesses that were selected into the sample with certainty, the first requirement is changed. These certainty sampling units are not dropped from canvass and tabulation if they are no longer on the IRS mailing list. If there are successor businesses, they are added to the survey. This is a tighter form of control used for these larger businesses.

Use of the rotating sample and composite estimating procedures—Rotating samples or panels are used except for very large businesses which are selected with certainty. For sampling units in the rotating panels, two months of data are obtained at each enumeration. For example, February rotating panel cases report data for February (the current month) and January (the previous month). In the following month, a different rotating panel (the March panel) reports figures for March and February. Three sample panels are used. This permits the use of a composite estimating procedure which provides estimates more reliable than those which would be obtained from a completely fixed sample of about twice the size. In addition, this procedure reduces the reporting burden of selected businesses.

The first estimate issued each month, based on the full sample, is called the preliminary estimate. The preliminary composite estimate for the current month is a weighted average of two estimates: (1) the current month unbiased estimate (weight .35), and (2) a ratio estimate (weight .65) obtained by multiplying the preliminary composite estimate for the previous month by the current-to-previous-month ratio obtained from the current month reports. Preliminary inventory estimates have been modified, prior to publication, based on past relationships between preliminary and final estimates.

A final estimate is developed one month later using information available from the following month's enumeration. The final composite estimate is also a weighted average of two estimates: (1) the preliminary composite estimate for a given month (weight .7), and (2) the unbiased estimate (weight .3) for the same month as obtained from the next month's reporting panel.

The preliminary composite estimates provide a measure of the dollar volume level that is considerably more reliable than the unbiased estimates, and the final composite estimates are generally more reliable than the preliminary composite estimates. The indication of the month-to-month trend considered to be most reliable is the ratio of the current month's preliminary composite estimate divided by the previous month's final composite estimate. This is true because the numerator and denominator of this ratio are more highly correlated than would be the case if the numerator and denominator were two preliminary estimates or two final estimates. The trend of the preliminary/final ratio, therefore, has less variability than one based on two preliminary figures or two final figures.

Another advantage of the use of the rotating panel system is that the frequency of canvass of very large noncertainty cases can be increased with a consequent reduction, in an unbiased manner, of their statistical weight. This increases the reliability of the estimates, particularly the measure of month-to-month change.

III. PREVIOUSLY PUBLISHED DATA

Data developed from the new sample are not comparable with data previously published in this series. Sales and inventory estimates prior to September 1977 have been revised to reflect: (1) a new sample design; (2) benchmarking of sales to the results of the 1967 and 1972 censuses of wholesale trade; (3) conversion of classifications based on the 1967 SIC manual to classifications based on the 1972 SIC manual (4) addition

of farm assemblers and bulk petroleum establishments; and (5) revision and updating of seasonal adjustment factors.

The revised historical sales series were derived in a manner designed to minimize the changes to the month-to-month trends in the old series. The inventory series were revised by applying the stock-sales ratios from the old series to the revised sales series to obtain the preliminary revised inventory series. These preliminary series were then revised slightly so that August 1977 estimates would equal the new sample estimates.

Although the month-to-month movements in the old and new series show very little change, the level of the revised series show substantial change from the old series for some kinds of business. The change in levels depends on the difference between the old series for census years and the benchmark levels and on the difference between the new series level and the old series level for the link month, August 1977.

Additional details concerning the sample design, and revised estimates of merchant wholesale sales and inventories from January 1967 through August 1977, have been provided in a special supplementary publication **Monthly Wholesale, Sales and Inventories: January 1967-August 1977, Revised BW-13-77S.** This report may be obtained from Subscriber Services (Publications), Bureau of the Census, Washington, D.C. 20233 at $.90 per copy.

IV. UNPUBLISHED DATA

Additional data, such as dollar volume estimates for some kinds of business not separately shown in this report, are produced as a byproduct of the regularly published statistics. These additional data have not been included in this publication because the sampling variability associated with these data does not meet the Census Bureau's publication criteria. The Census Bureau, on written request will release these data for individual use, though not for publication.

V. DEFINITION OF TERMS

Sales—Sales include the following: merchandise sold for cash or credit at wholesale and retail by establishments primarily engaged in merchant wholesale trade; receipts from customers for rental or leasing of equipment, instruments, tools, etc.; receipts for delivery, installation, alteration, maintenance, repair, storage, and other services; and gasoline, liquor, tobacco and other excise taxes which are paid by the manufacturer and passed along to the wholesaler. Sales are net after deductions for refunds and allowances for merchandise returned by customers. Sales which are made on an agency basis for others are included as gross sales. Direct shipments on orders from wholesalers are also included in sales. Total sales do not include nonoperating income from such sources as investments, rental or sale of real estate, etc.

In the new series, sales exclude sales and excise taxes collected directly from customers and paid directly to a local, State, or Federal tax agency. Also excluded are receipts from customers for carrying or other credit charges. In the old series respondents were requested to include these taxes and credit charges in the reported sales. The impact of this change is considered minimal.

Inventories—Inventories represent stocks, at cost, of merchandise on hand for sale at the end of the month regardless of location, except for goods outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included.

Stock-sales ratios—The stock-sales ratios are percentages derived by dividing the dollar value of inventories, at cost, by the dollar value of sales. No adjustment is made in these ratios for the markup in sales which may vary from trade to trade.

The sales and inventory figures represent total sales and inventories of all establishments primarily engaged in merchant wholesale trade. Also included are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments.

APPENDIX D. Kind-of-Business Classifications

DURABLE GOODS
(SIC Major Group 50)

This major group includes establishments primarily engaged in the wholesale distribution of durable goods.

MOTOR VEHICLES AND AUTOMOTIVE PARTS AND SUPPLIES
(SIC 501)

Automobiles and Other Motor Vehicles (SIC 5012)[1]—Establishments primarily engaged in the wholesale distribution of new and used passenger automobiles, trucks, and other motor vehicles. Automotive distributors primarily engaged in selling at retail to individual consumers for personal use, and also selling a limited amount of new and used passenger automobiles and trucks at wholesale to dealers, are classified in retail trade, industry 5511.

Automotive Parts and Supplies (SIC 5013)—Establishments primarily engaged in the wholesale distribution of automotive parts, supplies, accessories, tools and equipment.

Tires and Tubes (SIC 5014)[1]—Establishments primarily engaged in the wholesale distribution of rubber tires and tubes for passenger and commercial vehicles.

FURNITURE AND HOME FURNISHINGS
(SIC 502)

Furniture (SIC 5021)—Establishments primarily engaged in the wholesale distribution of furniture, including bedsprings, mattresses, and other household furniture; office furniture; and furniture for public parks, buildings, etc.

SIC 5021 is subdivided into—

1. Household and lawn furniture.
2. Office and business furniture.

Home Furnishings (SIC 5023)—Establishments primarily engaged in the wholesale distribution of home furnishings and homewares, including antiques; china; glassware and earthenware; lamps; curtains and draperies; linens and towels; carpets, linoleum, and all other types of hard and soft surface floor coverings. Establishments primarily engaged in the wholesale distribution of electrical household goods are classified in industry 5064.

[1] Data for this kind of business are not shown separately but are included in the group total.

LUMBER AND OTHER CONSTRUCTION MATERIALS
(SIC 503)

Lumber, Plywood, and Millwork (SIC 5031)—Establishments, with or without yards, primarily engaged in the wholesale distribution of rough, dressed, and finished lumber (but not timber); plywood; door and window frames (wood or metal); and other wood and metal millwork. Establishments selling lumber, plywood and millwork to the general public and known as "retail" in the trade are classified in industry 521.

Construction Materials, Not Elsewhere Classified (SIC 5039)—Establishments primarily engaged in the wholesale distribution of such building materials as brick, building stone, cement, granite, gravel, lime, marble, plaster, building glass, roofing materials, sand, and tile. Establishments selling construction materials to the general public and known as "retail" in the trade are classified in industry 521. Establishments primarily engaged in marketing heavy structural metal products are classified in industry 5051. Establishments primarily selling readymade concrete are classified in manufacturing.

SPORTING, RECREATIONAL, PHOTOGRAPHIC, AND HOBBY GOODS, TOYS, AND SUPPLIES
(SIC 504)[1]

Establishments primarily engaged in the wholesale distribution of all types of amusement and sporting goods and accessories—billiard and pool supplies; cameras and photographic equipment; coin-operated game machines; games, toys; ammunition and fireworks; etc.

METALS AND MINERALS, EXCEPT PETROLEUM
(SIC 505)

Ferrous Metals Service Centers and Offices (SIC 5051 pt.)—Establishments primarily engaged in marketing ferrous metal semifinished products such as nails, pig iron, steel and tin bars. Establishments in this industry may operate with warehouses (ferrous metals service centers) or without warehouses (ferrous metals sales offices).

Sales branches of domestic manufacturers are included in this category if the establishment is separate from the manufacturing plant and has warehouse space greater than 5,000 square feet.

Nonferrous Metals Service Centers and Offices and Other Minerals and Ores (SIC 5051 pt. and SIC 5052 pt.)[1]—Establishments primarily engaged in marketing nonferrous metal semifinished products such as aluminum bars and copper rods. Establishments in this industry may operate with warehouses (nonferrous metals service centers) or without warehouses (nonferrous metals sales offices). Also included are establishments primarily engaged in the wholesale distribution of copper, iron, lead, and other metallic ores except precious; and crude nonmetallic minerals (including concentrates) except crude petroleum. Establishments primarily engaged in the wholesale distribution of nonmetallic minerals used in construction, such as sand and gravel, are included in industry 5039.

Coal (SIC 5052 pt.)[1]—Establishments primarily engaged in the wholesale distribution of coal and coke. Included are establishments which have products shipped direct from mine to customer, and establishments operating yards and dock space and making deliveries therefrom at wholesale as well as other coal merchants.

ELECTRICAL GOODS (SIC 506)

Electrical Apparatus and Equipment, Wiring Supplies, and Construction Materials (SIC 5063)—Establishments primarily engaged in the wholesale distribution of electrical power equipment for the generation, transmission, or utilization of electric energy; and electrical construction materials for outside power transmission lines and for electrical systems. Construction contractors primarily engaged in installing electrical systems and equipment from their own stock are classified in industry 1731.

Electrical Appliances, TV and Radio Sets (SIC 5064)—Establishments primarily engaged in the wholesale distribution of radio and television sets and household electrical appliances.

Electronic Parts and Equipment (SIC 5065)[1]—Establishments primarily engaged in the wholesale distribution of electronic parts and equipment, such as industrial and radio and television receiving and transmitting electronic tubes; electronic intercommunication equipment; radio parts and accessories; and electronic sound equipment. Establishments primarily engaged in the wholesale distribution of radio and television receiving sets and phonographs are classified in industry 5064.

HARDWARE, PLUMBING, HEATING EQUIPMENT, AND SUPPLIES (SIC 507)

Hardware (SIC 5072)—Establishments primarily engaged in the wholesale distribution of hardware, such as builders; shelf or light hardware; handtools (except automotive and machinists' precision); handsaws and cutlery; brads, staples, and tacks; and bolts, nuts, rivets, and screws. Establishments primarily engaged in the wholesale distribution of nails, noninsulated wire, and screening are classified in industry 5051.

Plumbing and Heating Equipment and Supplies (Hydronics) (SIC 5074)—Establishments primarily engaged in the wholesale distribution of hydronic plumbing and heating equipment and supplies. Construction contractors primarily engaged in installing plumbing and heating equipment from their own stock are classified in industry 1711.

Warm Air Heating and Air-Conditioning Equipment and Supplies (SIC 5075)[1]—Establishments primarily engaged in the distribution of warm air heating and air-conditioning equipment and supplies. Construction contractors primarily engaged in installing warm air heating and air-conditioning equipment are classified in industry 1711.

Refrigeration Equipment and Supplies (SIC 5078)[1]—Establishments primarily engaged in the distribution of refrigeration equipment and supplies. Construction contractors primarily engaged in installing refrigeration equipment from their own stock are classified in industry 1711.

MACHINERY, EQUIPMENT, AND SUPPLIES (SIC 508)

Commercial Machines and Equipment (SIC 5081)[1]—Establishments primarily engaged in wholesaling commercial machines and equipment, such as office, store, and business machines and equipment; commercial food service equipment; and fountain and store fixtures.

Construction and Mining Machinery and Equipment (SIC 5082)—Establishments primarily engaged in marketing cranes, excavating machinery and equipment, power shovels, road construction and maintenance machinery, tractor-mounting equipment and other specialized machinery and equipment used in the construction, mining, and logging industries. Establishments engaged in marketing oil well machinery and equipment are classified in industry 5084.

Farm and Garden Machinery and Equipment (SIC 5083)[1]—Establishments primarily engaged in marketing agricultural machinery and equipment for use in the preparation and maintenance of the soil, the planting and harvesting of crops, and other operations and processes pertaining to work on the farm or the lawn or garden; and dairy and other livestock equipment.

Industrial Machinery and Equipment (SIC 5084)[1]—Establishments primarily engaged in marketing industrial machinery and equipment, such as metal working tools, food industries machinery, oil well and oil refining machinery, industrial

[1] Data for this kind of business are not shown separately but are included in the group total.

trucks and tractors (except over-the-road types), printing machinery, and machinery and equipment for other manufacturing industries.

Industrial Supplies (SIC 5085)[1]—Establishments primarily engaged in marketing industrial supplies, such as abrasives and materials, rope and cordage, and mechanical rubber goods; welding supplies; mechanical power transmission supplies, including bearings; industrial valves and fittings; metal containers; industrial leather; and reconditioned barrels and drums.

Professional Equipment and Supplies (SIC 5086)—Establishments primarily engaged in the wholesale distribution of mechanical devices and other equipment used by architects, dentists, engineers, physicians, surgeons, veterinarians, optometrists, osteopaths, and other professional groups.

Surgical, Medical, Hospital Supplies (SIC 5086 pt.)[1]—Establishments primarily engaged in selling surgical and medical instruments; doctors' apparatus and equipment; orthopedic appliances; artifical limbs; operating room and other hospital equipment, X-ray machines and accessories and other scientific instruments used by physicians and in hospitals.

Service Establishment Equipment and Supplies (SIC 5087)[1]—Establishments primarily engaged in the wholesale distribution of equipment and supplies for barber shops, beauty parlors power laundries, dry-cleaning plants, upholsterers, undertakers, and related personal service establishments.

Transportation Equipment and Supplies, Except Motor Vehicles (SIC 5088)[1]—Establishments primarily engaged in the wholesale distribution of transportation equipment and supplies. Establishments primarily engaged in the wholesale distribution of motor vehicles and motor vehicle parts are classified in group 501.

MISCELLANEOUS DURABLE GOODS (SIC 509)[1]

Scrap and Waste Materials (SIC 5093)—Establishments primarily engaged in assembling, breaking up, sorting and wholesale distribution of scrap and waste materials. This industry includes auto wreckers engaged in dismantling automobiles for scrap. However, those engaged in dismantling cars for the purpose of selling secondhand parts at retail are classified in industry 5931.

SIC 5093 is subdivided into—

1. *Iron and Steel scrap.*
2. *Waste and secondary materials dealers.*

[1] Data for this kind of business are not shown separately but are included in the group total.

Jewelry, Watches, Diamonds, and Other Precious Stones (SIC 5094)[1]—Establishments primarily engaged in the wholesale distribution of jewelry, precious stones and metals, costume jewelry, watches, clocks, silverware, and jewelers' findings.

Durable Goods, Not Elsewhere Classified (SIC 5099)[1]—Establishments primarily engaged in the wholesale distribution of durable goods, not elsewhere classified, such as musical instruments and forest products, except lumber.

NONDURABLE GOODS (SIC Major Group 51)

This major group includes establishments primarily engaged in the wholesale distribution of nondurable goods.

PAPER AND PAPER PRODUCTS (SIC 511)

Printing and Writing Paper (SIC 5111)[1]—Establishments primarily engaged in the wholesale distribution of writing paper, including envelope paper, fine paper, and ground wood, printing, and rotogravure paper.

Stationery Supplies (SIC 5112)[1]—Establishments primarily engaged in the wholesale distribution of stationery and office supplies, including envelopes, typewriter and mimeograph paper, file cards and folders, pens, social stationery, and greeting cards.

Industrial and Personal Service Paper (SIC 5113)[1]—Establishments primarily engaged in the wholesale distribution of wrapping and other coarse paper, paperboard, cellophane, and converted paper products, such as bags, boxes, dishes, napkins, and shipping supplies.

DRUGS, DRUG PROPRIETARIES, AND DRUGGISTS' SUNDRIES (SIC 512)

Drugs, Drug Proprietaries, and Druggists' Sundries (SIC 5122)—Establishments primarily engaged in the wholesale distribution of drugs, drug proprietaries, druggists' sundries, and toiletries. Establishments primarily engaged in the wholesale distribution of surgical, dental, and hospital equipment are classified in industry 5086.

SIC 5122 is subdivided into—

1. *General-line drugs*—These are distinguished from specialty-line drug and toiletries wholesalers on the basis of their commodity-line mix. Drug wholesalers were classified as general line if they reported a substantial portion of their sales in "pharmaceuticals, antibiotics, druggists' chemicals, biologicals, botanicals" and "proprietary products, toilet-

ries, druggists' sundries," and if annual sales volume was $1 million or more.

2. *Specialty-line pharmaceuticals, cosmetics, and toiletries.*

APPAREL, PIECE GOODS, AND NOTIONS (SIC 513)

Piece Goods (SIC 5133)[1]—Establishments primarily engaged in the wholesale distribution of woven piece goods or yard goods of natural or manmade fibers. "Converters" who buy goods in the grey, have them finished on contract, and sell at wholesale are included here. This industry does not include establishments primarily engaged in the wholesale distribution of home furnishings, which are classified in industry 5023.

Notions and Other Dry Goods (SIC 5134)[1]—Establishments primarily engaged in the wholesale distribution of notions (sewing and hair accessories, etc.), knit goods, and other dry goods, except piece goods.

Men's and Boys' Clothing and Furnishings (SIC 5136)[1]—Establishments primarily engaged in the wholesale distribution of men's and boys' apparel and furnishings, sportswear, hosiery, underwear, nightwear, and work clothing.

Women's Children's, and Infants' Clothing and Accessories (SIC 5137)[1]—Establishments primarily engaged in the wholesale distribution of women's, children's, and infants' clothing and accessories, including hosiery, lingerie, millinery and millinery supplies, and furs.

Footwear (SIC 5139)[1]—Establishments primarily engaged in the wholesale distribution of footwear of leather, rubber, and other materials.

GROCERIES AND RELATED PRODUCTS (SIC 514)

Groceries, General-Line (SIC 5141)—Establishments primarily engaged in the wholesale distribution of a general line of groceries. Establishments primarily engaged in roasting coffee and establishments primarily engaged in blending tea or grinding and packaging spices are classified in major group 20.

SIC 5141 is subdivided into—

1. *Voluntary group wholesalers.*
2. *Retailer cooperative wholesalers.*
3. *Other general-line wholesalers.*

Frozen Foods (SIC 5142)[1]—Establishments primarily engaged in the wholesale distribution of packaged quick-frozen vegetables, juices, meats, fish, poultry, pastries, and other "deep freeze" products. Establishments primarily engaged in the wholesale distribution of frozen dairy products are classified in industry 5143. Frozen poultry, fish, and meat which are not packaged are classified in industries 5144, 5146, and 5147, respectively.

Dairy Products (SIC 5143)[1]—Establishments primarily engaged in the wholesale distribution of dairy products, such as butter, cheese, ice cream and ices, and fluid milk and cream. This industry does not include establishments primarily engaged in pasteurizing and bottling milk, which are classified in group 202.

Poultry and Poultry Products (SIC 5144)—Establishments primarily engaged in the wholesale distribution of poultry and poultry products, except canned and packaged frozen products. This industry does not include establishments primarily engaged in the killing and dressing of poultry, which are classified in industry 2016. Establishments primarily engaged in the wholesale distribution of packaged frozen poultry are classified in industry 5142, and of canned poultry in industry 5149.

Confectionery (SIC 5145)—Establishments primarily engaged in the wholesale distribution of confectionery, such as candy, chewing gum, fountain fruits, salted or roasted nuts, popcorn, and fountain syrups; and potato, corn, and similar chips.

Fish and Seafoods (SIC 5146)[1]—Establishments primarily engaged in the wholesale distribution (not packaging) of fresh, cured, and frozen fish and seafoods, except canned (industry 5149) or packaged frozen (industry 5142). The preparation, packaging, and freezing of fresh fish and other seafood, and the shucking and packing of fresh oysters in nonsealed containers, are classified in industry 2092.

Meats and Meat Products (SIC 5147)—Establishments primarily engaged in the wholesale distribution of fresh, cured, and processed (but not canned) meats and lard. The wholesale distribution of frozen packaged meats is classified in industry 5142 and canned meats in industry 5149.

Fresh Fruits and Vegetables (SIC 5148)—Establishments primarily engaged in the wholesale distribution of fresh fruits and vegetables.

Groceries and Related Products, Not Elsewhere Classified (SIC 5149)[1]—Establishments primarily engaged in the wholesale distribution of groceries and related products, not elsewhere classified. Establishments primarily engaged in the wholesale distribution of soft drinks, and in bottling and distributing natural spring and mineral waters, are classified in this industry, but establishments primarily engaged in bottling soft drinks are classified in major group 20. This industry does not include farm-product raw materials (group 515), or beer, wine, and distilled alcholic beverages (group 518).

[1] Data for this kind of business are not shown separately but are included in the group total.

FARM-PRODUCT RAW MATERIALS (SIC 515)

Cotton (SIC 5152)[1]—Establishments primarily engaged in buying and/or marketing cotton and cotton linters.

Grain (SIC 5153)—Establishments primarily engaged in buying and/or marketing grain (such as corn, wheat, oats, barley, and unpolished rice); dry beans; soybeans, and other inedible beans. Country grain elevators primarily engaged in buying or receiving grain from farmers are included as are terminal elevators and other merchants marketing grain.

Livestock (SIC 5154)[1]—Establishments primarily engaged in buying and/or marketing cattle, hogs, sheep, and goats.

Farm-Product Raw Materials, Not Elsewhere Classified (SIC 5159)[1]—Establishments primarily engaged in buying and/or marketing farm products not elsewhere classified, such as horses and mules, leaf tobacco, hides, skins, furs, wool, mohair, raw silk, hops, and nuts, except roasted or salted (industry 5145). Establishments primarily engaged in the wholesale distribution of milk are classified in industry 5143 and live poultry in industry 5144.

CHEMICALS AND ALLIED PRODUCTS (SIC 516)[1]

Chemicals and Allied Products (SIC 5161)[1]—Establishments primarily engaged in the wholesale distribution of chemicals and allied products, not elsewhere classified, such as acids, industrial and heavy chemicals, dyestuffs, industrial salts, naval stores, plastics materials, rosin, and turpentine. Establishments primarily engaged in the wholesale distribution of ammunition are classified in industry 5041; agricultural chemicals and pesticides in industry 5191; drugs in industry 5122; and paints and varnishes in industry 5198.

PETROLEUM AND PETROLEUM PRODUCTS (SIC 517)

Petroleum Bulk Stations and Terminals (SIC 5171)—Establishments primarily engaged in wholesaling petroleum products, including liquefied petroleum gas, from bulk liquid storage facilities.

Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals (SIC 5172)[1]—Establishments primarily engaged in wholesaling petroleum and petroleum products, except those with bulk liquid storage facilities. Included are packaged and bottled petroleum products distributors, truck jobbers, and others marketing petroleum and products at wholesale but without bulk liquid storage facilities.

[1] Data for this kind of business are not shown separately but are included in the group total.

BEER, WINE, AND DISTILLED ALCOHOLIC BEVERAGES (SIC 518)

Beer and Ale (SIC 5181)—Establishments primarily engaged in the wholesale distribution of beer, ale, porter, and other fermented malt beverages.

Wines and Distilled Alcoholic Beverages (SIC 5182)—Establishments primarily engaged in the wholesale distribution of distilled spirits, including neutral spirits and ethyl alcohol used in blending wines and distilled liquors.

MISCELLANEOUS NONDURABLE GOODS (SIC 519)

Farm Supplies (SIC 5191)[1]—Establishments primarily engaged in the wholesale distribution of animal feeds, fertilizers, agricultural chemicals, pesticides, seeds, and other farm supplies, except grains.

Tobacco and Tobacco Products (SIC 5194)—Establishments primarily engaged in the wholesale distribution of tobacco and tobacco products. Leaf tobacco wholesalers are classified in industry 5159 and establishments primarily engaged in stemming and redrying tobacco in industry 2141.

Paints, Varnishes, and Supplies (SIC 5198)[1]—Establishments primarily engaged in the wholesale distribution of paints, varnishes, wallpaper, and supplies, and sometimes glass. Establishments selling to the general public and known as "retail" in the trade are classified in industry 5231.

Books, Periodicals, Newspapers (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of books, lithographed matter, magazines, newspapers, and all other forms of reading material.

Nondurable Goods, Not Elsewhere Classified (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of nondurable goods, not elswhere classified, such as art goods, flowers and florist supplies, industrial yarn, textile bags, bagging and burlap.

CHANGES IN WHOLESALE KIND-OF-BUSINESS CLASSIFICATIONS IN 1972 FROM 1967

The wholesale trade kind-of-business structure was expanded from one SIC major group (SIC 50) in 1967 to two major groups in 1972, "durable goods" (SIC 50) and "nondurable goods" (SIC 51). There were 61 four-digit industries in 1972 compared to 48 four-digit industries in 1967.

The definitions of some kinds of business also were changed in 1972. Establishments primarily selling farm supplies and equipment to farmers, and establishments primarily selling

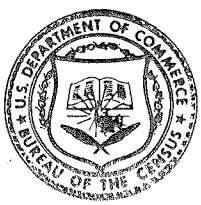
plumbing, heating, and air-conditioning equipment and electrical supplies were classified in wholesale trade rather than retail trade. However, establishments primarily selling lumber and other building materials and paint, glass, and wallpaper were classified in retail trade if they sell to the public, even though sales to contractors account for a larger portion of the total. The change resulted in moving to wholesale trade those establishments primarily selling plumbing, heating, and air-conditioning equipment; electrical supplies; farm equipment; hay, grain, and feed; and other farm supplies. The change also theoretically could have shifted to wholesale trade some establishments primarily selling lumber and paint, glass and wallpaper to contractors, but not to the public.

In addition to the kind-of-business changes noted above the special nonmerchant classifications of farm assemblers and bulk petroleum were eliminated in the 1972 census. These establishments were classified in the appropriate merchant, or sales branch category.

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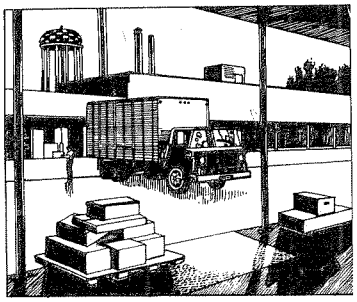
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued May 1979

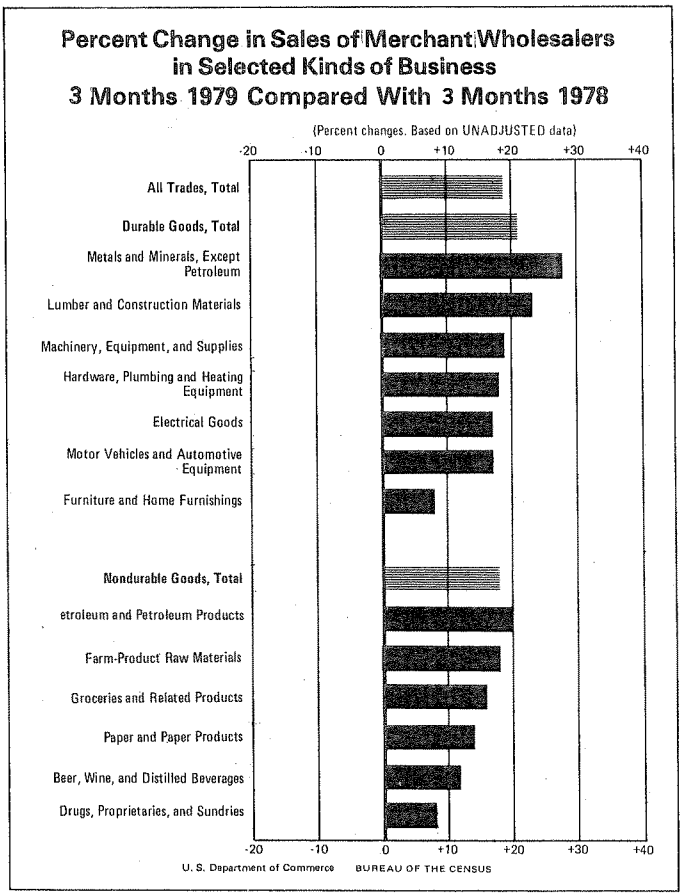
March 1979

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Sales—March 1979 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences, but not for price changes, were $70.7 billion, up 5 percent from the previous month and 20 percent above March 1978. Adjusted January-through-March total sales were up 1 percent from the October-through-December period and were 19 percent above the total sales for the comparable months a year ago.

After adjustment, March sales in the durable goods trades were up 6 percent from the previous month and were 23 percent above sales for the same month a year ago. Nondurable goods sales were up 4 percent from February and were 18 percent above March 1978. Total monthly sales in the durable goods group during the January-through-March period were 2 percent above the prior three months and were 21 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were virtually unchanged from the October-through-December period, but were 17 percent above sales for the same period a year ago.

Based on adjusted data, all trade groups showed increases from their previous month sales levels with the exception of groceries and related products and petroleum and petrolum products which showed no change. The largest increases were shown in furniture and home furnishings; metals and minerals, except petroleum; and miscellaneous nondurable goods—all up 10 percent. Compared with sales of a year ago, all trade groups showed increases with the sharper increases reported in metals and minerals, except petroleum (38%) and lumber and construction materials (29%).



Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variations, but not for price changes, were valued at $84.6 billion at the end of March, up 2 percent from last month, and 17 percent above the same month a year ago. Durable goods stocks were up 1 percent from February and were 16 percent above March 1978. Nondurable goods stocks were up 4 percent from last month and were 18 percent above stocks on hand a year ago.

Based on adjusted data, most trade groups showed increases from February, with the largest increase shown in petroleum and petroleum products (11%). Compared with year-ago inventories, all trade groups showed increases, with the sharper increases reported in beer, wine and distilled beverages (33%) and motor vehicles and automotive equipment (27%).

Stock-Sales Ratios—The March stock-sales ratio for merchant wholesalers, based on seasonally-adjusted data, was 120, down 3 points from the previous month and 4 points below the year-ago level. The stock-sales ratio for durable goods was 161, down 8 points from Febuary and 10 points below the March 1978 ratio. The ratio for nondurable goods was 82, virtually unchanged from both the previous month and year-ago ratios.

An advance release of the March 1979 data was issued on May 9, 1979.

U.S. Department of Commerce
BUREAU OF THE CENSUS

Inquiries concerning this report should be addressed to Ronald Piencykoski, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-5294/763-5295.

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Table 1. Estimated Monthly Sales of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979			1978										Total 3 months	
		Jan.	Feb.	Mar.[p]	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1979	1978
	Merchant wholesalers, total	63,739	61,721	74,225	62,900	60,613	66,249	65,834	60,651	67,702	63,933	69,086	67,699	64,527	199,683	167,807
	Total (excluding farm-product raw materials)	56,481	55,208	66,144	55,848	54,095	58,061	58,658	54,411	60,838	57,342	61,033	59,923	57,237	177,831	149,301
50	Durable goods, total	28,284	28,141	34,886	28,985	28,784	30,405	30,991	28,701	32,279	30,404	32,242	31,037	29,340	91,309	75,733
501	Motor vehicles and automotive parts and supplies	5,634	5,650	7,091	5,870	5,956	6,083	5,929	5,552	6,134	5,381	6,009	6,013	5,510	18,375	15,732
5013,4	Automotive parts and supplies, tires and tubes	3,120	3,081	3,592	3,128	3,217	3,403	3,227	2,935	3,440	2,998	3,344	3,298	2,927	9,793	8,311
5013	Automotive parts and supplies	2,594	2,603	3,018	2,602	2,706	2,828	2,660	2,432	2,872	2,496	2,761	2,752	2,413	8,215	7,054
502	Furniture and home furnishings	1,012	950	1,180	1,111	1,046	1,077	1,104	1,013	1,133	1,162	1,174	1,218	1,140	3,141	2,899
5021	Furniture--household and office	343	332	407	356	352	368	370	328	366	379	379	411	422	1,082	970
5023	Home furnishings	669	618	773	755	695	710	735	685	767	783	795	807	718	2,060	1,929
503	Lumber and other construction materials	2,387	2,212	2,936	2,368	2,517	2,889	3,067	2,771	3,208	3,056	3,173	2,874	2,542	7,534	6,126
5031	Lumber, plywood, and millwork[1]	1,672	1,544	2,039	1,582	1,676	1,947	2,037	1,845	2,105	1,949	2,083	1,915	1,682	5,255	4,160
5039	Construction materials, n.e.c	715	668	897	786	841	942	1,031	927	1,103	1,107	1,089	959	860	2,279	1,966
505	Metals and minerals, except petroleum	3,206	3,215	3,975	3,040	2,942	3,153	3,169	2,817	3,306	3,037	3,186	3,209	2,942	10,396	8,102
5051 pt.	Ferrous metals service centers and offices	2,455	2,437	3,008	2,344	2,190	2,360	2,380	2,158	2,515	2,339	2,446	2,448	2,260	7,899	6,236
5051 pt.	Ferrous metals service centers	1,652	1,744	2,157	1,713	1,629	1,755	1,778	1,580	1,833	1,721	1,801	1,768	1,678	5,553	4,543
506	Electrical goods	3,017	3,083	3,539	3,096	2,980	3,239	3,385	3,193	3,540	3,338	3,590	3,474	3,322	9,639	8,264
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,533	1,638	1,861	1,561	1,556	1,698	1,725	1,663	1,812	1,663	1,832	1,722	1,655	5,032	4,177
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,484	1,445	1,678	1,535	1,424	1,541	1,660	1,530	1,728	1,675	1,758	1,751	1,667	4,608	4,087
5064	Electrical appliances, TV and radio sets	834	849	993	939	841	931	994	912	1,064	1,057	1,040	1,090	1,006	2,675	2,463
507	Hardware, plumbing, heating equipment, and supplies	2,142	1,984	2,373	2,021	2,102	2,306	2,360	2,247	2,412	2,159	2,455	2,250	2,057	6,499	5,519
5072	Hardware	802	758	871	793	797	856	836	760	864	771	859	830	721	2,431	2,165
5074	Plumbing and heating equipment and supplies (hydronics)	854	800	970	801	834	904	902	916	988	928	1,047	918	854	2,624	2,202
508	Machinery, equipment, and supplies	7,691	7,841	9,658	8,301	8,296	8,616	8,790	7,827	8,757	8,655	8,909	8,421	8,485	25,190	21,123
5082	Construction and mining machinery and equipment	895	927	1,234	1,130	1,254	1,276	1,229	1,122	1,196	1,115	1,155	1,126	1,125	3,056	2,830
5084,5	Industrial machinery, equipment, and supplies	3,390	3,464	3,920	3,294	3,077	3,388	3,505	3,049	3,532	3,450	3,573	3,474	3,623	10,774	8,630
5086	Professional equipment, supplies	907	914	1,059	863	816	873	952	888	990	949	941	949	975	2,880	2,305
5093	Scrap and waste materials	1,132	1,184	1,529	979	958	1,058	1,057	940	1,073	978	1,007	1,103	1,079	3,846	2,550
51	Nondurable goods, total	35,455	33,580	39,339	33,915	31,829	35,844	34,843	31,950	35,423	33,529	36,844	36,662	35,187	108,374	92,075
	Total (excluding farm-product raw materials)	28,197	27,067	31,258	26,863	25,311	27,656	27,667	25,710	28,559	26,937	28,791	28,885	27,897	86,522	73,568
511	Paper and paper products	1,540	1,479	1,678	1,506	1,395	1,508	1,498	1,384	1,581	1,456	1,598	1,569	1,489	4,697	4,107
5111,3	Printing, writing, industrial, and personal services paper	1,133	1,100	1,257	1,100	1,032	1,126	1,125	1,046	1,177	1,088	1,191	1,177	1,140	3,490	2,976
512	Drugs, drug proprietaries, and druggists' sundries	950	917	1,052	994	912	943	950	902	1,026	973	1,082	1,017	963	2,918	2,705
5122	Drugs, drug proprietaries, and druggists' sundries	950	917	1,052	994	912	943	950	902	1,026	973	1,082	1,017	963	2,918	2,705
5122 pt.	General-line drugs[2]	423	427	508	470	423	447	448	409	482	464	494	465	445	1,357	1,286
513	Apparel, piece goods, and notions[3]	2,094	1,996	2,356	2,063	1,818	2,099	2,066	2,036	2,658	2,313	2,443	2,369	1,976	6,446	5,297
514	Groceries and related products	11,122	10,381	11,810	10,398	9,916	10,873	10,685	10,237	11,002	10,489	11,150	11,155	10,830	33,313	28,752
5141	Groceries, general-line	3,965	3,658	4,183	3,740	3,547	3,791	3,724	3,649	3,965	3,767	3,999	4,120	3,914	11,805	10,499
5144	Poultry and poultry products	518	489	552	486	468	507	503	482	539	505	525	569	536	1,559	1,284
5145	Confectionery	184	177	207	191	173	191	189	171	187	190	218	211	197	568	507
5147	Meats and meat products	1,979	1,971	2,194	1,651	1,688	1,871	1,826	1,800	1,974	1,840	1,928	1,911	1,885	6,144	4,573
5148	Fresh fruits and vegetables	1,020	961	1,125	986	1,035	1,184	1,198	1,044	985	890	980	974	973	3,106	2,649
515	Farm-product raw materials	7,258	6,513	8,081	7,052	6,518	8,188	7,176	6,240	6,864	6,591	8,053	7,777	7,290	21,852	18,506
5153	Grain	5,859	5,235	6,679	5,718	5,358	6,890	6,078	5,317	5,760	5,448	6,623	6,391	5,912	17,773	14,770
517	Petroleum and petroleum products	4,837	5,008	5,239	4,249	3,830	4,178	4,111	4,000	4,441	4,136	4,431	4,554	4,598	15,085	12,542
5171	Petroleum bulk stations and terminals	2,738	2,785	2,926	2,384	2,188	2,425	2,358	2,190	2,378	2,280	2,449	2,507	2,678	8,449	7,064
518	Beer, wine, and distilled alcoholic beverages	2,020	1,952	2,453	2,299	1,993	2,295	2,506	2,191	2,463	2,254	2,347	2,547	2,709	6,424	5,722
5181	Beer and ale	999	953	1,199	1,094	998	1,219	1,372	1,217	1,328	1,119	1,105	1,088	1,108	3,151	2,728
5182	Wine and distilled alcoholic beverages[2]	1,021	999	1,254	1,204	996	1,076	1,134	974	1,134	1,135	1,242	1,459	1,601	3,273	2,995
519	Miscellaneous nondurable goods	4,529	4,383	5,448	4,434	4,568	4,730	4,819	4,040	4,297	4,311	4,510	4,486	4,425	14,360	11,939
5194	Tobacco and tobacco products	823	749	831	782	765	812	849	838	871	814	848	831	846	2,403	2,196

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. [p]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]The lumber, plywood and millwork group is subject to a sampling variability of 8 percent for March 1979.
[2]The general-line drugs group is subject to a sampling variability of 10 percent for March 1979.
[3]The apparel piece goods and notions group is subject to a sampling variability of 13 percent for March 1979.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations)

1972 SIC code	Kind of business	1979			1978									
		Jan.	Feb.	Mar.[P]	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	81,896	83,917	85,975	73,931	74,635	74,634	74,882	74,874	74,943	76,074	78,715	80,100	80,922
	Total (excluding farm-product raw materials)	75,593	77,627	79,881	67,973	69,060	69,883	70,513	71,073	71,138	71,889	73,327	73,947	74,898
50	Durable goods, total	51,860	53,807	54,684	47,275	47,957	[r]48,918	49,627	49,900	49,841	49,944	50,462	50,971	51,646
501	Motor vehicles and automotive parts and supplies	9,512	10,189	10,124	7,995	7,973	8,246	8,218	8,367	8,378	8,099	8,701	9,326	9,227
5013,4	Automotive parts and supplies, tires and tubes	5,758	5,888	5,981	4,856	4,901	5,149	5,035	5,034	5,206	5,172	5,298	5,635	5,552
5013	Automotive parts and supplies	4,881	5,003	5,063	4,041	4,171	4,382	4,241	4,288	4,415	4,345	4,489	4,792	4,674
502	Furniture and home furnishings	1,764	1,753	1,808	1,633	1,669	1,730	1,781	1,764	1,760	1,810	1,780	1,774	1,752
5023	Home furnishings	1,292	1,282	1,317	1,182	1,233	1,279	1,305	1,305	1,306	1,326	1,315	1,305	1,251
503	Lumber and other construction materials	3,113	3,178	3,271	2,919	2,966	3,030	3,071	3,095	3,007	3,076	3,076	2,995	3,117
5031	Lumber, plywood, and millwork.[1]	2,030	2,082	2,112	1,870	1,882	1,963	1,949	1,967	1,929	1,932	1,946	1,918	2,009
505	Metals and minerals, except petroleum	5,106	5,434	5,401	4,953	4,976	5,356	5,307	5,305	5,437	5,285	5,095	5,208	5,151
5051 pt.	Ferrous metals service centers and offices	4,191	4,425	4,430	3,820	3,823	4,116	4,108	4,104	4,232	4,148	3,976	4,150	4,191
5051 pt.	Ferrous metals service centers	3,241	3,459	3,497	3,039	2,971	3,220	3,268	3,191	3,308	3,299	3,098	3,236	3,336
506	Electrical goods	5,509	5,582	5,746	4,867	4,951	5,129	5,312	5,266	5,264	5,416	5,500	5,526	5,577
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2,542	2,684	2,799	2,226	2,286	2,417	2,358	2,283	2,367	2,356	2,399	2,534	2,558
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,966	2,898	2,947	2,640	2,665	2,712	2,954	2,983	2,899	3,059	3,101	3,016	3,023
507	Hardware, plumbing, heating equipment, and supplies	4,251	4,461	4,536	4,058	4,231	4,222	4,201	4,215	4,117	4,032	4,152	4,033	4,063
5072	Hardware	1,476	1,540	1,553	1,421	1,428	1,445	1,423	1,410	1,369	1,417	1,466	1,382	1,407
5074	Plumbing and heating equipment and supplies (hydronics)	1,819	1,900	1,913	1,784	1,861	1,815	1,818	1,839	1,800	1,805	1,738	1,737	1,760
508	Machinery, equipment, and supplies	17,748	18,254	18,710	16,511	16,762	16,796	17,061	17,057	17,183	17,405	17,352	17,428	18,012
5082	Construction and mining machinery and equipment	3,932	4,152	4,354	3,505	3,516	3,589	3,636	3,637	3,793	3,899	3,937	4,002	4,109
5084,5	Industrial machinery, equipment, and supplies	5,728	5,800	5,916	4,996	5,055	5,160	5,328	5,301	5,317	5,519	5,508	5,570	5,752
51	Nondurable goods, total	30,036	30,110	31,291	26,656	26,678	25,716	25,255	24,974	25,102	26,130	28,253	29,129	29,276
	Total (excluding farm-product raw materials)	23,733	23,820	25,197	20,699	21,103	20,966	20,887	21,173	21,297	21,946	22,865	22,976	23,252
511	Paper and paper products	1,424	1,468	1,537	1,310	1,349	1,343	1,376	1,341	1,361	1,414	1,419	1,441	1,482
5111,3	Printing, writing, industrial, and personal service paper	986	1,010	1,035	910	911	929	955	938	921	976	969	967	1,025
512	Drugs, drug proprietaries, and druggists' sundries	1,465	1,484	1,601	1,330	1,345	1,350	1,401	1,368	1,410	1,489	1,502	1,476	1,440
514	Groceries and related products	6,408	6,346	6,712	5,710	5,740	5,752	5,871	5,833	5,803	6,186	6,469	6,412	6,497
5141	Groceries, general-line	2,696	2,744	2,913	2,562	2,500	2,495	2,512	2,480	2,505	2,641	2,811	2,814	2,761
517	Petroleum and petroleum products	2,106	2,101	2,337	1,953	1,872	1,938	1,837	1,974	2,093	2,098	2,151	2,151	2,153
518	Beer, wine, and distilled alcoholic beverages	2,462	2,427	2,677	2,017	2,133	2,135	2,148	2,178	2,158	2,221	2,453	2,513	2,290
5181	Beer and ale[2]	800	845	1,012	707	758	730	717	709	679	720	769	777	729
5182	Wines and distilled alcoholic beverages	1,662	1,582	1,666	1,311	1,375	1,405	1,431	1,469	1,480	1,501	1,684	1,736	1,561

See footnotes at end of table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Percent. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979			1978									
		Jan.	Feb.	Mar.[P]	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	128	136	116	118	123	113	114	123	111	119	114	118	125
	Total (excluding farm-product raw materials)	134	141	121	122	128	120	120	131	117	125	120	123	131
50	Durable goods, total	183	191	157	163	167	161	160	174	154	164	157	164	176
501	Motor vehicles and automotive parts and supplies	169	180	143	136	134	136	139	151	137	151	145	155	167
5013,4	Automotive parts and supplies, tires and tubes	185	191	167	155	152	151	156	172	151	173	158	171	190
5013	Automotive parts and supplies	188	192	168	155	154	155	159	176	154	174	163	174	194
502	Furniture and home furnishings	174	185	153	147	159	161	161	174	155	156	152	146	154
5023	Home furnishings	193	208	170	157	178	180	178	190	170	169	165	162	174
503	Lumber and other construction materials	130	144	114	123	118	105	100	112	94	101	97	104	123
5031	Lumber, plywood, and millwork	121	135	104	118	112	101	96	107	92	99	93	100	119
505	Metals and minerals, except petroleum	159	169	136	163	169	170	167	188	164	174	160	162	175
5051 pt.	Ferrous metals service centers and offices	171	182	147	163	175	174	173	190	168	177	163	170	185
5051 pt.	Ferrous metals service centers	196	198	162	177	182	184	184	202	181	192	172	183	199
506	Electrical goods	183	181	162	157	166	158	157	165	149	162	153	159	168
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	166	164	150	143	147	142	137	137	131	142	131	147	155
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	200	201	176	172	187	176	178	195	168	183	176	171	181
507	Hardware, plumbing, heating equipment, and supplies	198	225	191	201	201	183	178	188	171	187	169	179	198
5072	Hardware	184	203	178	179	179	169	170	185	158	179	171	167	195
5074	Plumbing and heating equipment and supplies (hydronics)	213	237	197	223	223	201	202	201	182	188	166	189	206
508	Machinery, equipment, and supplies	231	238	194	199	202	195	194	218	196	201	195	207	212
5082	Construction and mining machinery and equipment	439	448	353	310	280	281	296	324	317	350	341	356	365
5084,5	Industrial machinery, equipment, and supplies	168	167	151	152	164	152	152	174	151	160	154	160	159
51	Nondurable goods, total	85	90	80	79	84	72	72	78	71	78	77	79	83
	Total (excluding farm-product raw materials)	84	88	81	77	83	76	75	82	75	81	79	80	83
511	Paper and paper products	92	99	92	87	97	89	92	97	86	97	89	92	100
5111,3	Printing, writing, industrial, and personal service paper	87	92	82	83	88	82	85	90	78	90	81	82	90
512	Drugs, drug proprietaries, and druggists' sundries	154	162	152	134	147	143	147	152	137	153	139	145	150
514	Groceries and related products	58	61	57	55	58	53	55	57	53	59	58	57	60
5141	Groceries, general-line	68	75	70	68	70	66	67	68	63	70	70	68	71
517	Petroleum and petroleum products	44	42	45	46	49	46	45	49	47	51	49	47	47
518	Beer, wine, and distilled alcoholic beverages	122	124	109	88	107	93	86	99	88	99	105	99	85
5181	Beer and ale	80	89	84	65	76	60	52	58	51	64	70	71	66
5182	Wines and distilled alcoholic beverages	163	158	133	109	138	131	126	151	130	132	136	119	97

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. [P]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures. [r]Revised.

[1]The lumber, plywood and millwork group is subject to a sampling variability of 8 percent for March 1979.

[2]The beer and ale group is subject to a sampling variability of 8 percent for March 1979.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1979 and 1978

(Sales and inventories in millions of dollars. Stock-sales ratios in percent)

1972 SIC code	Kind of business	1979			1978									
		Jan.	Feb.	Mar.[p]	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Sales ADJUSTED for seasonal variations and trading-day differences												
	Merchant wholesalers, total	67,148	67,495	70,737	58,803	61,640	63,171	62,656	63,425	64,894	64,531	67,338	67,552	67,823
	Total (excluding farm-product raw materials)	60,346	60,603	63,515	52,539	54,992	55,288	55,252	56,716	57,461	57,326	59,349	60,373	60,526
50	Durable goods, total	31,012	31,769	33,754	27,419	28,831	28,627	28,741	29,859	30,043	29,863	30,953	31,498	31,939
501	Motor vehicles and automotive parts and supplies	5,994	6,285	6,677	5,454	5,530	5,614	5,516	5,631	5,739	5,598	6,113	6,442	6,088
502	Furniture and home furnishings	1,162	1,058	1,159	1,056	1,080	1,060	1,036	1,136	1,077	1,118	1,047	1,136	1,197
503	Lumber and other construction materials	2,876	2,758	3,017	2,347	2,661	2,630	2,733	2,705	2,732	2,878	2,887	2,874	3,026
505	Metals and minerals, except petroleum	3,184	3,518	3,870	2,811	2,984	2,930	3,036	3,090	3,045	2,947	3,188	3,305	3,258
506	Electrical goods	3,279	3,460	3,543	3,034	3,103	3,259	3,179	3,225	3,377	3,311	3,340	3,356	3,362
507	Hardware, plumbing, heating equipment, and supplies	2,354	2,270	2,426	2,022	2,148	2,161	2,185	2,232	2,209	2,108	2,290	2,237	2,330
508	Machinery, equipment, and supplies	8,461	8,840	9,103	7,690	8,305	7,997	8,082	8,201	8,372	8,382	8,607	8,730	9,193
51	Nondurable goods, total	36,136	35,726	36,983	31,384	32,809	34,544	33,915	33,566	34,851	34,668	36,385	36,054	35,884
	Total (excluding farm-product raw materials)	29,334	28,834	29,761	25,120	26,161	26,661	26,511	26,857	27,418	27,463	28,396	28,875	28,587
511	Paper and paper products	1,540	1,595	1,626	1,416	1,494	1,459	1,446	1,447	1,473	1,419	1,536	1,579	1,608
512	Drugs, drug proprietaries, and druggists' sundries	953	990	1,012	938	947	940	952	971	980	965	1,000	1,007	997
513	Apparel, piece goods, and notions	2,230	2,114	2,272	1,926	1,981	2,075	2,091	2,173	2,299	2,177	2,268	2,291	2,269
514	Groceries and related products	11,407	11,408	11,455	9,978	10,199	10,319	10,176	10,340	10,443	10,607	11,039	11,178	11,400
515	Farm-product raw materials[1]	6,802	6,892	7,222	6,264	6,648	7,883	7,404	6,709	7,433	7,205	7,989	7,179	7,297
517	Petroleum and petroleum products	4,876	4,905	4,915	3,944	3,982	4,354	4,111	4,144	4,430	4,442	4,390	4,542	4,387
518	Beer, wine, and distilled alcoholic beverages	2,491	2,395	2,503	2,250	2,198	2,149	2,199	2,245	2,284	2,305	2,333	2,383	2,387
519	Miscellaneous nondurable goods	4,645	4,361	4,779	3,802	4,463	4,403	4,583	4,580	4,499	4,521	4,657	4,693	4,567
		Inventories ADJUSTED for seasonal variations												
	Merchant wholesalers, total	81,543	83,005	84,620	72,629	74,327	74,779	75,191	75,744	76,338	77,113	78,625	79,526	80,771
	Total (excluding farm-product raw materials)	76,224	77,545	79,193	67,319	68,769	69,436	70,028	70,920	71,546	72,119	73,434	74,285	75,546
50	Durable goods, total	52,490	53,773	54,241	46,871	47,677	48,319	48,756	49,414	49,972	50,160	50,948	51,625	52,460
501	Motor vehicles and automotive parts and supplies	9,390	9,883	9,965	7,869	7,925	8,084	8,177	8,434	8,637	8,315	8,870	9,420	9,236
502	Furniture and home furnishings	1,778	1,765	1,813	1,638	1,677	1,716	1,748	1,755	1,750	1,789	1,776	1,782	1,801
503	Lumber and other construction materials	3,160	3,207	3,154	2,818	2,888	2,925	3,020	3,052	3,013	3,101	3,181	3,113	3,190
505	Metals and minerals, except petroleum	5,142	5,528	5,390	4,943	4,937	5,345	5,296	5,161	5,289	5,290	5,269	5,266	5,166
506	Electrical goods	5,697	5,772	5,804	4,916	4,971	5,068	5,177	5,193	5,227	5,346	5,435	5,499	5,650
507	Hardware, plumbing, heating equipment, and supplies	4,382	4,543	4,460	3,990	4,053	4,091	4,095	4,149	4,092	4,098	4,207	4,153	4,228
508	Machinery, equipment, and supplies	17,927	18,073	18,433	16,251	16,745	16,630	16,710	17,006	17,357	17,510	17,527	17,658	18,249
51	Nondurable goods, total	29,053	29,232	30,379	25,758	26,650	26,460	26,435	26,330	26,366	26,953	27,677	27,901	28,311
	Total (excluding farm-product raw materials)	23,734	23,772	24,952	20,448	21,092	21,117	21,272	21,506	21,574	21,959	22,486	22,660	23,086
511	Paper and paper products	1,458	1,493	1,551	1,323	1,334	1,338	1,341	1,341	1,358	1,404	1,419	1,447	1,482
512	Drugs, drug proprietaries, and druggists' sundries	1,528	1,530	1,604	1,333	1,337	1,379	1,393	1,382	1,410	1,453	1,435	1,446	1,444
514	Groceries and related products	6,492	6,333	6,574	5,593	5,711	5,798	5,948	5,922	5,921	6,192	6,342	6,355	6,433
517	Petroleum and petroleum products	2,017	2,114	2,351	1,969	1,987	2,019	1,948	2,050	2,078	2,039	2,052	2,064	2,082
518	Beer, wine, and distilled alcoholic beverages	2,557	2,536	2,748	2,071	2,152	2,087	2,087	2,180	2,204	2,214	2,293	2,377	2,403
		Stock-sales ratios based on ADJUSTED data												
	Merchant wholesalers, total	121	123	120	124	121	118	120	119	118	119	117	118	119
	Total (excluding farm-product raw materials)	126	128	125	128	125	126	127	125	125	126	123	123	125
50	Durable goods, total	169	169	161	171	165	169	170	165	166	168	165	164	164
501	Motor vehicles and automotive parts and supplies	157	157	149	144	143	144	148	150	150	149	145	146	152
502	Furniture and home furnishings	153	167	156	155	155	162	169	154	162	160	170	157	150
503	Lumber and other construction materials	110	116	105	120	109	111	111	113	110	108	110	108	105
505	Metals and minerals, except petroleum	161	157	139	176	165	182	174	167	174	179	165	159	159
506	Electrical goods	174	167	164	162	160	156	163	161	155	161	163	164	168
507	Hardware, plumbing, heating equipment, and supplies	186	200	184	197	189	189	187	186	185	194	184	186	181
508	Machinery, equipment, and supplies	212	204	202	211	202	208	207	207	207	209	204	202	199
51	Nondurable goods, total	80	82	82	82	81	77	78	78	76	78	76	77	79
	Total (excluding farm-product raw materials)	81	82	84	81	81	79	80	80	79	80	79	78	81
511	Paper and paper products	95	94	95	93	89	92	93	92	92	99	92	92	92
512	Drugs, drug proprietaries, and druggists' sundries	160	155	158	142	141	147	146	142	144	151	144	144	145
514	Groceries and related products	57	56	57	56	56	56	58	57	57	58	57	57	56
517	Petroleum and petroleum products	41	43	48	50	50	46	47	49	47	46	47	45	47
518	Beer, wine, and distilled alcoholic beverages	103	106	110	92	98	97	95	97	97	96	98	100	101

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions. All data for 1978 have been revised to reflect recomputed factors for seasonal adjustment.

NA Not available. [p]Preliminary estimates. See p. 15, Sample Design and Estimation Procedures.

[1]There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table 4B. Percent Change Between Selected 3-Month Periods Sales of Merchant Wholesalers, United States

(Based on seasonally-adjusted data)

Item	3 month period, Jan. 1979-Mar. 1979 from--			
	Oct. 1978-Dec. 1978 (3 months ago)	July 1978-Sept. 1978 (6 months ago)	April 1978-June 1978 (9 months ago)	Jan. 1978-Mar. 1978 (12 months ago)
Merchant wholesalers, total.....	+1	+6	+10	+19
Durable goods, total.....	+2	+8	+12	+21
Nondurable goods, total....	0	+6	+7	+17

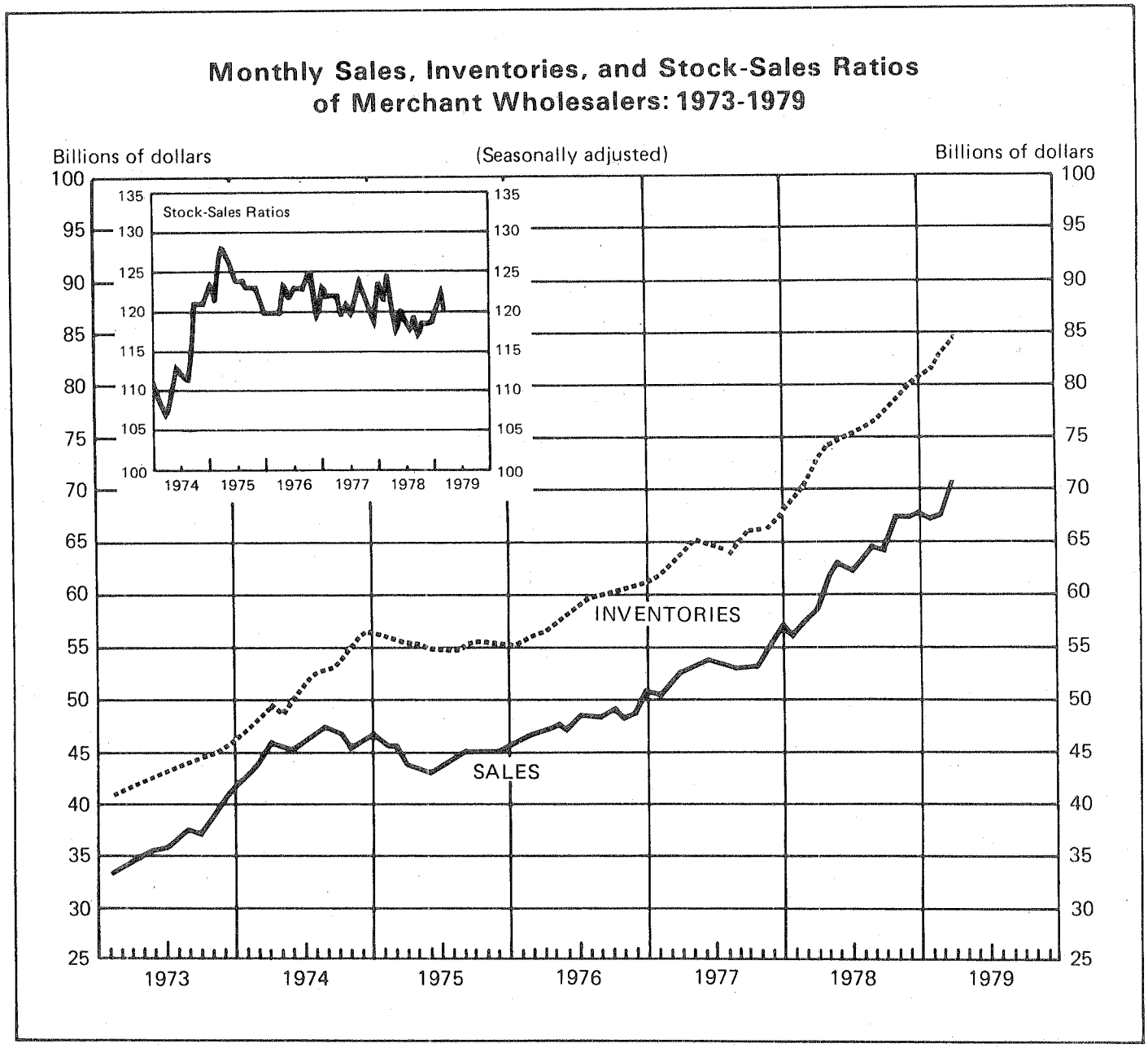


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: March 1979

1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		March 1979 from February 1979	March 1979 from March 1978	3 months 1979 from 3 months 1978	March 1979 from February 1979	March 1979 from March 1978	March 1979 from February 1979	March 1979 from March 1978	March 1979 from February 1979	March 1979 from March 1978
	Merchant wholesalers, total	+20	+18	+19	+2	+16	+5	+20	+2	+17
	Total (excluding farm-product raw materials)	+20	+18	+19	+3	+18	+5	+21	+2	+18
50	Durable goods, total	+24	+20	+21	+2	+16	+6	+23	+1	+16
501	Motor vehicles and automotive parts and supplies	+26	+21	+17	-1	+27	+6	+22	+1	+27
5012	Automobiles and other motor vehicles	+36	+28	+16	-4	+32	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	+17	+15	+18	+2	+23	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	+16	+16	+16	+1	+25	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	+24	+6	+8	+3	+11	+10	+10	+3	+11
5021	Furniture--household and office	+23	+14	+11	+4	+9	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	+26	+18	+11	+5	+13	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	+21	+13	+12	+3	+5	(*)	(*)	(*)	(*)
5023	Home furnishings	+25	+2	+7	+3	+11	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	+33	+24	+23	+3	+12	+9	+29	-2	+12
5031	Lumber, plywood, and millwork	+32	+29	+26	+1	+13	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c	+34	+14	+16	+6	+10	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	+23	+4	+10	+4	+6	+7	+6	+6	+6
505	Metals and minerals, except petroleum	+24	+31	+28	-1	+9	+10	+38	-2	+9
5051 pt.	Ferrous metals service centers and offices	+23	+28	+27	0	+16	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	+24	+26	+22	+1	+15	(*)	(*)	(*)	(*)
5051 pt.	Nonferrous metals service centers and offices	+24	+48	+35	-3	-12	(*)	(*)	(*)	(*)
506	Electrical goods	+15	+14	+17	+3	+18	+2	+17	+1	+18
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+14	+19	+20	+4	+26	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+16	+9	+13	+2	+12	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	+17	+6	+9	+2	+17	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	+20	+17	+18	+2	+12	+7	+20	-2	+12
5072	Hardware	+15	+10	+12	+1	+9	(*)	(*)	(*)	(*)
5074	Plumbing and heating equipment and supplies (hydronics)	+21	+21	+19	+1	+7	(*)	(*)	(*)	(*)
5075	Warm air heating and air conditioning equipment and supplies	+30	+31	+26	+5	+30	(*)	(*)	(*)	(*)
508	Machinery, equipment, and supplies	+23	+16	+19	+2	+13	+3	+18	+2	+13
5081	Commercial machines and equipment	+23	+9	+5	+3	+5	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	+33	+9	+8	+5	+24	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	+55	+19	+20	+2	0	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	+13	+19	+25	+2	+18	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	+16	+23	+25	0	+20	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	+29	+56	+51	+3	+14	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	+28	+64	+61	+4	+20	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	+32	+45	+37	+2	+1	(*)	(*)	(*)	(*)
51	Nondurable goods, total	+17	+16	+18	+4	+17	+4	+18	+4	+18
	Total (excluding farm-product raw materials)	+15	+16	+18	+6	+22	+3	+18	+5	+22
511	Paper and paper products	+13	+11	+14	+5	+17	+2	+15	+4	+17
5111, 3	Printing, writing, industrial, and personal service paper	+14	+14	+17	+2	+14	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	+15	+6	+8	+8	+20	+2	+8	+5	+20
5122	Drugs, drug proprietaries, and druggists' sundries	+15	+6	+8	+8	+20	+2	+8	+5	+20
5122 pt.	General-line drugs	+19	+8	+6	+8	+19	(*)	(*)	(*)	(*)
514	Groceries and related products	+14	+14	+16	+6	+18	0	+15	+4	+18
5141	Groceries, general-line	+14	+12	+12	+6	+14	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	+11	+12	+13	+6	+12	(*)	(*)	(*)	(*)
5141 pt.	Retailer cooperatives	+12	+10	+10	+8	+15	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	+19	+13	+14	+5	+14	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	+14	+6	+10	+4	+12	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	+13	+14	+21	+8	+33	(*)	(*)	(*)	(*)
5145	Confectionery	+17	+9	+12	+1	+15	(*)	(*)	(*)	(*)
5147	Meats and meat products	+11	+33	+34	+14	+46	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	+17	+14	+17	-3	+39	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	+24	+15	+18	-3	+2	+5	+15	-1	+2
5152	Cotton	+1	-5	+10	-8	+3	(*)	(*)	(*)	(*)
5153	Grain	+28	+17	+20	-1	+1	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	+5	+23	+20	+11	+20	0	+25	+11	+19
5171	Petroleum bulk stations and terminals	+5	+23	+20	+7	+20	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	+26	+7	+12	+10	+33	+5	+11	+8	+33
5181	Beer and ale	+26	+10	+16	+20	+43	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	+26	+4	+9	+5	+27	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	+24	+23	+20	+6	+19	+10	+26	+6	+19
5191	Farm supplies	+25	+24	+25	+6	+22	(*)	(*)	(*)	(*)
5194	Tobacco and tobacco products	+11	+6	+9	+5	+14	(*)	(*)	(*)	(*)
5198	Paints, varnishes, and supplies	+23	+18	+18	-2	+23	(*)	(*)	(*)	(*)
5199 pt.	Books, periodicals, newspapers	+16	+6	+4	+2	+9	(*)	(*)	(*)	(*)

*Adjusted data are available only for summary group totals.
S Does not meet publication standards because of extreme variability or high nonresponse rate.

[1]Adjusted for seasonal variations and, in the case of sales, also for trading-day differences. Adjusted data are only available for the summary kind-of-business groups shown.
[2]There are indications that the seasonal adjustment factors for this trade group may not reflect recent trends. The seasonally adjusted data for this trade group and also for the summary group totals should, therefore, be used with caution.

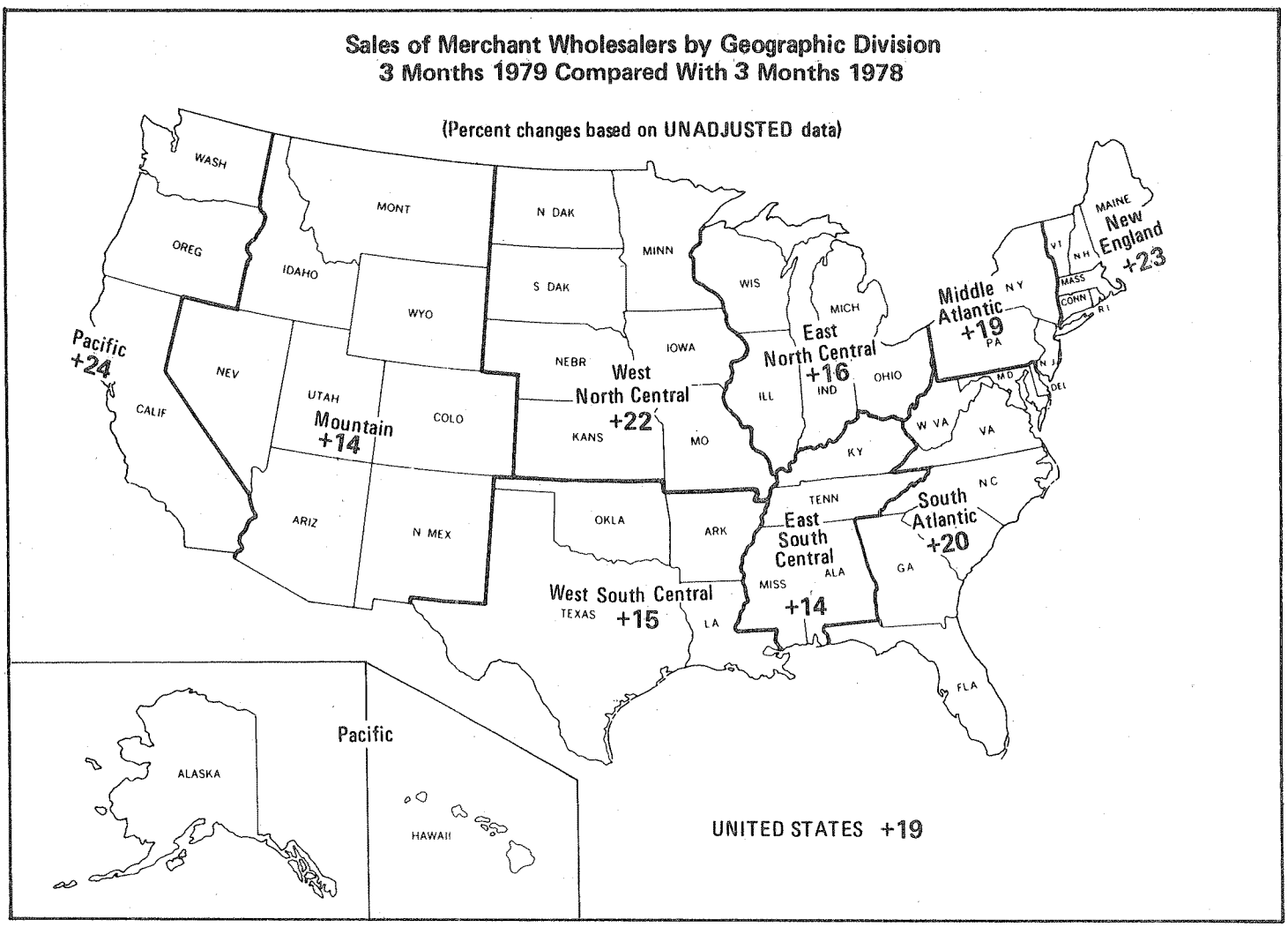


Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1979 and 1978

(Sales, in millions of dollars, are NOT ADJUSTED for seasonal variations or trading-day differences; sampling errors in percent)

1972 SIC code	Kind of business and geographic division[1]	1979			1978									Total 3 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.[p]	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1979	1978	Range[2]	Median
	Merchant wholesalers, total	63,739	61,721	74,225	62,900	60,613	66,249	65,834	60,651	67,702	63,933	69,086	67,699	64,527	199,683	167,807	0.8-0.9	0.9
	New England	3,393	3,289	3,789	3,191	2,913	3,231	3,451	3,206	3,654	3,472	3,638	3,678	3,652	10,471	8,541	5-6	6
	Middle Atlantic	14,513	13,785	16,681	14,206	13,114	14,345	14,752	13,281	15,382	14,387	15,123	15,304	14,529	44,979	37,893	2-2	2
	East North Central	10,573	10,454	12,519	10,680	10,708	11,787	11,510	10,461	11,636	10,821	12,195	11,757	10,882	33,547	28,877	2-3	3
	West North Central	6,695	6,589	7,998	6,419	6,522	7,583	6,999	6,513	7,373	6,836	7,790	7,471	6,894	21,282	17,374	2-3	2
	South Atlantic	7,023	6,620	8,155	6,792	6,533	6,858	7,044	6,523	7,139	6,877	7,449	7,106	6,979	21,799	18,144	2-3	2
	East South Central	2,961	2,801	3,505	3,201	3,318	3,453	3,132	2,962	3,127	2,938	3,213	3,075	2,922	9,267	8,156	4-5	4
	West South Central	6,703	6,648	7,721	6,878	6,433	6,857	6,744	6,382	6,890	6,717	7,036	6,885	6,680	21,072	18,303	3-4	4
	Mountain	2,337	2,253	2,683	2,536	2,412	2,537	2,777	2,456	2,620	2,693	2,583	2,477	2,540	7,273	6,370	5-5	5
	Pacific	9,540	9,281	11,172	8,994	8,659	9,600	9,426	8,868	9,881	9,191	10,058	9,946	9,448	29,994	24,150	2-3	3
50	Durable goods, total	28,284	28,141	34,886	28,985	28,784	30,405	30,991	28,701	32,279	30,404	32,242	31,037	29,340	91,309	75,733	0.8-1.0	0.9
	Middle Atlantic	5,936	5,892	7,223	6,295	5,952	6,181	6,464	5,808	6,765	6,303	6,618	6,516	6,094	19,051	16,406	4-5	4
	East North Central	4,818	4,975	6,314	5,081	5,128	5,495	5,407	4,958	5,793	5,342	5,801	5,674	5,177	16,107	13,379	3-4	4
	West North Central	2,157	2,208	2,848	2,228	2,378	2,548	2,446	2,383	2,695	2,504	2,740	2,652	2,379	7,213	5,809	5-6	5
	South Atlantic	3,515	3,211	4,148	3,414	3,455	3,538	3,817	3,480	3,738	3,689	3,869	3,608	3,513	10,874	8,991	4-5	4
	West South Central	3,020	3,067	3,645	3,180	3,097	3,303	3,366	3,135	3,403	3,224	3,438	3,160	3,144	9,732	8,219	4-4	4
	Mountain	1,076	1,043	1,276	1,192	1,208	1,247	1,412	1,303	1,372	1,340	1,283	1,172	1,207	3,394	3,007	6-7	7
	Pacific	5,259	5,268	6,300	5,007	4,901	5,316	5,256	5,026	5,641	5,214	5,597	5,524	5,250	16,827	13,405	2-3	3
51	Nondurable goods, total	35,455	33,580	39,339	33,915	31,829	35,844	34,843	31,950	35,423	33,529	36,844	36,662	35,187	108,374	92,075	1.0-1.2	1.0
	New England	2,166	2,066	2,293	2,017	1,747	2,014	2,151	1,988	2,293	2,117	2,245	2,316	2,349	6,525	5,487	5-7	6
	Middle Atlantic	8,577	7,893	9,458	7,912	7,162	8,164	8,288	7,473	8,617	8,084	8,505	8,788	8,435	25,928	21,486	3-3	3
	East North Central	5,755	5,479	6,205	5,599	5,580	6,292	6,103	5,504	5,843	5,479	6,394	6,083	5,704	17,439	15,498	3-4	3
	West North Central	4,538	4,381	5,150	4,191	4,145	5,035	4,554	4,129	4,678	4,331	5,050	4,820	4,515	14,069	11,566	3-4	3
	South Atlantic	3,508	3,409	4,007	3,378	3,078	3,320	3,227	3,044	3,400	3,188	3,580	3,498	3,466	10,925	9,153	3-5	3
	East South Central	1,685	1,549	1,869	1,788	1,819	1,892	1,609	1,572	1,616	1,505	1,710	1,706	1,650	5,103	4,692	3-4	4
	West South Central	3,683	3,581	4,077	3,699	3,336	3,554	3,378	3,248	3,487	3,493	3,598	3,725	3,536	11,341	10,084	5-5	5
	Pacific	4,281	4,013	4,872	3,987	3,757	4,284	4,170	3,842	4,241	3,978	4,461	4,422	4,199	13,166	10,746	4-5	4

Note: Detail may not add to totals due to rounding and minor revisions.

[p]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]See map on page 7.

[2]The range of sampling error of the estimate is based on data for August, September, and October 1977.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: March 1979

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in-- Sales: March 1979 from February 1979	Sales: March 1979 from March 1978	Sales: 3 months 1979 from 3 months 1978	Inventories: March 1979 from February 1979	Inventories: March 1979 from March 1978	Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		A	B	C[1]	D	E	A	D
	Merchant wholesalers, total	+20	+18	+19	+2	+16	0.4	0.2
	New England	+15	+19	+23	+1	+17	2.0	1.9
	Middle Atlantic	+21	+17	+19	+1	+15	1.1	0.6
	East North Central	+20	+17	+16	+1	+12	1.2	0.8
	West North Central	+21	+25	+22	+2	+14	1.3	1.1
	South Atlantic	+23	+20	+20	+1	+16	1.6	1.0
	East South Central	+25	+10	+14	+1	+12	1.7	1.4
	West South Central	+16	+12	+15	+2	+14	1.4	0.8
	Mountain	+19	+6	+14	+2	+4	2.4	1.3
	Pacific	+20	+24	+24	+3	+26	1.2	0.5
50	Durable goods, total	+24	+20	+21	+2	+16	0.6	0.3
	New England	+22	+27	+29	0	+15	2.4	1.3
	Middle Atlantic	+23	+15	+16	-1	+12	1.7	1.0
	East North Central	+27	+24	+20	0	+13	1.9	1.0
	West North Central	+29	+28	+24	+2	+17	3.3	1.7
	South Atlantic	+29	+22	+21	0	+13	1.9	1.2
	East South Central	+31	+16	+20	+2	+6	3.9	2.5
	West South Central	+19	+15	+18	+2	+17	2.1	1.2
	Mountain	+22	+7	+13	0	+3	2.9	1.7
	Pacific	+20	+26	+26	+2	+27	1.9	0.7
51	Nondurable goods, total	+17	+16	+18	+4	+17	0.6	0.4
	New England	+11	+14	+19	+2	+19	1.9	2.7
	Middle Atlantic	+20	+20	+21	+3	+20	1.9	0.9
	East North Central	+13	+11	+13	+3	+10	1.4	1.1
	West North Central	+18	+23	+22	+1	+11	1.6	1.4
	South Atlantic	+18	+19	+19	+2	+23	2.4	1.8
	East South Central	+21	+5	+9	0	+22	1.7	2.4
	West South Central	+14	+10	+12	+1	+9	2.2	1.3
	Mountain	+16	+5	+15	+5	+7	3.2	1.2
	Pacific	+21	+22	+23	+6	+24	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	+17	+15	+18	+2	+23	2	1
	New England	+3	+20	+27	-3	+23	7	4
	Middle Atlantic	(S)	(S)	+15	-2	+12	4	2
	East North Central	+24	+34	+30	-8	+10	7	1
	West North Central	+28	+37	+24	+3	+19	5	2
	South Atlantic	+32	+22	+25	-7	+13	4	2
	East South Central	+28	+15	+21	-3	-4	4	3
	West South Central	+24	+7	+14	0	+17	5	2
	Mountain	+3	(S)	(S)	-5	(S)	7	3
	Pacific	+17	+37	+24	+3	+66	3	2
502	Furniture and home furnishings	+24	+6	+8	+3	+11	2	1
	Middle Atlantic	+34	+28	+25	+3	+20	4	2
	East North Central	+22	+6	+22	+4	-1	7	2
	West North Central	+15	-18	-11	+1	-6	5	4
	West South Central	+21	+8	+13	+1	+20	5	7
	Pacific	+25	-7	-6	+4	+11	5	3
503	Lumber and other construction materials	+33	+24	+23	+3	+12	2	1
	New England	+36	+34	+32	+4	+2	4	5
	Middle Atlantic	+26	+12	+18	+6	+12	4	2
	East North Central	+46	+20	+12	+6	+10	3	2
	West North Central	+55	+64	+38	+7	+23	7	7
	South Atlantic	+40	+25	+22	-2	+23	4	2
	East South Central	+33	(S)	+13	+3	(S)	4	3
	West South Central	+26	(S)	+8	-2	+8	6	5
	Pacific	+22	+31	+32	0	+9	5	1
5051 pt.	Ferrous metals service centers	+24	+26	+22	+1	+15	2	1
	New England	+11	+12	+31	+2	+4	6	2
	Middle Atlantic	+27	+21	+14	-1	-1	5	2
	East North Central	+27	+34	+25	+1	+20	3	2
	West North Central	+31	+28	+32	0	+2	5	2
	South Atlantic	+21	+15	+16	0	+6	3	2
	East South Central	+13	+16	+26	+2	+10	4	4
	West South Central	+20	+33	+28	+2	+27	4	2
	Mountain	+26	(S)	(S)	-2	(S)	2	2
	Pacific	+15	+32	(S)	-2	+55	2	3
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+14	+19	+20	+4	+26	2	1
	New England	+7	+28	+30	+1	+35	3	2
	Middle Atlantic	+10	+13	+14	+1	+12	5	2
	East North Central	+12	+15	+22	+2	+13	3	2
	West North Central	+26	(S)	+24	+6	(S)	5	3
	South Atlantic	+8	+4	+15	+4	+20	3	2
	East South Central	+47	+18	+15	0	+27	3	5
	West South Central	+11	+26	+31	+12	+49	4	2
	Mountain	+16	+31	+24	+3	+22	4	2
	Pacific	+8	+26	+26	+5	+25	4	2

See footnotes at end of table.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: March 1979—Continued

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in-- Sales: March 1979 from February 1979	Sales: March 1979 from March 1978	Sales: 3 months 1979 from 3 months 1978	Inventories: March 1979 from February 1979	Inventories: March 1979 from March 1978	Sampling errors of the ratio corresponding to the percent change in columns[2]-- A	D
		A	B	C	D	E	A	D
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+16	+9	+13	+2	+12	3	1
	Middle Atlantic	+13	+9	+13	+1	+15	3	2
	East North Central	+17	+24	+24	-3	+11	4	1
	West North Central	+28	-2	-5	+8	+5	4	4
	South Atlantic	+15	+12	+10	+5	+17	6	4
	West South Central	+35	+17	+16	-2	-10	4	4
	Mountain	+15	-8	+15	-1	(S)	6	3
	Pacific	+12	+2	+12	+1	+15	3	2
5072	Hardware	+15	+10	+12	+1	+9	1	1
	New England	+14	+34	+22	0	(S)	6	3
	Middle Atlantic	+11	+3	+10	+3	+11	6	2
	East North Central	+17	+5	+4	-4	+10	4	2
	West North Central	+11	+24	+24	+3	+14	3	3
	South Atlantic	+20	+4	+9	0	-12	4	2
	East South Central	+20	(S)	+8	-2	-13	4	1
	Pacific	+14	+10	+18	+1	+7	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	+21	+21	+19	+1	+7	2	1
	Middle Atlantic	+17	+25	+24	+2	+9	6	3
	East North Central	+23	+30	+16	-4	+18	3	3
	South Atlantic	+25	+26	+22	+3	+16	3	2
	Mountain	+14	(S)	(S)	-2	-1	7	4
	Pacific	+11	+7	+14	+7	-7	5	4
5084,5	Industrial machinery, equipment, and supplies	+13	+19	+25	+2	+18	2	1
	Middle Atlantic	+19	+8	+12	-1	+13	7	2
	East North Central	+14	+27	+26	+1	+29	3	2
	West South Central	+15	+33	+35	0	+8	4	3
	Pacific	+7	+26	+33	+3	+28	5	2
512	Drugs, drug proprietaries, and druggists' sundries	+15	+6	+8	+8	+20	1	1
	New England	+12	(S)	+6	+9	+10	5	3
	Middle Atlantic	+6	+1	+9	+16	+31	3	2
	East North Central	+25	+6	+7	+1	+3	6	3
	West North Central	+11	+8	+5	+8	+19	2	2
	South Atlantic	+6	-6	+2	+2	+7	6	5
	East South Central	+26	+22	+9	+1	+33	6	5
	West South Central	+17	+16	+12	+10	+40	3	2
	Mountain	+15	+16	+13	+6	+27	3	2
	Pacific	+21	+16	+12	+4	+17	3	3
5141	Groceries, general-line	+14	+12	+12	+6	+14	1	1
	New England	+9	+5	+14	+2	+11	2	1
	Middle Atlantic	+17	+8	+10	+4	+11	1	2
	East North Central	+16	+10	+8	+7	+7	3	1
	West North Central	+11	+11	+12	+7	+22	1	1
	South Atlantic	+14	+20	+22	+5	+18	2	1
	West South Central	+11	+14	+13	+3	+12	2	1
	Mountain	+19	+6	+12	+7	+7	2	2
	Pacific	+15	+19	+19	+5	+19	1	1
5142,3,6,9	Specialty-line groceries	+14	+6	+10	+4	+12	1	1
	Middle Atlantic	+14	-1	+6	+1	+2	4	2
	East North Central	+10	+12	+13	+3	+11	3	2
	West North Central	+7	+2	+4	+10	+11	3	1
	South Atlantic	+15	+9	+10	+7	+39	5	6
	East South Central	+7	+10	+13	(S)	+3	2	2
5148	Fresh fruits and vegetables	+17	+14	+17	-3	+39	2	4
	Middle Atlantic	+19	+16	+20	-4	+15	7	5
	East North Central	+10	+5	+6	0	+8	6	6
	West North Central	+18	+1	+10	-1	+40	6	3
	West South Central	+12	+7	+13	+4	+59	5	3
	Pacific	+18	+12	+16	-7	+52	4	4
5194	Tobacco and tobacco products	+11	+6	+9	+5	+14	1	1
	New England	+5	(S)	(S)	-3	-4	5	3
	Middle Atlantic	+14	+24	+16	+2	+18	4	3
	East North Central	+10	-8	+10	+5	-6	4	3
	West North Central	+8	+6	0	+10	+12	4	2
	South Atlantic	+15	+27	+21	+8	+34	6	6
	East South Central	+8	-15	-8	+4	-2	7	4
	West South Central	+11	+37	+10	+3	(S)	7	6
	Mountain	+1	-3	-3	-4	-22	6	2
	Pacific	+11	+12	+20	+3	+24	2	5

Note: Data at the United States level are generally more reliable than data by geographic division. In those kinds of business where the geographic division trends are subject to a high sampling error, it may be desirable to use the United States total trends for the kinds of business rather than the geographic division trends.

S Does not meet publication standards because of extreme variability or high nonresponse rate.

[1]See map on page 7.

[2]The sampling errors (in percent) shown in columns A and D are based on medians of measurements on data for August, September, and October 1977. For SIC's 5051 pt., and 5063 the medians of measurements in columns A and D are based on data for June, July, and August 1978.

APPENDIX A. Reliability of Data

There are two types of errors possible in an estimate based on a sample survey—sampling and nonsampling. Sampling errors occur because observations are made only on a sample, not on the entire population. Nonsampling errors can be attributed to many sources in the collection and processing of data. The accuracy of a survey result is determined by the joint effects of sampling and nonsampling errors.

Measures of sampling variability—The particular sample used in this survey is one of a large number of all possible samples of the same size that could have been selected using the same design. Estimates derived from the different samples would differ from each other. The average of these estimates would be close to the estimate derived from a complete enumeration of the population (assuming that a complete enumeration has the same nonsampling errors as the sample survey). The average of the estimates differs from the estimate from a complete census because of the composite estimation technique. Disregarding this difference, the sampling error or standard error of the estimate is a measure of the variability among the estimates from all possible samples of the same size and design and, thus, is a measure of the precision with which an estimate from a particular sample approximates the results of a complete enumeration. The coefficient of variation (expressed as a percent) is the standard error of the estimate times 100 percent, divided by the value being estimated. Note that any measures of sampling variability, such as the standard error or coefficient of variation, are estimates derived from the sample and are also subject to sampling variability.

Estimates of sampling variability (the coefficients of variation in percent) for sales and inventories at the kind-of-business detail provided in this publication are shown in table A-1. These coefficients of variation permit certain confidence statements about the sample estimates. As noted above, the particular sample used in this survey is one of a large number of all possible samples of about the same size that could have been selected using the same design. In about two out of three (67 percent) of these samples, the estimate would differ from a complete enumeration by less than the corresponding percent for that estimate shown in the sampling variability table. In about 19 out of 20 (95 percent) of these samples, the estimate would differ from the results of a complete enumeration by less than twice the percentages shown.

To illustrate the computations involved in the above confidence statements for monthly dollar volume estimates, assume that an estimate for a kind of business published in table 1 for a particular month is $5,000 million and that the median coefficient of variation for this statistic, is 0.9 percent or .009. Multiplying $5,000 million by .009 yields $45 million. Therefore, a 67 percent confidence interval is $4,955 million to $5,045 million (i.e. $5,000 million plus or minus $45 million). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately two out of three (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Similarly a 95 percent confidence interval is $4,910 million to $5,090 million (i.e., $5,000 million plus or minus $90 million).

As an example of the use of the coefficients of variation with ratios, assume that an estimated month-to-month percent change published in table 5 is -1.0 percent for a particular kind of business. This is equivalent to a month-to-month ratio of .990. Assume the median coefficient of variation for this ratio as shown in table A-1 is 0.5 percent (or .005). Multiplying .990 by .005 yields .005. Therefore, a 67 percent confidence interval is .985 to .995 (i.e., .990 plus or minus .005) and a 95 percent confidence interval is .980 to 1.000 (i.e., .990 plus or minus .010).

Nonsampling errors—As calculated for this report, the coefficient of variation measures certain nonsampling errors but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples of the same size and design, between the estimate and the true value being estimated. The accuracy of the tabulated data is determined by the joint effects of the sampling and nonsampling errors.

Nonsampling errors can be attributed to many sources: (1) inability to obtain information about all cases in the sample, (2) response errors, (3) definitional difficulties, (4) differences in the interpretation of questions, (5) mistakes in recording or coding the data obtained, and (6) other errors of collection, response, coverage, and estimation for missing data. These nonsampling errors also occur in complete censuses.

Although no direct measurement of the biases due to nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is due to imputing data for nonrespondents, for late reporters, and for data which fail edit. For all kinds of business combined, imputed data amount to about 15 percent of the sales estimates and 25 percent for inventories.

Table A-1. Estimated Sampling Variability of Sales and Inventories by Kind of Business for the United States

1972 SIC code	Kind of business	Sales						Inventories					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total	0.8-1.1	0.9	0.8-0.9	0.9	0.4-0.5	0.5	0.8-1.0	0.9	0.7-1.0	0.9	0.2-0.5	0.4
	Total (excluding farm-product raw materials)	0.9-1.2	1.1	0.9-1.0	1.0	0.4-0.6	0.5	0.9-1.0	1.0	0.8-1.0	0.9	0.2-0.5	0.3
50	Durable goods, total	1.1-1.3	1.2	0.9-1.0	1.0	0.6-0.6	0.6	1.1-1.2	1.2	1.0-1.2	1.1	0.3-0.7	0.5
501	Motor vehicles and automotive parts and supplies	2.3-3.3	3.1	1.9-2.8	2.2	1.4-1.9	1.7	2.5-3.3	2.9	2.6-3.1	3.0	0.6-1.3	1.0
5012	Automobiles and other motor vehicles	(*)	(*)	(*)	(*)	1.7-3.9	3.1	(*)	(*)	(*)	(*)	1.7-3.0	2.8
5013,4	Automotive parts and supplies, tires and tubes	2.9-3.7	3.1	2.9-3.2	3.1	1.5-2.0	1.6	4.0-4.5	4.3	3.9-4.4	4.0	0.4-1.4	0.7
5013	Automotive parts and supplies	3.3-4.0	3.9	3.1-3.8	3.7	1.9-2.2	2.0	4.7-5.3	5.2	4.7-5.2	5.0	0.5-1.5	0.9
502	Furniture and home furnishings	4.2-5.8	4.6	4.2-4.4	4.3	1.7-2.9	2.0	3.2-4.9	3.7	3.4-4.2	3.7	0.8-2.3	2.0
5021	Furniture--household and office	6.6-7.6	6.9	5.6-7.1	6.9	4.0-5.7	4.3	(*)	(*)	(*)	(*)	1.4-3.4	2.2
5021 pt.	Household furniture	(*)	(*)	(*)	(*)	5.0-5.8	5.1	(*)	(*)	(*)	(*)	1.4-4.3	2.0
5021 pt.	Office furniture	(*)	(*)	(*)	(*)	5.7-8.0	5.9	(*)	(*)	(*)	(*)	0.7-3.7	2.1
5023	Home furnishings	5.1-7.5	6.1	5.1-6.1	5.5	1.6-3.6	2.2	4.8-6.9	5.6	4.9-6.0	5.0	1.0-3.1	2.6
503	Lumber and other construction materials	2.8-4.4	3.1	2.9-3.9	3.1	1.6-2.5	1.9	4.5-6.5	4.9	4.8-5.8	4.9	0.7-1.8	0.9
5031	Lumber, plywood, and millwork	4.1-4.6	4.3	3.3-4.6	4.0	2.1-2.5	2.4	5.9-8.2	6.5	6.0-6.9	6.5	1.0-2.6	1.8
5039	Construction materials, n.e.c.	4.2-7.2	4.9	4.5-5.9	4.9	2.0-3.4	2.2	(*)	(*)	(*)	(*)	1.1-2.0	1.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(*)	(*)	(*)	(*)	2.2-2.4	2.3	(*)	(*)	(*)	(*)	1.0-2.5	1.4
505	Metals and minerals, except petroleum	4.4-6.0	4.7	4.0-5.1	4.0	1.5-3.0	2.8	3.2-3.8	3.7	3.7-4.1	4.0	0.8-1.4	1.3
5051 pt.	Ferrous metals service centers and offices	5.0-5.8	5.7	4.1-5.2	4.7	1.2-3.8	3.1	3.8-4.2	4.1	4.1-4.3	4.2	0.5-1.6	1.4
5051 pt.	Ferrous metals service centers	6.7-8.0	6.8	5.0-6.8	5.8	1.1-5.3	3.5	2.9-4.4	3.4	3.4-4.0	3.5	0.6-2.2	2.1
5051 pt.	Nonferrous metals service centers and offices	(*)	(*)	(*)	(*)	4.5-7.0	6.1	(*)	(*)	(*)	(*)	2.8-5.4	4.7
506	Electrical goods	1.9-2.6	2.3	1.6-2.1	1.7	1.3-1.6	1.4	2.5-2.9	2.6	2.2-2.8	2.4	0.5-1.0	0.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2.2-3.1	2.6	2.3-2.7	2.4	1.4-1.7	1.6	2.9-3.5	3.2	3.0-3.2	3.1	0.6-1.2	0.7
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3.4-4.0	3.8	3.0-3.2	3.1	1.6-2.8	2.5	2.9-4.2	3.2	2.7-3.8	3.0	0.7-1.6	0.9
5064	Electrical appliances, TV and radio sets	3.0-3.8	3.6	2.6-3.7	3.1	1.7-2.7	2.5	(*)	(*)	(*)	(*)	0.9-1.7	1.4
507	Hardware, plumbing, heating equipment, and supplies	2.7-3.0	2.9	2.4-2.6	2.5	1.1-1.9	1.5	2.4-2.8	2.6	2.4-2.9	2.7	0.3-1.4	0.6
5072	Hardware	3.6-4.2	3.8	2.6-3.1	3.0	1.3-2.4	1.9	2.0-4.1	2.7	2.2-3.5	2.8	0.4-2.1	0.8
5074	Plumbing and heating equipment and supplies (hydronics)	4.1-5.3	4.2	3.9-5.1	4.2	1.6-3.8	2.1	5.0-7.0	6.0	4.5-7.1	5.3	0.5-3.1	0.9
5075	Warm air heating and air conditioning equipment and supplies	(*)	(*)	(*)	(*)	2.0-4.4	2.7	(*)	(*)	(*)	(*)	1.1-4.3	1.4
508	Machinery, equipment, and supplies	2.3-2.7	2.6	1.8-2.5	2.1	1.2-1.5	1.4	2.0-2.6	2.3	1.7-2.1	1.9	0.4-1.8	1.1
5081	Commercial machines and equipment	(*)	(*)	(*)	(*)	2.9-4.3	4.1	(*)	(*)	(*)	(*)	1.6-8.5	1.9
5082	Construction and mining machinery and equipment	5.0-7.3	5.8	3.3-5.8	4.9	3.9-4.6	4.4	2.9-7.0	4.0	3.2-4.1	3.3	0.7-5.3	1.0
5083	Farm and garden machinery and equipment	(*)	(*)	(*)	(*)	4.1-6.6	6.0	(*)	(*)	(*)	(*)	1.1-2.9	1.2
5084,5	Industrial machinery, equipment, and supplies	3.1-3.4	3.2	2.8-3.0	2.9	1.1-2.3	1.6	2.4-3.0	2.9	2.4-3.0	2.7	0.5-1.6	0.6
5086	Professional equipment and supplies	3.7-7.5	4.3	4.0-5.5	5.2	1.8-3.3	2.0	(*)	(*)	(*)	(*)	0.6-5.2	0.7
5086 pt.	Surgical, medical, hospital, and supplies	(*)	(*)	(*)	(*)	1.7-3.8	2.5	(*)	(*)	(*)	(*)	0.7-5.4	1.0
5087	Service establishment equipment and supplies	(*)	(*)	(*)	(*)	1.8-11.0	2.9	(*)	(*)	(*)	(*)	1.0-3.4	1.3
5093	Scrap and waste materials	4.6-13.3	9.0	4.6-8.8	5.0	2.2-4.9	2.7	(*)	(*)	(*)	(*)	0.7-3.8	0.9
5093 pt.	Iron and steel scrap	(*)	(*)	(*)	(*)	2.6-3.5	3.1	(*)	(*)	(*)	(*)	0.8-1.4	1.0
5093 pt.	Waste materials	(*)	(*)	(*)	(*)	2.6-8.8	4.8	(*)	(*)	(*)	(*)	1.2-9.1	1.6
51	Nondurable goods, total	1.0-1.3	1.1	1.0-1.1	1.1	0.4-0.7	0.6	1.5-1.7	1.6	1.4-1.6	1.5	0.3-0.7	0.4
	Total (excluding farm-product raw materials)	1.0-1.6	1.2	1.3-1.4	1.4	0.5-0.8	0.6	1.7-2.0	1.9	1.6-1.8	1.7	0.3-0.7	0.4
511	Paper and paper products	2.6-4.0	3.7	2.4-4.1	3.1	1.0-1.4	1.3	2.5-3.4	2.7	2.4-3.2	2.8	0.4-1.5	0.6
5111,3	Printing, writing, industrial, and personal service paper	2.4-3.1	2.7	2.3-2.8	2.4	1.3-1.5	1.4	2.9-3.4	3.1	2.7-3.2	2.8	0.4-1.3	0.9
5112	Stationery supplies	(*)	(*)	(*)	(*)	2.4-3.4	2.5	3.2-6.1	5.8	3.6-5.1	4.4	0.9-4.8	1.4
512	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	5.6-6.3	5.7	5.6-5.7	5.7	0.6-2.2	0.7
5122	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	(*)	(*)	(*)	(*)	0.6-2.2	0.7
5122 pt.	General-line drugs	7.2-9.8	7.9	7.5-8.5	7.6	0.7-3.0	1.0	(*)	(*)	(*)	(*)	0.5-3.1	1.0
513	Apparel, piece goods, and notions	8.3-12.4	8.8	8.6-9.3	9.1	2.6-4.0	3.3	(*)	(*)	(*)	(*)	(*)	(*)
514	Groceries and related products	1.7-2.2	2.0	1.6-2.0	1.9	0.4-1.2	0.5	1.5-2.5	1.8	1.8-2.1	1.9	0.4-1.3	0.6
5141	Groceries, general-line	1.9-2.7	2.1	1.7-2.7	2.0	0.4-1.5	0.7	1.8-2.7	2.3	1.7-2.0	1.8	0.3-1.2	0.8
5141 pt.	Voluntary groups	(*)	(*)	(*)	(*)	0.5-1.7	0.6	(*)	(*)	(*)	(*)	0.4-1.7	0.5
5141 pt.	Retailer cooperatives	(*)	(*)	(*)	(*)	0.6-1.6	1.1	(*)	(*)	(*)	(*)	0.4-2.4	0.7
5141 pt.	Other general-lines	(*)	(*)	(*)	(*)	0.9-3.1	1.8	(*)	(*)	(*)	(*)	0.5-1.3	0.7
5142,3,6,9	Specialty-line groceries	(*)	(*)	(*)	(*)	0.7-3.4	1.3	(*)	(*)	(*)	(*)	0.9-2.4	1.0
5144	Poultry and poultry products	3.4-5.5	4.4	4.0-4.4	4.2	0.6-2.2	1.5	(*)	(*)	(*)	(*)	2.1-4.1	2.3
5145	Confectionery	4.7-6.3	4.7	3.6-5.4	4.3	2.0-3.2	2.2	(*)	(*)	(*)	(*)	0.8-2.4	2.3
5147	Meats and meat products	4.5-4.8	4.7	4.6-4.6	4.6	1.4-2.9	1.7	(*)	(*)	(*)	(*)	1.7-3.9	2.2
5148	Fresh fruits and vegetables	4.7-5.4	4.9	3.9-4.1	4.0	1.9-4.2	2.7	(*)	(*)	(*)	(*)	2.9-4.4	3.9
515	Farm-product raw materials	1.8-2.2	2.0	1.6-2.0	1.7	1.1-1.7	1.3	(*)	(*)	(*)	(*)	1.1-2.8	2.4
5152	Cotton	(*)	(*)	(*)	(*)	1.8-4.9	2.8	(*)	(*)	(*)	(*)	1.3-2.9	2.4
5153	Grain	2.4-2.7	2.6	2.2-2.4	2.3	1.0-1.7	1.3	(*)	(*)	(*)	(*)	1.6-3.3	1.9
517	Petroleum and petroleum products	4.0-5.0	4.7	4.2-4.6	4.5	1.1-1.9	1.5	4.1-5.2	5.0	4.4-5.4	4.7	1.6-3.0	2.3
5171	Petroleum bulk stations and terminals	2.8-3.3	2.9	2.8-3.0	2.9	0.9-1.4	1.2	(*)	(*)	(*)	(*)	1.7-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages	3.4-3.9	3.7	3.1-3.7	3.2	0.8-1.8	1.7	3.9-4.2	4.1	4.0-4.3	4.2	1.0-2.0	1.3
5181	Beer and ale	2.2-4.4	3.1	2.8-3.2	2.9	1.0-2.5	2.0	3.6-5.5	3.8	3.6-4.1	3.8	1.7-2.7	2.1
5182	Wines and distilled alcoholic beverages	5.2-6.3	5.4	4.6-5.6	4.7	1.2-3.4	1.7	4.6-5.4	4.8	5.0-5.6	5.3	1.4-2.3	1.6
519	Miscellaneous nondurable goods	2.4-3.2	2.9	2.4-2.7	2.5	1.4-2.3	1.6	(*)	(*)	(*)	(*)	0.8-1.7	1.4
5191	Farm supplies	(*)	(*)	(*)	(*)	3.2-3.6	3.3	(*)	(*)	(*)	(*)	1.7-3.9	2.0
5194	Tobacco and tobacco products	4.0-5.2	4.1	3.4-4.5	4.2	1.3-2.4	1.7	(*)	(*)	(*)	(*)	0.8-4.3	1.0
5198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.8-3.8	3.0	(*)	(*)	(*)	(*)	1.5-3.1	2.9
5199 pt.	Books, magazines, newspapers	(*)	(*)	(*)	(*)	3.2-8.0	5.6	(*)	(*)	(*)	(*)	2.0-6.5	5.1

Note: Measures of sampling variability are based on data unadjusted for seasonal variations or trading-day differences. The range of sampling error of the monthly dollar estimates and the ratio of current month to previous month for sales and inventories is based on data for July, August, and September 1977.

*Measures of sampling variability are not shown since sales and/or inventory estimates for these kinds of business are not published.

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

Seasonal factors for adjusting data in this historical publication have been developed by the method described in the **X-11 Variant of the Census Method II Seasonal Adjustment Program**, U.S. Bureau of the Census Technical Paper No. 15, Revised 1967. Trading-day factors for adjusting sales were also derived from the X-11 program.

Adjustment of estimates is an approximation based on past experiences, and therefore, will be less precise to the extent that current competitive pressures, changes in economic condition, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of trading-day adjustment factors may be found in **Estimating Trading-Day Variation in Monthly Economic Time Series**, Bureau of the Census Technical Paper No. 12, 1965. Additional details concerning the adjustment factors may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.7	91.8	107.1	97.7	104.3	104.7	95.6	104.7	98.3	102.2	100.6	96.3
	Total (excluding farm-product raw materials)	91.6	91.6	106.6	97.8	105.1	105.8	95.8	106.1	100.3	102.3	99.3	95.0
50	Durable goods, total	89.6	89.0	105.7	99.0	106.5	107.3	96.4	107.7	101.9	104.1	98.6	91.5
501	Motor vehicles and automotive parts and supplies	93.3	89.8	107.6	107.7	108.4	107.5	98.6	106.9	96.1	98.3	93.3	90.5
502	Furniture and home furnishings	84.8	89.8	105.2	96.8	101.6	106.6	89.2	105.2	103.9	112.1	107.2	95.2
503	Lumber and other construction materials	80.6	80.2	100.9	94.6	109.8	112.2	102.4	117.4	106.2	109.9	100.0	84.0
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	78.7	88.7	104.5	101.5	109.3	97.0	96.1	105.2	105.4	106.0	108.0	95.5
505	Metals and minerals, except petroleum	98.2	91.4	108.2	98.6	107.6	104.4	91.2	108.6	103.1	100.0	97.1	90.3
506	Electrical goods	89.3	89.1	102.0	96.0	99.4	106.5	99.0	104.8	100.8	107.5	103.5	98.8
507	Hardware, plumbing, heating equipment, and supplies	89.2	87.4	99.9	97.9	106.7	108.0	100.7	109.2	102.4	107.2	100.6	88.3
508	Machinery, equipment, and supplies	88.1	88.6	107.9	99.9	107.7	108.8	95.4	104.6	103.3	103.5	96.5	92.3
509	Miscellaneous durable goods	86.2	89.8	106.2	96.2	100.2	110.7	88.4	109.5	101.9	108.1	103.7	96.0
51	Nondurable goods, total	96.4	93.8	108.5	97.1	103.5	102.3	94.9	102.1	96.1	100.2	101.8	100.1
	Total (excluding farm-product raw materials)	94.3	94.0	106.8	96.6	103.2	104.5	95.5	104.5	97.6	100.6	100.6	98.4
511	Paper and paper products	95.5	92.6	106.3	93.4	103.3	103.6	95.6	107.3	102.6	104.0	99.4	92.6
512	Drugs, drug proprietaries, and druggists' sundries	97.8	92.6	106.0	96.3	100.3	99.8	92.9	104.7	100.8	108.1	101.0	96.6
513	Apparel, piece goods, and notions	90.1	94.4	107.1	91.8	101.2	98.8	93.7	115.6	106.3	107.7	103.4	87.1
514	Groceries and related products	94.7	91.1	104.2	97.2	105.4	105.0	99.0	105.3	98.9	101.0	99.8	95.0
515	Farm-product raw materials[1]	103.1	94.7	112.6	98.0	103.9	96.9	93.0	92.4	91.5	100.8	108.3	99.9
516	Chemicals and allied products	90.2	89.2	106.3	98.0	107.1	108.3	96.1	108.0	97.8	105.0	98.8	93.3
517	Petroleum and petroleum products	99.7	102.3	107.7	96.2	95.9	100.0	96.5	100.2	93.1	100.9	100.3	104.8
518	Beer, wine, and distilled alcoholic beverages	77.8	81.4	102.2	90.7	106.8	113.9	97.6	107.8	97.8	100.6	106.9	113.5
519	Miscellaneous nondurable goods	96.0	100.5	116.6	102.4	107.4	105.2	88.2	95.5	95.4	96.8	95.6	96.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.8	101.2	101.7	100.7	99.4	99.3	98.6	98.1	98.7	100.1	100.9	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.0	100.3	100.6	100.7	100.2	99.4	99.6	99.9	99.7	99.1
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.5
501	Motor vehicles and automotive parts and supplies	101.3	103.0	101.6	100.6	102.0	100.5	99.2	97.0	97.4	98.1	99.0	99.9
502	Furniture and home furnishings	99.1	99.3	99.7	99.5	100.8	101.9	100.5	100.6	101.2	100.2	99.5	97.3
503	Lumber and other construction materials	98.4	99.1	103.6	102.7	103.6	101.7	101.4	99.8	99.2	96.7	96.2	97.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.6	99.8	100.7	102.4	106.5	105.3	100.9	101.5	100.9	93.9	89.9
505	Metals and minerals, except petroleum	99.4	98.2	100.2	100.8	100.2	100.2	102.8	102.8	99.9	96.7	98.9	99.7
506	Electrical goods	96.7	96.8	99.0	99.6	101.2	102.6	101.4	100.7	101.3	101.2	100.5	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.4	103.2	102.6	101.6	100.6	98.4	98.7	97.1	96.1
508	Machinery, equipment, and supplies	99.0	101.0	101.6	100.1	101.0	102.1	100.3	99.0	99.4	99.0	98.7	98.7
509	Miscellaneous durable goods	97.0	97.6	96.0	97.5	96.4	100.8	102.4	102.6	102.9	103.8	102.4	100.5
51	Nondurable goods, total	104.1	103.2	103.3	99.4	96.7	95.1	94.7	95.3	97.4	102.1	104.6	103.4
	Total (excluding farm-product raw materials)	100.0	100.0	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.6	100.5
511	Paper and paper products	97.8	98.3	99.1	101.1	100.4	102.6	100.0	100.2	100.7	100.0	99.6	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.1	99.8	100.6	97.9	100.6	99.0	100.0	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.0	100.2	101.9	101.5	99.8	99.0	98.6	99.3
514	Groceries and related products	98.7	100.2	102.1	100.5	99.2	98.7	98.5	98.0	99.9	102.0	100.9	101.0
515	Farm-product raw materials[1]	118.8	115.2	112.2	100.3	88.9	84.6	78.8	79.4	83.8	103.8	117.4	115.3
516	Chemicals and allied products	98.0	100.0	101.9	101.6	102.4	100.9	101.6	100.2	100.4	96.9	97.0	98.7
517	Petroleum and petroleum products	104.4	99.3	99.2	94.2	96.0	94.3	96.3	100.7	102.9	104.8	104.2	103.4
518	Beer, wine, and distilled alcoholic beverages	96.3	95.8	97.4	99.1	102.3	102.9	99.9	97.9	100.3	107.0	105.7	95.3
519	Miscellaneous nondurable goods	103.6	104.6	105.0	102.1	97.2	93.2	95.1	96.0	97.4	99.7	101.9	104.0

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979—Continued

1972 SIC code	Kind of business	1979											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	95.9	91.8	104.7	100.0	105.3	101.5	98.4	104.2	95.8	104.5	100.4	96.2
	Total (excluding farm-product raw materials)	94.0	91.6	103.9	99.8	106.1	102.9	98.6	105.7	97.6	104.9	99.2	94.5
50	Durable goods, total	91.9	89.1	103.2	101.1	107.3	104.3	99.4	107.0	99.3	106.8	98.4	91.2
501	Motor vehicles and automotive parts and supplies	94.0	89.9	106.2	108.4	110.5	104.7	102.9	104.4	94.7	99.1	93.7	89.3
502	Furniture and home furnishings	87.1	89.8	101.8	98.4	102.6	104.0	91.2	105.5	101.7	115.1	106.5	94.2
503	Lumber and other construction materials	83.0	80.2	97.3	98.0	110.4	107.7	107.0	117.2	102.4	113.5	100.3	83.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	84.3	88.7	102.1	101.4	107.8	98.7	95.0	103.6	103.6	113.3	102.3	97.8
505	Metals and minerals, except petroleum	100.7	91.4	102.7	101.4	107.6	101.3	95.4	108.3	101.3	102.6	96.1	89.0
506	Electrical goods	92.0	89.1	99.9	99.3	98.8	103.9	100.6	104.5	98.2	110.6	102.9	100.1
507	Hardware, plumbing, heating equipment, and supplies	91.0	87.4	97.8	100.1	108.1	104.5	103.4	108.6	100.5	109.2	100.3	88.6
508	Machinery, equipment, and supplies	90.9	88.7	106.1	102.1	108.9	105.2	97.1	104.4	100.1	106.7	96.3	92.9
509	Miscellaneous durable goods	86.8	89.8	105.0	99.4	101.6	105.4	92.6	109.0	98.1	109.1	106.2	95.5
51	Nondurable goods, total	93.8	93.7	106.2	99.2	104.4	99.5	97.2	101.8	93.9	102.7	101.5	99.8
	Total (excluding farm-product raw materials)	96.8	94.0	104.0	99.0	104.1	101.2	98.0	104.7	94.9	103.2	100.7	98.0
511	Paper and paper products	100.0	92.7	103.2	94.8	103.3	102.4	97.4	107.1	99.3	108.7	97.7	92.2
512	Drugs, drug proprietaries, and druggists' sundries	99.7	92.6	104.0	98.9	100.6	96.9	96.6	103.9	97.6	110.1	101.8	96.1
513	Apparel, piece goods, and notions	93.9	94.4	103.7	92.4	101.8	97.8	95.7	115.5	102.9	112.3	102.1	85.9
514	Groceries and related products	97.5	91.0	103.1	98.3	106.3	103.0	100.0	105.0	96.2	104.0	99.5	95.1
515	Farm-product raw materials[1]	106.7	94.5	111.9	100.2	102.7	97.1	94.1	91.8	87.9	104.3	108.3	100.5
516	Chemicals and allied products	92.5	89.2	101.9	100.8	107.7	105.0	100.2	108.2	94.8	107.6	98.9	91.7
517	Petroleum and petroleum products	99.2	102.1	106.6	99.2	95.9	96.9	100.0	100.7	90.7	100.1	103.6	103.5
518	Beer, wine, and distilled alcoholic beverages	81.1	81.5	98.0	93.8	107.9	109.4	101.0	108.2	94.0	104.8	106.4	112.3
519	Miscellaneous nondurable goods	97.5	100.5	114.0	106.1	108.2	101.4	90.4	96.3	92.4	98.3	96.6	96.6
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.7	101.2	101.7	100.8	99.5	99.3	98.6	98.1	98.7	100.1	100.8	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.1	100.4	100.6	100.7	100.2	99.4	99.6	99.9	99.6	99.0
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.4
501	Motor vehicles and automotive parts and supplies	101.3	103.1	101.6	100.6	102.0	100.5	99.3	97.0	97.4	98.2	99.0	99.8
502	Furniture and home furnishings	99.2	99.3	99.7	99.5	100.9	102.0	100.4	100.6	101.2	100.2	99.5	97.2
503	Lumber and other construction materials	98.5	99.1	103.7	102.7	103.4	101.5	101.3	99.8	99.2	96.8	96.2	97.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.7	99.8	100.7	102.3	106.4	105.3	100.9	101.6	100.9	93.8	90.0
505	Metals and minerals, except petroleum	99.3	98.3	100.2	100.8	100.2	100.2	102.8	102.9	100.0	96.6	98.8	99.6
506	Electrical goods	96.7	96.7	99.0	99.7	101.3	102.7	101.4	100.7	101.4	101.1	100.4	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.6	103.3	102.6	101.6	100.6	98.4	98.7	97.0	96.0
508	Machinery, equipment, and supplies	99.0	101.0	101.5	100.1	101.0	102.1	100.3	99.1	99.4	98.9	98.6	98.7
509	Miscellaneous durable goods	97.1	97.5	96.0	97.4	96.4	100.9	102.4	102.6	103.0	103.8	102.4	100.5
51	Nondurable goods, total	103.9	103.2	103.4	99.5	96.9	95.3	94.7	95.3	97.4	102.0	104.5	103.4
	Total (excluding farm-product raw materials)	100.0	99.9	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.5	100.5
511	Paper and paper products	97.7	98.3	99.1	101.1	100.5	102.7	99.9	100.1	100.7	100.0	99.5	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.0	99.8	100.5	97.8	100.6	99.0	100.1	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.1	100.2	101.8	101.6	99.8	99.1	98.5	99.2
514	Groceries and related products	98.7	100.2	102.1	100.5	99.3	98.7	98.5	98.0	99.9	102.0	100.8	101.0
515	Farm-product raw materials[1]	118.5	115.2	112.3	100.8	89.6	85.4	78.5	79.2	83.5	103.3	117.1	115.1
516	Chemicals and allied products	98.0	100.0	102.0	101.6	102.4	101.0	101.6	100.2	100.5	96.9	96.8	98.6
517	Petroleum and petroleum products	104.4	99.4	99.4	94.2	95.9	94.2	96.2	100.9	102.9	104.7	104.2	103.2
518	Beer, wine, and distilled alcoholic beverages	96.3	95.7	97.4	99.1	102.3	102.8	99.9	97.9	100.3	106.9	105.7	95.3
519	Miscellaneous nondurable goods	103.7	104.6	105.1	102.1	97.2	93.1	95.1	95.9	97.3	99.7	101.8	104.0

Note: The adjustment factors shown above for sales are a combination of the seasonal and trading-day factors. These are separately available, however, upon request. Adjustment factors are included in this table for some kinds of business for which adjusted data are not published separately.

Adjusted sales and inventory data shown in table 4 are obtained by dividing the unadjusted data shown in tables 1 and 2 by the adjustment factors shown above for the corresponding kinds of business. Adjusted data for the summary trade totals are obtained by summarizing the adjusted data for the individual kinds of business. Seasonal factors shown for the summary trade totals provide an approximation to these totals but may show small differences from the published data. The seasonally adjusted data for 1978 may vary slightly from the method shown above because of insignificant rounding differences.

[1]There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table B-2. Average Month-to-Month Percent Changes and Related Summary Measures for Sales and Inventories of Merchant Wholesalers

1972 SIC code	Kind of business	$\bar{O}$	$\bar{S}$	$\bar{CI}$	$\bar{I}$	$\bar{C}$	$\bar{I}/\bar{C}$	MCD	Average duration of run			
									CI	I	C	MCD
		Sales										
	Merchant wholesalers, total	4.74	3.10	1.31	.82	.96	.86	1	3.10	1.57	14.11	3.10
50	Durable goods, total	5.30	4.84	1.43	.89	1.08	.82	1	3.53	1.63	15.87	3.53
501	Motor vehicles and automotive parts and supplies	5.53	4.22	2.67	2.33	1.24	1.87	3	2.05	1.59	25.40	5.43
502	Furniture and home furnishings	6.00	7.29	2.06	1.68	1.07	1.57	2	2.27	1.55	9.07	3.00
503	Lumber and other construction materials	7.40	6.25	2.67	1.72	1.76	.98	1	2.76	1.51	14.11	2.76
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	9.79	9.32	4.02	3.74	1.20	3.12	4	1.81	1.67	7.06	3.44
505	Metals and minerals, except petroleum	6.79	3.78	3.10	2.38	1.63	1.46	2	2.19	1.41	9.07	3.71
506	Electrical goods	5.79	5.17	1.89	1.52	1.04	1.47	2	2.08	1.46	10.58	3.32
507	Hardware, plumbing, heating equipment, and supplies	5.42	4.86	1.78	1.33	1.09	1.22	2	1.98	1.41	12.70	3.94
508	Machinery, equipment, and supplies	6.10	5.41	1.87	1.51	.97	1.56	2	1.92	1.46	7.94	3.32
509	Miscellaneous durable goods	7.66	6.11	3.51	2.79	1.79	1.56	2	1.87	1.48	9.77	2.93
51	Nondurable goods, total	5.07	2.80	1.58	1.10	.95	1.16	2	2.59	1.43	9.07	3.60
511	Paper and paper products	5.41	3.16	1.99	1.44	1.10	1.30	2	1.98	1.48	7.94	3.60
512	Drugs, drug proprietaries, and druggists' sundries	5.97	3.89	1.90	1.64	.76	2.15	3	1.95	1.57	9.77	4.31
513	Apparel, piece goods, and notions	7.73	6.91	2.70	2.36	1.01	2.34	3	1.72	1.38	10.58	4.17
514	Groceries and related products	4.44	2.01	1.67	1.41	.82	1.72	2	1.92	1.51	12.70	3.15
515	Farm-product raw materials	9.27	5.04	4.87	4.29	1.59	2.70	4	1.90	1.53	6.68	3.54
516	Chemicals and allied products	6.21	4.53	2.47	1.93	1.46	1.32	2	2.19	1.49	8.47	3.32
517	Petroleum and petroleum products	7.38	4.71	4.81	4.47	1.35	3.30	4	1.67	1.55	9.07	2.70
518	Beer, wine, and distilled alcoholic beverages	10.94	8.71	1.86	1.64	.69	2.39	3	1.76	1.59	21.17	3.68
519	Miscellaneous nondurable goods	5.89	4.84	2.53	2.23	.96	2.32	3	1.92	1.63	8.47	3.47
		Inventories										
	Merchant wholesalers, total	1.10	.72	.94	.39	.83	.47	1	4.88	1.79	18.14	4.88
50	Durable goods, total	1.07	.57	.89	.35	.86	.41	1	7.94	1.46	31.75	7.94
501	Motor vehicles and automotive parts and supplies	2.20	1.22	1.69	1.13	1.21	.93	1	2.54	1.63	12.70	2.54
502	Furniture and home furnishings	2.13	1.28	1.60	1.19	1.00	1.19	2	2.40	1.57	21.17	5.25
503	Lumber and other construction materials	2.60	1.77	1.83	1.28	1.09	1.17	2	2.54	1.67	15.87	4.20
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	3.60	2.92	2.17	1.80	1.20	1.50	2	2.27	1.48	25.40	3.60
505	Metals and minerals, except petroleum	3.14	2.53	1.79	1.01	1.33	.76	1	3.26	1.72	8.47	3.26
506	Electrical goods	1.75	1.08	1.32	.90	.92	.98	1	2.49	1.31	42.33	2.49
507	Hardware, plumbing, heating equipment, and supplies	1.69	1.10	1.23	.87	.89	.98	1	2.70	1.53	18.14	2.70
508	Machinery, equipment, and supplies	1.36	.92	1.03	.66	.82	.82	1	2.65	1.65	31.75	2.65
509	Miscellaneous durable goods	2.29	1.47	1.85	1.28	1.18	1.08	2	1.95	1.53	25.40	4.34
51	Nondurable goods, total	2.49	2.19	1.44	.83	1.07	.78	1	3.74	1.74	7.06	3.74
511	Paper and paper products	1.82	.94	1.38	1.04	.75	.94	2	2.12	1.44	9.07	4.20
512	Drugs, drug proprietaries, and druggists' sundries	2.39	1.46	1.60	1.37	.67	2.04	3	1.81	1.51	31.75	3.38
513	Apparel, piece goods, and notions	2.28	1.43	1.86	1.43	1.05	1.35	2	2.40	1.74	9.07	3.15
514	Groceries and related products	1.87	1.29	1.43	.92	1.01	.91	1	2.54	1.38	11.55	2.54
515	Farm-product raw materials	8.88	8.22	4.86	3.99	2.03	1.96	3	2.49	1.90	8.47	3.91
516	Chemicals and allied products	3.14	1.58	1.36	1.89	1.39	1.36	2	2.35	1.49	12.70	3.71
517	Petroleum and petroleum products	6.09	3.19	5.01	4.34	2.00	2.17	3	1.87	1.59	15.87	3.68
518	Beer, wine, and distilled alcoholic beverages	4.28	3.68	1.76	1.46	.74	1.98	3	2.35	1.63	9.77	4.03
519	Miscellaneous nondurable goods	2.53	1.52	1.88	1.48	.84	1.75	2	2.19	1.59	7.06	3.15

Description of Measures Shown Above

The following are brief descriptions of the measures shown in this table. More complete explanations appear in "Electronic Computers and Business Indicators," Occasional Paper 57, National Bureau of Economic Research, Inc., New York, 1957.

$\bar{O}$ is the average month-to-month percentage change, without regard to sign, in the original series before seasonal or trading-day adjustment.

$\bar{S}$ is the average month-to-month percentage change, without regard to sign, in the seasonal component. It is a measure of the average monthly seasonal change in the unadjusted series.

$\bar{CI}$ is the average month-to-month percentage change, without regard to sign, in the seasonally adjusted series.

$\bar{I}$ is the average month-to-month percentage change without regard to sign, for the irregular component. The irregular component is obtained by dividing the seasonally adjusted series by the cyclical component.

$\bar{C}$ is the average month-to-month percentage change, without regard to sign, for the cyclical component, which is a smooth, flexible moving average.

$\bar{I}/\bar{C}$ is a measure of the relative smoothness (small values) or irregularity (large values) of the seasonally adjusted series.

MCD (months for cyclical dominance) gives an estimate of the appropriate time span over which to observe cyclical movements in a monthly series. In deriving MCD, the average (without regard to sign) percentage changes in the irregular and cyclical components are computed for 1-month spans (Jan.-Feb., Feb.-Mar., etc.) 2-months spans (Jan.-Mar., Feb.-Apr., etc.), and so on. MCD is the shortest span for which the average change (without regard to sign) in the cyclical component is larger than the average change (without regard to sign) in the irregular component; that is, it indicates the point at which fluctuations begin to be more attributable to cyclical than to irregular movements. MCD is small for smooth series and large for erratic series.

Average duration of run (ADR) is a measure of smoothness, and is equal to the average number of consecutive monthly changes in the same direction in any series of observations. When there is no change between 2 months, a change in the same direction as the preceding change is assumed. The ADR is shown for the seasonally adjusted series CI, irregular component I, cyclical component C, and the MCD moving average. The MCD moving average is an unweighted moving average (with the number of terms equal to MCD) of the seasonally adjusted series.

A comparison of these measures with the expected ADR of a random series gives an indication of whether the changes approximate those of a random series. (The expected value of ADR for a random series is 1.5 and it falls between 1.36 and 1.75 about 95 percent of the time. For a moving average of a random series the expected value is 2.0). For example, the ADR of CI is 2.08 for electrical goods sales. This indicates that 1-month changes in the seasonally adjusted series, on the average, reverse sign slightly less often than a random series. In the next two columns, 1.46 for I and 10.58 for C indicate the separation of the seasonally adjusted series into an essentially random component and the cyclical (nonrandom) component. Finally, 3.32 for MCD indicates that a 2-month moving average of the seasonally adjusted series (2 months being the MCD span) reverses direction on the average about every 3 months. The increase in the average duration of run from 2.08 for CI to 3.32 for the MCD moving average indicates that for this series the use of MCD spans reduces the effect of the irregular component upon the seasonally adjusted series.

These averages are based on a seasonally adjusted series which is adjusted historically; that is, the months used to compute the measures were the same months used to estimate the seasonal factors. Current data, however, are adjusted by use of factors projected 1 year ahead, and are thus subject to additional error. Therefore, current data are probably somewhat more irregular and subject to larger MCD than shown above.

APPENDIX C. Explanatory Material

I. SCOPE OF THE SURVEY

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the Standard Industrial Classification (SIC) Manual[1] and as covered in the 1972 census, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm or professional business users; or to other wholesalers; or acting as agents or brokers in buying merchandise for or selling merchandise to such persons or companies.

The principal types of establishments included are: (1) merchant wholesalers who take title to the goods they sell, such as wholesale merchants or jobbers, industrial distributors, voluntary group wholesalers, exporters, importers, cash-and-carry wholesalers, drop shippers, major distributors, retailer cooperative warehouses, terminal elevators, and cooperative buying associations; (2) sales branches and sales offices (but not retail stores) maintained by domestic manufacturing or mining enterprises apart from their plants or mines for the purpose of marketing their products; (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), which constitute the major portion of the broad field of wholesale trade, and excludes the other types of wholesale trade. All kinds of business in which merchant wholesalers operate are represented in this survey.

Kind-of-business classifications are not interchangeable with commodity classifications. Most businesses sell several kinds of commodities. The kind-of-business code assigned generally reflects either the individual commodity or the commodity group which is the primary source of the establishments receipts, or some mixture of commodities which characterizes the establishment's business. Thus, the classification of establishments by kind of business generally does not make it possible to determine either the number of establishments handling a particular commodity or the sales of that commodity. For example, the "grocery" classification excludes establishments selling groceries if the sale of groceries is not the primary source of receipts; moreover, even though establishments are classified as "grocery wholesalers" some of their sales may be derived from the sale of nonfood products.

A description of each kind of business included in the accompanying statistical data is shown in appendix D.

II. SAMPLE DESIGN AND ESTIMATION PROCEDURES

Framework of old series–The first publication in this series based on probability sampling, was the January 1954 report. Effective with the July 1956 publication an entirely new sample was selected from the 1954 Census of Business. Other changes in the sample have been made since 1956, representing, for the most part, revisions to reflect the findings of successive censuses of wholesale trade.

Selection of sample for new series–The new sample[2] like the old is a probability sample, and the estimating procedures used are similar in many respects to the old sample.

The new sample originally was drawn from the Standard Statistical Establishment List (SSEL) as updated to December 31, 1974. The initial SSEL consisted of two lists. One list was composed of all Employer Identification (EI) numbers issued by the Internal Revenue Service (IRS) with reported payroll in at least one quarter of 1973 or 1974, with payroll in the 1972 census, or with sales/receipts greater than $100,000 in the 1972 census. The second list consisted of all establishments of known multiestablishment companies as of December 31, 1974. These lists contained information on sales/receipts, payroll, employment, name and address, kind-of-business classification, etc.

Before the 1974 SSEL was available, a study was made, using files from the 1972 Census of Wholesale Trade. This study determined the stratification of the sampling units based on 1972 sales, inventories, and kind of business, and also determined the optimal allocation of the sample necessary to meet specified variance objectives for sales and inventory estimates for different kind-of-business groups. The primary stratum boundary determined in the study was the certainty cutoff to be used for each kind of business. The cutoff was particularly important since it also determined the type of sampling unit.

The sampling units for the new sample consisted of both companies and EI's. To be eligible for the initial sampling, an EI had to be active, i.e., had payroll in 1974 and was on the Internal Revenue Service mailing list for Federal Insurance Contribution Act (FICA) taxpayers. If a known multiestablishment company had total merchant wholesale sales (on a 1972 basis) above the cutoff for its major kind of business, the company was selected for the sample with certainty. Single establishment companies, whether or not selected with certainty, were considered as EI sampling units.

All merchant wholesale companies below the certainty cutoff were treated on an EI basis; that is, the EI was the sampling unit. The EI's were then stratified according to their major kind of business and their estimated sales (on a 1972

[1] Executive Office of the President, Office of Management and Budget, Standard Industrial Classification Manual, 1972.

[2] For a complete exposition of the new sample, see C. T. Isaki et al., "Sample Redesign Aspects of the Census Bureau's Monthly Business Surveys" and K. M. Wolter et al., "Sample Selection and Estimation Aspects of the Census Bureau's Monthly Business Surveys," Proceedings of the Business and Economic Statistics Section: American Statistical Association, 1976.

basis). Within each stratum, a simple random sample of EI's was selected. The sampling rates for these EI's varied between 1 in 3 and 1 in 600.

For those EI's in the inital sample that did not have kind-of-business classifications and for all EI "births" after the initial selection, a two-phase selection procedure was used. EI "births," as used here, are new EI's recently assigned by SSA and currently on the IRS mailing list for FICA taxpayers. In the first phase, "births" were stratified by kind of business and size (expected employment or quarterly payroll). A relatively large sample was drawn and canvassed in order to obtain a more reliable measure of size (sales in two recent months) and a more detailed kind-of-business code, if needed.

Using this more reliable information, the cases were re-stratified and the final sample drawn with overall probabilities equivalent to those used in drawing the initial sample from the 1974 SSEL. Because of the lag in reporting "births" to the IRS and Social Security Administration (SSA) and the time needed to accomplish the two-phase birth-selection procedure, "births" are actually added to the sample about eight or nine months after they begin operation. The ongoing birth-selection procedure is carried out quarterly.

Since "births" are not represented in the sample, until they go through the selection procedure described above, an interium procedure is required to account for "births" during the period between the onset of activity and the time of birth selection. This consists of imputing for all cases which go out of business, but which are still on the IRS mailing list. This imputation procedure was also used in the old series. However, because of recent delays in obtaining "births," this procedure now accounts for a larger percentage of the estimates.

To be eligible for the sample canvass and tabulation in a given month, a merchant wholesale business must meet both of the following requirements:

1. It must be on the IRS mailing list for FICA taxpayers from the previous quarter.

2. It must have been selected from either the SSEL or the file of employer "births." For this purpose, a universe file of all businesses ever given a chance of selection is maintained. This file shows, among other things, which EI numbers actually have been selected.

In the case of businesses that were selected into the sample with certainty, the first requirement is changed. These certainty sampling units are not dropped from canvass and tabulation if they are no longer on the IRS mailing list. If there are successor businesses, they are added to the survey. This is a tighter form of control used for these larger businesses.

Use of the rotating sample and composite estimating procedures—Rotating samples or panels are used except for very large businesses which are selected with certainty. For sampling units in the rotating panels, two months of data are obtained at each enumeration. For example, February rotating panel cases report data for February (the current month) and January (the previous month). In the following month, a different rotating panel (the March panel) reports figures for March and February. Three sample panels are used. This permits the use of a composite estimating procedure which provides estimates more reliable than those which would be obtained from a completely fixed sample of about twice the size. In addition, this procedure reduces the reporting burden of selected businesses.

The first estimate issued each month, based on the full sample, is called the preliminary estimate. The preliminary composite estimate for the current month is a weighted average of two estimates: (1) the current month unbiased estimate (weight .35), and (2) a ratio estimate (weight .65) obtained by multiplying the preliminary composite estimate for the previous month by the current-to-previous-month ratio obtained from the current month reports. Preliminary inventory estimates have been modified, prior to publication, based on past relationships between preliminary and final estimates.

A final estimate is developed one month later using information available from the following month's enumeration. The final composite estimate is also a weighted average of two estimates: (1) the preliminary composite estimate for a given month (weight .7), and (2) the unbiased estimate (weight .3) for the same month as obtained from the next month's reporting panel.

The preliminary composite estimates provide a measure of the dollar volume level that is considerably more reliable than the unbiased estimates, and the final composite estimates are generally more reliable than the preliminary composite estimates. The indication of the month-to-month trend considered to be most reliable is the ratio of the current month's preliminary composite estimate divided by the previous month's final composite estimate. This is true because the numerator and denominator of this ratio are more highly correlated than would be the case if the numerator and denominator were two preliminary estimates or two final estimates. The trend of the preliminary/final ratio, therefore, has less variability than one based on two preliminary figures or two final figures.

Another advantage of the use of the rotating panel system is that the frequency of canvass of very large noncertainty cases can be increased with a consequent reduction, in an unbiased manner, of their statistical weight. This increases the reliability of the estimates, particularly the measure of month-to-month change.

III. PREVIOUSLY PUBLISHED DATA

Data developed from the new sample are not comparable with data previously published in this series. Sales and inventory estimates prior to September 1977 have been revised to reflect: (1) a new sample design; (2) benchmarking of sales to the results of the 1967 and 1972 censuses of wholesale trade; (3) conversion of classifications based on the 1967 SIC manual to classifications based on the 1972 SIC manual (4) addition

of farm assemblers and bulk petroleum establishments; and (5) revision and updating of seasonal adjustment factors.

The revised historical sales series were derived in a manner designed to minimize the changes to the month-to-month trends in the old series. The inventory series were revised by applying the stock-sales ratios from the old series to the revised sales series to obtain the preliminary revised inventory series. These preliminary series were then revised slightly so that August 1977 estimates would equal the new sample estimates.

Although the month-to-month movements in the old and new series show very little change, the level of the revised series show substantial change from the old series for some kinds of business. The change in levels depends on the difference between the old series for census years and the benchmark levels and on the difference between the new series level and the old series level for the link month, August 1977.

Additional details concerning the sample design, and revised estimates of merchant wholesale sales and inventories from January 1967 through August 1977, have been provided in a special supplementary publication **Monthly Wholesale, Sales and Inventories: January 1967-August 1977, Revised BW-13-77S.** This report may be obtained from Subscriber Services (Publications), Bureau of the Census, Washington, D.C. 20233 at $.90 per copy.

IV. UNPUBLISHED DATA

Additional data, such as dollar volume estimates for some kinds of business not separately shown in this report, are produced as a byproduct of the regularly published statistics. These additional data have not been included in this publication because the sampling variability associated with these data does not meet the Census Bureau's publication criteria. The Census Bureau, on written request will release these data for individual use, though not for publication.

V. DEFINITION OF TERMS

Sales—Sales include the following: merchandise sold for cash or credit at wholesale and retail by establishments primarily engaged in merchant wholesale trade; receipts from customers for rental or leasing of equipment, instruments, tools, etc.; receipts for delivery, installation, alteration, maintenance, repair, storage, and other services; and gasoline, liquor, tobacco and other excise taxes which are paid by the manufacturer and passed along to the wholesaler. Sales are net after deductions for refunds and allowances for merchandise returned by customers. Sales which are made on an agency basis for others are included as gross sales. Direct shipments on orders from wholesalers are also included in sales. Total sales do not include nonoperating income from such sources as investments, rental or sale of real estate, etc.

In the new series, sales exclude sales and excise taxes collected directly from customers and paid directly to a local, State, or Federal tax agency. Also excluded are receipts from customers for carrying or other credit charges. In the old series respondents were requested to include these taxes and credit charges in the reported sales. The impact of this change is considered minimal.

Inventories—Inventories represent stocks, at cost, of merchandise on hand for sale at the end of the month regardless of location, except for goods outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included.

Stock-sales ratios—The stock-sales ratios are percentages derived by dividing the dollar value of inventories, at cost, by the dollar value of sales. No adjustment is made in these ratios for the markup in sales which may vary from trade to trade.

The sales and inventory figures represent total sales and inventories of all establishments primarily engaged in merchant wholesale trade. Also included are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments.

APPENDIX D. Kind-of-Business Classifications

DURABLE GOODS (SIC Major Group 50)

This major group includes establishments primarily engaged in the wholesale distribution of durable goods.

MOTOR VEHICLES AND AUTOMOTIVE PARTS AND SUPPLIES (SIC 501)

Automobiles and Other Motor Vehicles (SIC 5012)[1]—Establishments primarily engaged in the wholesale distribution of new and used passenger automobiles, trucks, and other motor vehicles. Automotive distributors primarily engaged in selling at retail to individual consumers for personal use, and also selling a limited amount of new and used passenger automobiles and trucks at wholesale to dealers, are classified in retail trade, industry 5511.

Automotive Parts and Supplies (SIC 5013)—Establishments primarily engaged in the wholesale distribution of automotive parts, supplies, accessories, tools and equipment.

Tires and Tubes (SIC 5014)[1]—Establishments primarily engaged in the wholesale distribution of rubber tires and tubes for passenger and commercial vehicles.

FURNITURE AND HOME FURNISHINGS (SIC 502)

Furniture (SIC 5021)—Establishments primarily engaged in the wholesale distribution of furniture, including bedsprings, mattresses, and other household furniture; office furniture; and furniture for public parks, buildings, etc.

SIC 5021 is subdivided into—

1. Household and lawn furniture.
2. Office and business furniture.

Home Furnishings (SIC 5023)—Establishments primarily engaged in the wholesale distribution of home furnishings and homewares, including antiques; china; glassware and earthenware; lamps; curtains and draperies; linens and towels; carpets, linoleum, and all other types of hard and soft surface floor coverings. Establishments primarily engaged in the wholesale distribution of electrical household goods are classified in industry 5064.

[1] Data for this kind of business are not shown separately but are included in the group total.

LUMBER AND OTHER CONSTRUCTION MATERIALS (SIC 503)

Lumber, Plywood, and Millwork (SIC 5031)—Establishments, with or without yards, primarily engaged in the wholesale distribution of rough, dressed, and finished lumber (but not timber); plywood; door and window frames (wood or metal); and other wood and metal millwork. Establishments selling lumber, plywood and millwork to the general public and known as "retail" in the trade are classified in industry 521.

Construction Materials, Not Elsewhere Classified (SIC 5039)—Establishments primarily engaged in the wholesale distribution of such building materials as brick, building stone, cement, granite, gravel, lime, marble, plaster, building glass, roofing materials, sand, and tile. Establishments selling construction materials to the general public and known as "retail" in the trade are classified in industry 521. Establishments primarily engaged in marketing heavy structural metal products are classified in industry 5051. Establishments primarily selling readymade concrete are classified in manufacturing.

SPORTING, RECREATIONAL, PHOTOGRAPHIC, AND HOBBY GOODS, TOYS, AND SUPPLIES (SIC 504)[1]

Establishments primarily engaged in the wholesale distribution of all types of amusement and sporting goods and accessories—billiard and pool supplies; cameras and photographic equipment; coin-operated game machines; games, toys; ammunition and fireworks; etc.

METALS AND MINERALS, EXCEPT PETROLEUM (SIC 505)

Ferrous Metals Service Centers and Offices (SIC 5051 pt.)—Establishments primarily engaged in marketing ferrous metal semifinished products such as nails, pig iron, steel and tin bars. Establishments in this industry may operate with warehouses (ferrous metals service centers) or without warehouses (ferrous metals sales offices).

Sales branches of domestic manufacturers are included in this category if the establishment is separate from the manufacturing plant and has warehouse space greater than 5,000 square feet.

Nonferrous Metals Service Centers and Offices and Other Minerals and Ores (SIC 5051 pt. and SIC 5052 pt.)[1]—Establishments primarily engaged in marketing nonferrous metal semifinished products such as aluminum bars and copper rods. Establishments in this industry may operate with warehouses (nonferrous metals service centers) or without warehouses (nonferrous metals sales offices). Also included are establishments primarily engaged in the wholesale distribution of copper, iron, lead, and other metallic ores except precious; and crude nonmetallic minerals (including concentrates) except crude petroleum. Establishments primarily engaged in the wholesale distribution of nonmetallic minerals used in construction, such as sand and gravel, are included in industry 5039.

Coal (SIC 5052 pt.)[1]—Establishments primarily engaged in the wholesale distribution of coal and coke. Included are establishments which have products shipped direct from mine to customer, and establishments operating yards and dock space and making deliveries therefrom at wholesale as well as other coal merchants.

ELECTRICAL GOODS (SIC 506)

Electrical Apparatus and Equipment, Wiring Supplies, and Construction Materials (SIC 5063)—Establishments primarily engaged in the wholesale distribution of electrical power equipment for the generation, transmission, or utilization of electric energy; and electrical construction materials for outside power transmission lines and for electrical systems. Construction contractors primarily engaged in installing electrical systems and equipment from their own stock are classified in industry 1731.

Electrical Appliances, TV and Radio Sets (SIC 5064)—Establishments primarily engaged in the wholesale distribution of radio and television sets and household electrical appliances.

Electronic Parts and Equipment (SIC 5065)[1]—Establishments primarily engaged in the wholesale distribution of electronic parts and equipment, such as industrial and radio and television receiving and transmitting electronic tubes; electronic intercommunication equipment; radio parts and accessories; and electronic sound equipment. Establishments primarily engaged in the wholesale distribution of radio and television receiving sets and phonographs are classified in industry 5064.

HARDWARE, PLUMBING, HEATING EQUIPMENT, AND SUPPLIES (SIC 507)

Hardware (SIC 5072)—Establishments primarily engaged in the wholesale distribution of hardware, such as builders; shelf or light hardware; handtools (except automotive and machinists' precision); handsaws and cutlery; brads, staples, and tacks; and bolts, nuts, rivets, and screws. Establishments primarily engaged in the wholesale distribution of nails, noninsulated wire, and screening are classified in industry 5051.

Plumbing and Heating Equipment and Supplies (Hydronics) (SIC 5074)—Establishments primarily engaged in the wholesale distribution of hydronic plumbing and heating equipment and supplies. Construction contractors primarily engaged in installing plumbing and heating equipment from their own stock are classified in industry 1711.

Warm Air Heating and Air-Conditioning Equipment and Supplies (SIC 5075)[1]—Establishments primarily engaged in the distribution of warm air heating and air-conditioning equipment and supplies. Construction contractors primarily engaged in installing warm air heating and air-conditioning equipment are classified in industry 1711.

Refrigeration Equipment and Supplies (SIC 5078)[1]—Establishments primarily engaged in the distribution of refrigeration equipment and supplies. Construction contractors primarily engaged in installing refrigeration equipment from their own stock are classified in industry 1711.

MACHINERY, EQUIPMENT, AND SUPPLIES (SIC 508)

Commercial Machines and Equipment (SIC 5081)[1]—Establishments primarily engaged in wholesaling commercial machines and equipment, such as office, store, and business machines and equipment; commercial food service equipment; and fountain and store fixtures.

Construction and Mining Machinery and Equipment (SIC 5082)—Establishments primarily engaged in marketing cranes, excavating machinery and equipment, power shovels, road construction and maintenance machinery, tractor-mounting equipment and other specialized machinery and equipment used in the construction, mining, and logging industries. Establishments engaged in marketing oil well machinery and equipment are classified in industry 5084.

Farm and Garden Machinery and Equipment (SIC 5083)[1]—Establishments primarily engaged in marketing agricultural machinery and equipment for use in the preparation and maintenance of the soil, the planting and harvesting of crops, and other operations and processes pertaining to work on the farm or the lawn or garden; and dairy and other livestock equipment.

Industrial Machinery and Equipment (SIC 5084)[1]—Establishments primarily engaged in marketing industrial machinery and equipment, such as metal working tools, food industries machinery, oil well and oil refining machinery, industrial

[1] Data for this kind of business are not shown separately but are included in the group total.

trucks and tractors (except over-the-road types), printing machinery, and machinery and equipment for other manufacturing industries.

Industrial Supplies (SIC 5085)[1]—Establishments primarily engaged in marketing industrial supplies, such as abrasives and materials, rope and cordage, and mechanical rubber goods; welding supplies; mechanical power transmission supplies, including bearings; industrial valves and fittings; metal containers; industrial leather; and reconditioned barrels and drums.

Professional Equipment and Supplies (SIC 5086)—Establishments primarily engaged in the wholesale distribution of mechanical devices and other equipment used by architects, dentists, engineers, physicians, surgeons, veterinarians, optometrists, osteopaths, and other professional groups.

Surgical, Medical, Hospital Supplies (SIC 5086 pt.)[1]—Establishments primarily engaged in selling surgical and medical instruments; doctors' apparatus and equipment; orthopedic appliances; artifical limbs; operating room and other hospital equipment, X-ray machines and accessories and other scientific instruments used by physicians and in hospitals.

Service Establishment Equipment and Supplies (SIC 5087)[1]—Establishments primarily engaged in the wholesale distribution of equipment and supplies for barber shops, beauty parlors power laundries, dry-cleaning plants, upholsterers, undertakers, and related personal service establishments.

Transportation Equipment and Supplies, Except Motor Vehicles (SIC 5088)[1]—Establishments primarily engaged in the wholesale distribution of transportation equipment and supplies. Establishments primarily engaged in the wholesale distribution of motor vehicles and motor vehicle parts are classified in group 501.

MISCELLANEOUS DURABLE GOODS (SIC 509)[1]

Scrap and Waste Materials (SIC 5093)—Establishments primarily engaged in assembling, breaking up, sorting and wholesale distribution of scrap and waste materials. This industry includes auto wreckers engaged in dismantling automobiles for scrap. However, those engaged in dismantling cars for the purpose of selling secondhand parts at retail are classified in industry 5931.

SIC 5093 is subdivided into—

1. *Iron and Steel scrap.*
2. *Waste and secondary materials dealers.*

[1] Data for this kind of business are not shown separately but are included in the group total.

Jewelry, Watches, Diamonds, and Other Precious Stones (SIC 5094)[1]—Establishments primarily engaged in the wholesale distribution of jewelry, precious stones and metals, costum jewelry, watches, clocks, silverware, and jewelers' findings.

Durable Goods, Not Elsewhere Classified (SIC 5099)[1]—Establishments primarily engaged in the wholesale distribution of durable goods, not elsewhere classified, such as musical instruments and forest products, except lumber.

NONDURABLE GOODS (SIC Major Group 51)

This major group includes establishments primarily engaged in the wholesale distribution of nondurable goods.

PAPER AND PAPER PRODUCTS (SIC 511)

Printing and Writing Paper (SIC 5111)[1]—Establishments primarily engaged in the wholesale distribution of writing paper, including envelope paper, fine paper, and ground wood, printing, and rotogravure paper.

Stationery Supplies (SIC 5112)[1]—Establishments primarily engaged in the wholesale distribution of stationery and office supplies, including envelopes, typewriter and mimeograph paper, file cards and folders, pens, social stationery, and greeting cards.

Industrial and Personal Service Paper (SIC 5113)[1]—Establishments primarily engaged in the wholesale distribution of wrapping and other coarse paper, paperboard, cellophane, and converted paper products, such as bags, boxes, dishes, napkins, and shipping supplies.

DRUGS, DRUG PROPRIETARIES, AND DRUGGISTS' SUNDRIES (SIC 512)

Drugs, Drug Proprietaries, and Druggists' Sundries (SIC 5122)—Establishments primarily engaged in the wholesale distribution of drugs, drug proprietaries, druggists' sundries, and toiletries. Establishments primarily engaged in the wholesale distribution of surgical, dental, and hospital equipment are classified in industry 5086.

SIC 5122 is subdivided into—

1. *General-line drugs*—These are distinguished from specialty-line drug and toiletries wholesalers on the basis of their commodity-line mix. Drug wholesalers were classified as general line if they reported a substantial portion of their sales in "pharmaceuticals, antibiotics, druggists' chemicals, biologicals, botanicals" and "proprietary products, toilet-

ries, druggists' sundries," and if annual sales volume was $1 million or more.

2. *Specialty-line pharmaceuticals, cosmetics, and toiletries.*

APPAREL, PIECE GOODS, AND NOTIONS (SIC 513)

Piece Goods (SIC 5133)[1]—Establishments primarily engaged in the wholesale distribution of woven piece goods or yard goods of natural or manmade fibers. "Converters" who buy goods in the grey, have them finished on contract, and sell at wholesale are included here. This industry does not include establishments primarily engaged in the wholesale distribution of home furnishings, which are classified in industry 5023.

Notions and Other Dry Goods (SIC 5134)[1]—Establishments primarily engaged in the wholesale distribution of notions (sewing and hair accessories, etc.), knit goods, and other dry goods, except piece goods.

Men's and Boys' Clothing and Furnishings (SIC 5136)[1]—Establishments primarily engaged in the wholesale distribution of men's and boys' apparel and furnishings, sportswear, hosiery, underwear, nightwear, and work clothing.

Women's Children's, and Infants' Clothing and Accessories (SIC 5137)[1]—Establishments primarily engaged in the wholesale distribution of women's, children's, and infants' clothing and accessories, including hosiery, lingerie, millinery and millinery supplies, and furs.

Footwear (SIC 5139)[1]—Establishments primarily engaged in the wholesale distribution of footwear of leather, rubber, and other materials.

GROCERIES AND RELATED PRODUCTS (SIC 514)

Groceries, General-Line (SIC 5141)—Establishments primarily engaged in the wholesale distribution of a general line of groceries. Establishments primarily engaged in roasting coffee and establishments primarily engaged in blending tea or grinding and packaging spices are classified in major group 20.

SIC 5141 is subdivided into—

1. *Voluntary group wholesalers.*
2. *Retailer cooperative wholesalers.*
3. *Other general-line wholesalers.*

Frozen Foods (SIC 5142)[1]—Establishments primarily engaged in the wholesale distribution of packaged quick-frozen vegetables, juices, meats, fish, poultry, pastries, and other "deep freeze" products. Establishments primarily engaged in the wholesale distribution of frozen dairy products are classified in industry 5143. Frozen poultry, fish, and meat which are not packaged are classified in industries 5144, 5146, and 5147, respectively.

Dairy Products (SIC 5143)[1]—Establishments primarily engaged in the wholesale distribution of dairy products, such as butter, cheese, ice cream and ices, and fluid milk and cream. This industry does not include establishments primarily engaged in pasteurizing and bottling milk, which are classified in group 202.

Poultry and Poultry Products (SIC 5144)—Establishments primarily engaged in the wholesale distribution of poultry and poultry products, except canned and packaged frozen products. This industry does not include establishments primarily engaged in the killing and dressing of poultry, which are classified in industry 2016. Establishments primarily engaged in the wholesale distribution of packaged frozen poultry are classified in industry 5142, and of canned poultry in industry 5149.

Confectionery (SIC 5145)—Establishments primarily engaged in the wholesale distribution of confectionery, such as candy, chewing gum, fountain fruits, salted or roasted nuts, popcorn, and fountain syrups; and potato, corn, and similar chips.

Fish and Seafoods (SIC 5146)[1]—Establishments primarily engaged in the wholesale distribution (not packaging) of fresh, cured, and frozen fish and seafoods, except canned (industry 5149) or packaged frozen (industry 5142). The preparation, packaging, and freezing of fresh fish and other seafood, and the shucking and packing of fresh oysters in nonsealed containers, are classified in industry 2092.

Meats and Meat Products (SIC 5147)—Establishments primarily engaged in the wholesale distribution of fresh, cured, and processed (but not canned) meats and lard. The wholesale distribution of frozen packaged meats is classified in industry 5142 and canned meats in industry 5149.

Fresh Fruits and Vegetables (SIC 5148)—Establishments primarily engaged in the wholesale distribution of fresh fruits and vegetables.

Groceries and Related Products, Not Elsewhere Classified (SIC 5149)[1]—Establishments primarily engaged in the wholesale distribution of groceries and related products, not elsewhere classified. Establishments primarily engaged in the wholesale distribution of soft drinks, and in bottling and distributing natural spring and mineral waters, are classified in this industry, but establishments primarily engaged in bottling soft drinks are classified in major group 20. This industry does not include farm-product raw materials (group 515), or beer, wine, and distilled alcholic beverages (group 518).

[1] Data for this kind of business are not shown separately but are included in the group total.

FARM-PRODUCT RAW MATERIALS (SIC 515)

Cotton (SIC 5152)[1]—Establishments primarily engaged in buying and/or marketing cotton and cotton linters.

Grain (SIC 5153)—Establishments primarily engaged in buying and/or marketing grain (such as corn, wheat, oats, barley, and unpolished rice); dry beans; soybeans, and other inedible beans. Country grain elevators primarily engaged in buying or receiving grain from farmers are included as are terminal elevators and other merchants marketing grain.

Livestock (SIC 5154)[1]—Establishments primarily engaged in buying and/or marketing cattle, hogs, sheep, and goats.

Farm-Product Raw Materials, Not Elsewhere Classified (SIC 5159)[1]—Establishments primarily engaged in buying and/or marketing farm products not elsewhere classified, such as horses and mules, leaf tobacco, hides, skins, furs, wool, mohair, raw silk, hops, and nuts, except roasted or salted (industry 5145). Establishments primarily engaged in the wholesale distribution of milk are classified in industry 5143 and live poultry in industry 5144.

CHEMICALS AND ALLIED PRODUCTS (SIC 516)[1]

Chemicals and Allied Products (SIC 5161)[1]—Establishments primarily engaged in the wholesale distribution of chemicals and allied products, not elsewhere classified, such as acids, industrial and heavy chemicals, dyestuffs, industrial salts, naval stores, plastics materials, rosin, and turpentine. Establishments primarily engaged in the wholesale distribution of ammunition are classified in industry 5041; agricultural chemicals and pesticides in industry 5191; drugs in industry 5122; and paints and varnishes in industry 5198.

PETROLEUM AND PETROLEUM PRODUCTS (SIC 517)

Petroleum Bulk Stations and Terminals (SIC 5171)—Establishments primarily engaged in wholesaling petroleum products, including liquefied petroleum gas, from bulk liquid storage facilities.

Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals (SIC 5172)[1]—Establishments primarily engaged in wholesaling petroleum and petroleum products, except those with bulk liquid storage facilities. Included are packaged and bottled petroleum products distributors, truck jobbers, and others marketing petroleum and products at wholesale but without bulk liquid storage facilities.

[1] Data for this kind of business are not shown separately but are included in the group total.

BEER, WINE, AND DISTILLED ALCOHOLIC BEVERAGES (SIC 518)

Beer and Ale (SIC 5181)—Establishments primarily engaged in the wholesale distribution of beer, ale, porter, and other fermented malt beverages.

Wines and Distilled Alcoholic Beverages (SIC 5182)—Establishments primarily engaged in the wholesale distribution of distilled spirits, including neutral spirits and ethyl alcohol used in blending wines and distilled liquors.

MISCELLANEOUS NONDURABLE GOODS (SIC 519)

Farm Supplies (SIC 5191)[1]—Establishments primarily engaged in the wholesale distribution of animal feeds, fertilizers, agricultural chemicals, pesticides, seeds, and other farm supplies, except grains.

Tobacco and Tobacco Products (SIC 5194)—Establishments primarily engaged in the wholesale distribution of tobacco and tobacco products. Leaf tobacco wholesalers are classified in industry 5159 and establishments primarily engaged in stemming and redrying tobacco in industry 2141.

Paints, Varnishes, and Supplies (SIC 5198)[1]—Establishments primarily engaged in the wholesale distribution of paints, varnishes, wallpaper, and supplies, and sometimes glass. Establishments selling to the general public and known as "retail" in the trade are classified in industry 5231.

Books, Periodicals, Newspapers (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of books, lithographed matter, magazines, newspapers, and all other forms of reading material.

Nondurable Goods, Not Elsewhere Classified (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of nondurable goods, not elswhere classified, such as art goods, flowers and florist supplies, industrial yarn, textile bags, bagging and burlap.

CHANGES IN WHOLESALE KIND-OF-BUSINESS CLASSIFICATIONS IN 1972 FROM 1967

The wholesale trade kind-of-business structure was expanded from one SIC major group (SIC 50) in 1967 to two major groups in 1972, "durable goods" (SIC 50) and "nondurable goods" (SIC 51). There were 61 four-digit industries in 1972 compared to 48 four-digit industries in 1967.

The definitions of some kinds of business also were changed in 1972. Establishments primarily selling farm supplies and equipment to farmers, and establishments primarily selling

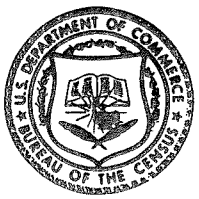
plumbing, heating, and air-conditioning equipment and electrical supplies were classified in wholesale trade rather than tail trade. However, establishments primarily selling lumber and other building materials and paint, glass, and wallpaper were classified in retail trade if they sell to the public, even though sales to contractors account for a larger portion of the total. The change resulted in moving to wholesale trade those establishments primarily selling plumbing, heating, and air-conditioning equipment; electrical supplies; farm equipment; hay, grain, and feed; and other farm supplies. The change also theoretically could have shifted to wholesale trade some establishments primarily selling lumber and paint, glass and wallpaper to contractors, but not to the public.

In addition to the kind-of-business changes noted above the special nonmerchant classifications of farm assemblers and bulk petroleum were eliminated in the 1972 census. These establishments were classified in the appropriate merchant, or sales branch category.

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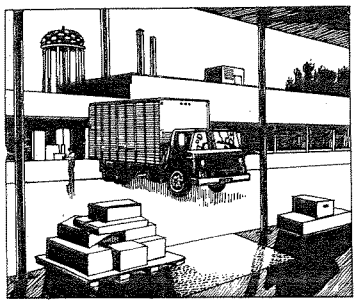
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued June 1979

April 1979

BW 79-4

Sales—April 1979 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences, but not for price changes, were $70.2 billion, down 1 percent from the previous month, but up 14 percent from April 1978. Adjusted February-through-April total sales were up 3 percent from the November-through-January period and were 17 percent above the total sales for the comparable months a year ago.

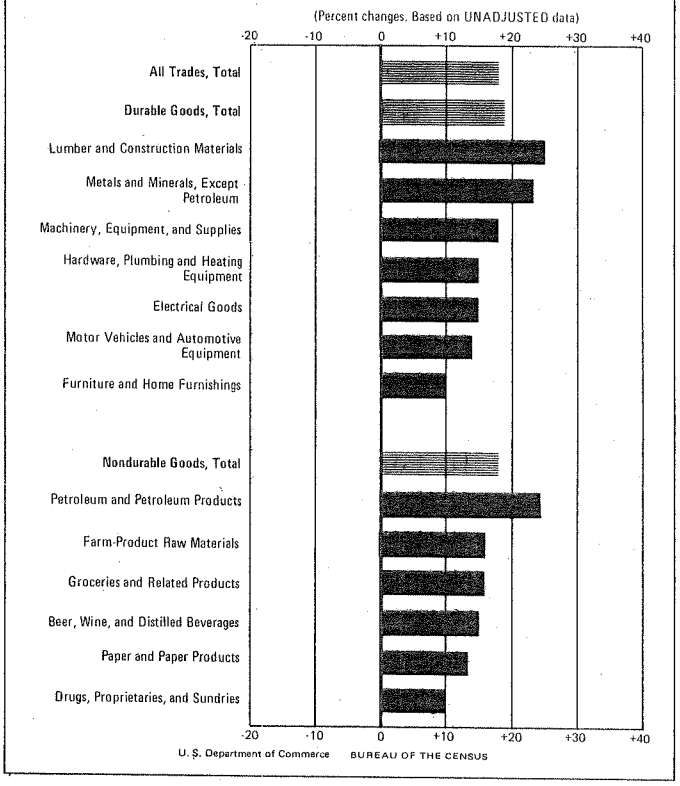
After adjustment, April sales in the durable goods trades were down 2 percent from the previous month, but were 14 percent above sales for the same month a year ago. Nondurable goods sales were up 1 percent from March and were 14 percent above April 1978. Total monthly sales in the durable goods group during the February-through-April period were 4 percent above the prior three months and were 18 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were 2 percent above the November-through-January period and were 16 percent above the total sales for the same period a year ago.

Based on adjusted data, comparisons with previous month sales levels showed mixed results with 7 trade groups showing gains and 8 indicating declines. The largest increase was shown in miscellaneous nondurable goods (6%). The largest decrease was reported in metals and minerals, except petroleum (-11%). Compared with sales of a year ago all trade groups showed increases with the sharper increases reported in petroleum and petroleum products (30%) and lumber and construction materials (22%).

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variations, but not for price changes, were valued at $85.1 billion at the end of April, up 1 percent from last month and 15 percent above the same month a year ago. Durable goods stocks were up 1 percent from March and were 14 percent above April 1978. Nondurable goods stocks were up 2 percent from last month and were 16 percent above stocks on hand a year ago.

Based on adjusted data, most trade groups showed increases from their previous month inventory levels with the largest increase reported in petroleum and petroleum products (5%). The more substantial decreases were shown in motor vehicles and automotive equipment (-4%) and paper and paper products (-2%). Compared with year-ago inventories, all trade groups reported increases. The sharper increases were noted in beer, wine, and distilled beverages (31%) and drugs, proprietaries, and sundries (23%).

Percent Change in Sales of Merchant Wholesalers in Selected Kinds of Business
4 Months 1979 Compared With 4 Months 1978



Stock-Sales Ratios—The April stock-sales ratio for merchant wholesalers, based on seasonally adjusted data, was 121, up 2 points from March and virtually unchanged from April 1978. The stock-sales ratio for durable goods was 165, up 4 points from last month and virtually unchanged from the year ago ratio. The ratio for nondurable goods was 82, up 1 point from both the March and year-ago ratios.

An advance release of the April 1979 data was issued on June 7, 1979.

U.S. Department of Commerce
BUREAU OF THE CENSUS

Inquiries concerning this report should be addressed to Ronald Piencykoski, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-5294/763-5295.

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Table 1. Estimated Monthly Sales of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979				1978									Total 4 months	
		Jan.	Feb.	Mar.	Apr.[p]	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1979	1978
	Merchant wholesalers, total	63,739	61,721	74,319	70,566	60,613	66,249	65,834	60,651	67,702	63,933	69,086	67,699	64,527	270,344	228,420
	Total (excluding farm-product raw materials)	56,481	55,208	66,198	63,340	54,095	58,061	58,658	54,411	60,838	57,342	61,033	59,923	57,237	241,226	203,396
50	Durable goods, total	28,284	28,141	34,689	33,439	28,784	30,405	30,991	28,701	32,279	30,404	32,242	31,037	29,340	124,551	104,517
501	Motor vehicles and automotive parts and supplies	5,634	5,650	6,888	6,659	5,956	6,083	5,929	5,552	6,134	5,381	6,009	6,013	5,510	24,831	21,688
5013,4	Automotive parts and supplies, tires and tubes	3,120	3,081	3,459	3,264	[r]3.162	[r]3.343	[r]3.169	[r]2.883	3,440	2,998	3,344	3,298	2,927	12,924	11,473
5013	Automotive parts and supplies	2,594	2,603	2,902	2,715	2,706	2,828	2,660	2,432	2,872	2,496	2,761	2,752	2,413	10,814	9,760
502	Furniture and home furnishings	1,012	950	1,199	1,178	1,046	1,077	1,104	1,013	1,133	1,162	1,174	1,218	1,140	4,338	3,945
5021	Furniture--household and office	343	332	416	437	352	368	370	328	366	379	379	411	422	1,527	1,322
5023	Home furnishings	669	618	783	741	695	710	735	685	767	783	795	807	718	2,811	2,623
503	Lumber and other construction materials	2,387	2,212	3,006	3,177	2,517	2,889	3,067	2,771	3,208	3,056	3,173	2,874	2,542	10,781	8,643
5031	Lumber, plywood, and millwork[1]	1,672	1,544	2,047	2,175	1,676	1,947	2,037	1,845	2,105	1,949	2,083	1,915	1,682	7,438	5,836
5039	Construction materials, n.e.c.	715	668	959	1,002	841	942	1,031	927	1,103	1,107	1,089	959	860	3,343	2,807
505	Metals and minerals, except petroleum	3,206	3,215	3,849	3,369	2,942	3,153	3,169	2,817	3,306	3,037	3,186	3,209	2,942	13,639	11,044
5051 pt.	Ferrous metals service centers and offices	2,455	2,437	2,925	2,567	2,190	2,360	2,380	2,158	2,515	2,339	2,446	2,448	2,260	10,383	8,426
5051 pt.	Ferrous metals service centers	1,652	1,744	2,129	1,903	1,629	1,755	1,778	1,580	1,833	1,721	1,801	1,768	1,678	7,427	6,172
506	Electrical goods	3,017	3,083	3,556	3,296	2,980	3,239	3,385	3,193	3,540	3,338	3,590	3,474	3,322	12,952	11,244
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,533	1,638	1,807	1,744	1,556	1,698	1,725	1,663	1,812	1,663	1,832	1,722	1,655	6,722	5,733
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,484	1,445	1,749	1,552	1,424	1,541	1,660	1,530	1,728	1,675	1,758	1,751	1,667	6,230	5,511
5064	Electrical appliances, TV and radio sets	834	849	1,024	891	841	931	994	912	1,064	1,057	1,040	1,090	1,006	3,598	3,304
507	Hardware, plumbing, heating equipment, and supplies	2,142	1,984	2,319	2,330	2,102	2,306	2,360	2,247	2,412	2,159	2,455	2,250	2,057	8,775	7,621
5072	Hardware	802	758	853	836	797	856	836	760	864	771	859	830	721	3,249	2,962
5074	Plumbing and heating equipment and supplies (hydronics)	854	800	960	979	834	904	902	916	988	928	1,047	918	854	3,592	3,036
508	Machinery, equipment, and supplies	7,691	7,841	9,664	9,405	8,296	8,616	8,790	7,827	8,757	8,655	8,909	8,421	8,485	34,602	29,419
5082	Construction and mining machinery and equipment[2]	895	927	1,189	1,351	1,254	1,276	1,229	1,122	1,196	1,115	1,155	1,126	1,125	4,363	4,085
5084,5	Industrial machinery, equipment, and supplies	3,390	3,464	3,940	3,641	3,077	3,388	3,505	3,049	3,532	3,450	3,573	3,474	3,623	14,435	11,706
5086	Professional equipment, supplies	907	914	1,048	947	816	873	952	888	990	949	941	949	975	3,816	3,120
5093	Scrap and waste materials	1,132	1,184	1,501	1,507	958	1,058	1,057	940	1,073	978	1,007	1,103	1,079	5,325	3,508
51	Nondurable goods, total	35,455	33,580	39,630	37,127	31,829	35,844	34,843	31,950	35,423	33,529	36,844	36,662	35,187	145,793	123,903
	Total (excluding farm-product raw materials)	28,197	27,067	31,509	29,901	25,311	27,656	27,667	25,710	28,559	26,937	28,791	28,885	27,897	116,675	98,879
511	Paper and paper products	1,540	1,479	1,688	1,513	1,395	1,508	1,498	1,384	1,581	1,456	1,598	1,569	1,489	6,221	5,502
5111,3	Printing, writing, industrial, and personal services paper	1,133	1,100	1,272	1,161	1,032	1,126	1,125	1,046	1,177	1,088	1,191	1,177	1,140	4,665	4,008
512	Drugs, drug proprietaries, and druggists' sundries	950	917	1,073	1,036	912	943	950	902	1,026	973	1,082	1,017	963	3,974	3,617
5122	Drugs, drug proprietaries, and druggists' sundries	950	917	1,073	1,036	912	943	950	902	1,026	973	1,082	1,017	963	3,974	3,617
5122 pt.	General-line drugs	423	427	507	495	423	447	448	409	482	464	494	465	445	1,851	1,709
513	Apparel, piece goods, and notions[3]	2,094	1,996	2,326	2,013	1,818	2,099	2,066	2,036	2,658	2,313	2,443	2,369	1,976	8,428	7,115
514	Groceries and related products	11,122	10,381	11,954	11,213	9,916	10,873	10,685	10,237	11,002	10,489	11,150	11,155	10,830	44,670	38,668
5141	Groceries, general-line	3,965	3,658	4,173	3,985	3,547	3,791	3,724	3,649	3,965	3,767	3,999	4,120	3,914	15,781	14,045
5144	Poultry and poultry products	518	489	559	549	468	507	503	482	539	505	525	569	536	2,115	1,752
5145	Confectionery	184	177	209	194	173	191	189	171	187	190	218	211	197	764	681
5147	Meats and meat products	1,979	1,971	2,198	1,952	1,688	1,871	1,826	1,800	1,974	1,840	1,928	1,911	1,885	8,100	6,261
5148	Fresh fruits and vegetables	1,020	961	1,203	1,091	1,035	1,184	1,198	1,044	985	890	980	974	973	4,275	3,684
515	Farm-product raw materials	7,258	6,513	8,121	7,226	6,518	8,188	7,176	6,240	6,864	6,591	8,053	7,777	7,290	29,118	25,024
5153	Grain	5,859	5,235	6,740	5,938	5,358	6,890	6,078	5,317	5,760	5,448	6,623	6,391	5,912	23,771	20,129
517	Petroleum and petroleum products	4,837	5,008	5,282	5,152	3,830	4,178	4,111	4,000	4,441	4,136	4,431	4,554	4,598	20,280	16,372
5171	Petroleum bulk stations and terminals	2,738	2,785	2,997	2,923	2,188	2,425	2,358	2,190	2,378	2,280	2,449	2,507	2,678	11,443	9,252
518	Beer, wine, and distilled alcoholic beverages	2,020	1,952	2,490	2,445	1,993	2,295	2,506	2,191	2,463	2,254	2,347	2,547	2,709	8,907	7,716
5181	Beer and ale	999	953	1,223	1,277	998	1,219	1,372	1,217	1,328	1,119	1,105	1,088	1,108	4,452	3,725
5182	Wine and distilled alcoholic beverages[2]	1,021	999	1,267	1,169	996	1,076	1,134	974	1,134	1,135	1,242	1,459	1,601	4,455	3,990
519	Miscellaneous nondurable goods	4,529	4,383	5,528	5,449	4,568	4,730	4,819	4,040	4,297	4,311	4,510	4,486	4,425	19,888	16,508
5194	Tobacco and tobacco products	823	749	852	831	765	812	849	838	871	814	848	831	846	3,255	2,961

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. [p]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures. [r]Revised.

[1]The lumber, plywood and millwork group is subject to a sampling variability of 10 percent for April 1979.
[2]The construction and mining machinery and equipment group is subject to a sampling variability of 8 percent for April 1979.
[3]The apparel piece goods and notions group is subject to a sampling variability of 15 percent for April 1979.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations)

1972 SIC code	Kind of business	1979				1978								
		Jan.	Feb.	Mar.	Apr.[p]	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	81,896	83,917	85,436	85,450	74,635	74,634	74,882	74,874	74,943	76,074	78,715	80,100	80,922
	Total (excluding farm-product raw materials)	75,593	77,627	79,311	79,712	69,060	69,883	70,513	71,073	71,138	71,889	73,327	73,947	74,898
50	Durable goods, total	51,860	53,807	54,381	54,589	47,957	48,918	49,627	49,900	49,841	49,944	50,462	50,971	51,646
501	Motor vehicles and automotive parts and supplies	9,512	10,189	9,797	9,339	7,973	8,246	8,218	8,367	8,378	8,099	8,701	9,326	9,227
5013,4	Automotive parts and supplies, tires and tubes	5,758	5,888	5,781	5,617	4,901	5,149	5,035	5,034	5,206	5,172	5,298	5,635	5,552
5013	Automotive parts and supplies	4,881	5,003	4,870	4,778	4,171	4,382	4,241	4,288	4,415	4,345	4,489	4,792	4,674
502	Furniture and home furnishings	1,764	1,753	1,872	1,887	1,669	1,730	1,781	1,764	1,760	1,810	1,780	1,774	1,752
5023	Home furnishings	1,292	1,282	1,355	1,358	1,233	1,279	1,305	1,305	1,306	1,326	1,315	1,305	1,251
503	Lumber and other construction materials	3,113	3,178	3,337	3,436	2,966	3,030	3,071	3,095	3,007	3,076	3,076	2,995	3,117
5031	Lumber, plywood, and millwork[1]	2,030	2,082	2,116	2,767	1,882	1,963	1,979	1,967	1,929	1,932	1,946	1,918	2,009
505	Metals and minerals, except petroleum	5,106	5,434	5,285	5,388	4,976	5,356	5,307	5,305	5,437	5,285	5,095	5,208	5,151
5051 pt.	Ferrous metals service centers and offices	4,191	4,425	4,365	4,385	3,823	4,116	4,108	4,104	4,232	4,148	3,976	4,150	4,191
5051 pt.	Ferrous metals service centers	3,241	3,459	3,433	3,450	2,971	3,220	3,268	3,191	3,308	3,299	3,098	3,236	3,336
506	Electrical goods	5,509	5,582	5,706	5,793	4,951	5,129	5,312	5,266	5,264	5,416	5,500	5,526	5,577
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2,542	2,684	2,676	2,725	2,286	2,417	2,358	2,283	2,367	2,356	2,399	2,534	2,558
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,966	2,898	3,030	3,068	2,665	2,712	2,954	2,983	2,899	3,059	3,101	3,016	3,023
507	Hardware, plumbing, heating equipment, and supplies	4,251	4,461	4,497	4,569	4,231	4,222	4,201	4,215	4,117	4,032	4,152	4,033	4,063
5072	Hardware	1,476	1,540	1,539	1,550	1,428	1,445	1,423	1,410	1,369	1,417	1,466	1,382	1,407
5074	Plumbing and heating equipment and supplies (hydronics)[1]	1,819	1,900	1,899	1,938	1,861	1,815	1,818	1,839	1,800	1,805	1,738	1,737	1,760
508	Machinery, equipment, and supplies	17,748	18,254	18,807	19,046	16,762	16,796	17,061	17,057	17,183	17,405	17,352	17,428	18,012
5082	Construction and mining machinery and equipment	3,932	4,152	4,334	4,275	3,516	3,589	3,636	3,637	3,793	3,899	3,937	4,002	4,109
5084,5	Industrial machinery, equipment, and supplies	5,728	5,800	6,015	6,109	5,055	5,160	5,328	5,301	5,317	5,519	5,508	5,570	5,752
51	Nondurable goods, total	30,036	30,110	31,055	30,861	26,678	25,716	25,255	24,974	25,102	26,130	28,253	29,129	29,276
	Total (excluding farm-product raw materials)	23,733	23,820	24,930	25,123	21,103	20,966	20,887	21,173	21,297	21,946	22,865	22,976	23,252
511	Paper and paper products	1,424	1,468	1,547	1,547	1,349	1,343	1,376	1,341	1,361	1,414	1,419	1,441	1,482
5111,3	Printing, writing, industrial, and personal service paper	986	1,010	1,053	1,052	911	929	955	938	921	976	969	967	1,025
512	Drugs, drug proprietaries, and druggists' sundries	1,465	1,484	1,612	1,646	1,345	1,350	1,401	1,368	1,410	1,489	1,502	1,476	1,440
514	Groceries and related products	6,408	6,346	6,719	6,709	5,740	5,752	5,871	5,833	5,803	6,186	6,469	6,412	6,497
5141	Groceries, general-line	2,696	2,744	2,895	2,879	2,500	2,495	2,512	2,480	2,505	2,641	2,811	2,814	2,761
517	Petroleum and petroleum products	2,106	2,101	2,224	2,210	1,872	1,938	1,837	1,974	2,093	2,098	2,151	2,151	2,153
518	Beer, wine, and distilled alcoholic beverages	2,462	2,427	2,684	2,788	2,133	2,135	2,148	2,178	2,158	2,221	2,453	2,513	2,290
5181	Beer and ale[2]	800	845	1,040	1,094	758	730	717	709	679	720	769	777	729
5182	Wines and distilled alcoholic beverages	1,662	1,582	1,645	1,695	1,375	1,405	1,431	1,469	1,480	1,501	1,684	1,736	1,561

See footnotes at end of table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Percent. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979				1978								
		Jan.	Feb.	Mar.	Apr.[p]	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	128	136	115	121	123	113	114	123	111	119	114	118	125
	Total (excluding farm-product raw materials)	134	141	120	126	128	120	120	131	117	129	120	123	131
50	Durable goods, total	183	191	157	163	167	161	160	174	154	164	157	164	176
501	Motor vehicles and automotive parts and supplies	169	180	142	140	134	136	139	151	137	151	145	155	167
5013,4	Automotive parts and supplies, tires and tubes	185	191	167	172	152	151	156	172	151	173	158	171	190
5013	Automotive parts and supplies	188	192	168	176	154	155	159	176	154	174	163	174	194
502	Furniture and home furnishings	174	185	156	160	159	161	161	174	155	156	152	146	154
5023	Home furnishings	193	208	173	183	178	180	178	190	170	169	165	162	174
503	Lumber and other construction materials	130	144	111	108	118	105	100	112	94	101	97	104	123
5031	Lumber, plywood, and millwork	121	135	103	100	112	101	96	107	92	99	93	100	119
505	Metals and minerals, except petroleum	159	169	137	160	169	170	167	188	164	174	160	162	175
5051 pt.	Ferrous metals service centers and offices	171	182	149	171	175	174	173	190	168	177	163	170	185
5051 pt.	Ferrous metals service centers	196	198	161	181	182	184	184	202	181	192	172	183	199
506	Electrical goods	183	181	160	176	166	158	157	165	149	162	153	159	168
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	166	164	148	156	147	142	137	137	131	142	131	147	155
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	200	201	173	198	187	176	178	195	168	183	176	171	181
507	Hardware, plumbing, heating equipment, and supplies	198	225	194	196	201	183	178	188	171	187	169	179	198
5072	Hardware	184	203	180	186	179	169	170	185	158	179	171	167	195
5074	Plumbing and heating equipment and supplies (hydronics)	213	237	198	198	223	201	202	201	182	188	166	189	206
508	Machinery, equipment, and supplies	231	238	195	202	202	195	194	218	196	201	195	207	212
5082	Construction and mining machinery and equipment	439	448	364	316	280	281	296	324	317	350	341	356	365
5084,5	Industrial machinery, equipment, and supplies	168	167	153	168	164	152	152	174	151	160	154	160	159
51	Nondurable goods, total	85	90	78	83	84	72	72	78	71	78	77	79	83
	Total (excluding farm-product raw materials)	84	88	79	84	83	76	75	82	75	81	79	80	83
511	Paper and paper products	92	99	92	102	97	89	92	97	86	97	89	92	100
5111,3	Printing, writing, industrial, and personal service paper	87	92	83	91	88	82	85	90	78	90	81	82	90
512	Drugs, drug proprietaries, and druggists' sundries	154	162	150	159	147	143	147	152	137	153	139	145	150
514	Groceries and related products	58	61	56	60	58	53	55	57	53	59	58	57	60
5141	Groceries, general-line	68	75	69	72	70	66	67	68	63	70	70	68	71
	Petroleum and petroleum products	44	42	42	43	49	46	45	49	47	51	49	47	47
	Beer, wine, and distilled alcoholic beverages	122	124	108	114	107	93	86	99	88	99	105	99	85
5181	Beer and ale	80	89	85	86	76	60	52	58	51	64	70	71	66
5182	Wines and distilled alcoholic beverages	163	158	130	145	138	131	126	151	130	132	136	119	97

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. [p]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]The lumber, plywood and millwork group is subject to a sampling variability of 8 percent for April 1979.
[2]The beer and ale group is subject to a sampling variability of 9 percent for April 1979.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1979 and 1978

(Sales and inventories in millions of dollars. Stock-sales ratios in percent)

1972 SIC code	Kind of business	1979				1978								
		Jan.	Feb.	Mar.	Apr.[p]	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Sales ADJUSTED for seasonal variations and trading-day differences												
	Merchant wholesalers, total	67,148	67,495	70,824	70,247	61,640	63,171	62,656	63,425	64,894	64,531	67,338	67,552	67,823
	Total (excluding farm-product raw materials)	60,346	60,603	63,567	63,035	54,992	55,288	55,252	56,716	57,461	57,326	59,349	60,373	60,526
50	Durable goods, total	31,012	31,769	33,570	32,797	28,831	28,627	28,741	29,859	30,043	29,863	30,953	31,498	31,939
501	Motor vehicles and automotive parts and supplies	5,994	6,285	6,486	6,143	5,530	5,614	5,516	5,631	5,739	5,598	6,113	6,442	6,088
502	Furniture and home furnishings	1,162	1,058	1,178	1,197	1,080	1,060	1,036	1,136	1,077	1,118	1,047	1,136	1,197
503	Lumber and other construction materials	2,876	2,758	3,089	3,242	2,661	2,630	2,733	2,705	2,732	2,878	2,887	2,874	3,026
505	Metals and minerals, except petroleum	3,184	3,518	3,748	3,322	2,984	2,930	3,036	3,090	3,045	2,947	3,188	3,305	3,258
506	Electrical goods	3,279	3,460	3,560	3,319	3,103	3,259	3,179	3,225	3,377	3,311	3,340	3,356	3,362
507	Hardware, plumbing, heating equipment, and supplies	2,354	2,270	2,371	2,328	2,148	2,161	2,185	2,232	2,209	2,108	2,290	2,237	2,330
508	Machinery, equipment, and supplies	8,461	8,840	9,108	9,212	8,305	7,997	8,082	8,201	8,372	8,382	8,607	8,730	9,193
51	Nondurable goods, total	36,136	35,726	37,254	37,450	32,809	34,544	33,915	33,566	34,851	34,668	36,385	36,054	35,884
	Total (excluding farm-product raw materials)	29,334	28,834	29,997	30,238	26,161	26,661	26,511	26,857	27,418	27,463	28,396	28,875	28,587
511	Paper and paper products	1,540	1,595	1,636	1,596	1,494	1,459	1,446	1,447	1,473	1,419	1,536	1,579	1,608
512	Drugs, drug proprietaries, and druggists' sundries	953	990	1,032	1,048	947	940	952	971	980	965	1,000	1,007	997
513	Apparel, piece goods, and notions	2,230	2,114	2,243	2,179	1,981	2,075	2,091	2,173	2,299	2,177	2,268	2,291	2,269
514	Groceries and related products	11,407	11,408	11,595	11,407	10,199	10,319	10,176	10,340	10,443	10,607	11,039	11,178	11,400
515	Farm-product raw materials[1]	6,802	6,892	7,257	7,212	6,648	7,883	7,404	6,709	7,433	7,205	7,989	7,179	7,297
517	Petroleum and petroleum products	4,876	4,905	4,955	5,194	3,982	4,354	4,111	4,144	4,430	4,442	4,390	4,542	4,387
518	Beer, wine, and distilled alcoholic beverages	2,491	2,395	2,541	2,607	2,198	2,149	2,199	2,245	2,284	2,305	2,333	2,383	2,387
519	Miscellaneous nondurable goods	4,645	4,361	4,849	5,136	4,463	4,403	4,583	4,580	4,499	4,521	4,657	4,693	4,567
		Inventories ADJUSTED for seasonal variations												
	Merchant wholesalers, total	81,543	83,005	84,078	85,081	74,327	74,779	75,191	75,744	76,338	77,113	78,625	79,526	80,771
	Total (excluding farm-product raw materials)	76,224	77,545	78,624	79,389	68,769	69,436	70,028	70,920	71,546	72,119	73,434	74,285	75,546
50	Durable goods, total	52,490	53,773	53,937	54,271	47,677	48,319	48,756	49,414	49,972	50,160	50,948	51,625	52,460
501	Motor vehicles and automotive parts and supplies	9,390	9,883	9,643	9,283	7,925	8,084	8,177	8,434	8,637	8,315	8,870	9,420	9,236
502	Furniture and home furnishings	1,778	1,765	1,878	1,896	1,677	1,716	1,748	1,755	1,750	1,789	1,776	1,782	1,8
503	Lumber and other construction materials	3,160	3,207	3,218	3,346	2,888	2,925	3,020	3,052	3,013	3,101	3,181	3,113	3,190
505	Metals and minerals, except petroleum	5,142	5,528	5,274	5,345	4,937	5,345	5,296	5,161	5,289	5,290	5,269	5,266	5,166
506	Electrical goods	5,697	5,772	5,764	5,810	4,971	5,068	5,177	5,193	5,227	5,346	5,435	5,499	5,650
507	Hardware, plumbing, heating equipment, and supplies	4,382	4,543	4,422	4,368	4,053	4,091	4,095	4,149	4,092	4,098	4,207	4,153	4,228
508	Machinery, equipment, and supplies	17,927	18,073	18,529	19,027	16,745	16,630	16,710	17,006	17,357	17,510	17,527	17,658	18,249
51	Nondurable goods, total	29,053	29,232	30,141	30,810	26,650	26,460	26,435	26,330	26,366	26,953	27,677	27,901	28,311
	Total (excluding farm-product raw materials)	23,734	23,772	24,687	25,118	21,092	21,117	21,272	21,506	21,574	21,959	22,486	22,660	23,086
511	Paper and paper products	1,458	1,493	1,561	1,530	1,334	1,338	1,341	1,341	1,358	1,404	1,419	1,447	1,482
512	Drugs, drug proprietaries, and druggists' sundries	1,528	1,530	1,615	1,638	1,337	1,379	1,393	1,382	1,410	1,453	1,435	1,446	1,444
514	Groceries and related products	6,492	6,333	6,581	6,676	5,711	5,798	5,948	5,922	5,921	6,192	6,342	6,355	6,433
517	Petroleum and petroleum products	2,017	2,114	2,237	2,346	1,987	2,019	1,948	2,050	2,078	2,039	2,052	2,064	2,082
518	Beer, wine, and distilled alcoholic beverages	2,557	2,536	2,756	2,813	2,152	2,087	2,087	2,180	2,204	2,214	2,293	2,377	2,403
		Stock-sales ratios based on ADJUSTED data												
	Merchant wholesalers, total	121	123	119	121	121	118	120	119	118	119	117	118	119
	Total (excluding farm-product raw materials)	126	128	124	126	125	126	127	125	125	126	123	123	125
50	Durable goods, total	169	169	161	165	165	169	170	165	166	168	165	164	164
501	Motor vehicles and automotive parts and supplies	157	157	149	151	143	144	148	150	150	149	145	146	152
502	Furniture and home furnishings	153	167	159	158	155	162	169	154	162	160	170	157	150
503	Lumber and other construction materials	110	116	104	103	109	111	111	113	110	108	110	108	105
505	Metals and minerals, except petroleum	161	157	141	161	165	182	174	167	174	179	165	159	159
506	Electrical goods	174	167	162	175	160	156	163	161	155	161	163	164	168
507	Hardware, plumbing, heating equipment, and supplies	186	200	187	188	189	189	187	186	185	194	184	186	181
508	Machinery, equipment, and supplies	212	204	203	207	202	208	207	207	207	209	204	202	199
51	Nondurable goods, total	80	82	81	82	81	77	78	78	76	78	76	77	79
	Total (excluding farm-product raw materials)	81	82	82	83	81	79	80	80	79	80	79	78	81
511	Paper and paper products	95	94	95	95	89	92	93	92	92	99	92	92	92
512	Drugs, drug proprietaries, and druggists' sundries	160	155	156	156	141	147	146	142	144	151	144	144	145
514	Groceries and related products	57	56	57	59	56	56	58	57	57	58	57	57	56
517	Petroleum and petroleum products	41	43	45	45	50	46	47	49	47	46	47	45	47
518	Beer, wine, and distilled alcoholic beverages	103	106	108	108	98	97	95	97	97	96	98	100	10

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions. All data for 1978 have been revised to reflect recomputed factors for seasonal adjustment.

NA Not available. [p]Preliminary estimates. See p. 15, Sample Design and Estimation Procedures.

[1]There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table 4B. Percent Change Between Selected 3-Month Periods Sales of Merchant Wholesalers, United States

(Based on seasonally-adjusted data)

Item	3 month period, Feb. 1979-Apr. 1979 from--			
	Nov. 1978-Jan. 1979 (3 months ago)	Aug. 1978-Oct. 1978 (6 months ago)	May 1978-July 1978 (9 months ago)	Feb. 1978-Apr. 1978 (12 months ago)
Merchant wholesalers, total.....	+3	+6	+10	+17
Durable goods, total.....	+4	+8	+13	+18
Nondurable goods, total....	+2	+4	+8	+16

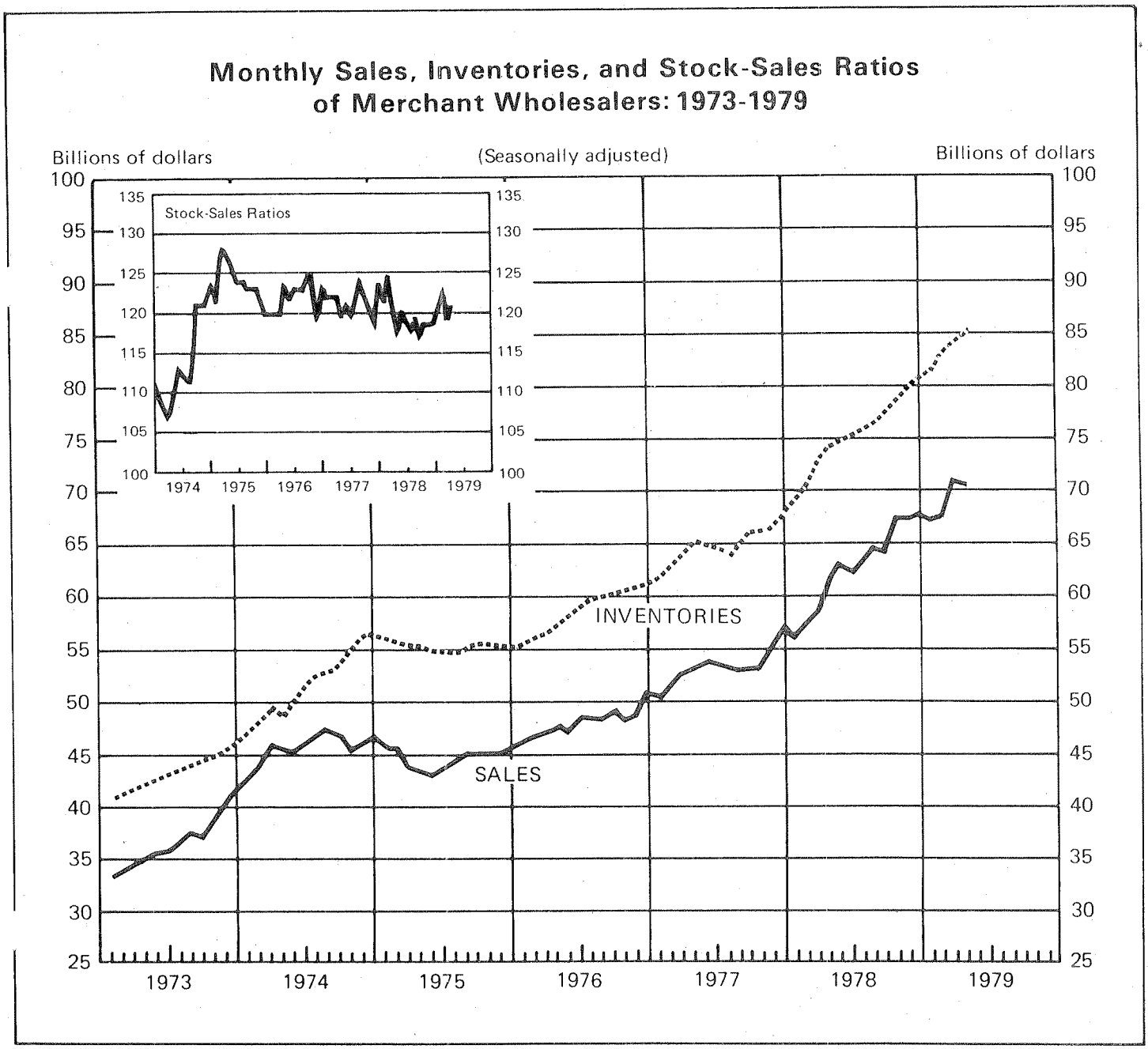


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: April 1979

1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		April 1979 from March 1979	April 1979 from April 1978	4 months 1979 from 4 months 1978	April 1979 from March 1979	April 1979 from April 1978	April 1979 from March 1979	April 1979 from April 1978	April 1979 from March 1979	April 1979 from April 1978
	Merchant wholesalers, total	-5	+16	+18	0	+14	-1	+14	+1	+15
	Total (excluding farm-product raw materials)	-4	+17	+19	+1	+15	-1	+15	+1	+15
50	Durable goods, total	-4	+16	+19	0	+14	-2	+14	+1	+14
501	Motor vehicles and automotive parts and supplies	-3	+12	+14	-5	+17	-5	+11	-4	+17
5012	Automobiles and other motor vehicles	-1	+24	+17	-9	+19	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	-6	+3	+13	-1	+16	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	-6	0	+11	-2	+15	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	-2	+13	+10	+1	+13	+2	+11	+1	+13
5021	Furniture--household and office	+5	+24	+16	+2	+21	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	-8	+7	+10	0	+19	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	(S)	(S)	(S)	+4	+24	(*)	(*)	(*)	(*)
5023	Home furnishings	-5	+7	+7	0	+10	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	+6	+26	+25	+3	+16	+5	+22	+4	+16
5031	Lumber, plywood, and millwork	+6	+30	+27	+2	+15	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c.	+4	+19	+19	+4	+17	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	-4	+4	+10	+1	+12	-4	+4	+2	+12
505	Metals and minerals, except petroleum	-12	+15	+23	+2	+8	-11	+11	+1	+8
5051 pt.	Ferrous metals service centers and offices	-12	+17	+23	0	+15	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	-11	+17	+20	0	+16	(*)	(*)	(*)	(*)
5051 pt.	Nonferrous metals service centers and offices	-16	+15	+28	+9	-9	(*)	(*)	(*)	(*)
506	Electrical goods	-7	+11	+15	+2	+17	-7	+7	+1	+17
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-3	+12	+17	+2	+19	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-11	+9	+13	+1	+15	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	-13	+6	+9	0	+14	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	0	+11	+15	+2	+8	-2	+8	-1	+8
5072	Hardware	-2	+5	+10	+1	+9	(*)	(*)	(*)	(*)
5074	Plumbing and heating equipment and supplies (hydronics)	+2	+17	+18	+2	+4	(*)	(*)	(*)	(*
5075	Warm air heating and air conditioning equipment and supplies	0	+9	+20	+1	+13	(*)	(*)	(*)	(
508	Machinery, equipment, and supplies	-3	+13	+18	+1	+14	+1	+11	+3	+14
5081	Commercial machines and equipment	-17	-1	+3	0	+5	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	+14	+8	+7	-1	+22	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	+6	+9	+17	+2	+5	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	-8	+18	+23	+2	+21	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	-10	+16	+22	+4	+7	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	0	+57	+52	+3	+12	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	0	+61	+60	+4	+16	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	+1	+52	+40	0	0	(*)	(*)	(*)	(*)
51	Nondurable goods, total	-6	+17	+18	-1	+16	+1	+14	+2	+16
	Total (excluding farm-product raw materials)	-5	+18	+18	+1	+19	+1	+16	+2	+19
511	Paper and paper products	-10	+9	+13	0	+15	-2	+7	-2	+15
5111,3	Printing, writing, industrial, and personal service paper	-9	+13	+16	0	+16	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	-3	+14	+10	+2	+22	+2	+11	+1	+23
5122	Drugs, drug proprietaries, and druggists' sundries	-3	+14	+10	+2	+22	(*)	(*)	(*)	(*)
5122 pt.	General-line drugs	-2	+17	+8	+2	+23	(*)	(*)	(*)	(*)
514	Groceries and related products	-6	+13	+16	0	+17	-2	+12	+1	+17
5141	Groceries, general-line	-4	+12	+12	-1	+15	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	-3	+13	+13	+2	+16	(*)	(*)	(*)	(*)
5141 pt.	Retailer cooperatives	-6	+8	+9	-3	+17	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	-5	+15	+15	-1	+14	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	-5	+15	+11	-1	+13	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	-2	+17	+21	+3	+34	(*)	(*)	(*)	(*)
5145	Confectionery	-7	+12	+12	0	+16	(*)	(*)	(*)	(*)
5147	Meats and meat products	-11	+16	+29	+1	+27	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	-9	+5	+16	+1	+36	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	-11	+11	+16	-6	+3	-1	+8	+4	+2
5152	Cotton	-8	-7	+1	-11	+1	(*)	(*)	(*)	(*)
5153	Grain	-12	+11	+18	-6	0	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	-2	+35	+24	-1	+18	+5	+30	+5	+18
5171	Petroleum bulk stations and terminals	-2	+34	+24	-2	+22	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	-2	+23	+15	+4	+31	+3	+19	+2	+31
5181	Beer and ale	+4	+28	+19	+5	+44	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	-8	+17	+12	+3	+23	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	-1	+19	+20	+1	+16	+6	+15	+4	+16
5191	Farm supplies	+7	+24	+26	-3	+16	(*)	(*)	(*)	(*)
5194	Tobacco and tobacco products	-2	+9	+10	+3	+16	(*)	(*)	(*)	(*
5198	Paints, varnishes, and supplies	0	+15	+17	+11	+38	(*)	(*)	(*)	(
5199 pt.	Books, periodicals, newspapers	0	+4	+5	-1	-7	(*)	(*)	(*)	(

*Adjusted data are available only for summary group totals.
(S)Does not meet publication standards because of extreme variability or high nonresponse rate.

[1]Adjusted for seasonal variations and, in the case of sales, also for trading-day differences. Adjusted data are only available for the summary kind-of-business groups shown.
[2]There are indications that the seasonal adjustment factors for this trade group may not reflect recent trends. The seasonally adjusted data for this trade group and also for the summary group totals should, therefore, be used with caution.

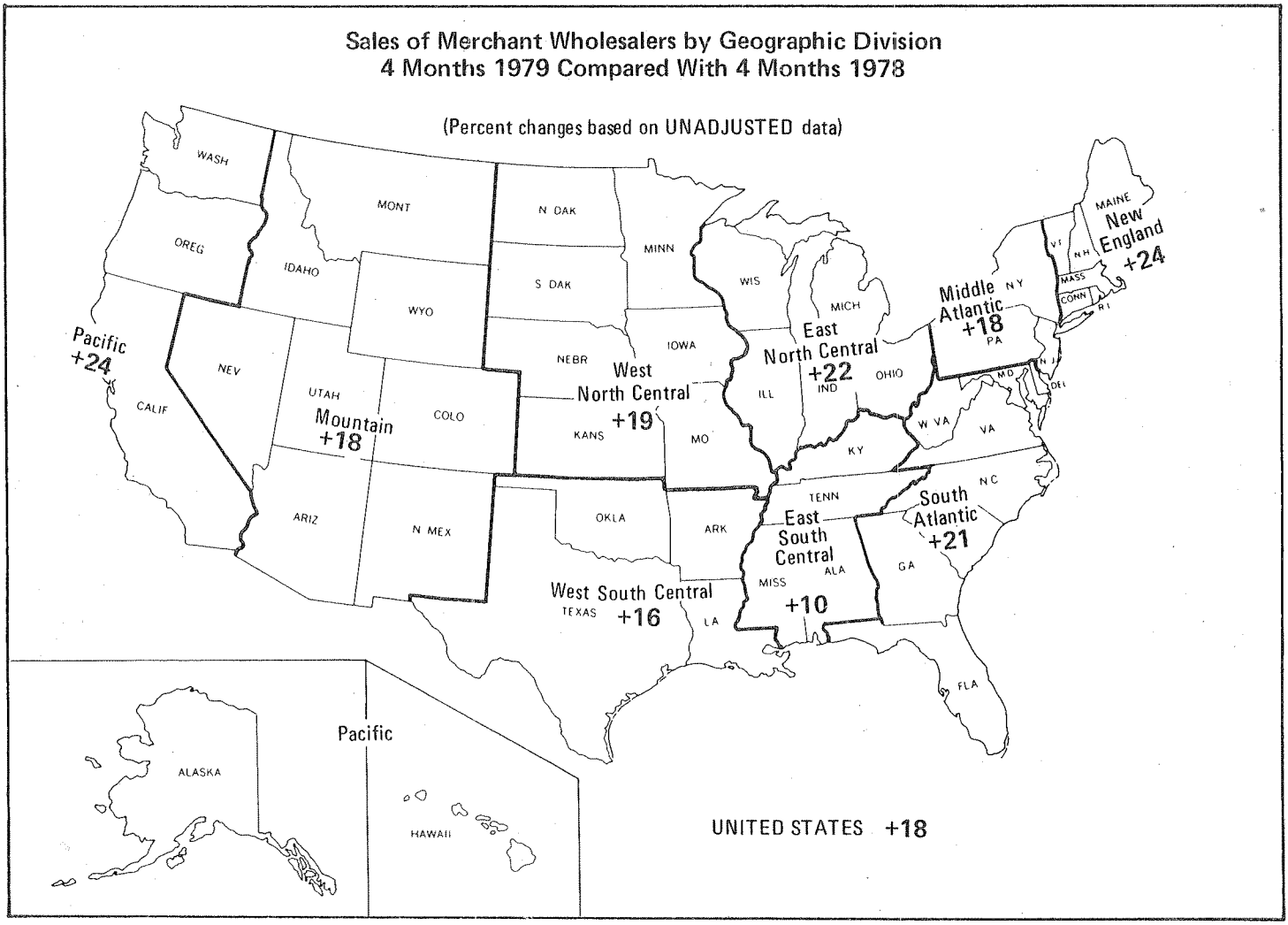


Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1979 and 1978

(Sales, in millions of dollars, are NOT ADJUSTED for seasonal variations or trading-day differences; sampling errors in percent)

1972 SIC code	Kind of business and geographic division[1]	1979				1978									Total 4 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.	Apr.[p]	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1979	1978	Range[2]	Median
	Merchant wholesalers, total	63,739	61,721	74,319	70,566	60,613	66,249	65,834	60,651	67,702	63,933	69,086	67,699	64,527	270,344	228,420	0.8-0.9	0.9
	New England	3,393	3,289	3,835	3,687	2,913	3,231	3,451	3,206	3,654	3,472	3,638	3,678	3,652	14,203	11,454	5-6	6
	Middle Atlantic	14,513	13,785	16,692	15,102	13,114	14,345	14,752	13,281	15,382	14,387	15,123	15,304	14,529	60,092	51,007	2-2	2
	East North Central	10,573	10,454	12,314	11,814	10,708	11,787	11,510	10,461	11,636	10,821	12,195	11,757	10,882	45,156	39,585	2-3	3
	West North Central	6,695	6,589	7,834	7,420	6,522	7,583	6,999	6,513	7,373	6,836	7,790	7,471	6,894	28,537	23,897	2-3	2
	South Atlantic	7,023	6,620	8,329	7,951	6,533	6,858	7,044	6,523	7,139	6,877	7,449	7,106	6,979	29,924	24,677	2-3	2
	East South Central	2,961	2,801	3,505	3,393	3,318	3,453	3,132	2,962	3,127	2,938	3,213	3,075	2,922	12,660	11,474	4-5	4
	West South Central	6,703	6,648	7,785	7,586	6,433	6,857	6,744	6,382	6,890	6,717	7,036	6,885	6,680	28,722	24,736	3-4	4
	Mountain	2,337	2,253	2,904	2,838	2,412	2,537	2,777	2,456	2,620	2,693	2,583	2,477	2,540	10,332	8,782	5-5	5
	Pacific	9,540	9,281	11,121	10,776	8,659	9,600	9,426	8,868	9,881	9,191	10,058	9,946	9,448	40,718	32,809	2-3	3
50	Durable goods, total	28,284	28,141	34,689	33,439	28,784	30,405	30,991	28,701	32,279	30,404	32,242	31,037	29,340	124,551	104,517	0.8-1.0	0.9
	Middle Atlantic	5,936	5,892	7,165	6,629	5,952	6,181	6,464	5,808	6,765	6,303	6,618	6,516	6,094	25,622	22,359	4-5	4
	East North Central	4,818	4,975	6,057	5,824	5,128	5,495	5,407	4,958	5,793	5,342	5,801	5,674	5,177	21,675	18,507	3-4	4
	West North Central	2,157	2,208	2,718	2,687	2,378	2,548	2,446	2,383	2,695	2,504	2,740	2,652	2,379	9,771	8,187	5-6	5
	South Atlantic	3,515	3,211	4,246	4,117	3,455	3,538	3,817	3,480	3,738	3,689	3,869	3,608	3,513	15,088	12,445	4-5	4
	West South Central	3,020	3,067	3,649	3,594	3,097	3,303	3,366	3,135	3,403	3,224	3,438	3,160	3,144	13,330	11,316	4-4	4
	Mountain	1,076	1,043	1,408	1,358	1,208	1,247	1,412	1,303	1,372	1,340	1,283	1,172	1,207	4,885	4,215	6-7	7
	Pacific	5,259	5,268	6,330	6,203	4,901	5,316	5,256	5,026	5,641	5,214	5,597	5,524	5,250	23,060	18,306	2-3	3
51	Nondurable goods, total	35,455	33,580	39,630	37,127	31,829	35,844	34,843	31,950	35,423	33,529	36,844	36,662	35,187	145,793	123,903	1.0-1.2	1.0
	New England	2,166	2,066	2,335	2,207	1,747	2,014	2,151	1,988	2,293	2,117	2,245	2,316	2,349	8,774	7,234	5-7	6
	Middle Atlantic	8,577	7,893	9,527	8,473	7,162	8,164	8,288	7,473	8,617	8,084	8,505	8,788	8,435	34,470	28,648	3-3	3
	East North Central	5,755	5,479	6,256	5,990	5,580	6,292	6,103	5,504	5,843	5,479	6,394	6,083	5,704	23,481	21,078	3-4	3
	West North Central	4,538	4,381	5,115	4,733	4,145	5,035	4,554	4,129	4,678	4,331	5,050	4,820	4,515	18,767	15,710	3-4	3
	South Atlantic	3,508	3,409	4,084	3,835	3,078	3,320	3,227	3,044	3,400	3,188	3,580	3,498	3,466	14,836	12,232	3-5	3
	East South Central	1,685	1,549	1,889	1,845	1,819	1,892	1,609	1,572	1,616	1,505	1,710	1,706	1,650	6,968	6,511	3-4	4
	West South Central	3,683	3,581	4,136	3,992	3,336	3,554	3,378	3,248	3,487	3,493	3,598	3,725	3,536	15,392	13,420	5-5	5
	Pacific	4,281	4,013	4,790	4,574	3,757	4,284	4,170	3,842	4,241	3,978	4,461	4,422	4,199	17,658	14,503	4-5	4

Note: Detail may not add to totals due to rounding and minor revisions.

PPreliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]See map on page 7.

[2]The range of sampling error of the estimate is based on data for August, September, and October 1977.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: April 1979

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in--					Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		Sales			Inventories			
		April 1979 from March 1979	April 1979 from April 1978	4 months 1979 from 4 months 1978	April 1979 from March 1979	April 1979 from April 1978		
		A	B	C[1]	D	E	A	D
	Merchant wholesalers, total	-5	+16	+18	0	+14	0.4	0.2
	New England	-4	+27	+24	+1	+22	2.0	1.9
	Middle Atlantic	-10	+15	+18	-1	+10	1.1	0.6
	East North Central	-4	+10	+22	-2	+8	1.2	0.8
	West North Central	-5	+14	+19	0	+10	1.3	1.1
	South Atlantic	-5	+22	+21	0	+16	1.6	1.0
	East South Central	-3	+2	+10	0	+15	1.7	1.4
	West South Central	-3	+18	+16	-1	+15	1.4	0.8
	Mountain	-2	+18	+18	-1	+23	2.4	1.3
	Pacific	-3	+24	+24	0	+22	1.2	0.5
50	Durable goods, total	-4	+16	+19	0	+14	0.6	0.3
	New England	-1	+27	+29	0	+18	2.4	1.3
	Middle Atlantic	-7	+11	+15	0	+9	1.7	1.0
	East North Central	-4	+14	+17	-1	+6	1.9	1.0
	West North Central	-1	+13	+19	+1	+8	3.3	1.7
	South Atlantic	-3	+19	+21	0	+14	1.9	1.2
	East South Central	-4	+3	+15	+1	+14	3.9	2.5
	West South Central	-2	+16	+18	+1	+19	2.1	1.2
	Mountain	-4	+12	+16	-2	+21	2.9	1.7
	Pacific	-2	+27	+26	-1	+21	1.9	0.7
51	Nondurable goods, total	-6	+17	+18	-1	+16	0.6	0.4
	New England	-5	+26	+21	+1	+27	1.9	2.7
	Middle Atlantic	-11	+18	+20	-1	+12	1.9	0.9
	East North Central	-4	+7	+11	-2	+11	1.4	1.1
	West North Central	-7	+14	+19	-1	+12	1.6	1.4
	South Atlantic	-6	+25	+21	-1	+19	2.4	1.8
	East South Central	-2	+1	+7	-1	+17	1.7	2.4
	West South Central	-3	+20	+15	-4	+8	2.2	1.3
	Mountain	-1	+23	+19	+1	+28	3.2	1.2
	Pacific	-5	+22	+22	+2	+23	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	-6	+3	+13	-1	+16	2	1
	New England	-1	-8	+15	-7	-5	7	4
	Middle Atlantic	-11	(S)	(S)	-3	+25	4	2
	East North Central	-4	+18	+24	-2	+14	7	1
	West North Central	-6	+24	+20	0	+21	5	2
	South Atlantic	-7	+17	+23	-1	+25	4	2
	East South Central	-1	+13	+20	+5	+6	4	3
	West South Central	-5	0	+10	-2	+7	5	2
	Mountain	+1	(S)	(S)	(S)	(S)	7	3
	Pacific	-6	+10	+17	-6	+14	3	2
502	Furniture and home furnishings	-2	+13	+10	+1	+13	2	1
	Middle Atlantic	-19	+6	+18	-1	+13	4	2
	East North Central	+4	+33	+29	+2	+32	7	2
	West North Central	+18	(S)	(S)	+1	-10	5	4
	West South Central	+5	+11	+10	-2	-2	5	7
	Pacific	+6	+20	+3	-1	+11	5	3
503	Lumber and other construction materials	+6	+26	+25	+3	+16	2	1
	New England	-4	+21	+28	+12	+28	4	5
	Middle Atlantic	+9	+8	+17	+2	+11	4	2
	East North Central	0	+12	+10	+1	+3	3	2
	West North Central	+11	+36	+36	-2	+6	7	7
	South Atlantic	+7	+30	+23	+2	+13	4	2
	East South Central	0	(S)	+8	+6	+13	4	3
	West South Central	+35	+27	+15	+1	+14	6	5
	Pacific	+1	+46	+39	+2	+25	5	1
5051 pt.	Ferrous metals service centers	-11	+17	+20	0	+16	2	1
	New England	-14	+2	+27	+10	+38	6	2
	Middle Atlantic	-13	+16	+14	-2	+3	5	2
	East North Central	-12	+24	+22	-2	+12	3	2
	West North Central	-9	+24	+33	+3	+3	5	2
	South Atlantic	-10	+12	+18	+1	+45	3	2
	East South Central	-11	+10	+22	+8	+20	4	4
	West South Central	-22	+3	+20	0	+26	4	2
	Mountain	(S)	(S)	(S)	+1	+19	2	2
	Pacific	+10	+44	+32	-2	+20	2	3
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-3	+12	+17	+2	+19	2	1
	New England	-5	+5	+22	+3	+7	3	2
	Middle Atlantic	+3	+8	+12	0	+5	5	2
	East North Central	-4	+22	+24	+1	+19	3	2
	West North Central	-1	+10	+11	-2	+12	5	3
	South Atlantic	-5	+17	+17	+3	+30	3	2
	East South Central	-12	+9	+12	-1	+32	3	5
	West South Central	-11	-2	+19	-2	+28	4	2
	Mountain	-10	+9	+18	-3	0	4	2
	Pacific	+1	+21	+22	+7	+25	4	2

See footnotes at end of table.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: April 1979—Continued

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in--					Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		Sales			Inventories			
		April 1979 from March 1979	April 1979 from April 1978	4 months 1979 from 4 months 1978	April 1979 from March 1979	April 1979 from April 1978		
		A	B	C[1]	D	E	A	D
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-11	+9	+13	+1	+15	3	1
	Middle Atlantic	-7	+15	+16	0	+12	3	2
	East North Central	-5	+10	+20	-1	0	4	1
	West North Central	-32	-18	-10	-3	0	4	4
	South Atlantic	-21	-3	+9	+2	+24	6	4
	West South Central	-19	+17	+19	+8	+19	4	4
	Mountain	-2	+22	+23	+6	+13	6	3
	Pacific	-11	+11	+14	+2	+30	3	2
5072	Hardware	-2	+5	+10	+1	+9	1	1
	New England	-10	-14	+6	-3	-7	6	3
	Middle Atlantic	0	+9	+11	-1	+16	6	2
	East North Central	+3	0	+2	-3	-4	4	2
	West North Central	-7	0	+14	-2	-4	3	3
	South Atlantic	-7	+11	+11	+4	+10	4	2
	East South Central	-6	(S)	+3	-1	+1	4	1
	Pacific	+7	+33	+23	+3	+17	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	+2	+17	+18	+2	+4	2	1
	Middle Atlantic	-2	+28	+26	+2	+15	6	3
	East North Central	(S)	(S)	+5	-4	(S)	3	3
	South Atlantic	+8	+35	+25	0	+5	3	2
	Mountain	(S)	(S)	(S)	+10	+36	7	4
	Pacific	+5	+21	+17	+5	+20	5	4
5084,5	Industrial machinery, equipment, and supplies	-8	+18	+23	+2	+21	2	1
	Middle Atlantic	-14	+6	+11	+1	+18	7	2
	East North Central	-9	+13	+21	-2	+11	3	2
	West South Central	-12	+11	+22	+2	+26	4	3
	Pacific	-1	+36	+35	+1	+33	5	2
512	Drugs, drug proprietaries, and druggists' sundries	-3	+14	+10	+2	+22	1	1
	New England	0	+33	+18	+6	+45	5	3
	Middle Atlantic	-11	-7	+5	-2	+17	3	2
	East North Central	-6	+16	+11	+2	+22	6	3
	West North Central	+1	+15	+6	0	+19	2	2
	South Atlantic	+4	+20	+9	+2	+23	6	5
	East South Central	-9	-3	+2	+1	+4	6	5
	West South Central	-2	+16	+11	-3	+10	3	2
	Mountain	-5	+10	+11	-1	+20	3	2
	Pacific	+1	+39	+20	+8	+36	3	3
5141	Groceries, general-line	-4	+12	+12	-1	+15	1	1
	New England	-1	+16	+14	0	+13	2	1
	Middle Atlantic	-5	+16	+13	-2	+24	1	2
	East North Central	-5	+11	+9	-1	+15	3	1
	West North Central	-4	+4	+10	-2	+13	1	1
	South Atlantic	-3	+18	+20	-1	+17	2	1
	West South Central	-4	+6	+10	-3	+6	2	1
	Mountain	-7	(S)	+20	+2	(S)	2	2
	Pacific	-4	+12	+16	0	+9	1	1
5142,3,6,9	Specialty-line groceries	-5	+15	+11	-1	+13	1	1
	Middle Atlantic	-7	+12	+9	-2	+6	4	2
	East North Central	-6	+6	+11	-1	+5	3	2
	West North Central	-3	+9	+6	+7	+28	3	1
	South Atlantic	-1	+23	+15	-2	+35	5	6
	East South Central	-2	+7	+12	+2	(S)	2	2
5148	Fresh fruits and vegetables	-9	+5	+16	+1	+36	2	4
	Middle Atlantic	-2	+7	+16	-2	+12	7	5
	East North Central	-1	-11	0	-3	+4	6	6
	West North Central	+1	+22	+17	-2	+43	6	3
	West South Central	(S)	-11	+9	-5	+33	5	3
	Pacific	-2	+6	+14	-1	+57	4	4
5194	Tobacco and tobacco products	-2	+9	+10	+3	+16	1	1
	New England	+2	(S)	(S)	+7	-7	5	3
	Middle Atlantic	-2	+11	+14	-2	-1	4	3
	East North Central	-4	+14	+16	+2	+23	4	3
	West North Central	-4	-7	-2	-5	-4	4	2
	South Atlantic	-1	(S)	+25	+5	(S)	6	6
	East South Central	+4	+8	0	+5	+29	7	4
	West South Central	-6	S	-5	-1	-2	7	6
	Mountain	-6	S	-6	+2	-16	6	2
	Pacific	-5	+20	+21	+6	+25	2	5

Note: Data at the United States level are generally more reliable than data by geographic division. In those kinds of business where the geographic division trends are subject to a high sampling error, it may be desirable to use the United States total trends for the kinds of business rather than the geographic division trends.

(S) Does not meet publication standards because of extreme variability or high nonresponse rate.

[1] See map on page 7.

[2] The sampling errors (in percent) shown in columns A and D are based on medians or measurements on data for August, September, and October 1977. For SIC's 5051 pt., and 5063 the medians of measurements in columns A and D are based on data for June, July, and August 1978.

APPENDIX A. Reliability of Data

There are two types of errors possible in an estimate based on a sample survey—sampling and nonsampling. Sampling errors occur because observations are made only on a sample, not on the entire population. Nonsampling errors can be attributed to many sources in the collection and processing of data. The accuracy of a survey result is determined by the joint effects of sampling and nonsampling errors.

Measures of sampling variability—The particular sample used in this survey is one of a large number of all possible samples of the same size that could have been selected using the same design. Estimates derived from the different samples would differ from each other. The average of these estimates would be close to the estimate derived from a complete enumeration of the population (assuming that a complete enumeration has the same nonsampling errors as the sample survey). The average of the estimates differs from the estimate from a complete census because of the composite estimation technique. Disregarding this difference, the sampling error or standard error of the estimate is a measure of the variability among the estimates from all possible samples of the same size and design and, thus, is a measure of the precision with which an estimate from a particular sample approximates the results of a complete enumeration. The coefficient of variation (expressed as a percent) is the standard error of the estimate times 100 percent, divided by the value being estimated. Note that any measures of sampling variability, such as the standard error or coefficient of variation, are estimates derived from the sample and are also subject to sampling variability.

Estimates of sampling variability (the coefficients of variation in percent) for sales and inventories at the kind-of-business detail provided in this publication are shown in table A-1. These coefficients of variation permit certain confidence statements about the sample estimates. As noted above, the particular sample used in this survey is one of a large number of all possible samples of about the same size that could have been selected using the same design. In about two out of three (67 percent) of these samples, the estimate would differ from a complete enumeration by less than the corresponding percent for that estimate shown in the sampling variability table. In about 19 out of 20 (95 percent) of these samples, the estimate would differ from the results of a complete enumeration by less than twice the percentages shown.

To illustrate the computations involved in the above confidence statements for monthly dollar volume estimates, assume that an estimate for a kind of business published in table 1 for a particular month is $5,000 million and that the median coefficient of variation for this statistic, is 0.9 percent or .009. Multiplying $5,000 million by .009 yields $45 million. Therefore, a 67 percent confidence interval is $4,955 million to $5,045 million (i.e. $5,000 million plus or minus $45 million). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately two out of three (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Similarly a 95 percent confidence interval is $4,910 million to $5,090 million (i.e., $5,000 million plus or minus $90 million).

As an example of the use of the coefficients of variation with ratios, assume that an estimated month-to-month percent change published in table 5 is -1.0 percent for a particular kind of business. This is equivalent to a month-to-month ratio of .990. Assume the median coefficient of variation for this ratio as shown in table A-1 is 0.5 percent (or .005). Multiplying .990 by .005 yields .005. Therefore, a 67 percent confidence interval is .985 to .995 (i.e., .990 plus or minus .005) and a 95 percent confidence interval is .980 to 1.000 (i.e., .990 plus or minus .010).

Nonsampling errors—As calculated for this report, the coefficient of variation measures certain nonsampling errors but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples of the same size and design, between the estimate and the true value being estimated. The accuracy of the tabulated data is determined by the joint effects of the sampling and nonsampling errors.

Nonsampling errors can be attributed to many sources: (1) inability to obtain information about all cases in the sample, (2) response errors, (3) definitional difficulties, (4) differences in the interpretation of questions, (5) mistakes in recording or coding the data obtained, and (6) other errors of collection, response, coverage, and estimation for missing data. These nonsampling errors also occur in complete censuses.

Although no direct measurement of the biases due to nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is due to imputing data for nonrespondents, for late reporters, and for data which fail edit. For all kinds of business combined, imputed data amount to about 15 percent of the sales estimates and 25 percent for inventories.

Table A-1. Estimated Sampling Variability of Sales and Inventories by Kind of Business for the United States

1972 SIC code	Kind of business	Sales						Inventories					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total	0.8-1.1	0.9	0.8-0.9	0.9	0.4-0.5	0.5	0.8-1.0	0.9	0.7-1.0	0.9	0.2-0.5	0.4
	Total (excluding farm-product raw materials)	0.9-1.2	1.1	0.9-1.0	1.0	0.4-0.6	0.5	0.9-1.0	1.0	0.8-1.0	0.9	0.2-0.5	0.3
50	Durable goods, total	1.1-1.3	1.2	0.9-1.0	1.0	0.6-0.6	0.6	1.1-1.2	1.2	1.0-1.2	1.1	0.3-0.7	0.5
501	Motor vehicles and automotive parts and supplies	2.3-3.3	3.1	1.9-2.8	2.2	1.4-1.9	1.7	2.5-3.3	2.9	2.6-3.1	3.0	0.6-1.3	1.0
5012	Automobiles and other motor vehicles	(·)	(·)	(·)	(·)	1.7-3.9	3.1	(·)	(·)	(·)	(·)	1.7-3.0	2.8
5013,4	Automotive parts and supplies, tires and tubes	2.9-3.7	3.1	2.9-3.2	3.1	1.5-2.0	1.6	4.0-4.5	4.3	3.9-4.4	4.0	0.4-1.4	0.7
5013	Automotive parts and supplies	3.3-4.0	3.9	3.1-3.8	3.7	1.9-2.2	2.0	4.7-5.3	5.2	4.7-5.2	5.0	0.5-1.5	0.9
502	Furniture and home furnishings	4.2-5.8	4.6	4.2-4.4	4.3	1.7-2.9	2.0	3.2-4.9	3.7	3.4-4.2	3.7	0.8-2.3	2.0
5021	Furniture--household and office	6.6-7.6	6.9	5.6-7.1	6.9	4.0-5.7	4.3	(·)	(·)	(·)	(·)	1.4-3.4	2.2
5021 pt.	Household furniture	(·)	(·)	(·)	(·)	5.0-5.8	5.1	(·)	(·)	(·)	(·)	1.4-4.3	2.0
5021 pt.	Office furniture	(·)	(·)	(·)	(·)	5.7-8.0	5.9	(·)	(·)	(·)	(·)	0.7-3.7	2.1
5023	Home furnishings	5.1-7.5	6.1	5.1-6.1	5.5	1.6-3.6	2.2	4.8-6.9	5.6	4.9-6.0	5.0	1.0-3.1	2.6
503	Lumber and other construction materials	2.8-4.4	3.1	2.9-3.9	3.1	1.6-2.5	1.9	4.5-6.5	4.9	4.8-5.8	4.9	0.7-1.8	0.9
5031	Lumber, plywood, and millwork	4.1-4.6	4.3	3.3-4.6	4.0	2.1-2.5	2.4	5.9-8.2	6.5	6.0-6.9	6.5	1.0-2.6	1.8
5039	Construction materials, n.e.c	4.2-7.2	4.9	4.5-5.9	4.9	2.0-3.4	2.2	(·)	(·)	(·)	(·)	1.1-2.0	1.5
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(·)	(·)	(·)	(·)	2.2-2.4	2.3	(·)	(·)	(·)	(·)	1.0-2.5	1.4
505	Metals and minerals, except petroleum	4.4-6.0	4.7	4.0-5.1	4.0	1.5-3.0	2.8	3.2-3.8	3.7	3.7-4.1	4.0	0.8-1.4	1.3
5051 pt.	Ferrous metals service centers and offices	5.0-5.8	5.7	4.1-5.2	4.7	1.2-3.8	3.1	3.8-4.2	4.1	4.1-4.3	4.2	0.5-1.6	1.4
5051 pt.	Ferrous metals service centers	6.7-8.0	6.8	5.0-6.8	5.8	1.1-5.3	3.5	2.9-4.4	3.4	3.4-4.0	3.5	0.6-2.2	2.1
5051 pt.	Nonferrous metals service centers and offices	(·)	(·)	(·)	(·)	4.5-7.0	6.1	(·)	(·)	(·)	(·)	2.8-5.4	4.7
506	Electrical goods	1.9-2.6	2.3	1.6-2.1	1.7	1.3-1.6	1.4	2.5-2.9	2.6	2.2-2.8	2.4	0.5-1.0	0.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2.2-3.1	2.6	2.3-2.7	2.4	1.4-1.7	1.6	2.9-3.5	3.2	3.0-3.2	3.1	0.6-1.2	0.7
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3.4-4.0	3.8	3.0-3.2	3.1	1.6-2.8	2.5	2.9-4.2	3.2	2.7-3.8	3.0	0.7-1.6	0.9
5064	Electrical appliances, TV and radio sets	3.0-3.8	3.6	2.6-3.7	3.1	1.7-2.7	2.5	(·)	(·)	(·)	(·)	0.9-1.7	1.4
507	Hardware, plumbing, heating equipment, and supplies	2.7-3.0	2.9	2.4-2.6	2.5	1.1-1.9	1.5	2.4-2.8	2.6	2.4-2.9	2.7	0.3-1.4	0.6
5072	Hardware	3.6-4.2	3.8	2.6-3.1	3.0	1.3-2.4	1.9	2.0-4.1	2.7	2.2-3.5	2.8	0.4-2.1	0.8
5074	Plumbing and heating equipment and supplies (hydronics)	4.1-5.3	4.2	3.9-5.1	4.2	1.6-3.8	2.1	5.0-7.0	6.0	4.5-7.1	5.3	0.5-3.1	0.9
5075	Warm air heating and air conditioning equipment and supplies	(·)	(·)	(·)	(·)	2.0-4.4	2.7	(·)	(·)	(·)	(·)	1.1-4.3	1.4
508	Machinery, equipment, and supplies	2.3-2.7	2.6	1.8-2.5	2.1	1.2-1.5	1.4	2.0-2.6	2.3	1.7-2.1	1.9	0.4-1.8	1.1
5081	Commercial machines and equipment	(·)	(·)	(·)	(·)	2.9-4.3	4.1	(·)	(·)	(·)	(·)	1.6-8.5	1.9
5082	Construction and mining machinery and equipment	5.0-7.3	5.8	3.3-5.8	4.9	3.9-4.6	4.4	2.9-7.0	4.0	3.2-4.1	3.3	0.7-5.3	1.0
5083	Farm and garden machinery and equipment	(·)	(·)	(·)	(·)	4.1-6.6	6.0	(·)	(·)	(·)	(·)	1.1-2.9	1.2
5084,5	Industrial machinery, equipment, and supplies	3.1-3.4	3.2	2.8-3.0	2.9	1.1-2.3	1.6	2.4-3.0	2.9	2.4-3.0	2.7	0.5-1.6	0.6
5086	Professional equipment and supplies	3.7-7.5	4.3	4.0-5.5	5.2	1.8-3.3	2.0	(·)	(·)	(·)	(·)	0.6-5.2	0.7
5086 pt.	Surgical, medical, hospital, and supplies	(·)	(·)	(·)	(·)	1.7-3.8	2.5	(·)	(·)	(·)	(·)	0.7-5.4	1.0
5087	Service establishment equipment and supplies	(·)	(·)	(·)	(·)	1.8-11.0	2.9	(·)	(·)	(·)	(·)	1.0-3.4	1.3
5093	Scrap and waste materials	4.6-13.3	9.0	4.6-8.8	5.0	2.2-4.9	2.7	(·)	(·)	(·)	(·)	0.7-3.8	0.9
5093 pt.	Iron and steel scrap	(·)	(·)	(·)	(·)	2.6-3.5	3.1	(·)	(·)	(·)	(·)	0.8-1.4	1.0
5093 pt.	Waste materials	(·)	(·)	(·)	(·)	2.6-8.8	4.8	(·)	(·)	(·)	(·)	1.2-9.1	1.6
51	Nondurable goods, total	1.0-1.3	1.1	1.0-1.1	1.1	0.4-0.7	0.6	1.5-1.7	1.6	1.4-1.6	1.5	0.3-0.7	0.4
	Total (excluding farm-product raw materials)	1.0-1.6	1.2	1.3-1.4	1.4	0.5-0.8	0.6	1.7-2.0	1.9	1.6-1.8	1.7	0.3-0.7	0.4
511	Paper and paper products	2.6-4.0	3.7	2.4-4.1	3.1	1.0-1.4	1.3	2.5-3.4	2.7	2.4-3.2	2.8	0.4-1.5	0.6
5111,3	Printing, writing, industrial, and personal service paper	2.4-3.1	2.7	2.3-2.8	2.4	1.3-1.5	1.4	2.9-3.4	3.1	2.7-3.2	2.8	0.4-1.3	0.9
5112	Stationery supplies	(·)	(·)	(·)	(·)	2.4-3.4	2.5	3.2-6.1	5.8	3.6-5.1	4.4	0.9-4.8	1.4
512	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	5.6-6.3	5.7	5.6-5.7	5.7	0.6-2.2	0.7
5122	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	(·)	(·)	(·)	(·)	0.6-2.2	0.7
5122 pt.	General-line drugs	7.2-9.8	7.9	7.5-8.5	7.6	0.7-3.0	1.0	(·)	(·)	(·)	(·)	0.5-3.1	1.0
513	Apparel, piece goods, and notions	8.3-12.4	8.8	8.6-9.3	9.1	2.6-4.0	3.3	(·)	(·)	(·)	(·)	(·)	(·)
514	Groceries and related products	1.7-2.2	2.0	1.6-2.0	1.9	0.4-1.2	0.5	1.5-2.5	1.8	1.8-2.1	1.9	0.4-1.3	0.6
5141	Groceries, general-line	1.9-2.7	2.1	1.7-2.7	2.0	0.4-1.5	0.7	1.8-2.7	2.3	1.7-2.0	1.8	0.3-1.2	0.8
5141 pt.	Voluntary groups	(·)	(·)	(·)	(·)	0.5-1.7	0.6	(·)	(·)	(·)	(·)	0.4-1.7	0.5
5141 pt.	Retailer cooperatives	(·)	(·)	(·)	(·)	0.6-1.6	1.1	(·)	(·)	(·)	(·)	0.4-2.4	0.7
5141 pt.	Other general-lines	(·)	(·)	(·)	(·)	0.9-3.1	1.8	(·)	(·)	(·)	(·)	0.5-1.3	0.7
5142,3,6,9	Specialty-line groceries	(·)	(·)	(·)	(·)	0.7-3.4	1.3	(·)	(·)	(·)	(·)	0.9-2.4	1.0
5144	Poultry and poultry products	3.4-5.5	4.4	4.0-4.4	4.2	0.6-2.2	1.5	(·)	(·)	(·)	(·)	2.1-4.1	2.3
5145	Confectionery	4.7-6.3	4.7	3.6-5.4	4.3	2.0-3.2	2.2	(·)	(·)	(·)	(·)	0.8-2.4	2.3
5147	Meats and meat products	4.5-4.8	4.7	4.6-4.6	4.6	1.4-2.9	1.7	(·)	(·)	(·)	(·)	1.7-3.9	2.2
5148	Fresh fruits and vegetables	4.7-5.4	4.9	3.9-4.1	4.0	1.9-4.2	2.7	(·)	(·)	(·)	(·)	2.9-4.4	3.9
515	Farm-product raw materials	1.8-2.2	2.0	1.6-2.0	1.7	1.1-1.7	1.3	(·)	(·)	(·)	(·)	1.1-2.8	2.4
5152	Cotton	(·)	(·)	(·)	(·)	1.8-4.9	2.8	(·)	(·)	(·)	(·)	1.3-2.9	2.4
5153	Grain	2.4-2.7	2.6	2.2-2.4	2.3	1.0-1.7	1.3	(·)	(·)	(·)	(·)	1.6-3.3	1.9
517	Petroleum and petroleum products	4.0-5.0	4.7	4.2-4.6	4.5	1.1-1.9	1.5	4.1-5.2	5.0	4.4-5.4	4.7	1.6-3.0	2.3
5171	Petroleum bulk stations and terminals	2.8-3.3	2.9	2.8-3.0	2.9	0.9-1.4	1.2	(·)	(·)	(·)	(·)	1.7-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages	3.4-3.9	3.7	3.1-3.7	3.2	0.8-1.8	1.7	3.9-4.2	4.1	4.0-4.3	4.2	1.0-2.0	1.3
5181	Beer and ale	2.2-4.4	3.1	2.8-3.2	2.9	1.0-2.5	2.0	3.6-5.5	3.8	3.6-4.1	3.8	1.7-2.7	2.1
5182	Wines and distilled alcoholic beverages	5.2-6.3	5.4	4.6-5.6	4.7	1.2-3.4	1.7	4.6-5.4	4.8	5.0-5.6	5.3	1.4-2.3	1.6
519	Miscellaneous nondurable goods	2.4-3.2	2.9	2.4-2.7	2.5	1.4-2.3	1.6	(·)	(·)	(·)	(·)	0.8-1.7	1.4
5191	Farm supplies	(·)	(·)	(·)	(·)	3.2-3.6	3.3	(·)	(·)	(·)	(·)	1.7-3.9	2.0
5194	Tobacco and tobacco products	4.0-5.2	4.1	3.4-4.5	4.2	1.3-2.4	1.7	(·)	(·)	(·)	(·)	0.8-4.3	1.0
5198	Paints, varnishes, and supplies	(·)	(·)	(·)	(·)	2.8-3.8	3.0	(·)	(·)	(·)	(·)	1.5-3.1	2.9
5199 pt.	Books, magazines, newspapers	(·)	(·)	(·)	(·)	3.2-8.0	5.6	(·)	(·)	(·)	(·)	2.0-6.5	5.1

Note: Measures of sampling variability are based on data unadjusted for seasonal variations or trading-day differences. The range of sampling error of the monthly dollar estimates and the ratio of current month to previous month for sales and inventories is based on data for July, August, and September 1977.

*Measures of sampling variability are not shown since sales and/or inventory estimates for these kinds of business are not published.

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

Seasonal factors for adjusting data in this historical publication have been developed by the method described in the **X-11 Variant of the Census Method II Seasonal Adjustment Program**, U.S. Bureau of the Census Technical Paper No. 15, Revised 1967. Trading-day factors for adjusting sales were also derived from the X-11 program.

Adjustment of estimates is an approximation based on past experiences, and therefore, will be less precise to the extent that current competitive pressures, changes in economic condition, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of trading-day adjustment factors may be found in **Estimating Trading-Day Variation in Monthly Economic Time Series**, Bureau of the Census Technical Paper No. 12, 1965. Additional details concerning the adjustment factors may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.7	91.8	107.1	97.7	104.3	104.7	95.6	104.7	98.3	102.2	100.6	96.3
	Total (excluding farm-product raw materials)	91.6	91.6	106.6	97.8	105.1	105.8	95.8	106.1	100.3	102.3	99.3	95.0
50	Durable goods, total	89.6	89.0	105.7	99.0	106.5	107.3	96.4	107.7	101.9	104.1	98.6	91.5
501	Motor vehicles and automotive parts and supplies	93.3	89.8	107.6	107.7	108.4	107.5	98.6	106.9	96.1	98.3	93.3	90.5
502	Furniture and home furnishings	84.8	89.8	105.2	96.8	101.6	106.6	89.2	105.2	103.9	112.1	107.2	95.2
503	Lumber and other construction materials	80.6	80.2	100.9	94.6	109.8	112.2	102.4	117.4	106.2	109.9	100.0	84.0
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	78.7	88.7	104.5	101.5	109.3	97.0	96.1	105.2	105.4	106.0	108.0	95.5
505	Metals and minerals, except petroleum	98.2	91.4	108.2	98.6	107.6	104.4	91.2	108.6	103.1	100.0	97.1	90.3
506	Electrical goods	89.3	89.1	102.0	96.0	99.4	106.5	99.0	104.8	100.8	107.5	103.5	98.8
507	Hardware, plumbing, heating equipment, and supplies	89.2	87.4	99.9	97.9	106.7	108.0	100.7	109.2	102.4	107.2	100.6	88.3
508	Machinery, equipment, and supplies	88.1	88.6	107.9	99.9	107.7	108.8	95.4	104.6	103.3	103.5	96.5	92.3
509	Miscellaneous durable goods	86.2	89.8	106.2	96.2	100.2	110.7	88.4	109.5	101.9	108.1	103.7	96.0
51	Nondurable goods, total	96.4	93.8	108.5	97.1	103.5	102.3	94.9	102.1	96.1	100.2	101.8	100.1
	Total (excluding farm-product raw materials)	94.3	94.0	106.8	96.6	103.2	104.5	95.5	104.5	97.6	100.6	100.6	98.4
511	Paper and paper products	95.5	92.6	106.3	93.4	103.3	103.6	95.6	107.3	102.6	104.0	99.4	92.6
512	Drugs, drug proprietaries, and druggists' sundries	97.8	92.6	106.0	96.3	100.3	99.8	92.9	104.7	100.8	108.1	101.0	96.6
513	Apparel, piece goods, and notions	90.1	94.4	107.1	91.8	101.2	98.8	93.7	115.6	106.3	107.7	103.4	87.1
514	Groceries and related products	94.7	91.1	104.2	97.2	105.4	105.0	99.0	105.3	98.9	101.0	99.8	95.0
515	Farm-product raw materials[1]	103.1	94.7	112.6	98.0	103.9	96.9	93.0	92.4	91.5	100.8	108.3	99.9
516	Chemicals and allied products	90.2	89.2	106.3	98.0	107.1	108.3	96.1	108.0	97.8	105.0	98.8	93.3
517	Petroleum and petroleum products	99.7	102.3	107.7	96.2	95.9	100.0	96.5	100.2	93.1	100.9	100.3	104.8
518	Beer, wine, and distilled alcoholic beverages	77.8	81.4	102.2	90.7	106.8	113.9	97.6	107.8	97.8	100.6	106.9	113.5
519	Miscellaneous nondurable goods	96.0	100.5	116.6	102.4	107.4	105.2	88.2	95.5	95.4	96.8	95.6	96.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.8	101.2	101.7	100.7	99.4	99.3	98.6	98.1	98.7	100.1	100.9	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.0	100.3	100.6	100.7	100.2	99.4	99.6	99.9	99.7	99.1
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.5
501	Motor vehicles and automotive parts and supplies	101.3	103.0	101.6	100.6	102.0	100.5	99.2	97.0	97.4	98.1	99.0	99.9
502	Furniture and home furnishings	99.1	99.3	99.7	99.5	100.8	101.9	100.5	100.6	101.2	100.2	99.5	97.3
503	Lumber and other construction materials	98.4	99.1	103.6	102.7	103.6	101.7	101.4	99.8	99.2	96.7	96.2	97.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.6	99.8	100.7	102.4	106.5	105.3	100.9	101.5	100.9	93.9	89.9
505	Metals and minerals, except petroleum	99.4	98.2	100.2	100.8	100.2	100.2	102.8	102.8	99.9	96.7	98.9	99.7
506	Electrical goods	96.7	96.8	99.0	99.6	101.2	102.6	101.4	100.7	101.3	101.2	100.5	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.4	103.2	102.6	101.6	100.6	98.4	98.7	97.1	96.1
508	Machinery, equipment, and supplies	99.0	101.0	101.6	100.1	101.0	102.1	100.3	99.0	99.4	99.0	98.7	98.7
509	Miscellaneous durable goods	97.0	97.6	96.0	97.5	96.4	100.8	102.4	102.6	102.9	103.8	102.4	100.5
51	Nondurable goods, total	104.1	103.2	103.3	99.4	96.7	95.1	94.7	95.3	97.4	102.1	104.6	103.4
	Total (excluding farm-product raw materials)	100.0	100.0	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.6	100.5
511	Paper and paper products	97.8	98.3	99.1	101.1	100.4	102.6	100.0	100.2	100.7	100.0	99.6	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.1	99.8	100.6	97.9	100.6	99.0	100.0	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.0	100.2	101.9	101.5	99.8	99.0	98.6	99.3
514	Groceries and related products	98.7	100.2	102.1	100.5	99.2	98.7	98.5	98.0	99.9	102.0	100.9	101.0
515	Farm-product raw materials[1]	118.8	115.2	112.2	100.3	88.9	84.6	78.8	79.4	83.8	103.8	117.4	115.3
516	Chemicals and allied products	98.0	100.0	101.9	101.6	102.4	100.9	101.6	100.2	100.4	96.9	97.0	98.7
517	Petroleum and petroleum products	104.4	99.3	99.2	94.2	96.0	94.3	96.3	100.7	102.9	104.8	104.2	103.4
518	Beer, wine, and distilled alcoholic beverages	96.3	95.8	97.4	99.1	102.3	102.9	99.9	97.9	100.3	107.0	105.7	95.3
519	Miscellaneous nondurable goods	103.6	104.6	105.0	102.1	97.2	93.2	95.1	96.0	97.4	99.7	101.9	104.0

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979—Continued

1972 SIC code	Kind of business	1979 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	95.9	91.8	104.7	100.0	105.3	101.5	98.4	104.2	95.8	104.5	100.4	96.2
	Total (excluding farm-product raw materials)	94.0	91.6	103.9	99.8	106.1	102.9	98.6	105.7	97.6	104.9	99.2	94.5
50	Durable goods, total	91.9	89.1	103.2	101.1	107.3	104.3	99.4	107.0	99.3	106.8	98.4	91.2
501	Motor vehicles and automotive parts and supplies	94.0	89.9	106.2	108.4	110.5	104.7	102.9	104.4	94.7	99.1	93.7	89.3
502	Furniture and home furnishings	87.1	89.8	101.8	98.4	102.6	104.0	91.2	105.5	101.7	115.1	106.5	94.2
503	Lumber and other construction materials	83.0	80.2	97.3	98.0	110.4	107.7	107.0	117.2	102.4	113.5	100.3	83.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	84.3	88.7	102.1	101.4	107.8	98.7	95.0	103.6	103.6	113.3	102.3	97.8
505	Metals and minerals, except petroleum	100.7	91.4	102.7	101.4	107.6	101.3	95.4	108.3	101.3	102.6	96.1	89.0
506	Electrical goods	92.0	89.1	99.9	99.3	98.8	103.9	100.6	104.5	98.2	110.6	102.9	100.1
507	Hardware, plumbing, heating equipment, and supplies	91.0	87.4	97.8	100.1	108.1	104.5	103.4	108.6	100.5	109.2	100.3	88.6
508	Machinery, equipment, and supplies	90.9	88.7	106.1	102.1	108.9	105.2	97.1	104.4	100.1	106.7	96.3	92.9
509	Miscellaneous durable goods	86.8	89.8	105.0	99.4	101.6	105.4	92.6	109.0	98.1	109.1	106.2	95.5
51	Nondurable goods, total	93.8	93.7	106.2	99.2	104.4	99.5	97.2	101.8	93.9	102.7	101.5	99.8
	Total (excluding farm-product raw materials)	96.8	94.0	104.0	99.0	104.1	101.2	98.0	104.7	94.9	103.2	100.7	98.0
511	Paper and paper products	100.0	92.7	103.2	94.8	103.3	102.4	97.4	107.1	99.3	108.7	97.7	92.2
512	Drugs, drug proprietaries, and druggists' sundries	99.7	92.6	104.0	98.9	100.6	96.9	96.6	103.9	97.6	110.1	101.8	96.1
513	Apparel, piece goods, and notions	93.9	94.4	103.7	92.4	101.8	97.8	95.7	115.5	102.9	112.3	102.1	85.9
514	Groceries and related products	97.5	91.0	103.1	98.3	106.3	103.0	100.0	105.0	96.2	104.0	99.5	95.1
515	Farm-product raw materials[1]	106.7	94.5	111.9	100.2	102.7	97.1	94.1	91.8	87.9	104.3	108.3	100.5
516	Chemicals and allied products	92.5	89.2	101.9	100.8	107.7	105.0	100.2	108.2	94.8	107.6	98.9	91.7
517	Petroleum and petroleum products	99.2	102.1	106.6	99.2	95.9	96.9	100.0	100.7	90.7	100.1	103.6	103.5
518	Beer, wine, and distilled alcoholic beverages	81.1	81.5	98.0	93.8	107.9	109.4	101.0	108.2	94.0	104.8	106.4	111.3
519	Miscellaneous nondurable goods	97.5	100.5	114.0	106.1	108.2	101.4	90.4	96.3	92.4	98.3	96.6	96.6
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.7	101.2	101.7	100.8	99.5	99.3	98.6	98.1	98.7	100.1	100.8	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.1	100.4	100.6	100.7	100.2	99.4	99.6	99.9	99.6	99.0
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.4
501	Motor vehicles and automotive parts and supplies	101.3	103.1	101.6	100.6	102.0	100.5	99.3	97.0	97.4	98.2	99.0	99.8
502	Furniture and home furnishings	99.2	99.3	99.7	99.5	100.9	102.0	100.4	100.6	101.2	100.2	99.5	97.2
503	Lumber and other construction materials	98.5	99.1	103.7	102.7	103.4	101.5	101.3	99.8	99.2	96.8	96.2	97.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.7	99.8	100.7	102.3	106.4	105.3	100.9	101.6	100.9	93.8	90.0
505	Metals and minerals, except petroleum	99.3	98.3	100.2	100.8	100.2	100.2	102.8	102.9	100.0	96.6	98.8	99.6
506	Electrical goods	96.7	96.7	99.0	99.7	101.3	102.7	101.4	100.7	101.4	101.1	100.4	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.6	103.3	102.6	101.6	100.6	98.4	98.7	97.0	96.0
508	Machinery, equipment, and supplies	99.0	101.0	101.5	100.1	101.0	102.1	100.3	99.1	99.4	98.9	98.6	98.7
509	Miscellaneous durable goods	97.1	97.5	96.0	97.4	96.4	100.9	102.4	102.6	103.0	103.8	102.4	100.5
51	Nondurable goods, total	103.9	103.2	103.4	99.5	96.9	95.3	94.7	95.3	97.4	102.0	104.5	103.4
	Total (excluding farm-product raw materials)	100.0	99.9	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.5	100.5
511	Paper and paper products	97.7	98.3	99.1	101.1	100.5	102.7	99.9	100.1	100.7	100.0	99.5	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.0	99.8	100.5	97.8	100.6	99.0	100.1	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.1	100.2	101.8	101.6	99.8	99.1	98.5	99.2
514	Groceries and related products	98.7	100.2	102.1	100.5	99.3	98.7	98.5	98.0	99.9	102.0	100.8	101.0
515	Farm-product raw materials[1]	118.5	115.2	112.3	100.8	89.6	85.4	78.5	79.2	83.5	103.3	117.1	115.1
516	Chemicals and allied products	98.0	100.0	102.0	101.6	102.4	101.0	101.6	100.2	100.5	96.9	96.8	98.6
517	Petroleum and petroleum products	104.4	99.4	99.4	94.2	95.9	94.2	96.2	100.9	102.9	104.7	104.2	103.2
518	Beer, wine, and distilled alcoholic beverages	96.3	95.7	97.4	99.1	102.3	102.8	99.9	97.9	100.3	106.9	105.7	95.3
519	Miscellaneous nondurable goods	103.7	104.6	105.1	102.1	97.2	93.1	95.1	95.9	97.3	99.7	101.8	104.0

Note: The adjustment factors shown above for sales are a combination of the seasonal and trading-day factors. These are separately available, however, upon request. Adjustment factors are included in this table for some kinds of business for which adjusted data are not published separately.

Adjusted sales and inventory data shown in table 4 are obtained by dividing the unadjusted data shown in tables 1 and 2 by the adjustment factors shown above for the corresponding kinds of business. Adjusted data for the summary trade totals are obtained by summarizing the adjusted data for the individual kinds of business. Seasonal factors shown for the summary trade totals provide an approximation to these totals but may show small differences from the published data. The seasonally adjusted data for 1978 may vary slightly from the method shown above because of insignificant rounding differences.

[1]There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table B-2. Average Month-to-Month Percent Changes and Related Summary Measures for Sales and Inventories of Merchant Wholesalers

1972 SIC code	Kind of business	$\bar{O}$	$\bar{S}$	$\overline{CI}$	$\bar{I}$	$\bar{C}$	$\bar{I}/\bar{C}$	MCD	Average duration of run			
									CI	I	C	MCD
		Sales										
	Merchant wholesalers, total	4.74	3.10	1.31	.82	.96	.86	1	3.10	1.57	14.11	3.10
50	Durable goods, total	5.30	4.84	1.43	.89	1.08	.82	1	3.53	1.63	15.87	3.53
501	Motor vehicles and automotive parts and supplies	5.53	4.22	2.67	2.33	1.24	1.87	3	2.05	1.59	25.40	5.43
502	Furniture and home furnishings	6.00	7.29	2.06	1.68	1.07	1.57	2	2.27	1.55	9.07	3.00
503	Lumber and other construction materials	7.40	6.25	2.67	1.72	1.76	.98	1	2.76	1.51	14.11	2.76
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	9.79	9.32	4.02	3.74	1.20	3.12	4	1.81	1.67	7.06	3.44
505	Metals and minerals, except petroleum	6.79	3.78	3.10	2.38	1.63	1.46	2	2.19	1.41	9.07	3.71
506	Electrical goods	5.79	5.17	1.89	1.52	1.04	1.47	2	2.08	1.46	10.58	3.32
507	Hardware, plumbing, heating equipment, and supplies	5.42	4.86	1.78	1.33	1.09	1.22	2	1.98	1.41	12.70	3.94
508	Machinery, equipment, and supplies	6.10	5.41	1.87	1.51	.97	1.56	2	1.92	1.46	7.94	3.32
509	Miscellaneous durable goods	7.66	6.11	3.51	2.79	1.79	1.56	2	1.87	1.48	9.77	2.93
51	Nondurable goods, total	5.07	2.80	1.58	1.10	.95	1.16	2	2.59	1.43	9.07	3.60
511	Paper and paper products	5.41	3.16	1.99	1.44	1.10	1.30	2	1.98	1.48	7.94	3.60
512	Drugs, drug proprietaries, and druggists' sundries	5.97	3.89	1.90	1.64	.76	2.15	3	1.95	1.57	9.77	4.31
513	Apparel, piece goods, and notions	7.73	6.91	2.70	2.36	1.01	2.34	3	1.72	1.38	10.58	4.17
514	Groceries and related products	4.44	2.01	1.67	1.41	.82	1.72	2	1.92	1.51	12.70	3.15
515	Farm-product raw materials	9.27	5.04	4.87	4.29	1.59	2.70	4	1.90	1.53	6.68	3.54
516	Chemicals and allied products	6.21	4.53	2.47	1.93	1.46	1.32	2	2.19	1.49	8.47	3.32
517	Petroleum and petroleum products	7.38	4.71	4.81	4.47	1.35	3.30	4	1.67	1.55	9.07	2.70
518	Beer, wine, and distilled alcoholic beverages	10.94	8.71	1.86	1.64	.69	2.39	3	1.76	1.59	21.17	3.68
519	Miscellaneous nondurable goods	5.89	4.84	2.53	2.23	.96	2.32	3	1.92	1.63	8.47	3.47
		Inventories										
	Merchant wholesalers, total	1.10	.72	.94	.39	.83	.47	1	4.88	1.79	18.14	4.88
50	Durable goods, total	1.07	.57	.89	.35	.86	.41	1	7.94	1.46	31.75	7.94
501	Motor vehicles and automotive parts and supplies	2.20	1.22	1.69	1.13	1.21	.93	1	2.54	1.63	12.70	2.54
502	Furniture and home furnishings	2.13	1.28	1.60	1.19	1.00	1.19	2	2.40	1.57	21.17	5.25
503	Lumber and other construction materials	2.60	1.77	1.83	1.28	1.09	1.17	2	2.54	1.67	15.87	4.20
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	3.60	2.92	2.17	1.80	1.20	1.50	2	2.27	1.48	25.40	3.60
505	Metals and minerals, except petroleum	3.14	2.53	1.79	1.01	1.33	.76	1	3.26	1.72	8.47	3.26
506	Electrical goods	1.75	1.08	1.32	.90	.92	.98	1	2.49	1.31	42.33	2.49
507	Hardware, plumbing, heating equipment, and supplies	1.69	1.10	1.23	.87	.89	.98	1	2.70	1.53	18.14	2.70
508	Machinery, equipment, and supplies	1.36	.92	1.03	.66	.82	.82	1	2.65	1.65	31.75	2.65
509	Miscellaneous durable goods	2.29	1.47	1.85	1.28	1.18	1.08	2	1.95	1.53	25.40	4.34
51	Nondurable goods, total	2.49	2.19	1.44	.83	1.07	.78	1	3.74	1.74	7.06	3.74
511	Paper and paper products	1.82	.94	1.38	1.04	.75	.94	2	2.12	1.44	9.07	4.20
512	Drugs, drug proprietaries, and druggists' sundries	2.39	1.46	1.60	1.37	.67	2.04	3	1.81	1.51	31.75	3.38
513	Apparel, piece goods, and notions	2.28	1.43	1.86	1.43	1.05	1.35	2	2.40	1.74	9.07	3.15
514	Groceries and related products	1.87	1.29	1.43	.92	1.01	.91	1	2.54	1.38	11.55	2.54
515	Farm-product raw materials	8.88	8.22	4.86	3.99	2.03	1.96	3	2.49	1.90	8.47	3.91
516	Chemicals and allied products	3.14	1.58	1.36	1.89	1.39	1.36	2	2.35	1.49	12.70	3.71
517	Petroleum and petroleum products	6.09	3.19	5.01	4.34	2.00	2.17	3	1.87	1.59	15.87	3.68
518	Beer, wine, and distilled alcoholic beverages	4.28	3.68	1.76	1.46	.74	1.98	3	2.35	1.63	9.77	4.03
519	Miscellaneous nondurable goods	2.53	1.52	1.88	1.48	.84	1.75	2	2.19	1.59	7.06	3.15

Description of Measures Shown Above

The following are brief descriptions of the measures shown in this table. More complete explanations appear in "Electronic Computers and Business Indicators," Occasional Paper 57, National Bureau of Economic Research, Inc., New York, 1957.

$\bar{O}$ is the average month-to-month percentage change, without regard to sign, in the original series before seasonal or trading-day adjustment.

$\bar{S}$ is the average month-to-month percentage change, without regard to sign, in the seasonal component. It is a measure of the average monthly seasonal change in the unadjusted series.

$\overline{CI}$ is the average month-to-month percentage change, without regard to sign, in the seasonally adjusted series.

$\bar{I}$ is the average month-to-month percentage change without regard to sign, for the irregular component. The irregular component is obtained by dividing the seasonally adjusted series by the cyclical component.

$\bar{C}$ is the average month-to-month percentage change, without regard to sign, for the cyclical component, which is a smooth, flexible moving average.

$\bar{I}/\bar{C}$ is a measure of the relative smoothness (small values) or irregularity (large values) of the seasonally adjusted series.

MCD (months for cyclical dominance) gives an estimate of the appropriate time span over which to observe cyclical movements in a monthly series. In deriving MCD, the average (without regard to sign) percentage changes in the irregular and cyclical components are computed for 1-month spans (Jan.-Feb., Feb.-Mar., etc.) 2-months spans (Jan.-Mar., Feb.-Apr., etc.), and so on. MCD is the shortest span for which the average change (without regard to sign) in the cyclical component is larger than the average change (without regard to sign) in the irregular component; that is, it indicates the point at which fluctuations begin to be more attributable to cyclical than to irregular movements. MCD is small for smooth series and large for erratic series.

Average duration of run (ADR) is a measure of smoothness, and is equal to the average number of consecutive monthly changes in the same direction in any series of observations. When there is no change between 2 months, a change in the same direction as the preceding change is assumed. The ADR is shown for the seasonally adjusted series CI, irregular component I, cyclical component C, and the MCD moving average. The MCD moving average is an unweighted moving average (with the number of terms equal to MCD) of the seasonally adjusted series.

A comparison of these measures with the expected ADR of a random series gives an indication of whether the changes approximate those of a random series. (The expected value of ADR for a random series is 1.5 and it falls between 1.36 and 1.75 about 95 percent of the time. For a moving average of a random series the expected value is 2.0). For example, the ADR of CI is 2.08 for electrical goods sales. This indicates that 1-month changes in the seasonally adjusted series, on the average, reverse sign slightly less often than a random series. In the next two columns, 1.46 for I and 10.58 for C indicate the separation of the seasonally adjusted series into an essentially random component and the cyclical (nonrandom) component. Finally, 3.32 for MCD indicates that a 2-month moving average of the seasonally adjusted series (2 months being the MCD span) reverses direction on the average about every 3 months. The increase in the average duration of run from 2.08 for CI to 3.32 for the MCD moving average indicates that for this series the use of MCD spans reduces the effect of the irregular component upon the seasonally adjusted series.

These averages are based on a seasonally adjusted series which is adjusted historically; that is, the months used to compute the measures were the same months used to estimate the seasonal factors. Current data, however, are adjusted by use of factors projected 1 year ahead, and are thus subject to additional error. Therefore, current data are probably somewhat more irregular and subject to larger MCD than shown above.

APPENDIX C. Explanatory Material

I. SCOPE OF THE SURVEY

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the Standard Industrial Classification (SIC) Manual[1] and as covered in the 1972 census, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm or professional business users; or to other wholesalers; or acting as agents or brokers in buying merchandise for or selling merchandise to such persons or companies.

The principal types of establishments included are: (1) merchant wholesalers who take title to the goods they sell, such as wholesale merchants or jobbers, industrial distributors, voluntary group wholesalers, exporters, importers, cash-and-carry wholesalers, drop shippers, major distributors, retailer cooperative warehouses, terminal elevators, and cooperative buying associations; (2) sales branches and sales offices (but not retail stores) maintained by domestic manufacturing or mining enterprises apart from their plants or mines for the purpose of marketing their products; (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), which constitute the major portion of the broad field of wholesale trade, and excludes the other types of wholesale trade. All kinds of business in which merchant wholesalers operate are represented in this survey.

Kind-of-business classifications are not interchangeable with commodity classifications. Most businesses sell several kinds of commodities. The kind-of-business code assigned generally reflects either the individual commodity or the commodity group which is the primary source of the establishments receipts, or some mixture of commodities which characterizes the establishment's business. Thus, the classification of establishments by kind of business generally does not make it possible to determine either the number of establishments handling a particular commodity or the sales of that commodity. For example, the "grocery" classification excludes establishments selling groceries if the sale of groceries is not the primary source of receipts; moreover, even though establishments are classified as "grocery wholesalers" some of their sales may be derived from the sale of nonfood products.

A description of each kind of business included in the accompanying statistical data is shown in appendix D.

II. SAMPLE DESIGN AND ESTIMATION PROCEDURES

Framework of old series—The first publication in this series based on probability sampling, was the January 1954 report. Effective with the July 1956 publication an entirely new sample was selected from the 1954 Census of Business. Other changes in the sample have been made since 1956, representing, for the most part, revisions to reflect the findings of successive censuses of wholesale trade.

Selection of sample for new series—The new sample[2] like the old is a probability sample, and the estimating procedures used are similar in many respects to the old sample.

The new sample originally was drawn from the Standard Statistical Establishment List (SSEL) as updated to December 31, 1974. The initial SSEL consisted of two lists. One list was composed of all Employer Identification (EI) numbers issued by the Internal Revenue Service (IRS) with reported payroll in at least one quarter of 1973 or 1974, with payroll in the 1972 census, or with sales/receipts greater than $100,000 in the 1972 census. The second list consisted of all establishments of known multiestablishment companies as of December 31, 1974. These lists contained information on sales/receipts, payroll, employment, name and address, kind-of-business classification, etc.

Before the 1974 SSEL was available, a study was made, using files from the 1972 Census of Wholesale Trade. This study determined the stratification of the sampling units based on 1972 sales, inventories, and kind of business, and also determined the optimal allocation of the sample necessary to meet specified variance objectives for sales and inventory estimates for different kind-of-business groups. The primary stratum boundary determined in the study was the certainty cutoff to be used for each kind of business. The cutoff was particularly important since it also determined the type of sampling unit.

The sampling units for the new sample consisted of both companies and EI's. To be eligible for the initial sampling, an EI had to be active, i.e., had payroll in 1974 and was on the Internal Revenue Service mailing list for Federal Insurance Contribution Act (FICA) taxpayers. If a known multiestablishment company had total merchant wholesale sales (on a 1972 basis) above the cutoff for its major kind of business, the company was selected for the sample with certainty. Single establishment companies, whether or not selected with certainty, were considered as EI sampling units.

All merchant wholesale companies below the certainty cutoff were treated on an EI basis; that is, the EI was the sampling unit. The EI's were then stratified according to their major kind of business and their estimated sales (on a 1972

[1] Executive Office of the President, Office of Management and Budget, **Standard Industrial Classification Manual**, 1972.

[2] For a complete exposition of the new sample, see C. T. Isaki et al., "Sample Redesign Aspects of the Census Bureau's Monthly Business Surveys" and K. M. Wolter et al., "Sample Selection and Estimation Aspects of the Census Bureau's Monthly Business Surveys," **Proceedings of the Business and Economic Statistics Section: American Statistical Association**, 1976.

basis). Within each stratum, a simple random sample of EI's was selected. The sampling rates for these EI's varied between 1 in 3 and 1 in 600.

For those EI's in the inital sample that did not have kind-of-business classifications and for all EI "births" after the initial selection, a two-phase selection procedure was used. EI "births," as used here, are new EI's recently assigned by SSA and currently on the IRS mailing list for FICA taxpayers. In the first phase, "births" were stratified by kind of business and size (expected employment or quarterly payroll). A relatively large sample was drawn and canvassed in order to obtain a more reliable measure of size (sales in two recent months) and a more detailed kind-of-business code, if needed.

Using this more reliable information, the cases were re-stratified and the final sample drawn with overall probabilities equivalent to those used in drawing the initial sample from the 1974 SSEL. Because of the lag in reporting "births" to the IRS and Social Security Administration (SSA) and the time needed to accomplish the two-phase birth-selection procedure, "births" are actually added to the sample about eight or nine months after they begin operation. The ongoing birth-selection procedure is carried out quarterly.

Since "births" are not represented in the sample, until they go through the selection procedure described above, an interium procedure is required to account for "births" during the period between the onset of activity and the time of birth selection. This consists of imputing for all cases which go out of business, but which are still on the IRS mailing list. This imputation procedure was also used in the old series. However, because of recent delays in obtaining "births," this procedure now accounts for a larger percentage of the estimates.

To be eligible for the sample canvass and tabulation in a given month, a merchant wholesale business must meet both of the following requirements:

1. It must be on the IRS mailing list for FICA taxpayers from the previous quarter.

2. It must have been selected from either the SSEL or the file of employer "births." For this purpose, a universe file of all businesses ever given a chance of selection is maintained. This file shows, among other things, which EI numbers actually have been selected.

In the case of businesses that were selected into the sample with certainty, the first requirement is changed. These certainty sampling units are not dropped from canvass and tabulation if they are no longer on the IRS mailing list. If there are successor businesses, they are added to the survey. This is a tighter form of control used for these larger businesses.

Use of the rotating sample and composite estimating procedures.—Rotating samples or panels are used except for very large businesses which are selected with certainty. For sampling units in the rotating panels, two months of data are obtained at each enumeration. For example, February rotating panel cases report data for February (the current month) and January (the previous month). In the following month, a different rotating panel (the March panel) reports figures for March and February. Three sample panels are used. This permits the use of a composite estimating procedure which provides estimates more reliable than those which would be obtained from a completely fixed sample of about twice the size. In addition, this procedure reduces the reporting burden of selected businesses.

The first estimate issued each month, based on the full sample, is called the preliminary estimate. The preliminary composite estimate for the current month is a weighted average of two estimates: (1) the current month unbiased estimate (weight .35), and (2) a ratio estimate (weight .65) obtained by multiplying the preliminary composite estimate for the previous month by the current-to-previous-month ratio obtained from the current month reports. Preliminary inventory estimates have been modified, prior to publication, based on past relationships between preliminary and final estimates.

A final estimate is developed one month later using information available from the following month's enumeration. The final composite estimate is also a weighted average of two estimates: (1) the preliminary composite estimate for a given month (weight .7), and (2) the unbiased estimate (weight .3) for the same month as obtained from the next month's reporting panel.

The preliminary composite estimates provide a measure of the dollar volume level that is considerably more reliable than the unbiased estimates, and the final composite estimates are generally more reliable than the preliminary composite estimates. The indication of the month-to-month trend considered to be most reliable is the ratio of the current month's preliminary composite estimate divided by the previous month's final composite estimate. This is true because the numerator and denominator of this ratio are more highly correlated than would be the case if the numerator and denominator were two preliminary estimates or two final estimates. The trend of the preliminary/final ratio, therefore, has less variability than one based on two preliminary figures or two final figures.

Another advantage of the use of the rotating panel system is that the frequency of canvass of very large noncertainty cases can be increased with a consequent reduction, in an unbiased manner, of their statistical weight. This increases the reliability of the estimates, particularly the measure of month-to-month change.

III. PREVIOUSLY PUBLISHED DATA

Data developed from the new sample are not comparable with data previously published in this series. Sales and inventory estimates prior to September 1977 have been revised to reflect: (1) a new sample design; (2) benchmarking of sales to the results of the 1967 and 1972 censuses of wholesale trade; (3) conversion of classifications based on the 1967 SIC manual to classifications based on the 1972 SIC manual (4) addition

of farm assemblers and bulk petroleum establishments; and (5) revision and updating of seasonal adjustment factors.

The revised historical sales series were derived in a manner designed to minimize the changes to the month-to-month trends in the old series. The inventory series were revised by applying the stock-sales ratios from the old series to the revised sales series to obtain the preliminary revised inventory series. These preliminary series were then revised slightly so that August 1977 estimates would equal the new sample estimates.

Although the month-to-month movements in the old and new series show very little change, the level of the revised series show substantial change from the old series for some kinds of business. The change in levels depends on the difference between the old series for census years and the benchmark levels and on the difference between the new series level and the old series level for the link month, August 1977.

Additional details concerning the sample design, and revised estimates of merchant wholesale sales and inventories from January 1967 through August 1977, have been provided in a special supplementary publication **Monthly Wholesale, Sales and Inventories: January 1967-August 1977, Revised BW-13-77S.** This report may be obtained from Subscriber Services (Publications), Bureau of the Census, Washington, D.C. 20233 at $.90 per copy.

IV. UNPUBLISHED DATA

Additional data, such as dollar volume estimates for some kinds of business not separately shown in this report, are produced as a byproduct of the regularly published statistics. These additional data have not been included in this publication because the sampling variability associated with these data does not meet the Census Bureau's publication criteria. The Census Bureau, on written request will release these data for individual use, though not for publication.

V. DEFINITION OF TERMS

Sales—Sales include the following: merchandise sold for cash or credit at wholesale and retail by establishments primarily engaged in merchant wholesale trade; receipts from customers for rental or leasing of equipment, instruments, tools, etc.; receipts for delivery, installation, alteration, maintenance, repair, storage, and other services; and gasoline, liquor, tobacco and other excise taxes which are paid by the manufacturer and passed along to the wholesaler. Sales are net after deductions for refunds and allowances for merchandise returned by customers. Sales which are made on an agency basis for others are included as gross sales. Direct shipments on orders from wholesalers are also included in sales. Total sales do not include nonoperating income from such sources as investments, rental or sale of real estate, etc.

In the new series, sales exclude sales and excise taxes collected directly from customers and paid directly to a local, State, or Federal tax agency. Also excluded are receipts from customers for carrying or other credit charges. In the old series respondents were requested to include these taxes and credit charges in the reported sales. The impact of this change is considered minimal.

Inventories—Inventories represent stocks, at cost, of merchandise on hand for sale at the end of the month regardless of location, except for goods outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included.

Stock-sales ratios—The stock-sales ratios are percentages derived by dividing the dollar value of inventories, at cost, by the dollar value of sales. No adjustment is made in these ratios for the markup in sales which may vary from trade to trade.

The sales and inventory figures represent total sales and inventories of all establishments primarily engaged in merchant wholesale trade. Also included are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments.

APPENDIX D. Kind-of-Business Classifications

DURABLE GOODS
(SIC Major Group 50)

This major group includes establishments primarily engaged in the wholesale distribution of durable goods.

MOTOR VEHICLES AND AUTOMOTIVE PARTS AND SUPPLIES
(SIC 501)

Automobiles and Other Motor Vehicles (SIC 5012)[1]—Establishments primarily engaged in the wholesale distribution of new and used passenger automobiles, trucks, and other motor vehicles. Automotive distributors primarily engaged in selling at retail to individual consumers for personal use, and also selling a limited amount of new and used passenger automobiles and trucks at wholesale to dealers, are classified in retail trade, industry 5511.

Automotive Parts and Supplies (SIC 5013)—Establishments primarily engaged in the wholesale distribution of automotive parts, supplies, accessories, tools and equipment.

Tires and Tubes (SIC 5014)[1]—Establishments primarily engaged in the wholesale distribution of rubber tires and tubes for passenger and commercial vehicles.

FURNITURE AND HOME FURNISHINGS
(SIC 502)

Furniture (SIC 5021)—Establishments primarily engaged in the wholesale distribution of furniture, including bedsprings, mattresses, and other household furniture; office furniture; and furniture for public parks, buildings, etc.

SIC 5021 is subdivided into—

1. Household and lawn furniture.
2. Office and business furniture.

Home Furnishings (SIC 5023)—Establishments primarily engaged in the wholesale distribution of home furnishings and homewares, including antiques; china; glassware and earthenware; lamps; curtains and draperies; linens and towels; carpets, linoleum, and all other types of hard and soft surface floor coverings. Establishments primarily engaged in the wholesale distribution of electrical household goods are classified in industry 5064.

[1] Data for this kind of business are not shown separately but are included in the group total.

LUMBER AND OTHER CONSTRUCTION MATERIALS
(SIC 503)

Lumber, Plywood, and Millwork (SIC 5031)—Establishments, with or without yards, primarily engaged in the wholesale distribution of rough, dressed, and finished lumber (but not timber); plywood; door and window frames (wood or metal); and other wood and metal millwork. Establishments selling lumber, plywood and millwork to the general public and known as "retail" in the trade are classified in industry 521.

Construction Materials, Not Elsewhere Classified (SIC 5039)—Establishments primarily engaged in the wholesale distribution of such building materials as brick, building stone, cement, granite, gravel, lime, marble, plaster, building glass, roofing materials, sand, and tile. Establishments selling construction materials to the general public and known as "retail" in the trade are classified in industry 521. Establishments primarily engaged in marketing heavy structural metal products are classified in industry 5051. Establishments primarily selling readymade concrete are classified in manufacturing.

SPORTING, RECREATIONAL, PHOTOGRAPHIC, AND HOBBY GOODS, TOYS, AND SUPPLIES
(SIC 504)[1]

Establishments primarily engaged in the wholesale distribution of all types of amusement and sporting goods and accessories—billiard and pool supplies; cameras and photographic equipment; coin-operated game machines; games, toys; ammunition and fireworks; etc.

METALS AND MINERALS, EXCEPT PETROLEUM
(SIC 505)

Ferrous Metals Service Centers and Offices (SIC 5051 pt.)—Establishments primarily engaged in marketing ferrous metal semifinished products such as nails, pig iron, steel and tin bars. Establishments in this industry may operate with warehouses (ferrous metals service centers) or without warehouses (ferrous metals sales offices).

Sales branches of domestic manufacturers are included in this category if the establishment is separate from the manufacturing plant and has warehouse space greater than 5,000 square feet.

Nonferrous Metals Service Centers and Offices and Other Minerals and Ores (SIC 5051 pt. and SIC 5052 pt.)[1]—Establishments primarily engaged in marketing nonferrous metal semifinished products such as aluminum bars and copper rods. Establishments in this industry may operate with warehouses (nonferrous metals service centers) or without warehouses (nonferrous metals sales offices). Also included are establishments primarily engaged in the wholesale distribution of copper, iron, lead, and other metallic ores except precious; and crude nonmetallic minerals (including concentrates) except crude petroleum. Establishments primarily engaged in the wholesale distribution of nonmetallic minerals used in construction, such as sand and gravel, are included in industry 5039.

Coal (SIC 5052 pt.)[1]—Establishments primarily engaged in the wholesale distribution of coal and coke. Included are establishments which have products shipped direct from mine to customer, and establishments operating yards and dock space and making deliveries therefrom at wholesale as well as other coal merchants.

ELECTRICAL GOODS (SIC 506)

Electrical Apparatus and Equipment, Wiring Supplies, and Construction Materials (SIC 5063)—Establishments primarily engaged in the wholesale distribution of electrical power equipment for the generation, transmission, or utilization of electric energy; and electrical construction materials for outside power transmission lines and for electrical systems. Construction contractors primarily engaged in installing electrical systems and equipment from their own stock are classified in industry 1731.

Electrical Appliances, TV and Radio Sets (SIC 5064)—Establishments primarily engaged in the wholesale distribution of radio and television sets and household electrical appliances.

Electronic Parts and Equipment (SIC 5065)[1]—Establishments primarily engaged in the wholesale distribution of electronic parts and equipment, such as industrial and radio and television receiving and transmitting electronic tubes; electronic intercommunication equipment; radio parts and accessories; and electronic sound equipment. Establishments primarily engaged in the wholesale distribution of radio and television receiving sets and phonographs are classified in industry 5064.

HARDWARE, PLUMBING, HEATING EQUIPMENT, AND SUPPLIES (SIC 507)

Hardware (SIC 5072)—Establishments primarily engaged in the wholesale distribution of hardware, such as builders; shelf or light hardware; handtools (except automotive and machinists' precision); handsaws and cutlery; brads, staples, and tacks; and bolts, nuts, rivets, and screws. Establishments primarily engaged in the wholesale distribution of nails, noninsulated wire, and screening are classified in industry 5051.

Plumbing and Heating Equipment and Supplies (Hydronics) (SIC 5074)—Establishments primarily engaged in the wholesale distribution of hydronic plumbing and heating equipment and supplies. Construction contractors primarily engaged in installing plumbing and heating equipment from their own stock are classified in industry 1711.

Warm Air Heating and Air-Conditioning Equipment and Supplies (SIC 5075)[1]—Establishments primarily engaged in the distribution of warm air heating and air-conditioning equipment and supplies. Construction contractors primarily engaged in installing warm air heating and air-conditioning equipment are classified in industry 1711.

Refrigeration Equipment and Supplies (SIC 5078)[1]—Establishments primarily engaged in the distribution of refrigeration equipment and supplies. Construction contractors primarily engaged in installing refrigeration equipment from their own stock are classified in industry 1711.

MACHINERY, EQUIPMENT, AND SUPPLIES (SIC 508)

Commercial Machines and Equipment (SIC 5081)[1]—Establishments primarily engaged in wholesaling commercial machines and equipment, such as office, store, and business machines and equipment; commercial food service equipment; and fountain and store fixtures.

Construction and Mining Machinery and Equipment (SIC 5082)—Establishments primarily engaged in marketing cranes, excavating machinery and equipment, power shovels, road construction and maintenance machinery, tractor-mounting equipment and other specialized machinery and equipment used in the construction, mining, and logging industries. Establishments engaged in marketing oil well machinery and equipment are classified in industry 5084.

Farm and Garden Machinery and Equipment (SIC 5083)[1]—Establishments primarily engaged in marketing agricultural machinery and equipment for use in the preparation and maintenance of the soil, the planting and harvesting of crops, and other operations and processes pertaining to work on the farm or the lawn or garden; and dairy and other livestock equipment.

Industrial Machinery and Equipment (SIC 5084)[1]—Establishments primarily engaged in marketing industrial machinery and equipment, such as metal working tools, food industries machinery, oil well and oil refining machinery, industrial

[1] Data for this kind of business are not shown separately but are included in the group total.

trucks and tractors (except over-the-road types), printing machinery, and machinery and equipment for other manufacturing industries.

Industrial Supplies (SIC 5085)[1]—Establishments primarily engaged in marketing industrial supplies, such as abrasives and materials, rope and cordage, and mechanical rubber goods; welding supplies; mechanical power transmission supplies, including bearings; industrial valves and fittings; metal containers; industrial leather; and reconditioned barrels and drums.

Professional Equipment and Supplies (SIC 5086)—Establishments primarily engaged in the wholesale distribution of mechanical devices and other equipment used by architects, dentists, engineers, physicians, surgeons, veterinarians, optometrists, osteopaths, and other professional groups.

Surgical, Medical, Hospital Supplies (SIC 5086 pt.)[1]—Establishments primarily engaged in selling surgical and medical instruments; doctors' apparatus and equipment; orthopedic appliances; artifical limbs; operating room and other hospital equipment, X-ray machines and accessories and other scientific instruments used by physicians and in hospitals.

Service Establishment Equipment and Supplies (SIC 5087)[1]—Establishments primarily engaged in the wholesale distribution of equipment and supplies for barber shops, beauty parlors power laundries, dry-cleaning plants, upholsterers, undertakers, and related personal service establishments.

Transportation Equipment and Supplies, Except Motor Vehicles (SIC 5088)[1]—Establishments primarily engaged in the wholesale distribution of transportation equipment and supplies. Establishments primarily engaged in the wholesale distribution of motor vehicles and motor vehicle parts are classified in group 501.

MISCELLANEOUS DURABLE GOODS (SIC 509)[1]

Scrap and Waste Materials (SIC 5093)—Establishments primarily engaged in assembling, breaking up, sorting and wholesale distribution of scrap and waste materials. This industry includes auto wreckers engaged in dismantling automobiles for scrap. However, those engaged in dismantling cars for the purpose of selling secondhand parts at retail are classified in industry 5931.

SIC 5093 is subdivided into—

1. *Iron and Steel scrap.*
2. *Waste and secondary materials dealers.*

[1] Data for this kind of business are not shown separately but are included in the group total.

Jewelry, Watches, Diamonds, and Other Precious Stones (SIC 5094)[1]—Establishments primarily engaged in the wholesale distribution of jewelry, precious stones and metals, costume jewelry, watches, clocks, silverware, and jewelers' findings.

Durable Goods, Not Elsewhere Classified (SIC 5099)[1]—Establishments primarily engaged in the wholesale distribution of durable goods, not elsewhere classified, such as musical instruments and forest products, except lumber.

NONDURABLE GOODS (SIC Major Group 51)

This major group includes establishments primarily engaged in the wholesale distribution of nondurable goods.

PAPER AND PAPER PRODUCTS (SIC 511)

Printing and Writing Paper (SIC 5111)[1]—Establishments primarily engaged in the wholesale distribution of writing paper, including envelope paper, fine paper, and ground wood, printing, and rotogravure paper.

Stationery Supplies (SIC 5112)[1]—Establishments primarily engaged in the wholesale distribution of stationery and office supplies, including envelopes, typewriter and mimeograph paper, file cards and folders, pens, social stationery, and greeting cards.

Industrial and Personal Service Paper (SIC 5113)[1]—Establishments primarily engaged in the wholesale distribution of wrapping and other coarse paper, paperboard, cellophane, and converted paper products, such as bags, boxes, dishes, napkins, and shipping supplies.

DRUGS, DRUG PROPRIETARIES, AND DRUGGISTS' SUNDRIES (SIC 512)

Drugs, Drug Proprietaries, and Druggists' Sundries (SIC 5122)—Establishments primarily engaged in the wholesale distribution of drugs, drug proprietaries, druggists' sundries, and toiletries. Establishments primarily engaged in the wholesale distribution of surgical, dental, and hospital equipment are classified in industry 5086.

SIC 5122 is subdivided into—

1. *General-line drugs*—These are distinguished from specialty-line drug and toiletries wholesalers on the basis of their commodity-line mix. Drug wholesalers were classified as general line if they reported a substantial portion of their sales in "pharmaceuticals, antibiotics, druggists' chemicals, biologicals, botanicals" and "proprietary products, toilet-

ries, druggists' sundries," and if annual sales volume was $1 million or more.

2. *Specialty-line pharmaceuticals, cosmetics, and toiletries.*

APPAREL, PIECE GOODS, AND NOTIONS (SIC 513)

Piece Goods (SIC 5133)[1]—Establishments primarily engaged in the wholesale distribution of woven piece goods or yard goods of natural or manmade fibers. "Converters" who buy goods in the grey, have them finished on contract, and sell at wholesale are included here. This industry does not include establishments primarily engaged in the wholesale distribution of home furnishings, which are classified in industry 5023.

Notions and Other Dry Goods (SIC 5134)[1]—Establishments primarily engaged in the wholesale distribution of notions (sewing and hair accessories, etc.), knit goods, and other dry goods, except piece goods.

Men's and Boys' Clothing and Furnishings (SIC 5136)[1]—Establishments primarily engaged in the wholesale distribution of men's and boys' apparel and furnishings, sportswear, hosiery, underwear, nightwear, and work clothing.

Women's Children's, and Infants' Clothing and Accessories (SIC 5137)[1]—Establishments primarily engaged in the wholesale distribution of women's, children's, and infants' clothing and accessories, including hosiery, lingerie, millinery and millinery supplies, and furs.

Footwear (SIC 5139)[1]—Establishments primarily engaged in the wholesale distribution of footwear of leather, rubber, and other materials.

GROCERIES AND RELATED PRODUCTS (SIC 514)

Groceries, General-Line (SIC 5141)—Establishments primarily engaged in the wholesale distribution of a general line of groceries. Establishments primarily engaged in roasting coffee and establishments primarily engaged in blending tea or grinding and packaging spices are classified in major group 20.

SIC 5141 is subdivided into—

1. *Voluntary group wholesalers.*
2. *Retailer cooperative wholesalers.*
3. *Other general-line wholesalers.*

Frozen Foods (SIC 5142)[1]—Establishments primarily engaged in the wholesale distribution of packaged quick-frozen vegetables, juices, meats, fish, poultry, pastries, and other "deep freeze" products. Establishments primarily engaged in the wholesale distribution of frozen dairy products are classified in industry 5143. Frozen poultry, fish, and meat which are not packaged are classified in industries 5144, 5146, and 5147, respectively.

Dairy Products (SIC 5143)[1]—Establishments primarily engaged in the wholesale distribution of dairy products, such as butter, cheese, ice cream and ices, and fluid milk and cream. This industry does not include establishments primarily engaged in pasteurizing and bottling milk, which are classified in group 202.

Poultry and Poultry Products (SIC 5144)—Establishments primarily engaged in the wholesale distribution of poultry and poultry products, except canned and packaged frozen products. This industry does not include establishments primarily engaged in the killing and dressing of poultry, which are classified in industry 2016. Establishments primarily engaged in the wholesale distribution of packaged frozen poultry are classified in industry 5142, and of canned poultry in industry 5149.

Confectionery (SIC 5145)—Establishments primarily engaged in the wholesale distribution of confectionery, such as candy, chewing gum, fountain fruits, salted or roasted nuts, popcorn, and fountain syrups; and potato, corn, and similar chips.

Fish and Seafoods (SIC 5146)[1]—Establishments primarily engaged in the wholesale distribution (not packaging) of fresh, cured, and frozen fish and seafoods, except canned (industry 5149) or packaged frozen (industry 5142). The preparation, packaging, and freezing of fresh fish and other seafood, and the shucking and packing of fresh oysters in nonsealed containers, are classified in industry 2092.

Meats and Meat Products (SIC 5147)—Establishments primarily engaged in the wholesale distribution of fresh, cured, and processed (but not canned) meats and lard. The wholesale distribution of frozen packaged meats is classified in industry 5142 and canned meats in industry 5149.

Fresh Fruits and Vegetables (SIC 5148)—Establishments primarily engaged in the wholesale distribution of fresh fruits and vegetables.

Groceries and Related Products, Not Elsewhere Classified (SIC 5149)[1]—Establishments primarily engaged in the wholesale distribution of groceries and related products, not elsewhere classified. Establishments primarily engaged in the wholesale distribution of soft drinks, and in bottling and distributing natural spring and mineral waters, are classified in this industry, but establishments primarily engaged in bottling soft drinks are classified in major group 20. This industry does not include farm-product raw materials (group 515), or beer, wine, and distilled alcholic beverages (group 518).

[1] Data for this kind of business are not shown separately but are included in the group total.

FARM-PRODUCT RAW MATERIALS (SIC 515)

Cotton (SIC 5152)[1]—Establishments primarily engaged in buying and/or marketing cotton and cotton linters.

Grain (SIC 5153)—Establishments primarily engaged in buying and/or marketing grain (such as corn, wheat, oats, barley, and unpolished rice); dry beans; soybeans, and other inedible beans. Country grain elevators primarily engaged in buying or receiving grain from farmers are included as are terminal elevators and other merchants marketing grain.

Livestock (SIC 5154)[1]—Establishments primarily engaged in buying and/or marketing cattle, hogs, sheep, and goats.

Farm-Product Raw Materials, Not Elsewhere Classified (SIC 5159)[1]—Establishments primarily engaged in buying and/or marketing farm products not elsewhere classified, such as horses and mules, leaf tobacco, hides, skins, furs, wool, mohair, raw silk, hops, and nuts, except roasted or salted (industry 5145). Establishments primarily engaged in the wholesale distribution of milk are classified in industry 5143 and live poultry in industry 5144.

CHEMICALS AND ALLIED PRODUCTS (SIC 516)[1]

Chemicals and Allied Products (SIC 5161)[1]—Establishments primarily engaged in the wholesale distribution of chemicals and allied products, not elsewhere classified, such as acids, industrial and heavy chemicals, dyestuffs, industrial salts, naval stores, plastics materials, rosin, and turpentine. Establishments primarily engaged in the wholesale distribution of ammunition are classified in industry 5041; agricultural chemicals and pesticides in industry 5191; drugs in industry 5122; and paints and varnishes in industry 5198.

PETROLEUM AND PETROLEUM PRODUCTS (SIC 517)

Petroleum Bulk Stations and Terminals (SIC 5171)—Establishments primarily engaged in wholesaling petroleum products, including liquefied petroleum gas, from bulk liquid storage facilities.

Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals (SIC 5172)[1]—Establishments primarily engaged in wholesaling petroleum and petroleum products, except those with bulk liquid storage facilities. Included are packaged and bottled petroleum products distributors, truck jobbers, and others marketing petroleum and products at wholesale but without bulk liquid storage facilities.

[1] Data for this kind of business are not shown separately but are included in the group total.

BEER, WINE, AND DISTILLED ALCOHOLIC BEVERAGES (SIC 518)

Beer and Ale (SIC 5181)—Establishments primarily engaged in the wholesale distribution of beer, ale, porter, and other fermented malt beverages.

Wines and Distilled Alcoholic Beverages (SIC 5182)—Establishments primarily engaged in the wholesale distribution of distilled spirits, including neutral spirits and ethyl alcohol used in blending wines and distilled liquors.

MISCELLANEOUS NONDURABLE GOODS (SIC 519)

Farm Supplies (SIC 5191)[1]—Establishments primarily engaged in the wholesale distribution of animal feeds, fertilizers, agricultural chemicals, pesticides, seeds, and other farm supplies, except grains.

Tobacco and Tobacco Products (SIC 5194)—Establishments primarily engaged in the wholesale distribution of tobacco and tobacco products. Leaf tobacco wholesalers are classified in industry 5159 and establishments primarily engaged in stemming and redrying tobacco in industry 2141.

Paints, Varnishes, and Supplies (SIC 5198)[1]—Establishments primarily engaged in the wholesale distribution of paints, varnishes, wallpaper, and supplies, and sometimes glass. Establishments selling to the general public and known as "retail" in the trade are classified in industry 5231.

Books, Periodicals, Newspapers (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of books, lithographed matter, magazines, newspapers, and all other forms of reading material.

Nondurable Goods, Not Elsewhere Classified (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of nondurable goods, not elswhere classified, such as art goods, flowers and florist supplies, industrial yarn, textile bags, bagging and burlap.

CHANGES IN WHOLESALE KIND-OF-BUSINESS CLASSIFICATIONS IN 1972 FROM 1967

The wholesale trade kind-of-business structure was expanded from one SIC major group (SIC 50) in 1967 to two major groups in 1972, "durable goods" (SIC 50) and "nondurable goods" (SIC 51). There were 61 four-digit industries in 1972 compared to 48 four-digit industries in 1967.

The definitions of some kinds of business also were changed in 1972. Establishments primarily selling farm supplies and equipment to farmers, and establishments primarily selling

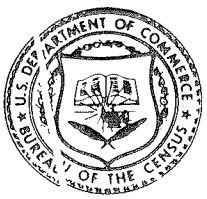
plumbing, heating, and air-conditioning equipment and electrical supplies were classified in wholesale trade rather than retail trade. However, establishments primarily selling lumber and other building materials and paint, glass, and wallpaper were classified in retail trade if they sell to the public, even though sales to contractors account for a larger portion of the total. The change resulted in moving to wholesale trade those establishments primarily selling plumbing, heating, and air-conditioning equipment; electrical supplies; farm equipment; hay, grain, and feed; and other farm supplies. The change also theoretically could have shifted to wholesale trade some establishments primarily selling lumber and paint, glass and wallpaper to contractors, but not to the public.

In addition to the kind-of-business changes noted above the special nonmerchant classifications of farm assemblers and bulk petroleum were eliminated in the 1972 census. These establishments were classified in the appropriate merchant, or sales branch category.

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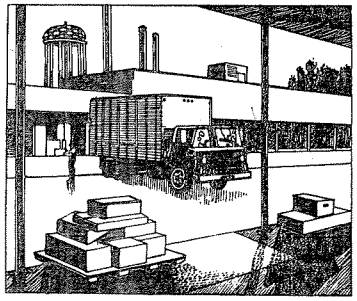
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued July 1979

May 1979

BW-79-05

Sales—May 1979 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences, but not for price changes, were $72.5 billion, up 3 percent from the previous month and 15 percent above May 1978. Adjusted March-through-May total sales were up 6 percent from the December-through-February period and were 16 percent above the total sales for the comparable months a year ago.

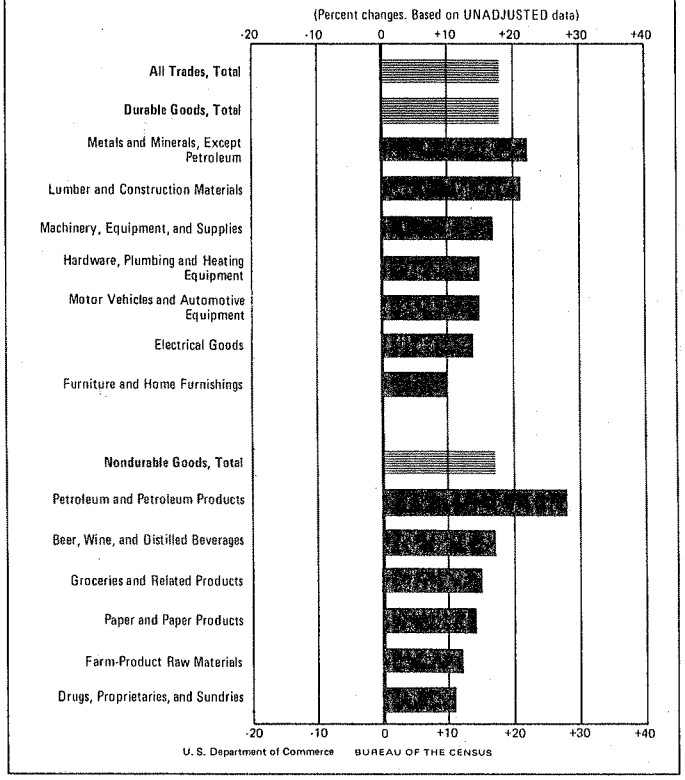
After adjustment, May sales in the durable goods trades were virtually unchanged from the pervious month, but were 15 percent above May 1978. Nondurable goods sales were up 5 percent from April and were 15 percent above the same month a year ago. Total monthly sales in the durable goods group during the March-through-May Period were up 5 percent from the prior three months and were 17 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were 6 percent above the December-through-February period and were 16 percent above sales for the same period a year ago.

Based on adjusted data, comparisons with previous month sales levels showed mixed results with 10 trade groups showing gains and 5 indicating declines. The larger increases were shown in petroleum and petroleum products (18%) and electrical goods (10%). Compared with sales of a year ago most trade groups showed increases with the sharper ones reported in petroleum and petroleum products (42%) and sporting goods, toys, and hobby goods (28%).

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were valued at $85.6 billion at the end of May, up 1 percent from the previous month and 14 percent above the same month a year ago. Durable goods stocks increased 1 percent from April and were 14 percent above May 1978. Nondurable goods stocks were virtually unchanged from last month but were 16 percent above stocks on hand a year ago.

Based on adjusted data, most trade groups showed increases from their previous month inventory levels with the larger increases reported in groceries and related products, and metals and minerals except petroleum-both up 4 percent. The most substantial decrease was shown in miscellaneous nondurable goods (-5%). Compared with year-ago inventories, all trade groups showed increases with the most substantial one reported in beer, wine, and distilled beverages (33%).

Percent Change in Sales of Merchant Wholesalers in Selected Kinds of Business 5 Months 1979 Compared With 5 Months 1978



Stock-Sales Ratios—The May stock-sales ratio for merchant wholesalers, based on seasonally adjusted data, was 118, down 3 points from last month but virtually unchanged from the year-ago ratio. The stock-sales ratio for durable goods was 167, 1 point above April, but 2 points below the May 1978 ratio. The ratio for nondurable goods was 78, down 3 points from the April ratio, but up 1 point from the year-ago ratio.

An advance release of the May 1979 data was issued on July 9, 1979.

U.S. Department of Commerce
BUREAU OF THE CENSUS

Inquiries concerning this report should be addressed to Ronald Piencykoski, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-5294/763-5295.

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Table 1. Estimated Monthly Sales of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979					1978								Total 4 months	
		Jan.	Feb.	Mar.	Apr.	May[P]	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1979	1978
	Merchant wholesalers, total	63,739	61,721	74,319	70.768	76,355	66,249	65,834	60,651	67,702	63,933	69,086	67,699	64,527	346,900	294,670
	Total (excluding farm-product raw materials)	56,481	55,208	66,198	63,588	68,309	58,061	58,658	54,411	60,838	57,342	61,033	59,923	57,237	309,782	261,518
50	Durable goods, total	28,284	28,141	34,689	33.429	35,276	30,405	30,991	28,701	32,279	30,404	32,242	31,037	29,340	159,817	134,922
501	Motor vehicles and automotive parts and supplies	5,634	5,650	6,888	6,845	6,885	6,083	5,929	5,552	6,134	5,381	6,009	6,013	5,510	31,903	27,771
5013,4	Automotive parts and supplies, tires and tubes	3,120	3,081	3,459	3,349	3,392	3.343	3.169	2.883	3,440	2,998	3,344	3,298	2,927	16,402	14,817
5013	Automotive parts and supplies	2,594	2,603	2,902	2,807	2,832	2,828	2,660	2,432	2,872	2,496	2,761	2,752	2,413	13,738	12,588
502	Furniture and home furnishings	1,012	950	1,199	1,130	1,246	1,077	1,104	1,013	1,133	1,162	1,174	1,218	1,140	5,536	5,022
5021	Furniture--household and office	343	332	416	413	445	368	370	328	366	379	379	411	422	1,948	1,690
5023	Home furnishings	669	618	783	717	801	710	735	685	767	783	795	807	718	3,588	3,333
503	Lumber and other construction materials	2,387	2,212	3,006	3,023	3,351	2,889	3,067	2,771	3,208	3,056	3,173	2,874	2,542	13,978	11,532
5031	Lumber, plywood, and millwork	1,672	1,544	2,047	2,067	2,280	1,947	2,037	1,845	2,105	1,949	2,083	1,915	1,682	9,609	7,783
5039	Construction materials, n.e.c.	715	668	959	957	1,071	942	1,031	927	1,103	1,107	1.039	959	860	4,369	3,749
505	Metals and minerals, except petroleum	3,206	3,215	3,849	3,295	3,809	3,153	3,169	2,817	3,306	3,037	3,186	3,209	2,942	17,373	14,198
5051 pt.	Ferrous metals service centers and offices	2,455	2,437	2,925	2,469	2,894	2,360	2,380	2,158	2,515	2,339	2,446	2,448	2,260	13,180	10,787
5051 pt.	Ferrous metals service centers	1,652	1,744	2,129	1,798	2,057	1,755	1,778	1,580	1,833	1,721	1,801	1,768	1,678	9,379	7,926
506	Electrical goods	3,017	3,083	3,556	3,271	3,565	3,239	3,385	3,193	3,540	3,338	3,590	3,474	3,322	16,492	14,483
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,533	1,638	1,807	1,748	1,957	1,698	1,725	1,663	1,812	1,663	1,832	1,722	1,655	8,683	7,430
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,484	1,445	1,749	1,554	1,637	1,541	1,660	1,530	1,728	1,675	1,758	1,751	1,667	7,869	7,053
5064	Electrical appliances, TV and radio sets	834	849	1,024	881	933	931	994	912	1,064	1,057	1,040	1,090	1,006	4,521	4,235
507	Hardware, plumbing, heating equipment, and supplies	2,142	1,984	2,319	2,374	2,637	2,306	2,360	2,247	2,412	2,159	2,455	2,250	2,057	11,457	9,927
5072	Hardware	802	758	853	852	963	856	836	760	864	771	859	830	721	4,229	3,818
5074	Plumbing and heating equipment and supplies (hydronics)	854	800	960	994	1,051	904	902	916	988	928	1,047	918	854	4,659	3,941
508	Machinery, equipment, and supplies	7,691	7,841	9,664	9,443	9,893	8,616	8,790	7,827	8,757	8,655	8,909	8,421	8,485	44,533	38,034
5082	Construction and mining machinery and equipment[1]	895	927	1,189	1,360	1,324	1,276	1,229	1,122	1,196	1,115	1,155	1,126	1,125	5,693	5,361
5084,5	Industrial machinery, equipment, and supplies	3,390	3,464	3,940	3,615	3,865	3,388	3,505	3,049	3,532	3,450	3,573	3,474	3,623	18,273	15,095
5086	Professional equipment, supplies	907	914	1,048	972	1,082	873	952	888	990	949	941	949	975	4,922	3,993
5093	Scrap and waste materials	1,132	1,184	1,501	1,492	1,455	1,058	1,057	940	1,073	978	1,007	1.103	1,079	6,765	4,566
51	Nondurable goods, total	35,455	33,580	39,630	37,339	41,079	35,844	34,843	31,950	35,423	33,529	36,844	36,662	35,187	187,083	159,749
	Total (excluding farm-product raw materials)	28,197	27.067	31,509	30,159	33,033	27,656	27,667	25,710	28,559	26,937	28,791	28,885	27,897	149,965	126,537
511	Paper and paper products	1,540	1,479	1,688	1,551	1,702	1,508	1,498	1,384	1,581	1,456	1,598	1,569	1,489	7,960	7,010
5111,3	Printing, writing, industrial, and personal services paper	1,133	1,100	1,272	1,184	1,286	1,126	1,125	1,046	1,177	1,088	1,191	1,177	1,140	5,974	5,134
512	Drugs, drug proprietaries, and druggists' sundries	950	917	1,073	1,038	1,098	943	950	902	1,026	973	1,082	1,017	963	5,074	4,560
5122	Drugs, drug proprietaries, and druggists' sundries	950	917	1,073	1.038	1.098	943	950	902	1,026	973	1,082	1,017	963	5.074	4.560
5122 pt.	General-line drugs	423	427	507	472	506	447	448	409	482	464	494	465	445	2.333	2.156
513	Apparel, piece goods, and notions[2]	2,094	1,996	2,326	2,107	2,100	2,099	2,066	2,036	2,658	2,313	2,443	2,369	1,976	10,623	9,214
514	Groceries and related products	11,122	10,381	11,954	11,281	12,124	10,873	10,685	10,237	11,002	10,489	11,150	11,155	10,830	56,862	49,541
5141	Groceries, general-line	3,965	3,658	4,173	3,989	4,274	3,791	3,724	3,649	3,965	3,767	3,999	4,120	3,914	20,058	17.836
5144	Poultry and poultry products	518	489	559	554	609	507	503	482	539	505	525	569	536	2,729	2,259
5145	Confectionery	184	177	209	196	209	191	189	171	187	190	218	211	197	975	872
5147	Meats and meat products	1,979	1,971	2,198	2,029	2,163	1,871	1,826	1,800	1,974	1,840	1,928	1,911	1,885	10,340	8,133
5148	Fresh fruits and vegetables	1,020	961	1,203	1,086	1,180	1,184	1,198	1,044	985	890	980	974	973	5,450	4,868
515	Farm-product raw materials	7,258	6,513	8,121	7,180	8,046	8,188	7,176	6,240	6,864	6,591	8,053	7,777	7,290	37,118	33,212
5153	Grain	5,859	5,235	6,740	5,886	6,756	6,890	6,078	5,317	5,760	5,448	6,623	6,391	5,912	30,476	27,019
517	Petroleum and petroleum products	4,837	5,008	5,282	5,221	5,947	4,178	4,111	4,000	4,441	4,136	4,431	4,554	4,598	26,296	20,550
5171	Petroleum bulk stations and terminals	2,738	2,785	2,997	2,857	3,245	2,425	2,358	2,190	2,378	2,280	2,449	2,507	2,678	14,622	11,677
518	Beer, wine, and distilled alcoholic beverages	2,020	1,952	2,490	2,453	2,759	2,295	2,506	2,191	2,463	2,254	2,347	2,547	2,709	11,673	10,011
5181	Beer and ale	999	953	1,223	1,258	1,531	1,219	1,372	1,217	1,328	1,119	1,105	1,088	1,108	5,964	4,944
5182	Wine and distilled alcoholic beverages	1,021	999	1,267	1,195	1,228	1,076	1,134	974	1,134	1,135	1,242	1,459	1,601	5,709	5,066
519	Miscellaneous nondurable goods	4,529	4,383	5,528	5,406	5,975	4,730	4,819	4,040	4,297	4,311	4,510	4,486	4,425	25,821	21,238
5194	Tobacco and tobacco products	823	749	852	848	932	812	849	838	871	814	848	831	846	4,203	3,773

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. [P]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]The construction and mining machinery and equipment group is subject to a sampling variability of 9 percent for May 1979.

[2]The apparel piece goods and notions group is subject to a sampling variability of 13 percent for May 1979.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations)

1972 SIC code	Kind of business	1979					1978							
		Jan.	Feb.	Mar.	Apr.	May[p]	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	81,896	83,917	85,436	85,345	85,521	74,634	74,882	74,874	74,943	76,074	78,715	80,100	80,922
	Total (excluding farm-product raw materials)	75,593	77,627	79,311	79,626	80,385	69,883	70,513	71,073	71,138	71,889	73,327	73,947	74,898
50	Durable goods, total	51,860	53,807	54,381	54,731	55,555	48,918	49,627	49,900	49,841	49,944	50,462	50,971	51,646
501	Motor vehicles and automotive parts and supplies	9,512	10,189	9,797	9,663	9,579	8,246	8,218	8,367	8,378	8,099	8,701	9,326	9,227
5013,4	Automotive parts and supplies, tires and tubes	5,758	5,888	5,781	5,809	5,847	5,149	5,035	5,034	5,206	5,172	5,298	5,635	5,552
5013	Automotive parts and supplies	4,881	5,003	4,870	4,917	4,923	4,382	4,241	4,288	4,415	4,345	4,489	4,792	4,674
502	Furniture and home furnishings	1,764	1,753	1,872	1,837	1,876	1,730	1,781	1,764	1,760	1,810	1,780	1,774	1,752
5023	Home furnishings	1,292	1,282	1,355	1,332	1,348	1,279	1,305	1,305	1,306	1,326	1,315	1,305	1,251
503	Lumber and other construction materials	3,113	3,178	3,337	3,404	3,499	3,030	3,071	3,095	3,007	3,076	3,076	2,995	3,117
5031	Lumber, plywood, and millwork	2,030	2,082	2,116	2,152	2,233	1,963	1,949	1,967	1,929	1,932	1,946	1,918	2,009
505	Metals and minerals, except petroleum	5,106	5,434	5,285	5,254	5,415	5,356	5,307	5,305	5,437	5,285	5,095	5,208	5,151
5051 pt.	Ferrous metals service centers and offices	4,191	4,425	4,365	4,239	4,379	4,116	4,108	4,104	4,232	4,148	3,976	4,150	4,191
5051 pt.	Ferrous metals service centers	3,241	3,459	3,433	3,269	3,378	3,220	3,268	3,191	3,308	3,299	3,098	3,236	3,336
506	Electrical goods	5,509	5,582	5,706	5,737	5,904	5,129	5,312	5,266	5,264	5,416	5,500	5,526	5,577
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2,542	2,684	2,676	2,730	2,818	2,417	2,358	2,283	2,367	2,356	2,399	2,534	2,558
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,966	2,898	3,030	3,007	3,086	2,712	2,954	2,983	2,899	3,059	3,101	3,016	3,023
507	Hardware, plumbing, heating equipment, and supplies	4,251	4,461	4,497	4,719	4,681	4,222	4,201	4,215	4,117	4,032	4,152	4,033	4,063
5072	Hardware	1,476	1,540	1,539	1,598	1,629	1,445	1,423	1,410	1,369	1,417	1,466	1,382	1,407
5074	Plumbing and heating equipment and supplies (hydronics)[1]	1,819	1,900	1,899	1,985	1,916	1,815	1,818	1,839	1,800	1,805	1,738	1,737	1,760
508	Machinery, equipment, and supplies	17,748	18,254	18,807	18,924	19,264	16,796	17,061	17,057	17,183	17,405	17,352	17,428	18,012
5082	Construction and mining machinery and equipment	3,932	4,152	4,334	4,280	4,433	3,589	3,636	3,637	3,793	3,899	3,937	4,002	4,109
5084,5	Industrial machinery, equipment, and supplies	5,728	5,800	6,015	6,030	6,077	5,160	5,328	5,301	5,317	5,519	5,508	5,570	5,752
51	Nondurable goods, total	30,036	30,110	31,055	30,614	29,966	25,716	25,255	24,974	25,102	26,130	28,253	29,129	29,276
	Total (excluding farm-product raw materials)	23,733	23,820	24,930	24,895	24,830	20,966	20,887	21,173	21,297	21,946	22,865	22,976	23,252
511	Paper and paper products	1,424	1,468	1,547	1,501	1,530	1,343	1,376	1,341	1,361	1,414	1,419	1,441	1,482
5111,3	Printing, writing, industrial, and personal service paper	986	1,010	1,053	1,018	1,046	929	955	938	921	976	969	967	1,025
512	Drugs, drug proprietaries, and druggists' sundries	1,465	1,484	1,612	1,617	1,590	1,350	1,401	1,368	1,410	1,489	1,502	1,476	1,440
514	Groceries and related products	6,408	6,346	6,719	6,644	6,816	5,752	5,871	5,833	5,803	6,186	6,469	6,412	6,497
5141	Groceries, general-line	2,696	2,744	2,895	2,846	2,837	2,495	2,512	2,480	2,505	2,641	2,811	2,814	2,761
517	Petroleum and petroleum products	2,106	2,101	2,224	2,177	2,271	1,938	1,837	1,974	2,093	2,098	2,151	2,151	2,153
518	Beer, wine, and distilled alcoholic beverages	2,462	2,427	2,684	2,806	2,846	2,135	2,148	2,178	2,158	2,221	2,453	2,513	2,290
5181	Beer and ale[1]	800	845	1,040	1,085	1,111	730	717	709	679	720	769	777	729
5182	Wines and distilled alcoholic beverages	1,662	1,582	1,645	1,721	1,735	1,405	1,431	1,469	1,480	1,501	1,684	1,736	1,561

See footnotes at end of table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Percent. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979					1978							
		Jan.	Feb.	Mar.	Apr.	May[p]	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	128	136	115	121	112	113	114	123	111	119	114	118	125
	Total (excluding farm-product raw materials)	134	141	120	125	118	120	120	131	117	125	120	123	131
50	Durable goods, total	183	191	157	164	157	161	160	174	154	164	157	164	176
501	Motor vehicles and automotive parts and supplies	169	180	142	141	139	136	139	151	137	151	145	155	167
5013,4	Automotive parts and supplies, tires and tubes	185	191	167	173	172	151	156	172	151	173	158	171	190
5013	Automotive parts and supplies	188	192	168	175	174	155	159	176	154	174	163	174	194
502	Furniture and home furnishings	174	185	156	163	151	161	161	174	155	156	152	146	154
5023	Home furnishings	193	208	173	186	168	180	178	190	170	169	165	162	174
503	Lumber and other construction materials	130	144	111	113	104	105	100	112	94	101	97	104	123
5031	Lumber, plywood, and millwork	121	135	103	104	98	101	96	107	92	99	93	100	119
505	Metals and minerals, except petroleum	159	169	137	159	142	170	167	188	164	174	160	162	175
5051 pt.	Ferrous metals service centers and offices	171	182	149	172	151	174	173	190	168	177	163	170	185
5051 pt.	Ferrous metals service centers	196	198	161	182	164	184	184	202	181	192	172	183	199
506	Electrical goods	183	181	160	175	166	158	157	165	149	162	153	159	168
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	166	164	148	156	144	142	137	137	131	142	131	147	155
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	200	201	173	194	188	176	178	195	168	183	176	171	181
507	Hardware, plumbing, heating equipment, and supplies	198	225	194	199	178	183	178	188	171	187	169	179	198
5072	Hardware	184	203	180	188	169	169	170	185	158	179	171	167	195
5074	Plumbing and heating equipment and supplies (hydronics)	213	237	198	200	182	201	202	201	182	188	166	189	206
508	Machinery, equipment, and supplies	231	238	195	200	195	195	194	218	196	201	195	207	212
5082	Construction and mining machinery and equipment	439	448	364	315	335	281	296	324	317	350	341	356	365
5084,5	Industrial machinery, equipment, and supplies	168	167	153	167	157	152	152	174	151	160	154	160	159
51	Nondurable goods, total	85	90	78	82	73	72	72	78	71	78	77	79	83
	Total (excluding farm-product raw materials)	84	88	79	83	75	76	75	82	75	81	79	80	83
511	Paper and paper products	92	99	92	97	90	89	92	97	86	97	89	92	100
5111,3	Printing, writing, industrial, and personal service paper	87	92	83	86	81	82	85	90	78	90	81	82	90
512	Drugs, drug proprietaries, and druggists' sundries	154	162	150	156	145	143	147	152	137	153	139	145	150
514	Groceries and related products	58	61	56	59	56	53	55	57	53	59	58	57	60
5141	Groceries, general-line	68	75	69	71	66	66	67	68	63	70	70	68	71
517	Petroleum and petroleum products	44	42	42	42	38	46	45	49	47	51	49	47	47
518	Beer, wine, and distilled alcoholic beverages	122	124	108	114	103	93	86	99	88	99	105	99	85
5181	Beer and ale	80	89	85	86	73	60	52	58	51	64	70	71	66
5182	Wines and distilled alcoholic beverages	163	158	130	144	141	131	126	151	130	132	136	119	97

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. [p]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]The beer and ale group is subject to a sampling variability of 9 percent for May 1979.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1979 and 1978

(Sales and inventories in millions of dollars. Stock-sales ratios in percent)

1972 SIC code	Kind of business	1979 Jan.	1979 Feb.	1979 Mar.	1979 Apr.	1979 May[p]	1978 May	1978 June	1978 July	1978 Aug.	1978 Sept.	1978 Oct.	1978 Nov.	1978 Dec.
	Sales ADJUSTED for seasonal variations and trading-day differences													
	Merchant wholesalers, total	67,148	67,495	70,824	70,444	72,482	63,171	62,656	63,425	64,894	64,531	67,338	67,552	67,823
	Total (excluding farm-product raw materials)	60,346	60,603	63,567	63,278	64,648	55,288	55,252	56,716	57,461	57,326	59,349	60,373	60,526
50	Durable goods, total	31,012	31,769	33,570	32,770	32,928	28,627	28,741	29,859	30,043	29,863	30,953	31,498	31,939
501	Motor vehicles and automotive parts and supplies	5,994	6,285	6,486	6,315	6,231	5,614	5,516	5,631	5,739	5,598	6,113	6,442	6,088
502	Furniture and home furnishings	1,162	1,058	1,178	1,148	1,214	1,060	1,036	1,136	1,077	1,118	1,047	1,136	1,197
503	Lumber and other construction materials	2,876	2,758	3,089	3,085	3,035	2,630	2,733	2,705	2,732	2,878	2,887	2,874	3,026
505	Metals and minerals, except petroleum	3,184	3,518	3,748	3,250	3,540	2,930	3,036	3,090	3,045	2,947	3,188	3,305	3,258
506	Electrical goods	3,279	3,460	3,560	3,294	3,608	3,259	3,179	3,225	3,377	3,311	3,340	3,356	3,362
507	Hardware, plumbing, heating equipment, and supplies	2,354	2,270	2,371	2,372	2,439	2,161	2,185	2,232	2,209	2,108	2,290	2,237	2,330
508	Machinery, equipment, and supplies	8,461	8,840	9,108	9,249	9,084	7,997	8,082	8,201	8,372	8,382	8,607	8,730	9,193
51	Nondurable goods, total	36,136	35,726	37,254	37,674	39,554	34,544	33,915	33,566	34,851	34,668	36,385	36,054	35,884
	Total (excluding farm-product raw materials)	29,334	28,834	29,997	30,508	31,720	26,661	26,511	26,857	27,418	27,463	28,396	28,875	28,587
511	Paper and paper products	1,540	1,595	1,636	1,636	1,648	1,459	1,446	1,447	1,473	1,419	1,536	1,579	1,608
512	Drugs, drug proprietaries, and druggists' sundries	953	990	1,032	1,050	1,091	940	952	971	980	965	1,000	1,007	997
513	Apparel, piece goods, and notions	2,230	2,114	2,243	2,280	2,063	2,075	2,091	2,173	2,299	2,177	2,268	2,291	2,269
514	Groceries and related products	11,407	11,408	11,595	11,476	11,405	10,319	10,176	10,340	10,443	10,607	11,039	11,178	11,400
515	Farm-product raw materials[1]	6,802	6,892	7,257	7,166	7,834	7,883	7,404	6,709	7,433	7,205	7,989	7,179	7,297
517	Petroleum and petroleum products	4,876	4,905	4,955	5,263	6,201	4,354	4,111	4,144	4,430	4,442	4,390	4,542	4,387
518	Beer, wine, and distilled alcoholic beverages	2,491	2,395	2,541	2,615	2,557	2,149	2,199	2,245	2,284	2,305	2,333	2,383	2,387
519	Miscellaneous nondurable goods	4,645	4,361	4,849	5,095	5,522	4,403	4,583	4,580	4,499	4,521	4,657	4,693	4,567
	Inventories ADJUSTED for seasonal variations													
	Merchant wholesalers, total	81,543	83,005	84,078	84,973	85,591	74,779	75,191	75,744	76,338	77,113	78,625	79,526	80,771
	Total (excluding farm-product raw materials)	76,224	77,545	78,624	79,299	79,859	69,436	70,028	70,920	71,546	72,119	73,434	74,285	75,546
50	Durable goods, total	52,490	53,773	53,937	54,408	54,874	48,319	48,756	49,414	49,972	50,160	50,948	51,625	52,460
501	Motor vehicles and automotive parts and supplies	9,390	9,883	9,643	9,605	9,391	8,084	8,177	8,434	8,637	8,315	8,870	9,420	9,236
502	Furniture and home furnishings	1,778	1,765	1,878	1,846	1,859	1,716	1,748	1,755	1,750	1,789	1,776	1,782	1,801
503	Lumber and other construction materials	3,160	3,207	3,218	3,315	3,384	2,925	3,020	3,052	3,013	3,101	3,181	3,113	3,190
505	Metals and minerals, except petroleum	5,142	5,528	5,274	5,212	5,404	5,345	5,296	5,161	5,289	5,290	5,269	5,266	5,166
506	Electrical goods	5,697	5,772	5,764	5,754	5,828	5,068	5,177	5,193	5,227	5,346	5,435	5,499	5,650
507	Hardware, plumbing, heating equipment, and supplies	4,382	4,543	4,422	4,511	4,531	4,091	4,095	4,149	4,092	4,098	4,207	4,153	4,228
508	Machinery, equipment, and supplies	17,927	18,073	18,529	18,905	19,073	16,630	16,710	17,006	17,357	17,510	17,527	17,658	18,249
51	Nondurable goods, total	29,053	29,232	30,141	30,565	30,717	26,460	26,435	26,330	26,366	26,953	27,677	27,901	28,311
	Total (excluding farm-product raw materials)	23,734	23,772	24,687	24,891	24,985	21,117	21,272	21,506	21,574	21,959	22,486	22,660	23,086
511	Paper and paper products	1,458	1,493	1,561	1,485	1,522	1,338	1,341	1,341	1,358	1,404	1,419	1,447	1,482
512	Drugs, drug proprietaries, and druggists' sundries	1,528	1,530	1,615	1,609	1,626	1,379	1,393	1,382	1,410	1,453	1,435	1,446	1,444
514	Groceries and related products	6,492	6,333	6,581	6,611	6,864	5,798	5,948	5,922	5,921	6,192	6,342	6,355	6,433
517	Petroleum and petroleum products	2,017	2,114	2,237	2,311	2,368	2,019	1,948	2,050	2,078	2,039	2,052	2,064	2,082
518	Beer, wine, and distilled alcoholic beverages	2,557	2,536	2,756	2,831	2,782	2,087	2,087	2,180	2,204	2,214	2,293	2,377	2,403
	Stock-sales ratios based on ADJUSTED data													
	Merchant wholesalers, total	121	123	119	121	118	118	120	119	118	119	117	118	119
	Total (excluding farm-product raw materials)	126	128	124	125	124	126	127	125	125	126	123	123	125
50	Durable goods, total	169	169	161	166	167	169	170	165	166	168	165	164	164
501	Motor vehicles and automotive parts and supplies	157	157	149	152	151	144	148	150	150	149	145	146	152
502	Furniture and home furnishings	153	167	159	161	153	162	169	154	162	160	170	157	150
503	Lumber and other construction materials	110	116	104	107	111	111	111	113	110	108	110	108	105
505	Metals and minerals, except petroleum	161	157	141	160	153	182	174	167	174	179	165	159	159
506	Electrical goods	174	167	162	175	162	156	163	161	155	161	163	164	168
507	Hardware, plumbing, heating equipment, and supplies	186	200	187	190	186	189	187	186	185	194	184	186	181
508	Machinery, equipment, and supplies	212	204	203	204	210	208	207	207	207	209	204	202	199
51	Nondurable goods, total	80	82	81	81	78	77	78	78	76	78	76	77	79
	Total (excluding farm-product raw materials)	81	82	82	82	79	79	80	80	79	80	79	78	81
511	Paper and paper products	95	94	95	91	92	92	93	92	92	99	92	92	92
512	Drugs, drug proprietaries, and druggists' sundries	160	155	156	153	149	147	146	142	144	151	144	144	145
514	Groceries and related products	57	56	57	58	60	56	58	57	57	58	57	57	56
517	Petroleum and petroleum products	41	43	45	44	38	46	47	49	47	46	47	45	47
518	Beer, wine, and distilled alcoholic beverages	103	106	108	108	109	97	95	97	97	96	98	100	101

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions. All data for 1978 have been revised to reflect recomputed factors for seasonal adjustment.

NA Not available. [p]Preliminary estimates. See p. 15, Sample Design and Estimation Procedures.

[1]There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table 4B. Percent Change Between Selected 3-Month Periods Sales of Merchant Wholesalers, United States

(Based on seasonally-adjusted data)

Item	3 month period, Mar. 1979-May. 1979 from--			
	Dec. 1978-Feb. 1979 (3 months ago)	Sept. 1978-Nov. 1978 (6 months ago)	June 1978-Aug. 1978 (9 months ago)	Mar. 1978-May 1978 (12 months ago)
Merchant wholesalers, total.....	+6	+7	+12	+16
Durable goods, total.....	+5	+8	+12	+17
Nondurable goods, total....	+6	+7	+12	+16

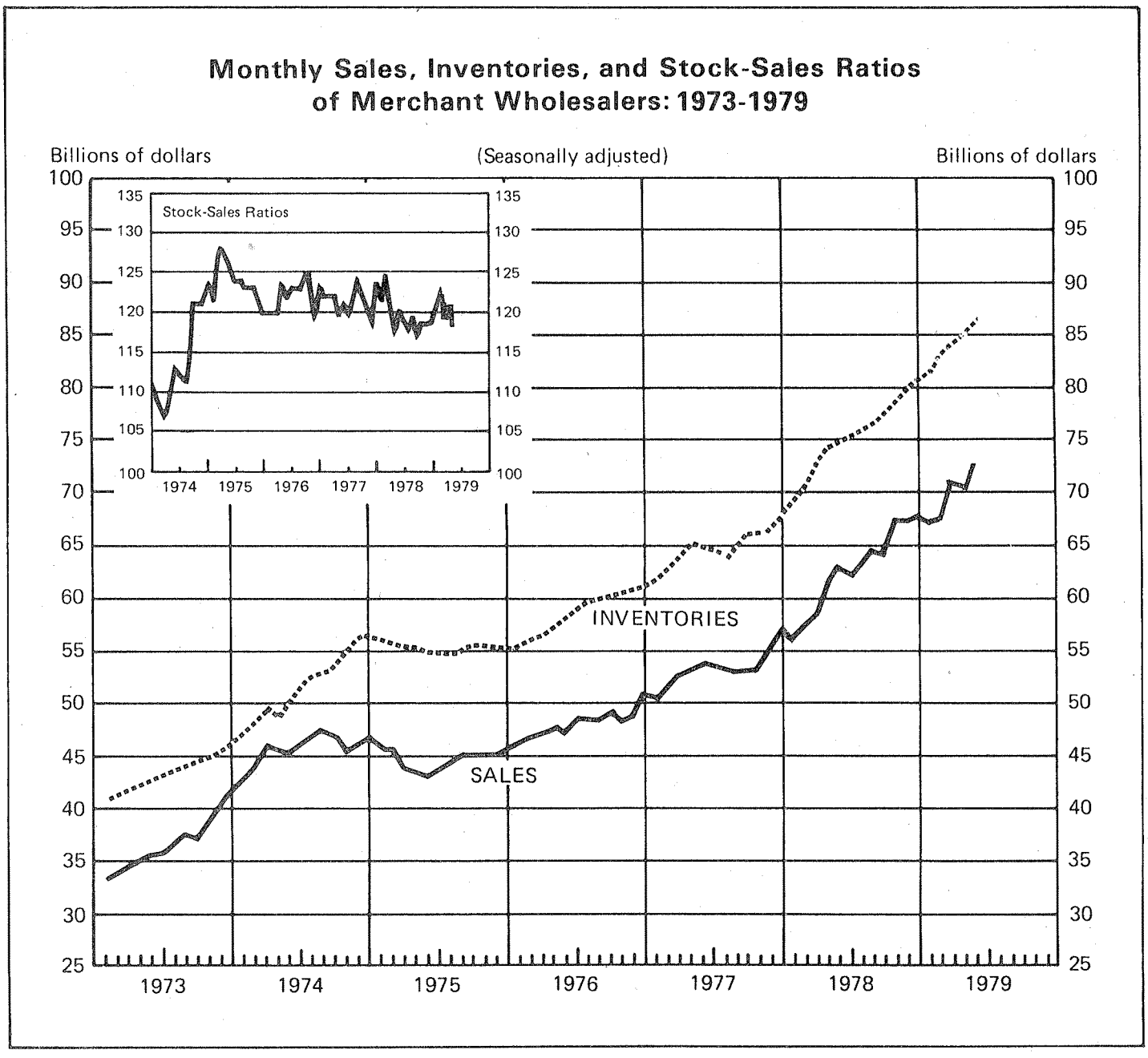


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: May 1979

1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		May 1979 from April 1979	May 1979 from May 1978	5 months 1979 from 5 months 1978	May 1979 from April 1979	May 1979 from May 1978	May 1979 from April 1979	May 1979 from May 1978	May 1979 from April 1979	May 1979 from May 1978
	Merchant wholesalers, total	+8	+15	+18	0	+15	+3	+15	+1	+14
	Total (excluding farm-product raw materials)	+7	+18	+18	+1	+15	+2	+17	+1	+15
50	Durable goods, total	+6	+16	+18	+2	+14	0	+15	+1	+14
501	Motor vehicles and automotive parts and supplies	+1	+13	+15	-1	+16	-1	+11	-2	+16
5012	Automobiles and other motor vehicles	0	+30	+21	-3	+21	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	+1	+1	+11	+1	+14	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	+1	0	+9	0	+12	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	+10	+16	+10	+2	+8	+6	+15	+1	+8
5021	Furniture--household and office	+8	+21	+15	+5	+17	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	+9	0	+7	+3	+7	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	+7	+34	+20	+2	+21	(*)	(*)	(*)	(*)
5023	Home furnishings	+12	+13	+8	+1	+5	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	+11	+16	+21	+3	+15	-2	+15	+2	+16
5031	Lumber, plywood, and millwork	+10	+17	+23	+4	+14	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c.	+12	+14	+17	+1	+19	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	+12	+27	+14	+4	+19	+5	+28	+2	+19
505	Metals and minerals, except petroleum	+16	+21	+22	+3	+1	+9	+21	+4	+1
5051 pt.	Ferrous metals service centers and offices	+17	+23	+22	+3	+6	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	+14	+17	+18	+3	+5	(*)	(*)	(*)	(*)
5051 pt.	Nonferrous metals service centers and offices	+10	+21	+27	+2	-11	(*)	(*)	(*)	(*)
506	Electrical goods	+9	+10	+14	+3	+15	+10	+11	+1	+15
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+12	+15	+17	+3	+17	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+5	+6	+12	+3	+14	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	+6	0	+7	+1	+10	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	+11	+14	+15	-1	+11	+3	+13	0	+11
5072	Hardware	+13	+13	+11	+2	+13	(*)	(*)	(*)	(*)
5074	Plumbing and heating equipment and supplies (hydronics)	+6	+16	+18	-4	+6	(*)	(*)	(*)	(*)
5075	Warm air heating and air conditioning equipment and supplies	+19	+18	+20	+1	+20	(*)	(*)	(*)	(*)
508	Machinery, equipment, and supplies	+5	+15	+17	+2	+15	-2	+14	+1	+15
5081	Commercial machines and equipment	+5	-2	+1	+3	+10	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	-3	+4	+6	+4	+24	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	+3	+24	+20	-1	+4	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	+7	+14	+21	+1	+18	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	+11	+24	+23	+4	+20	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	-2	+38	+48	+2	+14	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	-6	+37	+54	+2	+15	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	+4	+39	+39	+4	+13	(*)	(*)	(*)	(*)
51	Nondurable goods, total	+10	+15	+17	-2	+17	+5	+15	0	+16
	Total (excluding farm-product raw materials)	+10	+19	+19	0	+19	+4	+19	0	+18
511	Paper and paper products	+10	+13	+14	+2	+14	+1	+13	+2	+14
5111,3	Printing, writing, industrial, and personal service paper	+9	+14	+16	+3	+13	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	+6	+16	+11	-2	+18	+4	+16	+1	+18
5122	Drugs, drug proprietaries, and druggists' sundries	+6	+16	+11	-2	+18	(*)	(*)	(*)	(*)
5122 pt.	General-line drugs	+7	+13	+8	-5	+10	(*)	(*)	(*)	(*)
514	Groceries and related products	+7	+12	+15	+3	+19	-1	+11	+4	+18
5141	Groceries, general-line	+7	+13	+12	0	+14	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	+6	+11	+12	-1	+12	(*)	(*)	(*)	(*)
5141 pt.	Retailer cooperatives	+10	+13	+11	0	+19	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	+6	+14	+14	0	+12	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	+8	+11	+11	+6	+20	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	+10	+20	+21	0	+31	(*)	(*)	(*)	(*)
5145	Confectionery	+6	+9	+12	+9	+20	(*)	(*)	(*)	(*)
5147	Meats and meat products	+7	+16	+27	+1	+26	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	+9	0	+12	+7	+35	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	+12	-2	+12	-10	+8	+9	-1	+1	+7
5152	Cotton	-5	-7	-1	-13	-6	(*)	(*)	(*)	(*)
5153	Grain	+15	-2	+13	-10	+9	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	+14	+42	+28	+4	+17	+18	+42	+2	+17
5171	Petroleum bulk stations and terminals	+14	+34	+25	+2	+18	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	+12	+20	+17	+1	+33	-2	+19	-2	+33
5181	Beer and ale	+22	+26	+21	+2	+52	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	+3	+14	+13	+1	+23	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	+11	+26	+22	-9	+13	+8	+25	-5	+13
5191	Farm supplies	+15	+28	+26	-16	+12	(*)	(*)	(*)	(*)
5194	Tobacco and tobacco products	+10	+15	+11	+1	+7	(*)	(*)	(*)	(*)
5198	Paints, varnishes, and supplies	+11	+17	+18	+2	+32	(*)	(*)	(*)	(*)
5199 pt.	Books, periodicals, newspapers	+4	+26	+11	0	0	(*)	(*)	(*)	(*)

-Adjusted data are available only for summary group totals.
S Does not meet publication standards because of extreme variability or high nonresponse rate.

[1]Adjusted for seasonal variations and, in the case of sales, also for trading-day differences. Adjusted data are only available for the summary kind-of-business groups shown.
[2]There are indications that the seasonal adjustment factors for this trade group may not reflect recent trends. The seasonally adjusted data for this trade group and also for the summary group totals should, therefore, be used with caution.

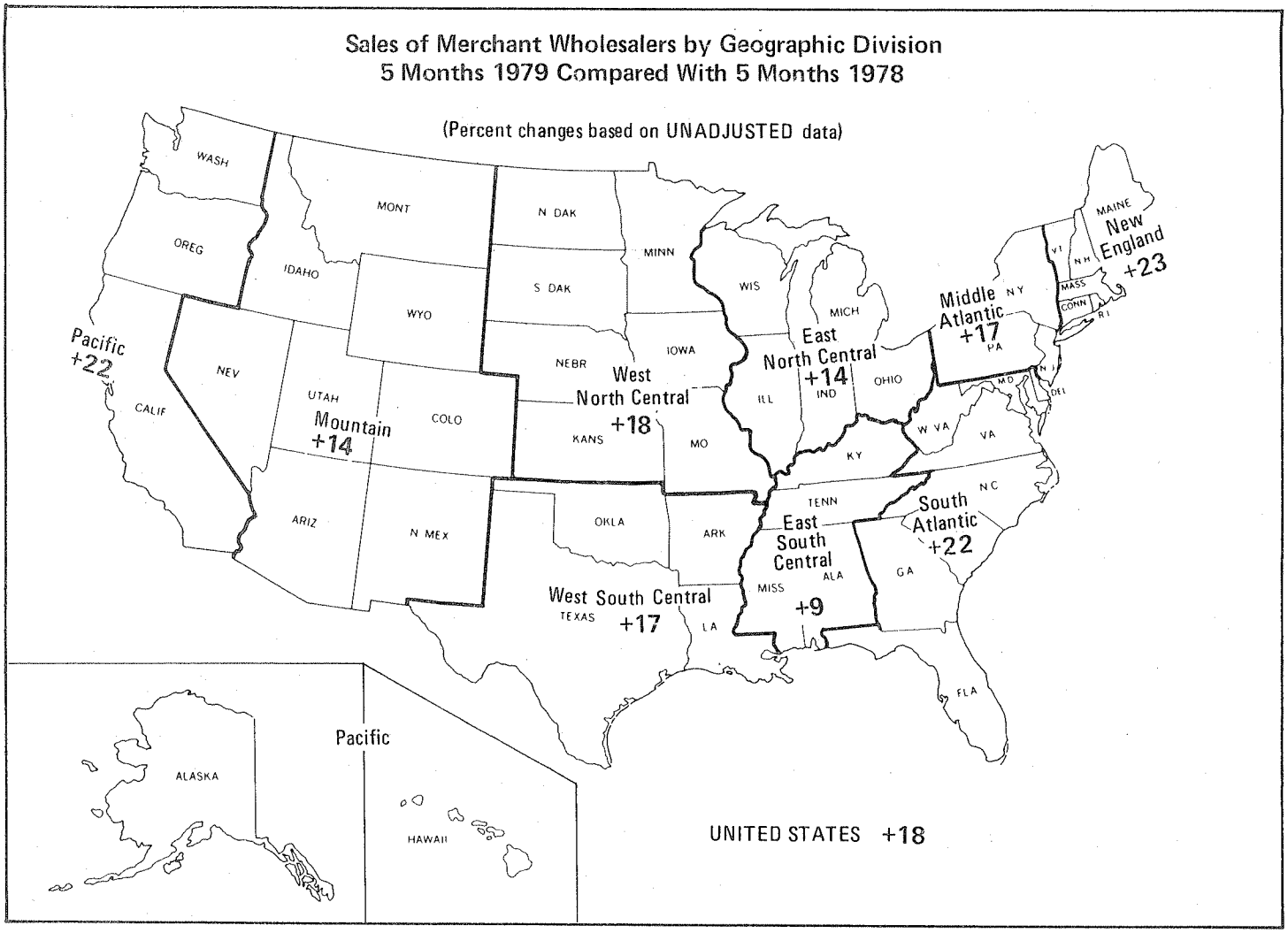


Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1979 and 1978

(Sales, in millions of dollars, are NOT ADJUSTED for seasonal variations or trading-day differences; sampling errors in percent)

1972 SIC code	Kind of business and geographic division[1]	1979					1978								Total 5 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.	Apr.	May[p]	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1979	1978	Range[2]	Median
	Merchant wholesalers, total	63,739	61,721	74,319	70,768	76,355	66,249	65,834	60,651	67,702	63,933	69,086	67,699	64,527	346,900	294,670	0.8-0.9	0.9
	New England	3,393	3,289	3,835	3,652	3,881	3,231	3,451	3,206	3,654	3,472	3,638	3,678	3,652	18,050	14,685	5-6	6
	Middle Atlantic	14,513	13,785	16,692	15,218	16,245	14,345	14,752	13,281	15,382	14,387	15,123	15,304	14,529	76,453	65,352	2-2	2
	East North Central	10,573	10,454	12,314	11,906	13,179	11,787	11,510	10,461	11,636	10,821	12,195	11,757	10,882	58,426	51,372	2-3	3
	West North Central	6,695	6,589	7,834	7,506	8,618	7,583	6,999	6,513	7,373	6,836	7,790	7,471	6,894	37,242	31,479	2-3	2
	South Atlantic	7,023	6,620	8,329	7,929	8,604	6,858	7,044	6,523	7,139	6,877	7,449	7,106	6,979	38,506	31,535	2-3	2
	East South Central	2,961	2,801	3,505	3,461	3,579	3,453	3,132	2,962	3,127	2,938	3,213	3,075	2,922	16,307	14,928	4-5	4
	West South Central	6,703	6,648	7,785	7,673	8,236	6,857	6,744	6,382	6,890	6,717	7,036	6,885	6,680	37,044	31,593	3-4	4
	Mountain	2,337	2,253	2,904	2,659	2,790	2,537	2,777	2,456	2,620	2,693	2,583	2,477	2,540	12,944	11,318	5-5	5
	Pacific	9,540	9,281	11,121	10,765	11,223	9,600	9,426	8,868	9,881	9,191	10,058	9,946	9,448	51,929	42,409	2-3	3
50	Durable goods, total	28,284	28,141	34,689	33,429	35,276	30,405	30,991	28,701	32,279	30,404	32,242	31,037	29,340	159,817	134,922	0.8-1.0	0.9
	Middle Atlantic	5,936	5,892	7,165	6,601	7,034	6,181	6,464	5,808	6,765	6,303	6,618	6,516	6,094	32,628	28,539	4-5	4
	East North Central	4,818	4,975	6,057	5,863	6,278	5,495	5,407	4,958	5,793	5,342	5,801	5,674	5,177	27,992	24,002	3-4	4
	West North Central	2,157	2,208	2,718	2,746	2,902	2,548	2,446	2,383	2,695	2,504	2,740	2,652	2,379	12,731	10,734	5-6	5
	South Atlantic	3,515	3,211	4,246	4,111	4,498	3,538	3,817	3,480	3,738	3,689	3,869	3,608	3,513	19,580	15,983	4-5	4
	West South Central	3,020	3,067	3,649	3,637	3,815	3,303	3,366	3,135	3,403	3,224	3,438	3,160	3,144	17,188	14,618	4-4	4
	Mountain	1,076	1,043	1,408	1,309	1,398	1,247	1,412	1,303	1,372	1,340	1,283	1,172	1,207	6,234	5,463	6-7	7
	Pacific	5,259	5,268	6,330	6,173	6,262	5,316	5,256	5,026	5,641	5,214	5,597	5,524	5,250	29,293	23,621	2-3	3
51	Nondurable goods, total	35,455	33,580	39,630	37,339	41,079	35,844	34,843	31,950	35,423	33,529	36,844	36,662	35,187	187,083	159,749	1.0-1.2	1.0
	New England	2,166	2,066	2,335	2,200	2,320	2,014	2,151	1,988	2,293	2,117	2,245	2,316	2,349	11,087	9,248	5-7	6
	Middle Atlantic	8,577	7,893	9,527	8,616	9,212	8,164	8,288	7,473	8,617	8,084	8,505	8,788	8,435	43,825	36,813	3-3	3
	East North Central	5,755	5,479	6,256	6,042	6,902	6,292	6,103	5,504	5,843	5,479	6,394	6,083	5,704	30,434	27,370	3-4	3
	West North Central	4,538	4,381	5,115	4,760	5,717	5,035	4,554	4,129	4,678	4,331	5,050	4,820	4,515	24,511	20,745	3-4	3
	South Atlantic	3,508	3,409	4,084	3,818	4,106	3,320	3,227	3,044	3,400	3,188	3,580	3,498	3,466	18,925	15,552	3-5	3
	East South Central	1,685	1,549	1,889	1,925	2,050	1,892	1,609	1,572	1,616	1,505	1,710	1,706	1,650	9,099	8,403	3-4	4
	West South Central	3,683	3,581	4,136	4,036	4,420	3,554	3,378	3,248	3,487	3,493	3,598	3,725	3,536	19,857	16,975	5-5	5
	Pacific	4,281	4,013	4,790	4,591	4,960	4,284	4,170	3,842	4,241	3,978	4,461	4,422	4,199	22,636	18,787	4-5	4

Note: Detail may not add to totals due to rounding and minor revisions.

[p]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]See map on page 7.

[2]The range of sampling error of the estimate is based on data for August, September, and October 1977.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: May 1979

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in-- Sales: May 1979 from April 1979	Sales: May 1979 from May 1978	Sales: 5 months 1979 from 5 months 1978	Inventories: May 1979 from April 1979	Inventories: May 1979 from May 1978	Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		A	B	C[1]	D	E	A	D
	Merchant wholesalers, total	+8	+15	+18	0	+15	0.4	0.2
	New England	+6	+20	+23	0	+22	2.0	1.9
	Middle Atlantic	+7	+13	+17	+1	+10	1.1	0.6
	East North Central	+11	+12	+14	-2	+8	1.2	0.8
	West North Central	+15	+15	+18	-4	+12	1.3	1.1
	South Atlantic	+9	+25	+22	0	+17	1.6	1.0
	East South Central	+3	+4	+9	-3	+10	1.7	1.4
	West South Central	+7	+20	+17	+1	+18	1.4	0.8
	Mountain	+5	+10	+14	-1	+17	2.4	1.3
	Pacific	+4	+17	+22	-1	+19	1.2	0.5
50	Durable goods, total	+6	+16	+18	+2	+14	0.6	0.3
	New England	+7	+28	+28	0	+19	2.4	1.3
	Middle Atlantic	+7	+14	+14	+1	+7	1.7	1.0
	East North Central	+7	+14	+17	0	+6	1.9	1.0
	West North Central	+6	+14	+19	0	+10	3.3	1.7
	South Atlantic	+9	+27	+22	+1	+17	1.9	1.2
	East South Central	0	-2	+10	0	+2	3.9	2.5
	West South Central	+5	+16	+18	+3	+22	2.1	1.2
	Mountain	+7	+12	+14	-1	+19	2.9	1.7
	Pacific	+1	+18	+24	0	+19	1.9	0.7
51	Nondurable goods, total	+10	+15	+17	-2	+17	0.6	0.4
	New England	+5	+15	+20	0	+27	1.9	2.7
	Middle Atlantic	+7	+13	+19	+3	+14	1.9	0.9
	East North Central	+14	+10	+11	-6	+12	1.4	1.1
	West North Central	+20	+15	+18	7	+15	1.6	1.4
	South Atlantic	+8	+24	+22	-1	+18	2.4	1.8
	East South Central	+6	+8	+8	-6	+24	1.7	2.4
	West South Central	+10	+24	+17	-3	+10	2.2	1.3
	Mountain	+3	+8	+15	-1	+12	3.2	1.2
	Pacific	+8	+16	+20	-3	+20	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	+1	+1	+11	+1	+14	2	1
	New England	-5	+10	+18	+2	+26	7	4
	Middle Atlantic	-6	(S)	-8	-2	+8	4	2
	East North Central	+5	+14	+22	0	+4	7	1
	West North Central	+5	-6	+11	-1	-5	5	2
	South Atlantic	+2	+24	+23	-2	+18	4	2
	East South Central	+1	0	+13	-1	-5	4	3
	West South Central	0	+1	+8	+4	+27	5	2
	Mountain	+14	-4	-8	-3	+18	7	3
	Pacific	+1	-2	+14	0	+22	3	2
502	Furniture and home furnishings	+10	+16	+10	+2	+8	2	1
	Middle Atlantic	+13	+11	+17	+5	+7	4	2
	East North Central	+7	+24	+25	0	+17	7	2
	West North Central	+8	(S)	(S)	-1	-15	5	4
	West South Central	+3	+4	+10	-1	-2	5	7
	Pacific	+15	+31	+7	0	+16	5	3
503	Lumber and other construction materials	+11	+16	+21	+3	+15	2	1
	New England	+10	-5	+17	-5	+14	4	5
	Middle Atlantic	+11	+10	+14	+4	+12	4	2
	East North Central	+19	0	+6	-1	-10	3	2
	West North Central	+11	+38	+36	+4	+33	7	7
	South Atlantic	+8	+25	+23	+1	+21	4	2
	East South Central	+14	+4	+7	+2	+15	4	3
	West South Central	+5	+12	+13	+4	+32	6	5
	Pacific	+8	+23	+33	+2	+12	5	1
5051 pt.	Ferrous metals service centers	+14	+17	+18	+3	+5	2	1
	New England	+13	+20	+24	-1	+6	6	2
	Middle Atlantic	+17	+22	+14	+2	0	5	2
	East North Central	+20	+19	+20	+3	0	3	2
	West North Central	+8	+18	+27	+2	-17	5	2
	South Atlantic	+17	+22	+18	+3	+23	3	2
	East South Central	+14	+3	+16	+4	+8	4	4
	West South Central	+10	+14	+20	0	+13	4	2
	Mountain	+12	(S)	(S)	-1	+9	2	2
	Pacific	+4	+15	+26	+3	+19	2	3
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+12	+15	+17	+3	+17	2	1
	New England	+19	(S)	+33	+5	+33	3	2
	Middle Atlantic	+5	+9	+10	-1	+6	5	2
	East North Central	+6	+19	+22	+2	+9	3	2
	West North Central	+21	+15	+13	+5	+32	5	3
	South Atlantic	+7	+9	+15	0	+16	3	2
	East South Central	+24	+1	+7	+2	+12	3	5
	West South Central	+30	+23	+21	+11	+43	4	2
	Mountain	+10	+6	+16	+2	+14	4	2
	Pacific	+9	+9	+18	0	+7	4	2

See footnotes at end of table.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: May 1979—Continued

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in--					Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		Sales			Inventories			
		May 1979 from April 1979	May 1979 from May 1978	5 months 1979 from 5 months 1978	May 1979 from April 1979	May 1979 from May 1978		
		A	B	C[1]	D	E	A	D
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+5	+6	+12	+3	+14	3	1
	Middle Atlantic	-2	+6	+14	+1	+13	3	2
	East North Central	+11	+25	+23	+4	+10	4	1
	West North Central	+5	-27	-14	-1	-22	4	4
	South Atlantic	+19	+17	+12	-1	+15	6	4
	West South Central	+3	+1	+14	+3	+18	4	4
	Mountain	0	+30	+23	-1	+25	6	3
	Pacific	+5	+2	+10	+2	+36	3	2
5072	Hardware	+13	+13	+11	+2	+13	1	1
	New England	+25	+14	+11	+1	+7	6	3
	Middle Atlantic	+12	+5	+9	+5	+20	6	2
	East North Central	+19	+33	+9	0	+12	4	2
	West North Central	+15	+14	+16	+2	+11	3	3
	South Atlantic	+13	+12	+11	-1	+11	4	2
	East South Central	+8	-6	+1	-1	-3	4	1
	Pacific	+7	+21	+21	0	+8	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	+6	+16	+18	-4	+6	2	1
	Middle Atlantic	+9	+26	+25	+1	+11	6	3
	East North Central	+10	-6	+5	(S)	(S)	3	3
	South Atlantic	+1	+28	+25	-1	+7	3	2
	Mountain	-4	+11	-1	-9	+51	7	4
	Pacific	+15	+31	+20	+3	+25	5	4
5084,5	Industrial machinery, equipment, and supplies	+7	+14	+21	+1	+18	2	1
	Middle Atlantic	+8	+8	+10	-1	+22	7	2
	East North Central	+12	+19	+22	0	+18	3	2
	West South Central	+6	+9	+19	+2	+22	4	3
	Pacific	-1	+13	+30	-1	+15	5	2
512	Drugs, drug proprietaries, and druggists' sundries	+6	+16	+11	-2	+18	1	1
	New England	0	+31	+21	-18	+17	5	3
	Middle Atlantic	+9	+10	+7	+4	+18	3	2
	East North Central	+9	+32	+15	-3	+29	6	3
	West North Central	+8	+10	+8	-4	+7	2	2
	South Atlantic	+6	+15	+10	-4	+8	6	5
	East South Central	-2	-4	+3	-1	+9	6	5
	West South Central	+6	0	+7	-4	-8	3	2
	Mountain	+10	+20	+14	+3	+18	3	2
	Pacific	+3	+31	+19	-3	+40	3	3
5141	Groceries, general-line	+7	+13	+12	0	+14	1	1
	New England	+7	+18	+16	+2	+30	2	1
	Middle Atlantic	+5	+8	+11	-1	+17	1	2
	East North Central	+10	+11	+9	-3	+8	3	1
	West North Central	+6	+9	+11	-1	+16	1	1
	South Atlantic	+5	+15	+19	+1	+16	2	1
	West South Central	+11	+21	+14	-2	+10	2	1
	Mountain	+2	+6	+14	-3	+10	2	2
	Pacific	+6	+13	+16	+1	+9	1	1
5142,3,6,9	Specialty-line groceries	+8	+11	+11	+6	+20	1	1
	Middle Atlantic	+3	+7	+8	+9	+14	4	2
	East North Central	+7	+9	+11	+1	+17	3	2
	West North Central	+15	+10	+7	+8	+46	3	1
	South Atlantic	+14	+24	+15	+4	-25	5	6
	East South Central	+10	(S)	+22	+5	+25	2	2
5148	Fresh fruits and vegetables	+9	0	+12	+7	+35	2	4
	Middle Atlantic	+14	-2	+12	+1	-5	7	5
	East North Central	+22	-3	+1	+5	+18	6	6
	West North Central	+8	+3	+10	+4	+47	6	3
	West South Central	+5	+14	+11	+1	+34	5	3
	Pacific	+5	-2	+10	+2	+66	4	4
5194	Tobacco and tobacco products	+10	+15	+11	+1	+7	1	1
	New England	+24	+28	-2	+7	+35	5	3
	Middle Atlantic	+5	+8	+13	+1	-10	4	3
	East North Central	+11	+17	+15	-3	+2	4	3
	West North Central	+17	+31	+10	+12	+12	4	2
	South Atlantic	+4	-2	+16	-8	-6	6	6
	East South Central	+7	+11	+2	-6	+2	7	4
	West South Central	+12	-5	+1	+8	-1	7	6
	Mountain	-1	(S)	+13	+1	+7	6	2
	Pacific	+14	+29	+22	-2	+48	2	5

Note: Data at the United States level are generally more reliable than data by geographic division. In those kinds of business where the geographic division trends are subject to a high sampling error, it may be desirable to use the United States total trends for the kinds of business rather than the geographic division trends.

(S)Does not meet publication standards because of extreme variability or high nonresponse rate.

[1]See map on page 7.

[2]The sampling errors (in percent) shown in columns A and D are based on medians or measurements on data for August, September, and October 1977. For SIC's 5051 pt., and 5063 the medians of measurements in columns A and D are based on data for June, July, and August 1978.

APPENDIX A. Reliability of Data

There are two types of errors possible in an estimate based on a sample survey—sampling and nonsampling. Sampling errors occur because observations are made only on a sample, not on the entire population. Nonsampling errors can be attributed to many sources in the collection and processing of data. The accuracy of a survey result is determined by the joint effects of sampling and nonsampling errors.

Measures of sampling variability—The particular sample used in this survey is one of a large number of all possible samples of the same size that could have been selected using the same design. Estimates derived from the different samples would differ from each other. The average of these estimates would be close to the estimate derived from a complete enumeration of the population (assuming that a complete enumeration has the same nonsampling errors as the sample survey). The average of the estimates differs from the estimate from a complete census because of the composite estimation technique. Disregarding this difference, the sampling error or standard error of the estimate is a measure of the variability among the estimates from all possible samples of the same size and design and, thus, is a measure of the precision with which an estimate from a particular sample approximates the results of a complete enumeration. The coefficient of variation (expressed as a percent) is the standard error of the estimate times 100 percent, divided by the value being estimated. Note that any measures of sampling variability, such as the standard error or coefficient of variation, are estimates derived from the sample and are also subject to sampling variability.

Estimates of sampling variability (the coefficients of variation in percent) for sales and inventories at the kind-of-business detail provided in this publication are shown in table A-1. These coefficients of variation permit certain confidence statements about the sample estimates. As noted above, the particular sample used in this survey is one of a large number of all possible samples of about the same size that could have been selected using the same design. In about two out of three (67 percent) of these samples, the estimate would differ from a complete enumeration by less than the corresponding percent for that estimate shown in the sampling variability table. In about 19 out of 20 (95 percent) of these samples, the estimate would differ from the results of a complete enumeration by less than twice the percentages shown.

To illustrate the computations involved in the above confidence statements for monthly dollar volume estimates, assume that an estimate for a kind of business published in table 1 for a particular month is $5,000 million and that the median coefficient of variation for this statistic, is 0.9 percent or .009. Multiplying $5,000 million by .009 yields $45 million. Therefore, a 67 percent confidence interval is $4,955 million to $5,045 million (i.e. $5,000 million plus or minus $45 million). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately two out of three (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Similarly a 95 percent confidence interval is $4,910 million to $5,090 million (i.e., $5,000 million plus or minus $90 million).

As an example of the use of the coefficients of variation with ratios, assume that an estimated month-to-month percent change published in table 5 is -1.0 percent for a particular kind of business. This is equivalent to a month-to-month ratio of .990. Assume the median coefficient of variation for this ratio as shown in table A-1 is 0.5 percent (or .005). Multiplying .990 by .005 yields .005. Therefore, a 67 percent confidence interval is .985 to .995 (i.e., .990 plus or minus .005) and a 95 percent confidence interval is .980 to 1.000 (i.e., .990 plus or minus .010).

Nonsampling errors—As calculated for this report, the coefficient of variation measures certain nonsampling errors but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples of the same size and design, between the estimate and the true value being estimated. The accuracy of the tabulated data is determined by the joint effects of the sampling and nonsampling errors.

Nonsampling errors can be attributed to many sources: (1) inability to obtain information about all cases in the sample, (2) response errors, (3) definitional difficulties, (4) differences in the interpretation of questions, (5) mistakes in recording or coding the data obtained, and (6) other errors of collection, response, coverage, and estimation for missing data. These nonsampling errors also occur in complete censuses.

Although no direct measurement of the biases due to nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is due to imputing data for nonrespondents, for late reporters, and for data which fail edit. For all kinds of business combined, imputed data amount to about 15 percent of the sales estimates and 25 percent for inventories.

Table A-1. Estimated Sampling Variability of Sales and Inventories by Kind of Business for the United States

1972 SIC code	Kind of business	Sales						Inventories					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total	0.8-1.1	0.9	0.8-0.9	0.9	0.4-0.5	0.5	0.8-1.0	0.9	0.7-1.0	0.9	0.2-0.5	0.4
	Total (excluding farm-product raw materials)	0.9-1.2	1.1	0.9-1.0	1.0	0.4-0.6	0.5	0.9-1.0	1.0	0.8-1.0	0.9	0.2-0.5	0.3
50	Durable goods, total	1.1-1.3	1.2	0.9-1.0	1.0	0.6-0.6	0.6	1.1-1.2	1.2	1.0-1.2	1.1	0.3-0.7	0.5
501	Motor vehicles and automotive parts and supplies	2.3-3.3	3.1	1.9-2.8	2.2	1.4-1.9	1.7	2.5-3.3	2.9	2.6-3.1	3.0	0.6-1.3	1.0
5012	Automobiles and other motor vehicles	(*)	(*)	(*)	(*)	1.7-3.9	3.1	(*)	(*)	(*)	(*)	1.7-3.0	2.8
5013,4	Automotive parts and supplies, tires and tubes	2.9-3.7	3.1	2.9-3.2	3.1	1.5-2.0	1.6	4.0-4.5	4.3	3.9-4.4	4.0	0.4-1.4	0.7
5013	Automotive parts and supplies	3.3-4.0	3.9	3.1-3.8	3.7	1.9-2.2	2.0	4.7-5.3	5.2	4.7-5.2	5.0	0.5-1.5	0.9
502	Furniture and home furnishings	4.2-5.8	4.6	4.2-4.4	4.3	1.7-2.9	2.0	3.2-4.9	3.7	3.4-4.2	3.7	0.8-2.3	2.0
5021	Furniture--household and office	6.6-7.6	6.9	5.6-7.1	6.9	4.0-5.7	4.3	(*)	(*)	(*)	(*)	1.4-3.4	2.2
5021 pt.	Household furniture	(*)	(*)	(*)	(*)	5.0-5.8	5.1	(*)	(*)	(*)	(*)	1.4-4.3	2.0
5021 pt.	Office furniture	(*)	(*)	(*)	(*)	5.7-8.0	5.9	(*)	(*)	(*)	(*)	0.7-3.7	2.1
5023	Home furnishings	5.1-7.5	6.1	5.1-6.1	5.5	1.6-3.6	2.2	4.8-6.9	5.6	4.9-6.0	5.0	1.0-3.1	2.6
503	Lumber and other construction materials	2.8-4.4	3.1	2.9-3.9	3.1	1.6-2.5	1.9	4.5-6.5	4.9	4.8-5.8	4.9	0.7-1.8	0.9
5031	Lumber, plywood, and millwork	4.1-4.6	4.3	3.3-4.6	4.0	2.1-2.5	2.4	5.9-8.2	6.5	6.0-6.9	6.5	1.0-2.6	1.8
5039	Construction materials, n.e.c.	4.2-7.2	4.9	4.5-5.9	4.9	2.0-3.4	2.2	(*)	(*)	(*)	(*)	1.1-2.0	1.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(*)	(*)	(*)	(*)	2.2-2.4	2.3	(*)	(*)	(*)	(*)	1.0-2.5	1.4
505	Metals and minerals, except petroleum	4.4-6.0	4.7	4.0-5.1	4.0	1.5-3.0	2.8	3.2-3.8	3.7	3.7-4.1	4.0	0.8-1.4	1.3
5051 pt.	Ferrous metals service centers and offices	5.0-5.8	5.7	4.1-5.2	4.7	1.2-3.8	3.1	3.8-4.2	4.1	4.1-4.3	4.2	0.5-1.6	1.4
5051 pt.	Ferrous metals service centers	6.7-8.0	6.8	5.0-6.8	5.8	1.1-5.3	3.5	2.9-4.4	3.4	3.4-4.0	3.5	0.6-2.2	2.1
5051 pt.	Nonferrous metals service centers and offices	(*)	(*)	(*)	(*)	4.5-7.0	6.1	(*)	(*)	(*)	(*)	2.8-5.4	4.7
506	Electrical goods	1.9-2.6	2.3	1.6-2.1	1.7	1.3-1.6	1.4	2.5-2.9	2.6	2.2-2.8	2.4	0.5-1.0	0.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2.2-3.1	2.6	2.3-2.7	2.4	1.4-1.7	1.6	2.9-3.5	3.2	3.0-3.2	3.1	0.6-1.2	0.7
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3.4-4.0	3.8	3.0-3.2	3.1	1.6-2.8	2.5	2.9-4.2	3.2	2.7-3.8	3.0	0.7-1.6	0.9
5064	Electrical appliances, TV and radio sets	3.0-3.8	3.6	2.6-3.7	3.1	1.7-2.7	2.5	(*)	(*)	(*)	(*)	0.9-1.7	1.4
507	Hardware, plumbing, heating equipment, and supplies	2.7-3.0	2.9	2.4-2.6	2.5	1.1-1.9	1.5	2.4-2.8	2.6	2.4-2.9	2.7	0.3-1.4	0.6
5072	Hardware	3.6-4.2	3.8	2.6-3.1	3.0	1.3-2.4	1.9	2.0-4.1	2.7	2.2-3.5	2.8	0.4-2.1	0.8
5074	Plumbing and heating equipment and supplies (hydronics)	4.1-5.3	4.2	3.9-5.1	4.2	1.6-3.8	2.1	5.0-7.0	6.0	4.5-7.1	5.3	0.5-3.1	0.9
5075	Warm air heating and air conditioning equipment and supplies	(*)	(*)	(*)	(*)	2.0-4.4	2.7	(*)	(*)	(*)	(*)	1.1-4.3	1.4
508	Machinery, equipment, and supplies	2.3-2.7	2.6	1.8-2.5	2.1	1.2-1.5	1.4	2.0-2.6	2.3	1.7-2.1	1.9	0.4-1.8	1.1
5081	Commercial machines and equipment	(*)	(*)	(*)	(*)	2.9-4.3	4.1	(*)	(*)	(*)	(*)	1.6-8.5	1.9
5082	Construction and mining machinery and equipment	5.0-7.3	5.8	3.3-5.8	4.9	3.9-4.6	4.4	2.9-7.0	4.0	3.2-4.1	3.3	0.7-5.3	1.0
5083	Farm and garden machinery and equipment	(*)	(*)	(*)	(*)	4.1-6.6	6.0	(*)	(*)	(*)	(*)	1.1-2.9	1.2
5084,5	Industrial machinery, equipment, and supplies	3.1-3.4	3.2	2.8-3.0	2.9	1.1-2.3	1.6	2.4-3.0	2.9	2.4-3.0	2.7	0.5-1.6	0.6
5086	Professional equipment and supplies	3.7-7.5	4.3	4.0-5.5	5.2	1.8-3.3	2.0	(*)	(*)	(*)	(*)	0.6-5.2	0.7
5086 pt.	Surgical, medical, hospital, and supplies	(*)	(-)	(*)	(*)	1.7-3.8	2.5	(*)	(*)	(*)	(*)	0.7-5.4	1.0
5087	Service establishment equipment and supplies	(*)	(*)	(*)	(*)	1.8-11.0	2.9	(*)	(*)	(*)	(*)	1.0-3.4	1.3
5093	Scrap and waste materials	4.6-13.3	9.0	4.6-8.8	5.0	2.2-4.9	2.7	(*)	(*)	(*)	(*)	0.7-3.8	0.9
5093 pt.	Iron and steel scrap	(*)	(*)	(*)	(*)	2.6-3.5	3.1	(*)	(*)	(*)	(*)	0.8-1.4	1.0
5093 pt.	Waste materials	(*)	(*)	(*)	(*)	2.6-8.8	4.8	(*)	(*)	(*)	(*)	1.2-9.1	1.6
51	Nondurable goods, total	1.0-1.3	1.1	1.0-1.1	1.1	0.4-0.7	0.6	1.5-1.7	1.6	1.4-1.6	1.5	0.3-0.7	0.4
	Total (excluding farm-product raw materials)	1.0-1.6	1.2	1.3-1.4	1.4	0.5-0.8	0.6	1.7-2.0	1.9	1.6-1.8	1.7	0.3-0.7	0.4
511	Paper and paper products	2.6-4.0	3.7	2.4-4.1	3.1	1.0-1.4	1.3	2.5-3.4	2.7	2.4-3.2	2.8	0.4-1.5	0.6
5111,3	Printing, writing, industrial, and personal service paper	2.4-3.1	2.7	2.3-2.8	2.4	1.3-1.5	1.4	2.9-3.4	3.1	2.7-3.2	2.8	0.4-1.3	0.9
5112	Stationery supplies	(*)	(*)	(*)	(*)	2.4-3.4	2.5	3.2-6.1	5.8	3.6-5.1	4.4	0.9-4.8	1.4
512	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	5.6-6.3	5.7	5.6-5.7	5.7	0.6-2.2	0.7
5122	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	(*)	(*)	(*)	(*)	0.6-2.2	0.7
5122 pt.	General-line drugs	7.2-9.8	7.9	7.5-8.5	7.6	0.7-3.0	1.0	(*)	(*)	(*)	(*)	0.5-3.1	1.0
513	Apparel, piece goods, and notions	8.3-12.4	8.8	8.6-9.3	9.1	2.6-4.0	3.3	(*)	(*)	(*)	(*)	(*)	(*)
514	Groceries and related products	1.7-2.2	2.0	1.6-2.0	1.9	0.4-1.2	0.5	1.5-2.5	1.8	1.8-2.1	1.9	0.4-1.3	0.6
5141	Groceries, general-line	1.9-2.7	2.1	1.7-2.7	2.0	0.4-1.5	0.7	1.8-2.7	2.3	1.7-2.0	1.8	0.3-1.2	0.8
5141 pt.	Voluntary groups	(*)	(*)	(*)	(*)	0.5-1.7	0.6	(*)	(*)	(*)	(*)	0.4-1.7	0.5
5141 pt.	Retailer cooperatives	(*)	(*)	(*)	(*)	0.6-1.6	1.1	(*)	(*)	(*)	(*)	0.4-2.4	0.7
5141 pt.	Other general-lines	(*)	(*)	(*)	(*)	0.9-3.1	1.8	(*)	(*)	(*)	(*)	0.5-1.3	0.7
5142,3,6,9	Specialty-line groceries	(*)	(*)	(*)	(*)	0.7-3.4	1.3	(*)	(*)	(*)	(*)	0.9-2.4	1.0
5144	Poultry and poultry products	3.4-5.5	4.4	4.0-4.4	4.2	0.6-2.2	1.5	(*)	(*)	(*)	(*)	2.1-4.1	2.3
5145	Confectionery	4.7-6.3	4.7	3.6-5.4	4.3	2.0-3.2	2.2	(*)	(*)	(*)	(*)	0.8-2.4	2.3
5147	Meats and meat products	4.5-4.8	4.7	4.6-4.6	4.6	1.4-2.9	1.7	(*)	(*)	(*)	(*)	1.7-3.9	2.2
5148	Fresh fruits and vegetables	4.7-5.4	4.9	3.9-4.1	4.0	1.9-4.2	2.7	(*)	(*)	(*)	(*)	2.9-4.4	3.9
515	Farm-product raw materials	1.8-2.2	2.0	1.6-2.0	1.7	1.1-1.7	1.3	(*)	(*)	(*)	(*)	1.1-2.8	2.4
5152	Cotton	(*)	(*)	(*)	(*)	1.8-4.9	2.8	(*)	(*)	(*)	(*)	1.3-2.9	2.4
5153	Grain	2.4-2.7	2.6	2.2-2.4	2.3	1.0-1.7	1.3	(*)	(*)	(*)	(*)	1.6-3.3	1.9
517	Petroleum and petroleum products	4.0-5.0	4.7	4.2-4.6	4.5	1.1-1.9	1.5	4.1-5.2	5.0	4.4-5.4	4.7	1.6-3.0	2.3
5171	Petroleum bulk stations and terminals	2.8-3.3	2.9	2.8-3.0	2.9	0.9-1.4	1.2	(*)	(*)	(*)	(*)	1.7-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages	3.4-3.9	3.7	3.1-3.7	3.2	0.8-1.8	1.7	3.9-4.2	4.1	4.0-4.3	4.2	1.0-2.0	1.3
5181	Beer and ale	2.2-4.4	3.1	2.8-3.2	2.9	1.0-2.5	2.0	3.6-5.5	3.8	3.6-4.1	3.8	1.7-2.7	2.1
5182	Wines and distilled alcoholic beverages	5.2-6.3	5.4	4.6-5.6	4.7	1.2-3.4	1.7	4.6-5.4	4.8	5.0-5.6	5.3	1.4-2.3	1.6
519	Miscellaneous nondurable goods	2.4-3.2	2.9	2.4-2.7	2.5	1.4-2.3	1.6	(*)	(*)	(*)	(*)	0.8-1.7	1.4
5191	Farm supplies	(*)	(*)	(*)	(*)	3.2-3.6	3.3	(*)	(*)	(*)	(*)	1.7-3.9	2.0
5194	Tobacco and tobacco products	4.0-5.2	4.1	3.4-4.5	4.2	1.3-2.4	1.7	(*)	(*)	(*)	(*)	0.8-4.3	1.0
5198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.8-3.8	3.0	(*)	(*)	(*)	(*)	1.5-3.1	2.9
5199 pt.	Books, magazines, newspapers	(*)	(*)	(*)	(*)	3.2-8.0	5.6	(*)	(*)	(*)	(*)	2.0-6.5	5.1

Note: Measures of sampling variability are based on data unadjusted for seasonal variations or trading-day differences. The range of sampling error of the monthly dollar estimates and the ratio of current month to previous month for sales and inventories is based on data for July, August, and September 1977.

*Measures of sampling variability are not shown since sales and/or inventory estimates for these kinds of business are not published.

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

Seasonal factors for adjusting data in this historical publication have been developed by the method described in the **X-11 Variant of the Census Method II Seasonal Adjustment Program**, U.S. Bureau of the Census Technical Paper No. 15. Revised 1967. Trading-day factors for adjusting sales were also derived from the X-11 program.

Adjustment of estimates is an approximation based on past experiences, and therefore, will be less precise to the extent that current competitive pressures, changes in economic condition, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of trading-day adjustment factors may be found in **Estimating Trading-Day Variation in Monthly Economic Time Series**, Bureau of the Census Technical Paper No. 12, 1965. Additional details concerning the adjustment factors may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.7	91.8	107.1	97.7	104.3	104.7	95.6	104.7	98.3	102.2	100.6	96.3
	Total (excluding farm-product raw materials)	91.6	91.6	106.6	97.8	105.1	105.8	95.8	106.1	100.3	102.3	99.3	95.0
50	Durable goods, total	89.6	89.0	105.7	99.0	106.5	107.3	96.4	107.7	101.9	104.1	98.6	91.5
501	Motor vehicles and automotive parts and supplies	93.3	89.8	107.6	107.7	108.4	107.5	98.6	106.9	96.1	98.3	93.3	90.5
502	Furniture and home furnishings	84.8	89.8	105.2	96.8	101.6	106.6	89.2	105.2	103.9	112.1	107.2	95.2
503	Lumber and other construction materials	80.6	80.2	100.9	94.6	109.8	112.2	102.4	117.4	106.2	109.9	100.0	84.0
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	78.7	88.7	104.5	101.5	109.3	97.0	96.1	105.2	105.4	106.0	108.0	95.5
505	Metals and minerals, except petroleum	98.2	91.4	108.2	98.6	107.6	104.4	91.2	108.6	103.1	100.0	97.1	90.3
506	Electrical goods	89.3	89.1	102.0	96.0	99.4	106.5	99.0	104.8	100.8	107.5	103.5	98.8
507	Hardware, plumbing, heating equipment, and supplies	89.2	87.4	99.9	97.9	106.7	108.0	100.7	109.2	102.4	107.2	100.6	88.3
508	Machinery, equipment, and supplies	88.1	88.6	107.9	99.9	107.7	108.8	95.4	104.6	103.3	103.5	96.5	92.3
509	Miscellaneous durable goods	86.2	89.8	106.2	96.2	100.2	110.7	88.4	109.5	101.9	108.1	103.7	96.0
51	Nondurable goods, total	96.4	93.8	108.5	97.1	103.5	102.3	94.9	102.1	96.1	100.2	101.8	100.1
	Total (excluding farm-product raw materials)	94.3	94.0	106.8	96.6	103.2	104.5	95.5	104.5	97.6	100.6	100.6	98.4
511	Paper and paper products	95.5	92.6	106.3	93.4	103.3	103.6	95.6	107.3	102.6	104.0	99.4	92.6
512	Drugs, drug proprietaries, and druggists' sundries	97.8	92.6	106.0	96.3	100.3	99.8	92.9	104.7	100.8	108.1	101.0	96.6
513	Apparel, piece goods, and notions	90.1	94.4	107.1	91.8	101.2	98.8	93.7	115.6	106.3	107.7	103.4	87.1
514	Groceries and related products	94.7	91.1	104.2	97.2	105.4	105.0	99.0	105.3	98.9	101.0	99.8	95.0
515	Farm-product raw materials[1]	103.1	94.7	112.6	98.0	103.9	96.9	93.0	92.4	91.5	100.8	108.3	99.9
516	Chemicals and allied products	90.2	89.2	106.3	98.0	107.1	108.3	96.1	108.0	97.8	105.0	98.8	93.3
517	Petroleum and petroleum products	99.7	102.3	107.7	96.2	95.9	100.0	96.5	100.2	93.1	100.9	100.3	104.8
518	Beer, wine, and distilled alcoholic beverages	77.8	81.4	102.2	90.7	106.8	113.9	97.6	107.8	97.8	100.6	106.9	113.5
519	Miscellaneous nondurable goods	96.0	100.5	116.6	102.4	107.4	105.2	88.2	95.5	95.4	96.8	95.6	96.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.8	101.2	101.7	100.7	99.4	99.3	98.6	98.1	98.7	100.1	100.9	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.0	100.3	100.6	100.7	100.2	99.4	99.6	99.9	99.7	99.1
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.5
501	Motor vehicles and automotive parts and supplies	101.3	103.0	101.6	100.6	102.0	100.5	99.2	97.0	97.4	98.1	99.0	99.9
502	Furniture and home furnishings	99.1	99.3	99.7	99.5	100.8	101.9	100.5	100.6	101.2	100.2	99.5	97.3
503	Lumber and other construction materials	98.4	99.1	103.6	102.7	103.6	101.7	101.4	99.8	99.2	96.7	96.2	97.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.6	99.8	100.7	102.4	106.5	105.3	100.9	101.5	100.9	93.9	89.9
505	Metals and minerals, except petroleum	99.4	98.2	100.2	100.8	100.2	100.2	102.8	102.8	99.9	96.7	98.9	99.7
506	Electrical goods	96.7	96.8	99.0	99.6	101.2	102.6	101.4	100.7	101.3	101.2	100.5	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.4	103.2	102.6	101.6	100.6	98.4	98.7	97.1	96.1
508	Machinery, equipment, and supplies	99.0	101.0	101.6	100.1	101.0	102.1	100.3	99.0	99.4	99.0	98.7	98.7
509	Miscellaneous durable goods	97.0	97.6	96.0	97.5	96.4	100.8	102.4	102.6	102.9	103.8	102.4	100.5
51	Nondurable goods, total	104.1	103.2	103.3	99.4	96.7	95.1	94.7	95.3	97.4	102.1	104.6	103.4
	Total (excluding farm-product raw materials)	100.0	100.0	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.6	100.5
511	Paper and paper products	97.8	98.3	99.1	101.1	100.4	102.6	100.0	100.2	100.7	100.0	99.6	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.1	99.8	100.6	97.9	100.6	99.0	100.0	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.0	100.2	101.9	101.5	99.8	99.0	98.6	99.3
514	Groceries and related products	98.7	100.2	102.1	100.5	99.2	98.7	98.5	98.0	99.9	102.0	100.9	101.0
515	Farm-product raw materials[1]	118.8	115.2	112.2	100.3	88.9	84.6	78.8	79.4	83.8	103.8	117.4	115.3
516	Chemicals and allied products	98.0	100.0	101.9	101.6	102.4	100.9	101.6	100.2	100.4	96.9	97.0	98.7
517	Petroleum and petroleum products	104.4	99.3	99.2	94.2	96.0	94.3	96.3	100.7	102.9	104.8	104.2	103.4
518	Beer, wine, and distilled alcoholic beverages	96.3	95.8	97.4	99.1	102.3	102.9	99.9	97.9	100.3	107.0	105.7	95.3
519	Miscellaneous nondurable goods	103.6	104.6	105.0	102.1	97.2	93.2	95.1	96.0	97.4	99.7	101.9	104.0

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979—Continued

1972 SIC code	Kind of business	1979											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	95.9	91.8	104.7	100.0	105.3	101.5	98.4	104.2	95.8	104.5	100.4	96.2
	Total (excluding farm-product raw materials)	94.0	91.6	103.9	99.8	106.1	102.9	98.6	105.7	97.6	104.9	99.2	94.5
50	Durable goods, total	91.9	89.1	103.2	101.1	107.3	104.3	99.4	107.0	99.3	106.8	98.4	91.2
501	Motor vehicles and automotive parts and supplies	94.0	89.9	106.2	108.4	110.5	104.7	102.9	104.4	94.7	99.1	93.7	89.3
502	Furniture and home furnishings	87.1	89.8	101.8	98.4	102.6	104.0	91.2	105.5	101.7	115.1	106.5	94.2
503	Lumber and other construction materials	83.0	80.2	97.3	98.0	110.4	107.7	107.0	117.2	102.4	113.5	100.3	83.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	84.3	88.7	102.1	101.4	107.8	98.7	95.0	103.6	103.6	113.3	102.3	97.8
505	Metals and minerals, except petroleum	100.7	91.4	102.7	101.4	107.6	101.3	95.4	108.3	101.3	102.6	96.1	89.0
506	Electrical goods	92.0	89.1	99.9	99.3	98.8	103.9	100.6	104.5	98.2	110.6	102.9	100.1
507	Hardware, plumbing, heating equipment, and supplies	91.0	87.4	97.8	100.1	108.1	104.5	103.4	108.6	100.5	109.2	100.3	88.6
508	Machinery, equipment, and supplies	90.9	88.7	106.1	102.1	108.9	105.2	97.1	104.4	100.1	106.7	96.3	92.9
509	Miscellaneous durable goods	86.8	89.8	105.0	99.4	101.6	105.4	92.6	109.0	98.1	109.1	106.2	95.5
51	Nondurable goods, total	93.8	93.7	106.2	99.2	104.4	99.5	97.2	101.8	93.9	102.7	101.5	99.8
	Total (excluding farm-product raw materials)	96.8	94.0	104.0	99.0	104.1	101.2	98.0	104.7	94.9	103.2	100.7	98.0
511	Paper and paper products	100.0	92.7	103.2	94.8	103.3	102.4	97.4	107.1	99.3	108.7	97.7	92.2
512	Drugs, drug proprietaries, and druggists' sundries	99.7	92.6	104.0	98.9	100.6	96.9	96.6	103.9	97.6	110.1	101.8	96.1
513	Apparel, piece goods, and notions	93.9	94.4	103.7	92.4	101.8	97.8	95.7	115.5	102.9	112.3	102.1	85.9
514	Groceries and related products	97.5	91.0	103.1	98.3	106.3	103.0	100.0	105.0	96.2	104.0	99.5	95.1
515	Farm-product raw materials[1]	106.7	94.5	111.9	100.2	102.7	97.1	94.1	91.8	87.9	104.3	108.3	100.5
516	Chemicals and allied products	92.5	89.2	101.9	100.8	107.7	105.0	100.2	108.2	94.8	107.6	98.9	91.7
517	Petroleum and petroleum products	99.2	102.1	106.6	99.2	95.9	96.9	100.0	100.7	90.7	100.1	103.6	103.5
518	Beer, wine, and distilled alcoholic beverages	81.1	81.5	98.0	93.8	107.9	109.4	101.0	108.2	94.0	104.8	106.4	112.3
519	Miscellaneous nondurable goods	97.5	100.5	114.0	106.1	108.2	101.4	90.4	96.3	92.4	98.3	96.6	96.6
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.7	101.2	101.7	100.8	99.5	99.3	98.6	98.1	98.7	100.1	100.8	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.1	100.4	100.6	100.7	100.2	99.4	99.6	99.9	99.6	99.0
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.4
501	Motor vehicles and automotive parts and supplies	101.3	103.1	101.6	100.6	102.0	100.5	99.3	97.0	97.4	98.2	99.0	99.8
502	Furniture and home furnishings	99.2	99.3	99.7	99.5	100.9	102.0	100.4	100.6	101.2	100.2	99.5	97.2
503	Lumber and other construction materials	98.5	99.1	103.7	102.7	103.4	101.5	101.3	99.8	99.2	96.8	96.2	97.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.7	99.8	100.7	102.3	106.4	105.3	100.9	101.6	100.9	93.8	90.0
505	Metals and minerals, except petroleum	99.3	98.3	100.2	100.8	100.2	100.2	102.8	102.9	100.0	96.6	98.8	99.6
506	Electrical goods	96.7	96.7	99.0	99.7	101.3	102.7	101.4	100.7	101.4	101.1	100.4	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.6	103.3	102.6	101.6	100.6	98.4	98.7	97.0	96.0
508	Machinery, equipment, and supplies	99.0	101.0	101.5	100.1	101.0	102.1	100.3	99.1	99.4	98.9	98.6	98.7
509	Miscellaneous durable goods	97.1	97.5	96.0	97.4	96.4	100.9	102.4	102.6	103.0	103.8	102.4	100.5
51	Nondurable goods, total	103.9	103.2	103.4	99.5	96.9	95.3	94.7	95.3	97.4	102.0	104.5	103.4
	Total (excluding farm-product raw materials)	100.0	99.9	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.5	100.5
511	Paper and paper products	97.7	98.3	99.1	101.1	100.5	102.7	99.9	100.1	100.7	100.0	99.5	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.0	99.8	100.5	97.8	100.6	99.0	100.1	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.1	100.2	101.8	101.6	99.8	99.1	98.5	99.2
514	Groceries and related products	98.7	100.2	102.1	100.5	99.3	98.7	98.5	98.0	99.9	102.0	100.8	101.0
515	Farm-product raw materials[1]	118.5	115.2	112.3	100.8	89.6	85.4	78.5	79.2	83.5	103.3	117.1	115.1
516	Chemicals and allied products	98.0	100.0	102.0	101.6	102.4	101.0	101.6	100.2	100.5	96.9	96.8	98.6
517	Petroleum and petroleum products	104.4	99.4	99.4	94.2	95.9	94.2	96.2	100.9	102.9	104.7	104.2	103.2
518	Beer, wine, and distilled alcoholic beverages	96.3	95.7	97.4	99.1	102.3	102.8	99.9	97.9	100.3	106.9	105.7	95.3
519	Miscellaneous nondurable goods	103.7	104.6	105.1	102.1	97.2	93.1	95.1	95.9	97.3	99.7	101.8	104.0

Note: The adjustment factors shown above for sales are a combination of the seasonal and trading-day factors. These are separately available, however, upon request. Adjustment factors are included in this table for some kinds of business for which adjusted data are not published separately.

Adjusted sales and inventory data shown in table 4 are obtained by dividing the unadjusted data shown in tables 1 and 2 by the adjustment factors shown above for the corresponding kinds of business. Adjusted data for the summary trade totals are obtained by summarizing the adjusted data for the individual kinds of business. Seasonal factors shown for the summary trade totals provide an approximation to these totals but may show small differences from the published data. The seasonally adjusted data for 1978 may vary slightly from the method shown above because of insignificant rounding differences.

[1]There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table B-2. Average Month-to-Month Percent Changes and Related Summary Measures for Sales and Inventories of Merchant Wholesalers

1972 SIC code	Kind of business	$\bar{O}$	$\bar{S}$	$\bar{CI}$	$\bar{I}$	$\bar{C}$	$\bar{I}/\bar{C}$	MCD	Average duration of run			
									CI	I	C	MCD
		Sales										
	Merchant wholesalers, total	4.74	3.10	1.31	.82	.96	.86	1	3.10	1.57	14.11	3.10
50	Durable goods, total	5.30	4.84	1.43	.89	1.08	.82	1	3.53	1.63	15.87	3.53
501	Motor vehicles and automotive parts and supplies	5.53	4.22	2.67	2.33	1.24	1.87	3	2.05	1.59	25.40	5.43
502	Furniture and home furnishings	6.00	7.29	2.06	1.68	1.07	1.57	2	2.27	1.55	9.07	3.00
503	Lumber and other construction materials	7.40	6.25	2.67	1.72	1.76	.98	1	2.76	1.51	14.11	2.76
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	9.79	9.32	4.02	3.74	1.20	3.12	4	1.81	1.67	7.06	3.44
505	Metals and minerals, except petroleum	6.79	3.78	3.10	2.38	1.63	1.46	2	2.19	1.41	9.07	3.71
506	Electrical goods	5.79	5.17	1.89	1.52	1.04	1.47	2	2.08	1.46	10.58	3.32
507	Hardware, plumbing, heating equipment, and supplies	5.42	4.86	1.78	1.33	1.09	1.22	2	1.98	1.41	12.70	3.94
508	Machinery, equipment, and supplies	6.10	5.41	1.87	1.51	.97	1.56	2	1.92	1.46	7.94	3.32
509	Miscellaneous durable goods	7.66	6.11	3.51	2.79	1.79	1.56	2	1.87	1.48	9.77	2.93
51	Nondurable goods, total	5.07	2.80	1.58	1.10	.95	1.16	2	2.59	1.43	9.07	3.60
511	Paper and paper products	5.41	3.16	1.99	1.44	1.10	1.30	2	1.98	1.48	7.94	3.60
512	Drugs, drug proprietaries, and druggists' sundries	5.97	3.89	1.90	1.64	.76	2.15	3	1.95	1.57	9.77	4.31
513	Apparel, piece goods, and notions	7.73	6.91	2.70	2.36	1.01	2.34	3	1.72	1.38	10.58	4.17
514	Groceries and related products	4.44	2.01	1.67	1.41	.82	1.72	2	1.92	1.51	12.70	3.15
515	Farm-product raw materials	9.27	5.04	4.87	4.29	1.59	2.70	4	1.90	1.53	6.68	3.54
516	Chemicals and allied products	6.21	4.53	2.47	1.93	1.46	1.32	2	2.19	1.49	8.47	3.32
517	Petroleum and petroleum products	7.38	4.71	4.81	4.47	1.35	3.30	4	1.67	1.55	9.07	2.70
518	Beer, wine, and distilled alcoholic beverages	10.94	8.71	1.86	1.64	.69	2.39	3	1.76	1.59	21.17	3.68
519	Miscellaneous nondurable goods	5.89	4.84	2.53	2.23	.96	2.32	3	1.92	1.63	8.47	3.47
		Inventories										
	Merchant wholesalers, total	1.10	.72	.94	.39	.83	.47	1	4.88	1.79	18.14	4.88
50	Durable goods, total	1.07	.57	.89	.35	.86	.41	1	7.94	1.46	31.75	7.94
501	Motor vehicles and automotive parts and supplies	2.20	1.22	1.69	1.13	1.21	.93	1	2.54	1.63	12.70	2.54
502	Furniture and home furnishings	2.13	1.28	1.60	1.19	1.00	1.19	2	2.40	1.57	21.17	5.25
503	Lumber and other construction materials	2.60	1.77	1.83	1.28	1.09	1.17	2	2.54	1.67	15.87	4.20
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	3.60	2.92	2.17	1.80	1.20	1.50	2	2.27	1.48	25.40	3.60
505	Metals and minerals, except petroleum	3.14	2.53	1.79	1.01	1.33	.76	1	3.26	1.72	8.47	3.26
506	Electrical goods	1.75	1.08	1.32	.90	.92	.98	1	2.49	1.31	42.33	2.49
507	Hardware, plumbing, heating equipment, and supplies	1.69	1.10	1.23	.87	.89	.98	1	2.70	1.53	18.14	2.70
508	Machinery, equipment, and supplies	1.36	.92	1.03	.66	.82	.82	1	2.65	1.65	31.75	2.65
509	Miscellaneous durable goods	2.29	1.47	1.85	1.28	1.18	1.08	2	1.95	1.53	25.40	4.34
51	Nondurable goods, total	2.49	2.19	1.44	.83	1.07	.78	1	3.74	1.74	7.06	3.74
511	Paper and paper products	1.82	.94	1.38	1.04	.75	.94	2	2.12	1.44	9.07	4.20
512	Drugs, drug proprietaries, and druggists' sundries	2.39	1.46	1.60	1 37	.67	2.04	3	1.81	1.51	31.75	3.38
513	Apparel, piece goods, and notions	2.28	1.43	1.86	1.43	1.05	1.35	2	2.40	1.74	9.07	3.15
514	Groceries and related products	1.87	1.29	1.43	.92	1.01	.91	1	2.54	1.38	11.55	2.54
515	Farm-product raw materials	8.88	8.22	4.86	3.99	2.03	1.96	3	2.49	1.90	8.47	3.91
516	Chemicals and allied products	3.14	1.58	1.36	1.89	1.39	1.36	2	2.35	1.49	12.70	3.71
517	Petroleum and petroleum products	6.09	3.19	5.01	4.34	2.00	2.17	3	1.87	1.59	15.87	3.68
518	Beer, wine, and distilled alcoholic beverages	4.28	3.68	1.76	1.46	.74	1.98	3	2.35	1.63	9.77	4.03
519	Miscellaneous nondurable goods	2.53	1.52	1.88	1.48	.84	1.75	2	2.19	1.59	7.06	3.15

Description of Measures Shown Above

The following are brief descriptions of the measures shown in this table. More complete explanations appear in "Electronic Computers and Business Indicators," Occasional Paper 57, National Bureau of Economic Research, Inc., New York, 1957.

$\bar{O}$ is the average month-to-month percentage change, without regard to sign, in the original series before seasonal or trading-day adjustment.

$\bar{S}$ is the average month-to-month percentage change, without regard to sign, in the seasonal component. It is a measure of the average monthly seasonal change in the unadjusted series.

$\bar{CI}$ is the average month-to-month percentage change, without regard to sign, in the seasonally adjusted series.

$\bar{I}$ is the average month-to-month percentage change without regard to sign, for the irregular component. The irregular component is obtained by dividing the seasonally adjusted series by the cyclical component.

$\bar{C}$ is the average month-to-month percentage change, without regard to sign, for the cyclical component, which is a smooth, flexible moving average.

$\bar{I}/\bar{C}$ is a measure of the relative smoothness (small values) or irregularity (large values) of the seasonally adjusted series.

MCD (months for cyclical dominance) gives an estimate of the appropriate time span over which to observe cyclical movements in a monthly series. In deriving MCD, the average (without regard to sign) percentage changes in the irregular and cyclical components are computed for 1-month spans (Jan.-Feb., Feb.-Mar., etc.) 2-months spans (Jan.-Mar., Feb.-Apr., etc.), and so on. MCD is the shortest span for which the average change (without regard to sign) in the cyclical component is larger than the average change (without regard to sign) in the irregular component; that is, it indicates the point at which fluctuations begin to be more attributable to cyclical than to irregular movements. MCD is small for smooth series and large for erratic series.

Average duration of run (ADR) is a measure of smoothness, and is equal to the average number of consecutive monthly changes in the same direction in any series of observations. When there is no change between 2 months, a change in the same direction as the preceding change is assumed. The ADR is shown for the seasonally adjusted series CI, irregular component I, cyclical component C, and the MCD moving average. The MCD moving average is an unweighted moving average (with the number of terms equal to MCD) of the seasonally adjusted series.

A comparison of these measures with the expected ADR of a random series gives an indication of whether the changes approximate those of a random series. (The expected value of ADR for a random series is 1.5 and it falls between 1.36 and 1.75 about 95 percent of the time. For a moving average of a random series the expected value is 2.0). For example, the ADR of CI is 2.08 for electrical goods sales. This indicates that 1-month changes in the seasonally adjusted series, on the average, reverse sign slightly less often than a random series. In the next two columns, 1.46 for I and 10.58 for C indicate the separation of the seasonally adjusted series into an essentially random component and the cyclical (nonrandom) component. Finally, 3.32 for MCD indicates that a 2-month moving average of the seasonally adjusted series (2 months being the MCD span) reverses direction on the average about every 3 months. The increase in the average duration of run from 2.08 for CI to 3.32 for the MCD moving average indicates that for this series the use of MCD spans reduces the effect of the irregular component upon the seasonally adjusted series.

These averages are based on a seasonally adjusted series which is adjusted historically; that is, the months used to compute the measures were the same months used to estimate the seasonal factors. Current data, however, are adjusted by use of factors projected 1 year ahead, and are thus subject to additional error. Therefore, current data are probably somewhat more irregular and subject to larger MCD than shown above.

APPENDIX C. Explanatory Material

I. SCOPE OF THE SURVEY

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the Standard Industrial Classification (SIC) Manual[1] and as covered in the 1972 census, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm or professional business users; or to other wholesalers; or acting as agents or brokers in buying merchandise for or selling merchandise to such persons or companies.

The principal types of establishments included are: (1) merchant wholesalers who take title to the goods they sell, such as wholesale merchants or jobbers, industrial distributors, voluntary group wholesalers, exporters, importers, cash-and-carry wholesalers, drop shippers, major distributors, retailer cooperative warehouses, terminal elevators, and cooperative buying associations; (2) sales branches and sales offices (but not retail stores) maintained by domestic manufacturing or mining enterprises apart from their plants or mines for the purpose of marketing their products; (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), which constitute the major portion of the broad field of wholesale trade, and excludes the other types of wholesale trade. All kinds of business in which merchant wholesalers operate are represented in this survey.

Kind-of-business classifications are not interchangeable with commodity classifications. Most businesses sell several kinds of commodities. The kind-of-business code assigned generally reflects either the individual commodity or the commodity group which is the primary source of the establishments receipts, or some mixture of commodities which characterizes the establishment's business. Thus, the classification of establishments by kind of business generally does not make it possible to determine either the number of establishments handling a particular commodity or the sales of that commodity. For example, the "grocery" classification excludes establishments selling groceries if the sale of groceries is not the primary source of receipts; moreover, even though establishments are classified as "grocery wholesalers" some of their sales may be derived from the sale of nonfood products.

A description of each kind of business included in the accompanying statistical data is shown in appendix D.

II. SAMPLE DESIGN AND ESTIMATION PROCEDURES

Framework of old series—The first publication in this series based on probability sampling, was the January 1954 report. Effective with the July 1956 publication an entirely new sample was selected from the 1954 Census of Business. Other changes in the sample have been made since 1956, representing, for the most part, revisions to reflect the findings of successive censuses of wholesale trade.

Selection of sample for new series—The new sample[2] like the old is a probability sample, and the estimating procedures used are similar in many respects to the old sample.

The new sample originally was drawn from the Standard Statistical Establishment List (SSEL) as updated to December 31, 1974. The initial SSEL consisted of two lists. One list was composed of all Employer Identification (EI) numbers issued by the Internal Revenue Service (IRS) with reported payroll in at least one quarter of 1973 or 1974, with payroll in the 1972 census, or with sales/receipts greater than $100,000 in the 1972 census. The second list consisted of all establishments of known multiestablishment companies as of December 31, 1974. These lists contained information on sales/receipts, payroll, employment, name and address, kind-of-business classification, etc.

Before the 1974 SSEL was available, a study was made, using files from the 1972 Census of Wholesale Trade. This study determined the stratification of the sampling units based on 1972 sales, inventories, and kind of business, and also determined the optimal allocation of the sample necessary to meet specified variance objectives for sales and inventory estimates for different kind-of-business groups. The primary stratum boundary determined in the study was the certainty cutoff to be used for each kind of business. The cutoff was particularly important since it also determined the type of sampling unit.

The sampling units for the new sample consisted of both companies and EI's. To be eligible for the initial sampling, an EI had to be active, i.e., had payroll in 1974 and was on the Internal Revenue Service mailing list for Federal Insurance Contribution Act (FICA) taxpayers. If a known multiestablishment company had total merchant wholesale sales (on a 1972 basis) above the cutoff for its major kind of business, the company was selected for the sample with certainty. Single establishment companies, whether or not selected with certainty, were considered as EI sampling units.

All merchant wholesale companies below the certainty cutoff were treated on an EI basis; that is, the EI was the sampling unit. The EI's were then stratified according to their major kind of business and their estimated sales (on a 1972

[1] Executive Office of the President, Office of Management and Budget, **Standard Industrial Classification Manual**, 1972.

[2] For a complete exposition of the new sample, see C. T. Isaki et al., "Sample Redesign Aspects of the Census Bureau's Monthly Business Surveys" and K. M. Wolter et al., "Sample Selection and Estimation Aspects of the Census Bureau's Monthly Business Surveys," **Proceedings of the Business and Economic Statistics Section: American Statistical Association**, 1976.

basis). Within each stratum, a simple random sample of EI's was selected. The sampling rates for these EI's varied between 1 in 3 and 1 in 600.

For those EI's in the inital sample that did not have kind-of-business classifications and for all EI "births" after the initial selection, a two-phase selection procedure was used. EI "births," as used here, are new EI's recently assigned by SSA and currently on the IRS mailing list for FICA taxpayers. In the first phase, "births" were stratified by kind of business and size (expected employment or quarterly payroll). A relatively large sample was drawn and canvassed in order to obtain a more reliable measure of size (sales in two recent months) and a more detailed kind-of-business code, if needed.

Using this more reliable information, the cases were re-stratified and the final sample drawn with overall probabilities equivalent to those used in drawing the initial sample from the 1974 SSEL. Because of the lag in reporting "births" to the IRS and Social Security Administration (SSA) and the time needed to accomplish the two-phase birth-selection procedure, "births" are actually added to the sample about eight or nine months after they begin operation. The ongoing birth-selection procedure is carried out quarterly.

Since "births" are not represented in the sample, until they go through the selection procedure described above, an interium procedure is required to account for "births" during the period between the onset of activity and the time of birth selection. This consists of imputing for all cases which go out of business, but which are still on the IRS mailing list. This imputation procedure was also used in the old series. However, because of recent delays in obtaining "births," this procedure now accounts for a larger percentage of the estimates.

To be eligible for the sample canvass and tabulation in a given month, a merchant wholesale business must meet both of the following requirements:

1. It must be on the IRS mailing list for FICA taxpayers from the previous quarter.

2. It must have been selected from either the SSEL or the file of employer "births." For this purpose, a universe file of all businesses ever given a chance of selection is maintained. This file shows, among other things, which EI numbers actually have been selected.

In the case of businesses that were selected into the sample with certainty, the first requirement is changed. These certainty sampling units are not dropped from canvass and tabulation if they are no longer on the IRS mailing list. If there are successor businesses, they are added to the survey. This is a tighter form of control used for these larger businesses.

Use of the rotating sample and composite estimating procedures–Rotating samples or panels are used except for very large businesses which are selected with certainty. For sampling units in the rotating panels, two months of data are obtained at each enumeration. For example, February rotating panel cases report data for February (the current month) and January (the previous month). In the following month, a different rotating panel (the March panel) reports figures for March and February. Three sample panels are used. This permits the use of a composite estimating procedure which provides estimates more reliable than those which would be obtained from a completely fixed sample of about twice the size. In addition, this procedure reduces the reporting burden of selected businesses.

The first estimate issued each month, based on the full sample, is called the preliminary estimate. The preliminary composite estimate for the current month is a weighted average of two estimates: (1) the current month unbiased estimate (weight .35), and (2) a ratio estimate (weight .65) obtained by multiplying the preliminary composite estimate for the previous month by the current-to-previous-month ratio obtained from the current month reports. Preliminary inventory estimates have been modified, prior to publication, based on past relationships between preliminary and final estimates.

A final estimate is developed one month later using information available from the following month's enumeration. The final composite estimate is also a weighted average of two estimates: (1) the preliminary composite estimate for a given month (weight .7), and (2) the unbiased estimate (weight .3) for the same month as obtained from the next month's reporting panel.

The preliminary composite estimates provide a measure of the dollar volume level that is considerably more reliable than the unbiased estimates, and the final composite estimates are generally more reliable than the preliminary composite estimates. The indication of the month-to-month trend considered to be most reliable is the ratio of the current month's preliminary composite estimate divided by the previous month's final composite estimate. This is true because the numerator and denominator of this ratio are more highly correlated than would be the case if the numerator and denominator were two preliminary estimates or two final estimates. The trend of the preliminary/final ratio, therefore, has less variability than one based on two preliminary figures or two final figures.

Another advantage of the use of the rotating panel system is that the frequency of canvass of very large noncertainty cases can be increased with a consequent reduction, in an unbiased manner, of their statistical weight. This increases the reliability of the estimates, particularly the measure of month-to-month change.

III. PREVIOUSLY PUBLISHED DATA

Data developed from the new sample are not comparable with data previously published in this series. Sales and inventory estimates prior to September 1977 have been revised to reflect: (1) a new sample design; (2) benchmarking of sales to the results of the 1967 and 1972 censuses of wholesale trade; (3) conversion of classifications based on the 1967 SIC manual to classifications based on the 1972 SIC manual (4) addition

of farm assemblers and bulk petroleum establishments; and (5) revision and updating of seasonal adjustment factors.

The revised historical sales series were derived in a manner designed to minimize the changes to the month-to-month trends in the old series. The inventory series were revised by applying the stock-sales ratios from the old series to the revised sales series to obtain the preliminary revised inventory series. These preliminary series were then revised slightly so that August 1977 estimates would equal the new sample estimates.

Although the month-to-month movements in the old and new series show very little change, the level of the revised series show substantial change from the old series for some kinds of business. The change in levels depends on the difference between the old series for census years and the benchmark levels and on the difference between the new series level and the old series level for the link month, August 1977.

Additional details concerning the sample design, and revised estimates of merchant wholesale sales and inventories from January 1967 through August 1977, have been provided in a special supplementary publication **Monthly Wholesale, Sales and Inventories: January 1967-August 1977, Revised BW-13-77S.** This report may be obtained from Subscriber Services (Publications), Bureau of the Census, Washington, D.C. 20233 at $.90 per copy.

IV. UNPUBLISHED DATA

Additional data, such as dollar volume estimates for some kinds of business not separately shown in this report, are produced as a byproduct of the regularly published statistics. These additional data have not been included in this publication because the sampling variability associated with these data does not meet the Census Bureau's publication criteria. The Census Bureau, on written request will release these data for individual use, though not for publication.

V. DEFINITION OF TERMS

Sales—Sales include the following: merchandise sold for cash or credit at wholesale and retail by establishments primarily engaged in merchant wholesale trade; receipts from customers for rental or leasing of equipment, instruments, tools, etc.; receipts for delivery, installation, alteration, maintenance, repair, storage, and other services; and gasoline, liquor, tobacco and other excise taxes which are paid by the manufacturer and passed along to the wholesaler. Sales are net after deductions for refunds and allowances for merchandise returned by customers. Sales which are made on an agency basis for others are included as gross sales. Direct shipments on orders from wholesalers are also included in sales. Total sales do not include nonoperating income from such sources as investments, rental or sale of real estate, etc.

In the new series, sales exclude sales and excise taxes collected directly from customers and paid directly to a local, State, or Federal tax agency. Also excluded are receipts from customers for carrying or other credit charges. In the old series respondents were requested to include these taxes and credit charges in the reported sales. The impact of this change is considered minimal.

Inventories—Inventories represent stocks, at cost, of merchandise on hand for sale at the end of the month regardless of location, except for goods outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included.

Stock-sales ratios—The stock-sales ratios are percentages derived by dividing the dollar value of inventories, at cost, by the dollar value of sales. No adjustment is made in these ratios for the markup in sales which may vary from trade to trade.

The sales and inventory figures represent total sales and inventories of all establishments primarily engaged in merchant wholesale trade. Also included are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments.

APPENDIX D. Kind-of-Business Classifications

DURABLE GOODS
(SIC Major Group 50)

This major group includes establishments primarily engaged in the wholesale distribution of durable goods.

MOTOR VEHICLES AND AUTOMOTIVE PARTS AND SUPPLIES (SIC 501)

Automobiles and Other Motor Vehicles (SIC 5012)[1]—Establishments primarily engaged in the wholesale distribution of new and used passenger automobiles, trucks, and other motor vehicles. Automotive distributors primarily engaged in selling at retail to individual consumers for personal use, and also selling a limited amount of new and used passenger automobiles and trucks at wholesale to dealers, are classified in retail trade, industry 5511.

Automotive Parts and Supplies (SIC 5013)—Establishments primarily engaged in the wholesale distribution of automotive parts, supplies, accessories, tools and equipment.

Tires and Tubes (SIC 5014)[1]—Establishments primarily engaged in the wholesale distribution of rubber tires and tubes for passenger and commercial vehicles.

FURNITURE AND HOME FURNISHINGS (SIC 502)

Furniture (SIC 5021)—Establishments primarily engaged in the wholesale distribution of furniture, including bedsprings, mattresses, and other household furniture; office furniture; and furniture for public parks, buildings, etc.

SIC 5021 is subdivided into—

1. Household and lawn furniture.
2. Office and business furniture.

Home Furnishings (SIC 5023)—Establishments primarily engaged in the wholesale distribution of home furnishings and homewares, including antiques; china; glassware and earthenware; lamps; curtains and draperies; linens and towels; carpets, linoleum, and all other types of hard and soft surface floor coverings. Establishments primarily engaged in the wholesale distribution of electrical household goods are classified in industry 5064.

LUMBER AND OTHER CONSTRUCTION MATERIALS (SIC 503)

Lumber, Plywood, and Millwork (SIC 5031)—Establishments, with or without yards, primarily engaged in the wholesale distribution of rough, dressed, and finished lumber (but not timber); plywood; door and window frames (wood or metal); and other wood and metal millwork. Establishments selling lumber, plywood and millwork to the general public and known as "retail" in the trade are classified in industry 521.

Construction Materials, Not Elsewhere Classified (SIC 5039)—Establishments primarily engaged in the wholesale distribution of such building materials as brick, building stone, cement, granite, gravel, lime, marble, plaster, building glass, roofing materials, sand, and tile. Establishments selling construction materials to the general public and known as "retail" in the trade are classified in industry 521. Establishments primarily engaged in marketing heavy structural metal products are classified in industry 5051. Establishments primarily selling readymade concrete are classified in manufacturing.

SPORTING, RECREATIONAL, PHOTOGRAPHIC, AND HOBBY GOODS, TOYS, AND SUPPLIES (SIC 504)[1]

Establishments primarily engaged in the wholesale distribution of all types of amusement and sporting goods and accessories—billiard and pool supplies; cameras and photographic equipment; coin-operated game machines; games, toys; ammunition and fireworks; etc.

METALS AND MINERALS, EXCEPT PETROLEUM (SIC 505)

Ferrous Metals Service Centers and Offices (SIC 5051 pt.)—Establishments primarily engaged in marketing ferrous metal semifinished products such as nails, pig iron, steel and tin bars. Establishments in this industry may operate with warehouses (ferrous metals service centers) or without warehouses (ferrous metals sales offices).

Sales branches of domestic manufacturers are included in this category if the establishment is separate from the manufacturing plant and has warehouse space greater than 5,000 square feet.

[1] Data for this kind of business are not shown separately but are included in the group total.

Nonferrous Metals Service Centers and Offices and Other Minerals and Ores (SIC 5051 pt. and SIC 5052 pt.)[1]—Establishments primarily engaged in marketing nonferrous metal semifinished products such as aluminum bars and copper rods. Establishments in this industry may operate with warehouses (nonferrous metals service centers) or without warehouses (nonferrous metals sales offices). Also included are establishments primarily engaged in the wholesale distribution of copper, iron, lead, and other metallic ores except precious; and crude nonmetallic minerals (including concentrates) except crude petroleum. Establishments primarily engaged in the wholesale distribution of nonmetallic minerals used in construction, such as sand and gravel, are included in industry 5039.

Coal (SIC 5052 pt.)[1]—Establishments primarily engaged in the wholesale distribution of coal and coke. Included are establishments which have products shipped direct from mine to customer, and establishments operating yards and dock space and making deliveries therefrom at wholesale as well as other coal merchants.

ELECTRICAL GOODS (SIC 506)

Electrical Apparatus and Equipment, Wiring Supplies, and Construction Materials (SIC 5063)—Establishments primarily engaged in the wholesale distribution of electrical power equipment for the generation, transmission, or utilization of electric energy; and electrical construction materials for outside power transmission lines and for electrical systems. Construction contractors primarily engaged in installing electrical systems and equipment from their own stock are classified in industry 1731.

Electrical Appliances, TV and Radio Sets (SIC 5064)—Establishments primarily engaged in the wholesale distribution of radio and television sets and household electrical appliances.

Electronic Parts and Equipment (SIC 5065)[1]—Establishments primarily engaged in the wholesale distribution of electronic parts and equipment, such as industrial and radio and television receiving and transmitting electronic tubes; electronic intercommunication equipment; radio parts and accessories; and electronic sound equipment. Establishments primarily engaged in the wholesale distribution of radio and television receiving sets and phonographs are classified in industry 5064.

HARDWARE, PLUMBING, HEATING EQUIPMENT, AND SUPPLIES (SIC 507)

Hardware (SIC 5072)—Establishments primarily engaged in the wholesale distribution of hardware, such as builders; shelf or light hardware; handtools (except automotive and machinists' precision); handsaws and cutlery; brads, staples, and tacks; and bolts, nuts, rivets, and screws. Establishments primarily engaged in the wholesale distribution of nails, noninsulated wire, and screening are classified in industry 5051.

Plumbing and Heating Equipment and Supplies (Hydronics) (SIC 5074)—Establishments primarily engaged in the wholesale distribution of hydronic plumbing and heating equipment and supplies. Construction contractors primarily engaged in installing plumbing and heating equipment from their own stock are classified in industry 1711.

Warm Air Heating and Air-Conditioning Equipment and Supplies (SIC 5075)[1]—Establishments primarily engaged in the distribution of warm air heating and air-conditioning equipment and supplies. Construction contractors primarily engaged in installing warm air heating and air-conditioning equipment are classified in industry 1711.

Refrigeration Equipment and Supplies (SIC 5078)[1]—Establishments primarily engaged in the distribution of refrigeration equipment and supplies. Construction contractors primarily engaged in installing refrigeration equipment from their own stock are classified in industry 1711.

MACHINERY, EQUIPMENT, AND SUPPLIES (SIC 508)

Commercial Machines and Equipment (SIC 5081)[1]—Establishments primarily engaged in wholesaling commercial machines and equipment, such as office, store, and business machines and equipment; commercial food service equipment; and fountain and store fixtures.

Construction and Mining Machinery and Equipment (SIC 5082)—Establishments primarily engaged in marketing cranes, excavating machinery and equipment, power shovels, road construction and maintenance machinery, tractor-mounting equipment and other specialized machinery and equipment used in the construction, mining, and logging industries. Establishments engaged in marketing oil well machinery and equipment are classified in industry 5084.

Farm and Garden Machinery and Equipment (SIC 5083)[1]—Establishments primarily engaged in marketing agricultural machinery and equipment for use in the preparation and maintenance of the soil, the planting and harvesting of crops, and other operations and processes pertaining to work on the farm or the lawn or garden; and dairy and other livestock equipment.

Industrial Machinery and Equipment (SIC 5084)[1]—Establishments primarily engaged in marketing industrial machinery and equipment, such as metal working tools, food industries machinery, oil well and oil refining machinery, industrial

[1] Data for this kind of business are not shown separately but are included in the group total.

trucks and tractors (except over-the-road types), printing machinery, and machinery and equipment for other manufacturing industries.

Industrial Supplies (SIC 5085)[1]—Establishments primarily engaged in marketing industrial supplies, such as abrasives and materials, rope and cordage, and mechanical rubber goods; welding supplies; mechanical power transmission supplies, including bearings; industrial valves and fittings; metal containers; industrial leather; and reconditioned barrels and drums.

Professional Equipment and Supplies (SIC 5086)—Establishments primarily engaged in the wholesale distribution of mechanical devices and other equipment used by architects, dentists, engineers, physicians, surgeons, veterinarians, optometrists, osteopaths, and other professional groups.

Surgical, Medical, Hospital Supplies (SIC 5086 pt.)[1]—Establishments primarily engaged in selling surgical and medical instruments; doctors' apparatus and equipment; orthopedic appliances; artifical limbs; operating room and other hospital equipment, X-ray machines and accessories and other scientific instruments used by physicians and in hospitals.

Service Establishment Equipment and Supplies (SIC 5087)[1]—Establishments primarily engaged in the wholesale distribution of equipment and supplies for barber shops, beauty parlors power laundries, dry-cleaning plants, upholsterers, undertakers, and related personal service establishments.

Transportation Equipment and Supplies, Except Motor Vehicles (SIC 5088)[1]—Establishments primarily engaged in the wholesale distribution of transportation equipment and supplies. Establishments primarily engaged in the wholesale distribution of motor vehicles and motor vehicle parts are classified in group 501.

MISCELLANEOUS DURABLE GOODS (SIC 509)[1]

Scrap and Waste Materials (SIC 5093)—Establishments primarily engaged in assembling, breaking up, sorting and wholesale distribution of scrap and waste materials. This industry includes auto wreckers engaged in dismantling automobiles for scrap. However, those engaged in dismantling cars for the purpose of selling secondhand parts at retail are classified in industry 5931.

SIC 5093 is subdivided into—

1. *Iron and Steel scrap.*
2. *Waste and secondary materials dealers.*

[1] Data for this kind of business are not shown separately but are included in the group total.

Jewelry, Watches, Diamonds, and Other Precious Stones (SIC 5094)[1]—Establishments primarily engaged in the wholesale distribution of jewelry, precious stones and metals, costume jewelry, watches, clocks, silverware, and jewelers' findings.

Durable Goods, Not Elsewhere Classified (SIC 5099)[1]—Establishments primarily engaged in the wholesale distribution of durable goods, not elsewhere classified, such as musical instruments and forest products, except lumber.

NONDURABLE GOODS (SIC Major Group 51)

This major group includes establishments primarily engaged in the wholesale distribution of nondurable goods.

PAPER AND PAPER PRODUCTS (SIC 511)

Printing and Writing Paper (SIC 5111)[1]—Establishments primarily engaged in the wholesale distribution of writing paper, including envelope paper, fine paper, and ground wood, printing, and rotogravure paper.

Stationery Supplies (SIC 5112)[1]—Establishments primarily engaged in the wholesale distribution of stationery and office supplies, including envelopes, typewriter and mimeograph paper, file cards and folders, pens, social stationery, and greeting cards.

Industrial and Personal Service Paper (SIC 5113)[1]—Establishments primarily engaged in the wholesale distribution of wrapping and other coarse paper, paperboard, cellophane, and converted paper products, such as bags, boxes, dishes, napkins, and shipping supplies.

DRUGS, DRUG PROPRIETARIES, AND DRUGGISTS' SUNDRIES (SIC 512)

Drugs, Drug Proprietaries, and Druggists' Sundries (SIC 5122)—Establishments primarily engaged in the wholesale distribution of drugs, drug proprietaries, druggists' sundries, and toiletries. Establishments primarily engaged in the wholesale distribution of surgical, dental, and hospital equipment are classified in industry 5086.

SIC 5122 is subdivided into—

1. *General-line drugs*—These are distinguished from specialty-line drug and toiletries wholesalers on the basis of their commodity-line mix. Drug wholesalers were classified as general line if they reported a substantial portion of the sales in "pharmaceuticals, antibiotics, druggists' chemicals, biologicals, botanicals" and "proprietary products, toilet-

ries, druggists' sundries," and if annual sales volume was $1 million or more.

Specialty-line pharmaceuticals, cosmetics, and toiletries.

APPAREL, PIECE GOODS, AND NOTIONS (SIC 513)

Piece Goods (SIC 5133)[1]—Establishments primarily engaged in the wholesale distribution of woven piece goods or yard goods of natural or manmade fibers. "Converters" who buy goods in the grey, have them finished on contract, and sell at wholesale are included here. This industry does not include establishments primarily engaged in the wholesale distribution of home furnishings, which are classified in industry 5023.

Notions and Other Dry Goods (SIC 5134)[1]—Establishments primarily engaged in the wholesale distribution of notions (sewing and hair accessories, etc.), knit goods, and other dry goods, except piece goods.

Men's and Boys' Clothing and Furnishings (SIC 5136)[1]—Establishments primarily engaged in the wholesale distribution of men's and boys' apparel and furnishings, sportswear, hosiery, underwear, nightwear, and work clothing.

Women's Children's, and Infants' Clothing and Accessories (SIC 5137)[1]—Establishments primarily engaged in the wholesale distribution of women's, children's, and infants' clothing and accessories, including hosiery, lingerie, millinery and millinery supplies, and furs.

Footwear (SIC 5139)[1]—Establishments primarily engaged in the wholesale distribution of footwear of leather, rubber, and other materials.

GROCERIES AND RELATED PRODUCTS (SIC 514)

Groceries, General-Line (SIC 5141)—Establishments primarily engaged in the wholesale distribution of a general line of groceries. Establishments primarily engaged in roasting coffee and establishments primarily engaged in blending tea or grinding and packaging spices are classified in major group 20.

SIC 5141 is subdivided into—

1. *Voluntary group wholesalers.*
2. *Retailer cooperative wholesalers.*
3. *Other general-line wholesalers.*

Frozen Foods (SIC 5142)[1]—Establishments primarily engaged in the wholesale distribution of packaged quick-frozen vegetables, juices, meats, fish, poultry, pastries, and other "deep freeze" products. Establishments primarily engaged in the wholesale distribution of frozen dairy products are classified in industry 5143. Frozen poultry, fish, and meat which are not packaged are classified in industries 5144, 5146, and 5147, respectively.

Dairy Products (SIC 5143)[1]—Establishments primarily engaged in the wholesale distribution of dairy products, such as butter, cheese, ice cream and ices, and fluid milk and cream. This industry does not include establishments primarily engaged in pasteurizing and bottling milk, which are classified in group 202.

Poultry and Poultry Products (SIC 5144)—Establishments primarily engaged in the wholesale distribution of poultry and poultry products, except canned and packaged frozen products. This industry does not include establishments primarily engaged in the killing and dressing of poultry, which are classified in industry 2016. Establishments primarily engaged in the wholesale distribution of packaged frozen poultry are classified in industry 5142, and of canned poultry in industry 5149.

Confectionery (SIC 5145)—Establishments primarily engaged in the wholesale distribution of confectionery, such as candy, chewing gum, fountain fruits, salted or roasted nuts, popcorn, and fountain syrups; and potato, corn, and similar chips.

Fish and Seafoods (SIC 5146)[1]—Establishments primarily engaged in the wholesale distribution (not packaging) of fresh, cured, and frozen fish and seafoods, except canned (industry 5149) or packaged frozen (industry 5142). The preparation, packaging, and freezing of fresh fish and other seafood, and the shucking and packing of fresh oysters in nonsealed containers, are classified in industry 2092.

Meats and Meat Products (SIC 5147)—Establishments primarily engaged in the wholesale distribution of fresh, cured, and processed (but not canned) meats and lard. The wholesale distribution of frozen packaged meats is classified in industry 5142 and canned meats in industry 5149.

Fresh Fruits and Vegetables (SIC 5148)—Establishments primarily engaged in the wholesale distribution of fresh fruits and vegetables.

Groceries and Related Products, Not Elsewhere Classified (SIC 5149)[1]—Establishments primarily engaged in the wholesale distribution of groceries and related products, not elsewhere classified. Establishments primarily engaged in the wholesale distribution of soft drinks, and in bottling and distributing natural spring and mineral waters, are classified in this industry, but establishments primarily engaged in bottling soft drinks are classified in major group 20. This industry does not include farm-product raw materials (group 515), or beer, wine, and distilled alcholic beverages (group 518).

[1] Data for this kind of business are not shown separately but are included in the group total.

FARM-PRODUCT RAW MATERIALS (SIC 515)

Cotton (SIC 5152)[1]—Establishments primarily engaged in buying and/or marketing cotton and cotton linters.

Grain (SIC 5153)—Establishments primarily engaged in buying and/or marketing grain (such as corn, wheat, oats, barley, and unpolished rice); dry beans; soybeans, and other inedible beans. Country grain elevators primarily engaged in buying or receiving grain from farmers are included as are terminal elevators and other merchants marketing grain.

Livestock (SIC 5154)[1]—Establishments primarily engaged in buying and/or marketing cattle, hogs, sheep, and goats.

Farm-Product Raw Materials, Not Elsewhere Classified (SIC 5159)[1]—Establishments primarily engaged in buying and/or marketing farm products not elsewhere classified, such as horses and mules, leaf tobacco, hides, skins, furs, wool, mohair, raw silk, hops, and nuts, except roasted or salted (industry 5145). Establishments primarily engaged in the wholesale distribution of milk are classified in industry 5143 and live poultry in industry 5144.

CHEMICALS AND ALLIED PRODUCTS (SIC 516)[1]

Chemicals and Allied Products (SIC 5161)[1]—Establishments primarily engaged in the wholesale distribution of chemicals and allied products, not elsewhere classified, such as acids, industrial and heavy chemicals, dyestuffs, industrial salts, naval stores, plastics materials, rosin, and turpentine. Establishments primarily engaged in the wholesale distribution of ammunition are classified in industry 5041; agricultural chemicals and pesticides in industry 5191; drugs in industry 5122; and paints and varnishes in industry 5198.

PETROLEUM AND PETROLEUM PRODUCTS (SIC 517)

Petroleum Bulk Stations and Terminals (SIC 5171)—Establishments primarily engaged in wholesaling petroleum products, including liquefied petroleum gas, from bulk liquid storage facilities.

Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals (SIC 5172)[1]—Establishments primarily engaged in wholesaling petroleum and petroleum products, except those with bulk liquid storage facilities. Included are packaged and bottled petroleum products distributors, truck jobbers, and others marketing petroleum and products at wholesale but without bulk liquid storage facilities.

[1] Data for this kind of business are not shown separately but are included in the group total.

BEER, WINE, AND DISTILLED ALCOHOLIC BEVERAGES (SIC 518)

Beer and Ale (SIC 5181)—Establishments primarily engaged the wholesale distribution of beer, ale, porter, and ot. fermented malt beverages.

Wines and Distilled Alcoholic Beverages (SIC 5182)—Establishments primarily engaged in the wholesale distribution of distilled spirits, including neutral spirits and ethyl alcohol used in blending wines and distilled liquors.

MISCELLANEOUS NONDURABLE GOODS (SIC 519)

Farm Supplies (SIC 5191)[1]—Establishments primarily engaged in the wholesale distribution of animal feeds, fertilizers, agricultural chemicals, pesticides, seeds, and other farm supplies, except grains.

Tobacco and Tobacco Products (SIC 5194)—Establishments primarily engaged in the wholesale distribution of tobacco and tobacco products. Leaf tobacco wholesalers are classified in industry 5159 and establishments primarily engaged in stemming and redrying tobacco in industry 2141.

Paints, Varnishes, and Supplies (SIC 5198)[1]—Establishments primarily engaged in the wholesale distribution of paints varnishes, wallpaper, and supplies, and sometimes glass. Est lishments selling to the general public and known as "retail in the trade are classified in industry 5231.

Books, Periodicals, Newspapers (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of books, lithographed matter, magazines, newspapers, and all other forms of reading material.

Nondurable Goods, Not Elsewhere Classified (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of nondurable goods, not elswhere classified, such as art goods, flowers and florist supplies, industrial yarn, textile bags, bagging and burlap.

CHANGES IN WHOLESALE KIND-OF-BUSINESS CLASSIFICATIONS IN 1972 FROM 1967

The wholesale trade kind-of-business structure was expanded from one SIC major group (SIC 50) in 1967 to two major groups in 1972, "durable goods" (SIC 50) and "nondurable goods" (SIC 51). There were 61 four-digit industries in 1972 compared to 48 four-digit industries in 1967.

The definitions of some kinds of business also were changed in 1972. Establishments primarily selling farm supplies and equipment to farmers, and establishments primarily selli

plumbing, heating, and air-conditioning equipment and electrical supplies were classified in wholesale trade rather than retail trade. However, establishments primarily selling lumber and other building materials and paint, glass, and wallpaper were classified in retail trade if they sell to the public, even though sales to contractors account for a larger portion of the total. The change resulted in moving to wholesale trade those establishments primarily selling plumbing, heating, and air-conditioning equipment; electrical supplies; farm equipment; hay, grain, and feed; and other farm supplies. The change also theoretically could have shifted to wholesale trade some establishments primarily selling lumber and paint, glass and wallpaper to contractors, but not to the public.

In addition to the kind-of-business changes noted above the special nonmerchant classifications of farm assemblers and bulk petroleum were eliminated in the 1972 census. These establishments were classified in the appropriate merchant, or sales branch category.

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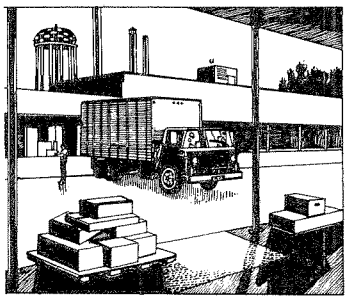
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued August 1979

June 1979

BW-79-06

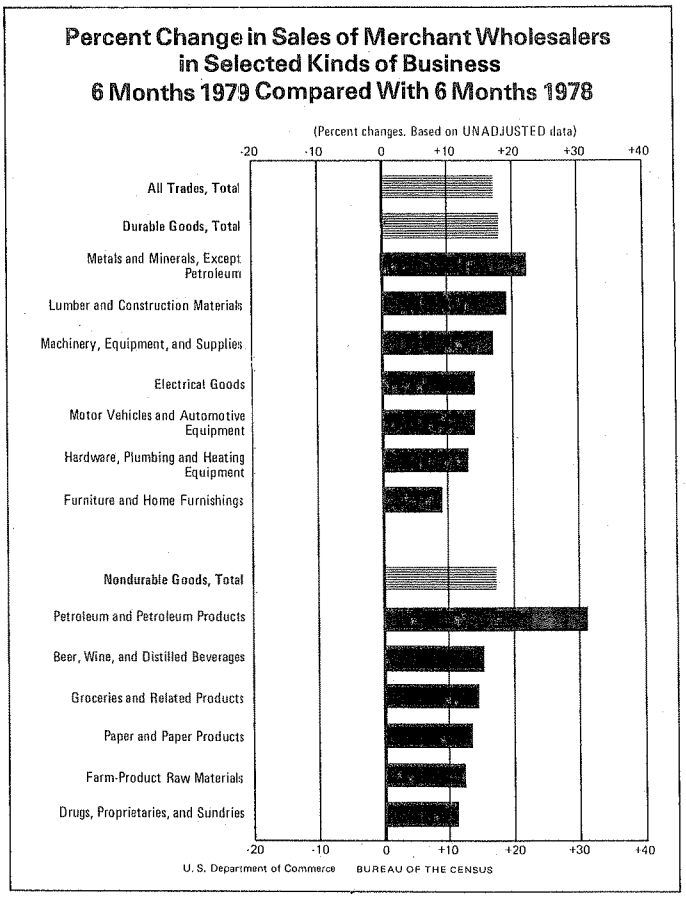
Sales—June 1979 sales of merchant wholesalers after adjustment for seasonal variation and trading-day differences, but not for price changes, were $73.3 billion, virtually unchanged from the previous month, but 17 percent above June 1978. Adjusted April-through-June total sales were up 5 percent from the January-through-March period and were 16 percent above the total sales for the comparable months a year ago.

After adjustment, June sales in the durable goods trades were virtually unchanged from the previous month, but were 16 percent above sales for the same month a year ago. Nondurable goods sales were up 1 percent from May and were 18 percent above June 1978. Total monthly sales in the durable goods group during the April-through-June period were 3 percent above the prior three months and were 15 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were 7 percent above the January-through-March period and were 16 percent above the total sales for the same period a year ago.

Based on adjusted data, comparisons with previous month sales levels showed mixed results with 6 trade groups showing gains, 7 indicating declines and 2 with no change. The largest increase was shown in sporting goods, toys, and hobby goods (20%). The largest decrease was reported in furniture and home furnishings (-5%). Compared with sales of a year ago all trade groups showed increases with the sharper increases reported in petroleum and petroleum products (50%) and sporting goods, toys, and hobby goods (25%).

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variation, but not for price changes, were valued at $85.9 billion at the end of June, up 1 percent from the previous month and 14 percent above the same month a year ago. Both durable and nondurable goods stocks were up 1 percent from May and were 13 and 16 percent respectively above the June 1978 level.

Based on adjusted data, comparisons with previous month inventory levels showed mixed results with 7 trade groups showing gains, 5 indicating declines, and 3 with no change. Compared with year-ago inventories, all trade groups reported increases. The sharper increases were noted in beer, wine, and distilled beverages (29%) and petroleum and petroleum products (25%).



Stock-Sales Ratios—The June stock-sales ratio for merchant wholesalers, based on seasonally adjusted data, was 117, virtually unchanged from the previous month, but down 3 points from June 1978. The stock-sales ratio for both durable goods and nondurable goods, 165 and 77 respectively, were unchanged from May. However, durable goods stocks were 5 points below the year-ago ratio, while nondurable goods stocks were down 1 point from the June 1978 ratio.

An advanced release of the June 1979 data was issued on August 9, 1979.

U.S. Department of Commerce
BUREAU OF THE CENSUS

Inquiries concerning this report should be addressed to Ronald Piencykoski, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-5294/763-5295.

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Table 1. Estimated Monthly Sales of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979						1978							Total 6 months	
		Jan.	Feb.	Mar.	Apr.	May	June[P]	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1979	1978
	Merchant wholesalers, total	63,739	61,721	74,319	70,768	76,814	75,085	65,834	60,651	67,702	63,933	69,086	67,699	64,527	422,445	360,507
	Total (excluding farm-product raw materials)	56,481	55,208	66,198	63,588	68,714	67,090	58,658	54,411	60,838	57,342	61,033	59,923	57,237	377,278	320,179
50	Durable goods, total	28,284	28,141	34,689	33,429	35,723	34,937	30,991	28,701	32,279	30,404	32,242	31,037	29,340	195,201	165,915
501	Motor vehicles and automotive parts and supplies	5,634	5,650	6,888	6,845	7,013	6,511	5,929	5,552	6,134	5,381	6,009	6,013	5,510	38,542	33,700
5013,4	Automotive parts and supplies, tires and tubes	3,120	3,081	3,459	3,349	3,385	3,535	3,169	2,883	3,440	2,998	3,344	3,298	2,927	19,930	17,985
5013	Automotive parts and supplies	2,594	2,603	2,902	2,807	2,966	2,822	2,660	2,432	2,872	2,496	2,761	2,752	2,413	16,694	15,248
502	Furniture and home furnishings	1,012	950	1,199	1,130	1,214	1,169	1,104	1,013	1,133	1,162	1,174	1,218	1,140	6,673	6,127
5021	Furniture--household and office	343	332	416	413	450	407	370	328	366	379	379	411	422	2,360	2,059
5023	Home furnishings	669	618	783	717	764	762	735	685	767	783	795	807	718	4,313	4,067
503	Lumber and other construction materials	2,387	2,212	3,006	3,023	3,353	3,358	3,067	2,771	3,208	3,056	3,173	2,874	2,542	17,339	14,599
5031	Lumber, plywood, and millwork	1,672	1,544	2,047	2,067	2,269	2,259	2,037	1,845	2,105	1,949	2,083	1,915	1,682	11,858	9,820
5039	Construction materials, n.e.c.	715	668	959	957	1,084	1,099	1,031	927	1,103	1,107	1,089	959	860	5,481	4,779
505	Metals and minerals, except petroleum	3,206	3,215	3,849	3,295	3,913	3,738	3,169	2,817	3,306	3,037	3,186	3,209	2,942	21,215	17,367
5051 pt.	Ferrous metals service centers and offices	2,455	2,437	2,925	2,469	2,951	2,794	2,380	2,158	2,515	2,339	2,446	2,448	2,260	16,031	13,166
5051 pt.	Ferrous metals service centers	1,652	1,744	2,129	1,798	2,160	2,055	1,778	1,580	1,833	1,721	1,801	1,768	1,678	11,537	9,705
506	Electrical goods	3,017	3,083	3,556	3,271	3,744	3,782	3,385	3,193	3,540	3,338	3,590	3,474	3,322	20,453	17,868
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,533	1,638	1,807	1,748	2,071	2,091	1,725	1,663	1,812	1,663	1,832	1,722	1,655	10,857	9,155
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,484	1,445	1,749	1,554	1,673	1,691	1,660	1,530	1,728	1,675	1,758	1,751	1,667	9,596	8,713
5064	Electrical appliances, TV and radio sets	834	849	1,024	881	939	1,026	994	912	1,064	1,057	1,040	1,090	1,006	5,553	5,230
507	Hardware, plumbing, heating equipment, and supplies	2,142	1,984	2,319	2,374	2,592	2,489	2,360	2,247	2,412	2,159	2,455	2,250	2,057	13,900	12,287
5072	Hardware	802	758	853	852	975	874	836	760	864	771	859	830	721	5,114	4,653
5074	Plumbing and heating equipment and supplies (hydronics)	854	800	960	994	1,001	965	902	916	988	928	1,047	918	854	5,573	4,843
508	Machinery, equipment, and supplies	7,691	7,841	9,664	9,443	10,062	9,938	8,790	7,827	8,757	8,655	8,909	8,421	8,485	54,640	46,824
5082	Construction and mining machinery and equipment.[1]	895	927	1,189	1,360	1,351	1,365	1,229	1,122	1,196	1,115	1,155	1,126	1,125	7,088	6,589
5084,5	Industrial machinery, equipment, and supplies	3,390	3,464	3,940	3,615	4,004	4,008	3,505	3,049	3,532	3,450	3,573	3,474	3,623	22,420	18,600
5086	Professional equipment, supplies	907	914	1,048	972	1,055	1,007	952	888	990	949	941	949	975	5,902	4,945
5093	Scrap and waste materials	1,132	1,184	1,501	1,492	1,518	1,501	1,057	940	1,073	978	1,007	1,103	1,079	8,329	5,623
51	Nondurable goods, total	35,455	33,580	39,630	37,339	41,091	40,148	34,843	31,950	35,423	33,529	36,844	36,662	35,187	227,244	194,593
	Total (excluding farm-product raw materials)	28,197	27,067	31,509	30,159	32,991	32,153	27,667	25,710	28,559	26,937	28,791	28,885	27,897	182,076	154,205
511	Paper and paper products	1,540	1,479	1,688	1,551	1,692	1,656	1,498	1,384	1,581	1,456	1,598	1,569	1,489	9,606	8,508
5111,3	Printing, writing, industrial, and personal services paper	1,133	1,100	1,272	1,184	1,272	1,248	1,125	1,046	1,177	1,088	1,191	1,177	1,140	7,208	6,259
512	Drugs, drug proprietaries, and druggists' sundries	950	917	1,073	1,038	1,102	1,033	950	902	1,026	973	1,082	1,017	963	6,111	5,510
5122	Drugs, drug proprietaries, and druggists' sundries	950	917	1,073	1,038	1,102	1,033	950	902	1,026	973	1,082	1,017	963	6,111	5,510
5122 pt.	General-line drugs[2]	423	427	507	472	509	476	448	409	482	464	494	465	445	2,812	2,604
513	Apparel, piece goods, and notions[3]	2,094	1,996	2,326	2,107	2,127	2,125	2,066	2,036	2,658	2,313	2,443	2,369	1,976	12,775	11,280
514	Groceries and related products	11,122	10,381	11,954	11,281	11,988	11,639	10,685	10,237	11,002	10,489	11,150	11,155	10,830	68,365	60,227
5141	Groceries, general-line	3,965	3,658	4,173	3,989	4,241	4,183	3,724	3,649	3,965	3,767	3,999	4,120	3,914	24,208	21,560
5144	Poultry and poultry products	518	489	559	554	592	554	503	482	539	505	525	569	536	3,266	2,762
5145	Confectionery	184	177	209	196	212	193	189	171	187	190	218	211	197	1,172	1,061
5147	Meats and meat products	1,979	1,971	2,198	2,029	2,076	2,021	1,826	1,800	1,974	1,840	1,928	1,911	1,885	12,274	9,958
5148	Fresh fruits and vegetables	1,020	961	1,203	1,086	1,202	1,214	1,198	1,044	985	890	980	974	973	6,686	6,066
515	Farm-product raw materials	7,258	6,513	8,121	7,180	8,100	7,995	7,176	6,240	6,864	6,591	8,053	7,777	7,290	45,168	40,388
5153	Grain	5,859	5,235	6,740	5,886	6,766	6,836	6,078	5,317	5,760	5,448	6,623	6,391	5,912	37,321	33,097
517	Petroleum and petroleum products	4,837	5,008	5,282	5,221	6,078	5,967	4,111	4,000	4,441	4,136	4,431	4,554	4,598	32,394	24,661
5171	Petroleum bulk stations and terminals	2,738	2,785	2,997	2,857	3,306	3,184	2,358	2,190	2,378	2,280	2,449	2,507	2,678	17,866	14,035
518	Beer, wine, and distilled alcoholic beverages	2,020	1,952	2,490	2,453	2,726	2,754	2,506	2,191	2,463	2,254	2,347	2,547	2,709	14,395	12,517
5181	Beer and ale	999	953	1,223	1,258	1,513	1,549	1,372	1,217	1,328	1,119	1,105	1,088	1,108	7,495	6,316
5182	Wine and distilled alcoholic beverages	1,021	999	1,267	1,195	1,214	1,205	1,134	974	1,134	1,135	1,242	1,459	1,601	6,900	6,200
519	Miscellaneous nondurable goods	4,529	4,383	5,528	5,406	6,001	5,772	4,819	4,040	4,297	4,311	4,510	4,486	4,425	31,619	26,057
5194	Tobacco and tobacco products	823	749	852	848	891	863	849	838	871	814	848	831	846	5,024	4,622

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. [P]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]The construction and mining machinery and equipment group is subject to a sampling variability of 9 percent for June 1979.
[2]The general-line drugs group is subject to a sampling variability of 8 percent for June 1979.
[3]The apparel piece goods and notions group is subject to a sampling variability of 12 percent for June 1979.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations)

1972 SIC code	Kind of business	1979						1978						
		Jan.	Feb.	Mar.	Apr.	May	June[P]	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	81,896	83,917	85,436	85,345	85,199	85,649	74,882	74,874	74,943	76,074	78,715	80,100	80,922
	Total (excluding farm-product raw materials)	75,593	77,627	79,311	79,626	80,246	80,801	70,513	71,073	71,138	71,889	73,327	73,947	74,898
50	Durable goods, total	51,860	53,807	54,381	54,731	55,566	56,242	49,627	49,900	49,841	49,944	50,462	50,971	51,646
501	Motor vehicles and automotive parts and supplies	9,512	10,189	9,797	9,663	9,631	9,573	8,218	8,367	8,378	8,099	8,701	9,326	9,227
5013,4	Automotive parts and supplies, tires and tubes	5,758	5,888	5,781	5,809	5,970	5,985	5,035	5,034	5,206	5,172	5,298	5,635	5,552
5013	Automotive parts and supplies	4,881	5,003	4,870	4,917	5,035	5,041	4,241	4,288	4,415	4,345	4,489	4,792	4,674
502	Furniture and home furnishings	1,764	1,753	1,872	1,837	1,815	1,881	1,781	1,764	1,760	1,810	1,780	1,774	1,752
5023	Home furnishings	1,292	1,282	1,355	1,332	1,309	1,367	1,305	1,305	1,306	1,326	1,315	1,305	1,251
503	Lumber and other construction materials	3,113	3,178	3,337	3,404	3,468	3,452	3,071	3,095	3,007	3,076	3,076	2,995	3,117
5031	Lumber, plywood, and millwork[1]	2,030	2,082	2,116	2,152	2,244	2,215	1,949	1,967	1,929	1,932	1,946	1,918	2,009
505	Metals and minerals, except petroleum	5,106	5,434	5,285	5,254	5,528	5,704	5,307	5,305	5,437	5,285	5,095	5,208	5,151
5051 pt.	Ferrous metals service centers and offices	4,191	4,425	4,365	4,239	4,455	4,640	4,108	4,104	4,232	4,148	3,976	4,150	4,191
5051 pt.	Ferrous metals service centers	3,241	3,459	3,433	3,269	3,506	3,685	3,268	3,191	3,308	3,299	3,098	3,236	3,336
506	Electrical goods	5,509	5,582	5,706	5,737	5,976	6,105	5,312	5,266	5,264	5,416	5,500	5,526	5,577
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2,542	2,684	2,676	2,730	2,946	3,004	2,358	2,283	2,367	2,356	2,399	2,534	2,558
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,966	2,898	3,030	3,007	3,030	3,101	2,954	2,983	2,899	3,059	3,101	3,016	3,023
507	Hardware, plumbing, heating equipment, and supplies	4,251	4,461	4,497	4,719	4,590	4,662	4,201	4,215	4,117	4,032	4,152	4,033	4,063
5072	Hardware	1,476	1,540	1,539	1,598	1,622	1,636	1,423	1,410	1,369	1,417	1,466	1,382	1,407
5074	Plumbing and heating equipment and supplies (hydronics)[1]	1,819	1,900	1,899	1,985	1,848	1,904	1,818	1,839	1,800	1,805	1,738	1,737	1,760
508	Machinery, equipment, and supplies	17,748	18,254	18,807	18,924	19,370	19,660	17,061	17,057	17,183	17,405	17,352	17,428	18,012
5082	Construction and mining machinery and equipment	3,932	4,152	4,334	4,280	4,430	4,660	3,636	3,637	3,793	3,899	3,937	4,002	4,109
5084,5	Industrial machinery, equipment, and supplies	5,728	5,800	6,015	6,030	6,073	6,028	5,328	5,301	5,317	5,519	5,508	5,570	5,752
51	Nondurable goods, total	30,036	30,110	31,055	30,614	29,633	29,407	25,255	24,974	25,102	26,130	28,253	29,129	29,276
	Total (excluding farm-product raw materials)	23,733	23,820	24,930	24,895	24,680	24,559	20,887	21,173	21,297	21,946	22,865	22,976	23,252
511	Paper and paper products	1,424	1,468	1,547	1,501	1,542	1,562	1,376	1,341	1,361	1,414	1,419	1,441	1,482
5111,3	Printing, writing, industrial, and personal service paper	986	1,010	1,053	1,018	1,050	1,073	955	938	921	976	969	967	1,025
512	Drugs, drug proprietaries, and druggists' sundries	1,465	1,484	1,612	1,617	1,585	1,618	1,401	1,368	1,410	1,489	1,502	1,476	1,440
514	Groceries and related products	6,408	6,346	6,719	6,644	6,644	6,593	5,871	5,833	5,803	6,186	6,469	6,412	6,497
5141	Groceries, general-line	2,696	2,744	2,895	2,846	2,785	2,801	2,512	2,480	2,505	2,641	2,811	2,814	2,761
517	Petroleum and petroleum products	2,106	2,101	2,224	2,177	2,401	2,302	1,837	1,974	2,093	2,098	2,151	2,151	2,153
518	Beer, wine, and distilled alcoholic beverages	2,462	2,427	2,684	2,806	2,760	2,764	2,148	2,178	2,158	2,221	2,453	2,513	2,290
5181	Beer and ale[2]	800	845	1,040	1,085	1,089	1,069	717	709	679	720	769	777	729
5182	Wines and distilled alcoholic beverages	1,662	1,582	1,645	1,721	1,671	1,694	1,431	1,469	1,480	1,501	1,684	1,736	1,561

See footnotes at end of table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Percent. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979						1978						
		Jan.	Feb.	Mar.	Apr.	May	June[P]	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	128	136	115	121	111	114	114	123	111	119	114	118	125
	Total (excluding farm-product raw materials)	134	141	120	125	117	120	120	131	117	125	120	123	131
50	Durable goods, total	183	191	157	164	156	161	160	174	154	164	157	164	176
501	Motor vehicles and automotive parts and supplies	169	180	142	141	137	147	139	151	137	151	145	155	167
5013,4	Automotive parts and supplies, tires and tubes	185	191	167	173	169	177	156	172	151	173	158	171	190
5013	Automotive parts and supplies	188	192	168	175	170	179	159	176	154	174	163	174	194
502	Furniture and home furnishings	174	185	156	163	150	161	161	174	155	156	152	146	154
5023	Home furnishings	193	208	173	186	171	179	178	190	170	169	165	162	174
503	Lumber and other construction materials	130	144	111	113	103	103	100	112	94	101	97	104	123
5031	Lumber, plywood, and millwork	121	135	103	104	99	98	96	107	92	99	93	100	119
505	Metals and minerals, except petroleum	159	169	137	159	141	153	167	188	164	174	160	162	175
5051 pt.	Ferrous metals service centers and offices	171	182	149	172	151	166	173	190	168	177	163	170	185
5051 pt.	Ferrous metals service centers	196	198	161	182	162	179	184	202	181	192	172	183	199
506	Electrical goods	183	181	160	175	160	161	157	165	149	162	153	159	168
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	166	164	148	156	142	144	137	137	131	142	131	147	155
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	200	201	173	194	181	183	178	195	168	183	176	171	181
507	Hardware, plumbing, heating equipment, and supplies	198	225	194	199	177	187	178	188	171	187	169	179	198
5072	Hardware	184	203	180	188	166	187	170	185	158	179	171	167	195
5074	Plumbing and heating equipment and supplies (hydronics)	213	237	198	200	185	197	202	201	182	188	166	189	206
508	Machinery, equipment, and supplies	231	238	195	200	192	197	194	218	196	201	195	207	212
5082	Construction and mining machinery and equipment	439	448	364	315	328	341	296	324	317	350	341	356	365
5084,5	Industrial machinery, equipment, and supplies	168	167	153	167	152	150	152	174	151	160	154	160	159
51	Nondurable goods, total	85	90	78	82	72	73	72	78	71	78	77	79	83
	Total (excluding farm-product raw materials)	84	88	79	83	75	76	75	82	75	81	79	80	83
511	Paper and paper products	92	99	92	97	91	94	92	97	86	97	89	92	100
5111,3	Printing, writing, industrial, and personal service paper	87	92	83	86	83	86	85	90	78	90	81	82	90
512	Drugs, drug proprietaries, and druggists' sundries	154	162	150	156	144	157	147	152	137	153	139	145	150
514	Groceries and related products	58	61	56	59	55	57	55	57	53	59	58	57	60
41	Groceries, general-line	68	75	69	71	66	67	67	68	63	70	70	68	71
7	Petroleum and petroleum products	44	42	42	42	40	39	45	49	47	51	49	47	47
518	Beer, wine, and distilled alcoholic beverages	122	124	108	114	101	100	86	99	88	99	105	99	85
5181	Beer and ale	80	89	85	86	72	69	52	58	51	64	70	71	66
5182	Wines and distilled alcoholic beverages	163	158	130	144	138	141	126	151	130	132	136	119	97

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. [P]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]The lumber, plywood, and millwork group is subject to a sampling variability of 8 percent for June 1979.
[2]The beer and ale group is subject to a sampling variability of 9 percent for June 1979.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1979 and 1978

(Sales and inventories in millions of dollars. Stock-sales ratios in percent)

1972 SIC code	Kind of business	1979 Jan.	Feb.	Mar.	Apr.	May	June[p]	1978 June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Sales ADJUSTED for seasonal variations and trading-day differences												
	Merchant wholesalers, total	67,148	67,495	70,824	70,444	72,937	73.337	62,656	63,425	64,894	64,531	67,338	67,552	67,823
	Total (excluding farm-product raw materials)	60,346	60,603	63,567	63,278	65,050	65.103	55,252	56,716	57,461	57,326	59,349	60,373	60,526
50	Durable goods, total	31,012	31,769	33,570	32,770	33,354	33,430	28,741	29,859	30,043	29,863	30,953	31,498	31,939
501	Motor vehicles and automotive parts and supplies	5,994	6,285	6,486	6,315	6,347	6,219	5,516	5,631	5,739	5,598	6,113	6,442	6,088
502	Furniture and home furnishings	1,162	1,058	1,178	1,148	1,183	1,124	1,036	1,136	1,077	1,118	1,047	1,136	1,197
503	Lumber and other construction materials	2,876	2,758	3,089	3,085	3,037	3,118	2,733	2,705	2,732	2,878	2,887	2,874	3,026
505	Metals and minerals, except petroleum	3,184	3,518	3,748	3,250	3,637	3,690	3,036	3,090	3,045	2,947	3,188	3,305	3,258
506	Electrical goods	3,279	3,460	3,560	3,294	3,789	3,640	3,179	3,225	3,377	3,311	3,340	3,356	3,362
507	Hardware, plumbing, heating equipment, and supplies	2,354	2,270	2,371	2,372	2,398	2,382	2,185	2,232	2,209	2,108	2,290	2,237	2,330
508	Machinery, equipment, and supplies	8,461	8,840	9,108	9,249	9,240	9,447	8,082	8,201	8,372	8,382	8,607	8,730	9,193
51	Nondurable goods, total	36,136	35,726	37,254	37,674	39,583	39,907	33,915	33,566	34,851	34,668	36,385	36,054	35,884
	Total (excluding farm-product raw materials)	29,334	28,834	29,997	30,508	31,696	31,673	26,511	26,857	27,418	27,463	28,396	28,875	28,587
511	Paper and paper products	1,540	1,595	1,636	1,636	1,638	1,617	1,446	1,447	1,473	1,419	1,536	1,579	1,608
512	Drugs, drug proprietaries, and druggists' sundries	953	990	1,032	1,050	1,095	1,066	952	971	980	965	1,000	1,007	997
513	Apparel, piece goods, and notions	2,230	2,114	2,243	2,280	2,089	2,173	2,091	2,173	2,299	2,177	2,268	2,291	2,269
514	Groceries and related products	11,407	11,408	11,595	11,476	11,278	11,300	10,176	10,340	10,443	10,607	11,039	11,178	11,400
515	Farm-product raw materials[1]	6,802	6,892	7,257	7,166	7,887	8,234	7,404	6,709	7,433	7,205	7,989	7,179	7,297
517	Petroleum and petroleum products	4,876	4,905	4,955	5,263	6,338	6,158	4,111	4,144	4,430	4,442	4,390	4,542	4,387
518	Beer, wine, and distilled alcoholic beverages	2,491	2,395	2,541	2,615	2,526	2,517	2,199	2,245	2,284	2,305	2,333	2,383	2,387
519	Miscellaneous nondurable goods	4,645	4,361	4,849	5,095	5,546	5,692	4,583	4,580	4,499	4,521	4,657	4,693	4,567
		Inventories ADJUSTED for seasonal variations												
	Merchant wholesalers, total	81,543	83,005	84,078	84,973	85,257	85,932	75,191	75,744	76,338	77,113	78,625	79,526	80,771
	Total (excluding farm-product raw materials)	76,224	77,545	78,624	79,299	79,729	80,255	70,028	70,920	71,546	72,119	73,434	74,285	75,546
50	Durable goods, total	52,490	53,773	53,937	54,408	54,886	55,253	48,756	49,414	49,972	50,160	50,948	51,625	52,460
501	Motor vehicles and automotive parts and supplies	9,390	9,883	9,643	9,605	9,442	9,525	8,177	8,434	8,637	8,315	8,870	9,420	9,236
502	Furniture and home furnishings	1,778	1,765	1,878	1,846	1,799	1,844	1,748	1,755	1,750	1,789	1,776	1,782	1,801
503	Lumber and other construction materials	3,160	3,207	3,218	3,315	3,354	3,401	3,020	3,052	3,013	3,101	3,181	3,113	3,190
505	Metals and minerals, except petroleum	5,142	5,528	5,274	5,212	5,517	5,693	5,296	5,161	5,289	5,290	5,269	5,266	5,166
506	Electrical goods	5,697	5,772	5,764	5,754	5,899	5,944	5,177	5,193	5,227	5,346	5,435	5,499	5,650
507	Hardware, plumbing, heating equipment, and supplies	4,382	4,543	4,422	4,511	4,443	4,544	4,095	4,149	4,092	4,098	4,207	4,153	4,228
508	Machinery, equipment, and supplies	17,927	18,073	18,529	18,905	19,178	19,256	16,710	17,006	17,357	17,510	17,527	17,658	18,249
51	Nondurable goods, total	29,053	29,232	30,141	30,565	30,371	30,679	26,435	26,330	26,366	26,953	27,677	27,901	28,311
	Total (excluding farm-product raw materials)	23,734	23,772	24,687	24,891	24,843	25,002	21,272	21,506	21,574	21,959	22,486	22,660	23,086
511	Paper and paper products	1,458	1,493	1,561	1,485	1,534	1,521	1,341	1,341	1,358	1,404	1,419	1,447	1,482
512	Drugs, drug proprietaries, and druggists' sundries	1,528	1,530	1,615	1,609	1,621	1,608	1,393	1,382	1,410	1,453	1,435	1,446	1,444
514	Groceries and related products	6,492	6,333	6,581	6,611	6,691	6,680	5,948	5,922	5,921	6,192	6,342	6,355	6,433
517	Petroleum and petroleum products	2,017	2,114	2,237	2,311	2,504	2,444	1,948	2,050	2,078	2,039	2,052	2,064	2,082
518	Beer, wine, and distilled alcoholic beverages	2,557	2,536	2,756	2,831	2,698	2,689	2,087	2,180	2,204	2,214	2,293	2,377	2,403
		Stock-sales ratios based on ADJUSTED data												
	Merchant wholesalers, total	121	123	119	121	117	117	120	119	118	119	117	118	119
	Total (excluding farm-product raw materials)	126	128	124	125	123	123	127	125	125	126	123	123	125
50	Durable goods, total	169	169	161	166	165	165	170	165	166	168	165	164	164
501	Motor vehicles and automotive parts and supplies	157	157	149	152	149	153	148	150	150	149	145	146	152
502	Furniture and home furnishings	153	167	159	161	152	164	169	154	162	160	170	157	150
503	Lumber and other construction materials	110	116	104	107	110	109	111	113	110	108	110	108	105
505	Metals and minerals, except petroleum	161	157	141	160	152	154	174	167	174	179	165	159	159
506	Electrical goods	174	167	162	175	156	163	163	161	155	161	163	164	168
507	Hardware, plumbing, heating equipment, and supplies	186	200	187	190	185	191	187	186	185	194	184	186	181
508	Machinery, equipment, and supplies	212	204	203	204	208	204	207	207	207	209	204	202	199
51	Nondurable goods, total	80	82	81	81	77	77	78	78	76	78	76	77	79
	Total (excluding farm-product raw materials)	81	82	82	82	78	79	80	80	79	80	79	78	81
511	Paper and paper products	95	94	95	91	94	94	93	92	92	99	92	92	92
512	Drugs, drug proprietaries, and druggists' sundries	160	155	156	153	148	151	146	142	144	151	144	144	145
514	Groceries and related products	57	56	57	58	59	59	58	57	57	58	57	57	56
517	Petroleum and petroleum products	41	43	45	44	40	40	47	49	47	46	47	45	47
518	Beer, wine, and distilled alcoholic beverages	103	106	108	108	107	107	95	97	97	96	98	100	1

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions. All data for 1978 have been revised to reflect recomputed factors for seasonal adjustment.

NA Not available. [p] Preliminary estimates. See p. 15, Sample Design and Estimation Procedures.

[1] There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table 4B. Percent Change Between Selected 3-Month Periods Sales of Merchant Wholesalers, United States

(Based on seasonally-adjusted data)

Item	3 month period, Apr. 1979-June 1979 from--			
	Jan. 1978-Mar. 1979 (3 months ago)	Oct. 1978-Dec. 1978 (6 months ago)	July 1978-Sept. 1978 (9 months ago)	Apr. 1978-June 1978 (12 months ago)
Merchant wholesalers, total	+5	+7	+12	+16
Durable goods, total	+3	+5	+11	+15
Nondurable goods, total	+7	+8	+14	+16

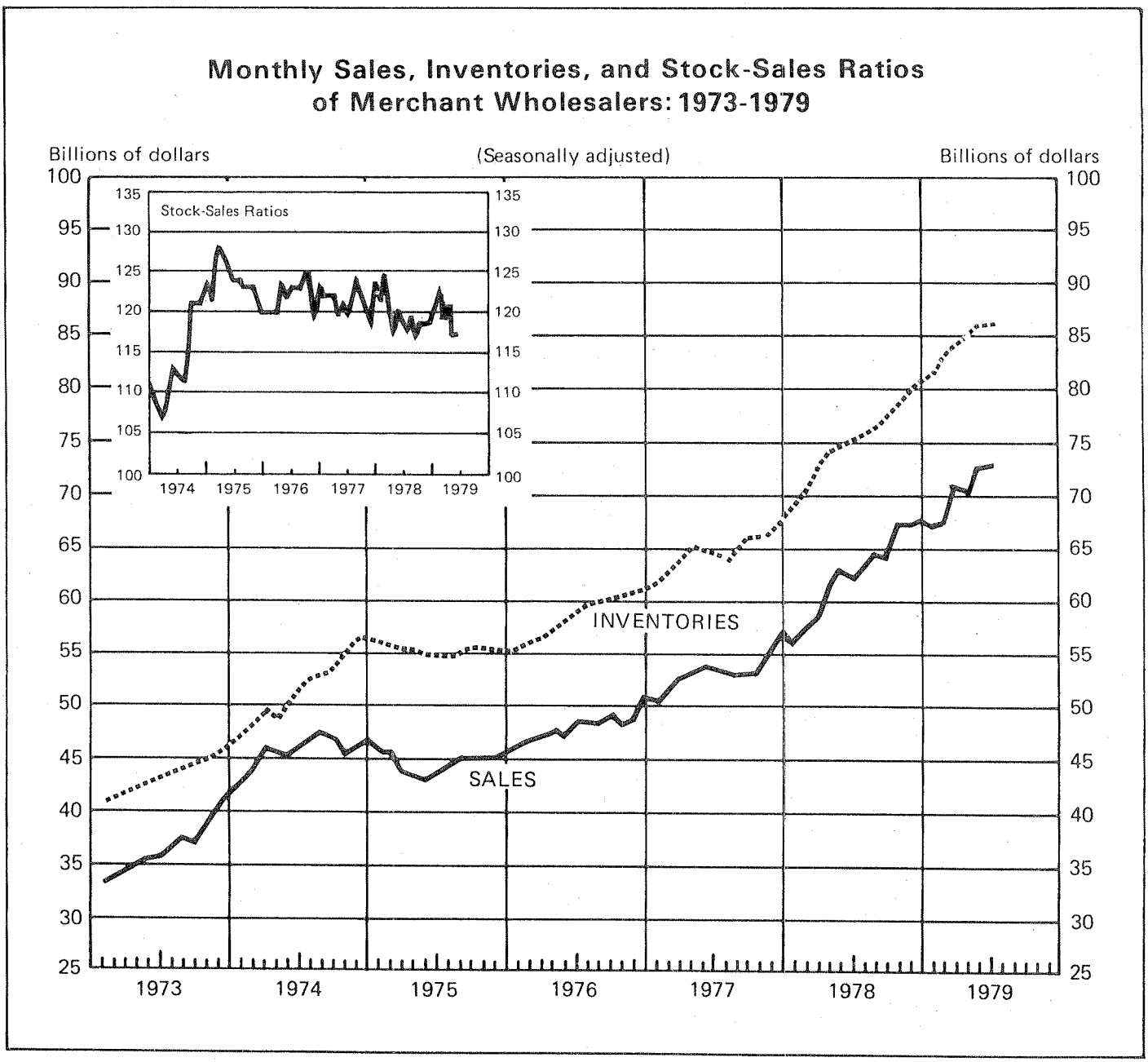


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: June 1979

1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		June 1979 from May 1979	June 1979 from June 1978	6 months 1979 from 6 months 1978	June 1979 from May 1979	June 1979 from June 1978	June 1979 from May 1979	June 1979 from June 1978	June 1979 from May 1979	June 1979 from June 1978
	Merchant wholesalers, total	-2	+14	+17	+1	+14	0	+17	+1	+14
	Total (excluding farm-product raw materials)	-2	+14	+18	+1	+15	0	+18	+1	+15
50	Durable goods, total	-2	+13	+18	+1	+13	0	+16	+1	+13
501	Motor vehicles and automotive parts and supplies	-7	+10	+14	-1	+16	-2	+13	+1	+16
5012	Automobiles and other motor vehicles	-10	+16	+20	-2	+13	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	-4	+7	+11	0	+19	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	-5	+6	+9	0	+19	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	-4	+6	+9	+4	+6	-5	+8	+3	+5
5021	Furniture--household and office	-10	+10	+15	+1	+8	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	-11	-5	+5	+1	+8	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	-9	+18	+20	+2	+7	(*)	(*)	(*)	(*)
5023	Home furnishings	0	+4	+6	+4	+5	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	0	+9	+19	0	+12	+3	+14	+1	+13
5031	Lumber, plywood, and millwork	0	+11	+21	-1	+14	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c.	+1	+7	+15	+1	+10	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	+10	+27	+15	+3	+10	+20	+25	-1	+10
505	Metals and minerals, except petroleum	-4	+18	+22	+3	+8	+1	+22	+3	+7
5051 pt.	Ferrous metals service centers and offices	-5	+17	+22	+4	+13	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	-5	+16	+19	+5	+13	(*)	(*)	(*)	(*)
5051 pt.	Nonferrous metals service centers and offices	-3	+24	+28	-1	-6	(*)	(*)	(*)	(*)
506	Electrical goods	+1	+12	+14	+2	+15	-4	+15	+1	+15
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+1	+21	+19	+2	+27	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+1	+2	+10	+2	+5	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	+9	+3	+6	+2	+4	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	-4	+5	+13	+2	+11	-1	+9	+2	+11
5072	Hardware	-10	+5	+10	+1	+15	(*)	(*)	(*)	(*)
5074	Plumbing and heating equipment and supplies (hydronics)	-4	+7	+15	+3	+5	(*)	(*)	(*)	(*)
5075	Warm air heating and air conditioning equipment and supplies	+5	+5	+16	-1	+20	(*)	(*)	(*)	(*)
508	Machinery, equipment, and supplies	-1	+13	+17	+1	+15	+2	+17	0	+15
5081	Commercial machines and equipment	+3	+6	+3	-2	+5	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	+1	+11	+8	+5	+28	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	-4	+18	+19	+2	+9	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	0	+14	+21	-1	+13	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	-5	+6	+19	+1	+18	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	-1	+42	+48	-3	+8	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	-1	+46	+54	-3	+9	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	-2	+35	+39	-2	+7	(*)	(*)	(*)	(*)
51	Nondurable goods, total	-2	+15	+17	-1	+16	+1	+18	+1	+16
	Total (excluding farm-product raw materials)	-3	+16	+18	0	+18	0	+19	+1	+18
511	Paper and paper products	-2	+11	+13	+1	+13	-1	+12	-1	+13
5111,3	Printing, writing, industrial, and personal service paper	-2	+11	+15	+2	+12	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	-6	+9	+11	+2	+16	-3	+12	-1	+15
5122	Drugs, drug proprietaries, and druggists' sundries	-6	+9	+11	+2	+16	(*)	(*)	(*)	(*)
5122 pt.	General-line drugs	-7	+6	+8	+1	+11	(*)	(*)	(*)	(*)
514	Groceries and related products	-3	+9	+14	-1	+12	0	+11	0	+12
5141	Groceries, general-line	-1	+12	+12	+1	+12	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	+1	+15	+13	0	+9	(*)	(*)	(*)	(*)
5141 pt.	Retailer cooperatives	0	+13	+10	0	+17	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	-5	+10	+13	+2	+10	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	-5	+7	+10	0	+10	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	-6	+10	+18	-4	+15	(*)	(*)	(*)	(*)
5145	Confectionery	-9	+2	+10	-5	+23	(*)	(*)	(*)	(*)
5147	Meats and meat products	-3	+11	+23	-3	+25	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	+1	+1	+10	-1	+13	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	-1	+11	+12	-2	+11	+4	+11	+3	+10
5152	Cotton	-8	+2	0	-19	-12	(*)	(*)	(*)	(*)
5153	Grain	+1	+12	+13	+3	+15	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	-2	+45	+31	-4	+25	-3	+50	-2	+25
5171	Petroleum bulk stations and terminals	-4	+35	+27	-5	+24	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	+1	+10	+15	0	+29	0	+14	0	+29
5181	Beer and ale	+2	+13	+19	-2	+49	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	-1	+6	+11	+1	+18	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	-4	+20	+21	-5	+12	+3	+24	-1	+12
5191	Farm supplies	-16	+13	+24	-11	+14	(*)	(*)	(*)	(*)
5194	Tobacco and tobacco products	-3	+2	+9	+1	+4	(*)	(*)	(*)	(*)
5198	Paints, varnishes, and supplies	-1	+8	+16	-2	+21	(*)	(*)	(*)	(*)
5199 pt.	Books, periodicals, newspapers	+1	+20	+13	-2	-3	(*)	(*)	(*)	(*)

*Adjusted data are available only for summary group totals.
(S)Does not meet publication standards because of extreme variability or high nonresponse rate.

[1]Adjusted for seasonal variations and, in the case of sales, also for trading-day differences. Adjusted data are only available for the summary kind-of-business groups shown.
[2]There are indications that the seasonal adjustment factors for this trade group may not reflect recent trends. The seasonally adjusted data for this trade group and also for the summary group totals should, therefore, be used with caution.

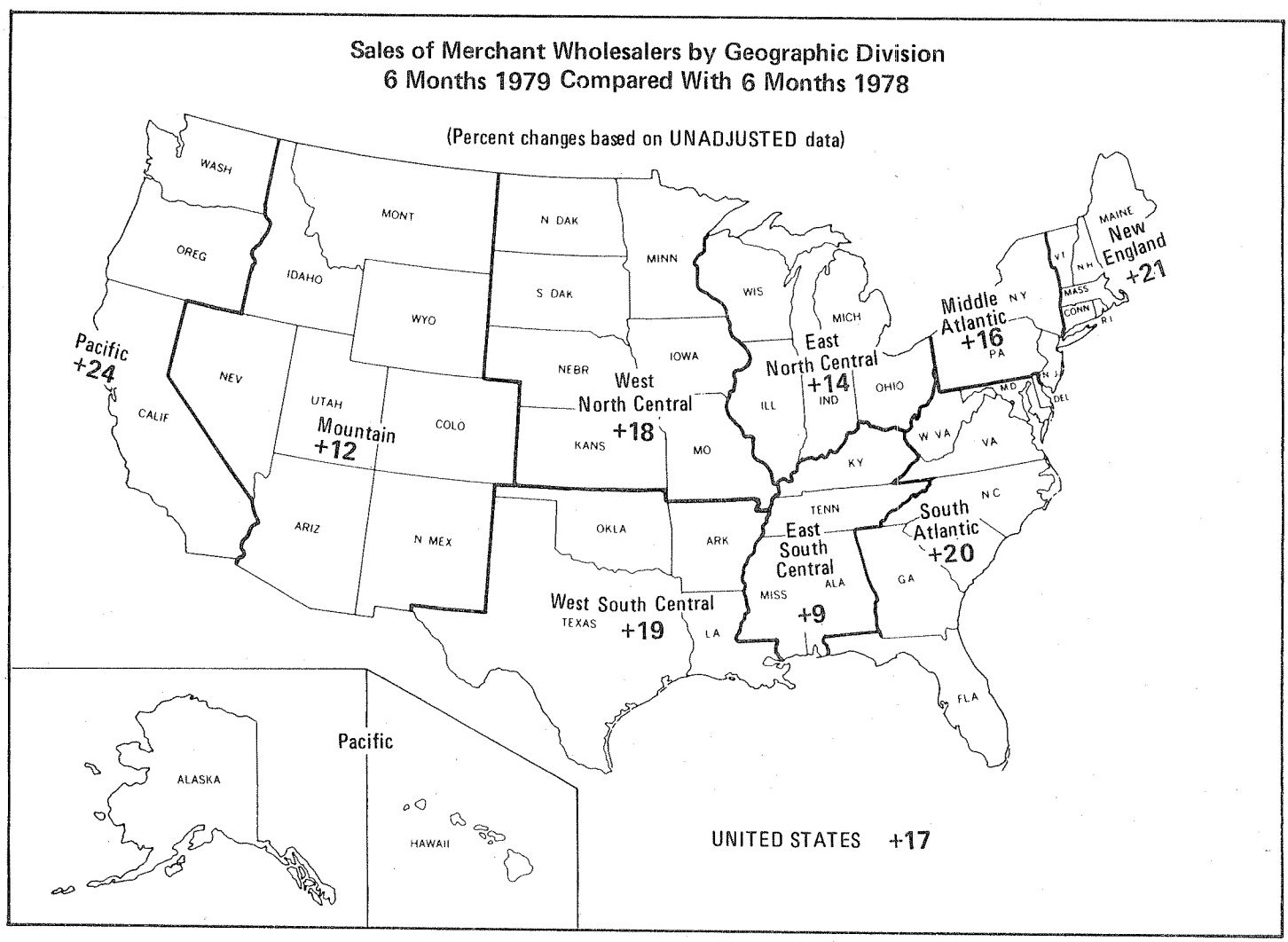


Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1979 and 1978

(Sales, in millions of dollars, are NOT ADJUSTED for seasonal variations or trading-day differences; sampling errors in percent)

1972 SIC code	Kind of business and geographic division[1]	1979						1978							Total 6 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.	Apr.	May	June[P]	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1979	1978	Range[2]	Median
	Merchant wholesalers, total	63,739	61,721	74,319	70,768	76,814	75,085	65,834	60,651	67,702	63,933	69,086	67,699	64,527	422,445	360,507	0.8-0.9	0.9
	New England	3,393	3,289	3,835	3,652	3,915	3,829	3,451	3,206	3,654	3,472	3,638	3,678	3,652	21,912	18,136	5-6	6
	Middle Atlantic	14,513	13,785	16,692	15,218	16,416	16,474	14,752	13,281	15,382	14,387	15,123	15,304	14,529	93,098	80,104	2-2	2
	East North Central	10,573	10,454	12,314	11,906	13,356	12,854	11,510	10,461	11,636	10,821	12,195	11,757	10,882	71,456	62,882	2-3	3
	West North Central	6,695	6,589	7,834	7,506	8,614	8,243	6,999	6,513	7,373	6,836	7,790	7,471	6,894	45,481	38,479	2-3	2
	South Atlantic	7,023	6,620	8,329	7,929	8,401	7,963	7,044	6,523	7,139	6,877	7,449	7,106	6,979	46,266	38,579	2-3	2
	East South Central	2,961	2,801	3,505	3,461	3,557	3,416	3,132	2,962	3,127	2,938	3,213	3,075	2,922	19,700	18,060	4-5	4
	West South Central	6,703	6,648	7,785	7,673	8,443	8,406	6,744	6,382	6,890	6,717	7,036	6,885	6,680	45,658	38,337	3-4	4
	Mountain	2,337	2,253	2,904	2,659	2,786	2,815	2,777	2,456	2,620	2,693	2,583	2,477	2,540	15,755	14,095	5-5	5
	Pacific	9,540	9,281	11,121	10,765	11,325	12,217	9,426	8,868	9,881	9,191	10,058	9,946	9,448	64,249	51,834	2-3	3
50	Durable goods, total	28,284	28,141	34,689	33,429	35,723	34,937	30,991	28,701	32,279	30,404	32,242	31,037	29,340	195,201	165,915	0.8-1.0	0.9
	Middle Atlantic	5,936	5,892	7,165	6,601	7,191	7,042	6,464	5,808	6,765	6,303	6,618	6,516	6,094	39,828	35,004	4-5	4
	East North Central	4,818	4,975	6,057	5,863	6,467	6,242	5,407	4,958	5,793	5,342	5,801	5,674	5,177	34,424	29,408	3-4	4
	West North Central	2,157	2,208	2,718	2,746	3,009	2,963	2,446	2,383	2,695	2,504	2,740	2,652	2,379	15,802	13,180	5-6	5
	South Atlantic	3,515	3,211	4,246	4,111	4,269	4,066	3,817	3,480	3,738	3,689	3,869	3,608	3,513	23,418	19,801	4-5	4
	West South Central	3,020	3,067	3,649	3,637	3,863	3,934	3,366	3,135	3,403	3,224	3,438	3,160	3,144	21,170	17,984	4-4	4
	Mountain	1,076	1,043	1,408	1,309	1,355	1,360	1,412	1,303	1,372	1,340	1,283	1,172	1,207	7,551	6,875	6-7	7
	Pacific	5,259	5,268	6,330	6,173	6,433	7,451	5,256	5,026	5,641	5,214	5,597	5,524	5,250	36,914	28,878	2-3	3
51	Nondurable goods, total	35,455	33,580	39,630	37,339	41,091	40,148	34,843	31,950	35,423	33,529	36,844	36,662	35,187	227,244	194,593	1.0-1.2	1.0
	New England	2,166	2,066	2,335	2,200	2,377	2,348	2,151	1,988	2,293	2,117	2,245	2,316	2,349	13,492	11,399	5-7	6
	Middle Atlantic	8,577	7,893	9,527	8,616	9,226	9,432	8,288	7,473	8,617	8,084	8,505	8,788	8,435	53,271	45,100	3-3	3
	East North Central	5,755	5,479	6,256	6,042	6,888	6,611	6,103	5,504	5,843	5,479	6,394	6,083	5,704	37,032	33,473	3-4	3
	West North Central	4,538	4,381	5,115	4,760	5,606	5,280	4,554	4,129	4,678	4,331	5,050	4,820	4,515	29,679	25,299	3-4	3
	South Atlantic	3,508	3,409	4,084	3,818	4,132	3,897	3,227	3,044	3,400	3,188	3,580	3,498	3,466	22,849	18,779	3-5	3
	East South Central	1,685	1,549	1,889	1,925	1,959	1,817	1,609	1,572	1,616	1,505	1,710	1,706	1,650	10,825	10,012	3-4	4
	West South Central	3,683	3,581	4,136	4,036	4,580	4,472	3,378	3,248	3,487	3,493	3,598	3,725	3,536	24,488	20,353	5-5	5
	Pacific	4,281	4,013	4,790	4,591	4,893	4,766	4,170	3,842	4,241	3,978	4,461	4,422	4,199	27,335	22,957	4-5	4

Note: Detail may not add to totals due to rounding and minor revisions.

[P]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]See map on page 7.

[2]The range of sampling error of the estimate is based on data for August, September, and October 1977.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: June 1979

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in--					Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		Sales			Inventories			
		June 1979 from May 1979	June 1979 from June 1978	6 months 1979 from 6 months 1978	June 1979 from May 1979	June 1979 from June 1978		
		A	B	C[1]	D	E	A	D
	Merchant wholesalers, total	-2	+14	+17	+1	+14	0.4	0.2
	New England	-2	+11	+21	-2	+10	2.0	1.9
	Middle Atlantic	0	+12	+16	+1	+11	1.1	0.6
	East North Central	-4	+12	+14	-1	+11	1.2	0.8
	West North Central	-4	+18	+18	-1	+20	1.3	1.1
	South Atlantic	-5	+13	+20	-2	+10	1.6	1.0
	East South Central	-4	+9	+9	+2	+11	1.7	1.4
	West South Central	0	+25	+19	0	+19	1.4	0.8
	Mountain	+1	+1	+12	0	+4	2.4	1.3
	Pacific	+8	+30	+24	-1	+20	1.2	0.5
50	Durable goods, total	-2	+13	+18	+1	+13	0.6	0.3
	New England	-4	+14	+25	-2	+4	2.4	1.3
	Middle Atlantic	-2	+9	+14	+1	+8	1.7	1.0
	East North Central	-3	+15	+17	+2	+12	1.9	1.0
	West North Central	-2	+21	+20	+1	+24	3.3	1.7
	South Atlantic	-5	+7	+18	-1	+7	1.9	1.2
	East South Central	0	+5	+10	+6	+9	3.9	2.5
	West South Central	+2	+17	+18	0	+18	2.1	1.2
	Mountain	0	-4	+10	0	+3	2.9	1.7
	Pacific	+16	+42	+28	0	+20	1.9	0.7
51	Nondurable goods, total	-2	+15	+17	-1	+16	0.6	0.4
	New England	-1	+9	+18	-2	+18	1.9	2.7
	Middle Atlantic	+2	+14	+18	+2	+16	1.9	0.9
	East North Central	-4	+8	+11	-6	+9	1.4	1.1
	West North Central	-6	+16	+17	-2	+16	1.6	1.4
	South Atlantic	-6	+21	+22	-3	+16	2.4	1.8
	East South Central	-7	+13	+8	-6	+14	1.7	2.4
	West South Central	-2	+32	+20	+2	+21	2.2	1.3
	Mountain	+2	+7	+14	0	+4	3.2	1.2
	Pacific	-3	+14	+19	-3	+17	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	-4	+7	+11	0	+19	2	1
	New England	-2	+17	+17	-1	+22	7	4
	Middle Atlantic	-9	-3	-5	-2	+14	4	2
	East North Central	-8	+18	+23	0	+14	7	1
	West North Central	-2	+14	+15	+4	+21	5	2
	South Atlantic	-9	-2	+17	-2	+3	4	2
	East South Central	-6	+5	+13	0	-3	4	3
	West South Central	-5	+5	+9	-1	+36	5	2
	Mountain	-11	(S)	(S)	-4	(S)	7	3
	Pacific	+4	+20	+15	+1	+56	3	2
502	Furniture and home furnishings	-4	+6	+9	+4	+6	2	1
	Middle Atlantic	-6	+9	+16	+1	+8	4	2
	East North Central	-6	+9	+22	0	+5	7	2
	West North Central	+20	(S)	(S)	+25	+1	5	4
	West South Central	-13	+2	+9	+4	+17	5	7
	Pacific	0	+11	+6	+1	+4	5	3
503	Lumber and other construction materials	0	+9	+19	0	+12	2	1
	New England	+12	+6	+16	-5	+1	4	5
	Middle Atlantic	+5	+4	+11	+1	+11	4	2
	East North Central	+3	+12	+10	-1	+9	3	2
	West North Central	+3	+22	+32	-4	+21	7	7
	South Atlantic	-9	+13	+21	-3	+24	4	2
	East South Central	+1	(S)	+3	-3	-6	4	3
	West South Central	-1	+5	+10	-2	+14	6	5
	Pacific	-1	+8	+27	+2	+10	5	1
5051 pt.	Ferrous metals service centers	-5	+16	+19	+5	+13	2	1
	New England	-5	-1	+19	+3	-16	6	2
	Middle Atlantic	-7	+21	+17	+3	+4	5	2
	East North Central	-1	+28	+22	+7	+16	5	2
	West North Central	-4	+4	+22	+3	+3	5	2
	South Atlantic	-7	-18	+7	+1	-13	3	2
	East South Central	+7	+14	+17	+5	+25	4	4
	West South Central	-8	+1	+17	+2	+18	4	2
	Mountain	+8	(S)	(S)	+1	-26	2	2
	Pacific	-13	+44	+36	+5	+81	2	3
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+1	+21	+19	+2	+27	2	1
	New England	-1	+30	+30	-1	+30	3	2
	Middle Atlantic	+14	+21	+13	-1	+14	5	2
	East North Central	-6	+10	+22	+1	+15	3	2
	West North Central	-3	+27	+15	0	+69	5	3
	South Atlantic	-6	0	+14	0	+20	3	2
	East South Central	+21	+28	+13	(S)	+43	3	
	West South Central	+5	(S)	+32	+2	+53	4	
	Mountain	-5	+14	+17	-2	+19	4	
	Pacific	-8	+21	+22	0	+22	4	2

See footnotes at end of table.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: June 1979—Continued

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in--					Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		Sales			Inventories			
		June 1979 from May 1979	June 1979 from June 1978	6 months 1979 from 6 months 1978	June 1979 from May 1979	June 1979 from June 1978		
		A	B	C[1]	D	E	A	D
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+1	+2	+10	+2	+5	3	1
	Middle Atlantic	+2	-5	+10	+2	+2	3	2
	East North Central	-6	+12	+20	+3	+6	4	1
	West North Central	-7	-11	-9	+5	+7	4	4
	South Atlantic	(S)	(S)	+15	+1	-1	6	4
	West South Central	-10	-1	+16	-2	+6	4	4
	Mountain	+1	+4	+19	-2	-18	6	3
	Pacific	0	-5	+7	-1	+6	3	2
5072	Hardware	-10	+5	+10	+1	+15	1	1
	New England	0	(S)	+18	+3	+49	6	3
	Middle Atlantic	-5	+1	+8	+2	+33	6	2
	East North Central	-23	-1	+7	+2	+14	4	2
	West North Central	-9	+17	+17	+1	+26	3	3
	South Atlantic	-3	+2	+8	0	+2	4	2
	East South Central	-10	-19	-4	-1	-17	4	1
	Pacific	-8	+9	+19	-3	+4	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	-4	+7	+15	+3	+5	2	1
	Middle Atlantic	+1	+18	+23	+9	+26	6	3
	East North Central	-4	+1	+4	(S)	(S)	3	3
	South Atlantic	+1	+20	+23	+3	+12	3	2
	Mountain	+1	(S)	-9	-2	+3	7	4
	Pacific	-3	+17	+19	0	+10	5	4
5084,5	Industrial machinery, equipment, and supplies	0	+14	+21	-1	+13	2	1
	Middle Atlantic	+13	+16	+11	-3	+9	7	2
	East North Central	-4	+28	+23	0	+29	3	2
	West South Central	+13	+35	+23	-1	+16	4	3
	Pacific	-4	+15	+30	+1	+20	5	2
512	Drugs, drug proprietaries, and druggists' sundries	-6	+9	+11	+2	+16	1	1
	New England	+3	+3	+16	+1	+7	5	3
	Middle Atlantic	-9	-5	+6	+1	+22	3	2
	East North Central	-12	+5	+11	(S)	(S)	6	3
	West North Central	-5	+27	+14	+2	+28	2	2
	South Atlantic	-11	-1	+8	0	+4	6	5
	East South Central	-6	+21	+5	+5	+20	6	5
	West South Central	-1	+14	+10	+1	+16	3	2
	Mountain	+2	+29	+17	+9	+43	3	2
	Pacific	-1	+27	+21	+1	+25	3	3
5141	Groceries, general-line	-1	+12	+12	+1	+12	1	1
	New England	+2	+9	+14	-3	+10	2	1
	Middle Atlantic	+1	+10	+11	-1	+9	1	2
	East North Central	-1	+12	+9	-1	+8	3	1
	West North Central	-2	-2	+7	-6	+7	1	1
	South Atlantic	-5	+19	+20	-3	+15	2	1
	West South Central	-4	+21	+14	+3	+12	2	1
	Mountain	+6	+11	+14	+7	+2	2	2
	Pacific	-1	+14	+15	+3	+19	1	1
5142,3,6,9	Specialty-line groceries	-5	+7	+10	0	+10	1	1
	Middle Atlantic	-3	+3	+7	0	+1	4	2
	East North Central	-7	+6	+10	-1	+7	3	2
	West North Central	-12	+11	+8	+5	+45	3	1
	South Atlantic	-8	+17	+15	+2	+30	5	6
	East South Central	-8	+8	+16	-4	+7	2	2
5148	Fresh fruits and vegetables	+1	+1	+10	-1	+13	2	4
	Middle Atlantic	+4	0	+9	+1	+9	7	5
	East North Central	+5	+1	+1	0	-11	6	6
	West North Central	+7	-3	+7	-5	+4	6	3
	West South Central	0	+6	+11	-1	+25	5	3
	Pacific	+6	+4	+9	-11	+14	4	4
5194	Tobacco and tobacco products	-3	+2	+9	+1	+4	1	1
	New England	-10	-15	-8	-6	-8	5	3
	Middle Atlantic	-3	+6	+11	+2	+12	4	3
	East North Central	+1	-9	+8	0	-16	4	3
	West North Central	-9	+1	+4	+9	+10	4	2
	South Atlantic	+3	+13	+17	-1	+5	6	6
	East South Central	-1	-12	-3	0	-10	7	4
	West South Central	-2	(S)	+12	-1	(S)	7	6
	Mountain	-8	+4	+7	-7	-25	6	2
	Pacific	-9	+5	+19	-1	+14	2	5

Note: Data at the United States level are generally more reliable than data by geographic division. In those kinds of business where the geographic division trends are subject to a high sampling error, it may be desirable to use the United States total trends for the kinds of business rather than the geographic division trends.

(S) Does not meet publication standards because of extreme variability or high nonresponse rate.

[1] See map on page 7.

[2] The sampling errors (in percent) shown in columns A and D are based on medians or measurements on data for August, September, and October 1977. For SIC's 5051 pt., and 5063 the medians of measurements in columns A and D are based on data for June, July, and August 1978.

APPENDIX A. Reliability of Data

There are two types of errors possible in an estimate based on a sample survey—sampling and nonsampling. Sampling errors occur because observations are made only on a sample, not on the entire population. Nonsampling errors can be attributed to many sources in the collection and processing of data. The accuracy of a survey result is determined by the joint effects of sampling and nonsampling errors.

Measures of sampling variability—The particular sample used in this survey is one of a large number of all possible samples of the same size that could have been selected using the same design. Estimates derived from the different samples would differ from each other. The average of these estimates would be close to the estimate derived from a complete enumeration of the population (assuming that a complete enumeration has the same nonsampling errors as the sample survey). The average of the estimates differs from the estimate from a complete census because of the composite estimation technique. Disregarding this difference, the sampling error or standard error of the estimate is a measure of the variability among the estimates from all possible samples of the same size and design and, thus, is a measure of the precision with which an estimate from a particular sample approximates the results of a complete enumeration. The coefficient of variation (expressed as a percent) is the standard error of the estimate times 100 percent, divided by the value being estimated. Note that any measures of sampling variability, such as the standard error or coefficient of variation, are estimates derived from the sample and are also subject to sampling variability.

Estimates of sampling variability (the coefficients of variation in percent) for sales and inventories at the kind-of-business detail provided in this publication are shown in table A-1. These coefficients of variation permit certain confidence statements about the sample estimates. As noted above, the particular sample used in this survey is one of a large number of all possible samples of about the same size that could have been selected using the same design. In about two out of three (67 percent) of these samples, the estimate would differ from a complete enumeration by less than the corresponding percent for that estimate shown in the sampling variability table. In about 19 out of 20 (95 percent) of these samples, the estimate would differ from the results of a complete enumeration by less than twice the percentages shown.

To illustrate the computations involved in the above confidence statements for monthly dollar volume estimates, assume that an estimate for a kind of business published in table 1 for a particular month is $5,000 million and that the median coefficient of variation for this statistic, is 0.9 percent or .009. Multiplying $5,000 million by .009 yields $45 million. Therefore, a 67 percent confidence interval is $4,955 million to $5,045 million (i.e. $5,000 million plus or minus $45 million). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately two out of three (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Similarly a 95 percent confidence interval is $4,910 million to $5,090 million (i.e., $5,000 million plus or minus $90 million).

As an example of the use of the coefficients of variation with ratios, assume that an estimated month-to-month percent change published in table 5 is -1.0 percent for a particular kind of business. This is equivalent to a month-to-month ratio of .990. Assume the median coefficient of variation for this ratio as shown in table A-1 is 0.5 percent (or .005). Multiplying .990 by .005 yields .005. Therefore, a 67 percent confidence interval is .985 to .995 (i.e., .990 plus or minus .005) and a 95 percent confidence interval is .980 to 1.000 (i.e., .990 plus or minus .010).

Nonsampling errors—As calculated for this report, the coefficient of variation measures certain nonsampling errors but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples of the same size and design, between the estimate and the true value being estimated. The accuracy of the tabulated data is determined by the joint effects of the sampling and nonsampling errors.

Nonsampling errors can be attributed to many sources: (1) inability to obtain information about all cases in the sample, (2) response errors, (3) definitional difficulties, (4) differences in the interpretation of questions, (5) mistakes in recording or coding the data obtained, and (6) other errors of collection, response, coverage, and estimation for missing data. These nonsampling errors also occur in complete censuses.

Although no direct measurement of the biases due to nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is due to imputing data for nonrespondents, for late reporters, and for data which fail edit. For all kinds of business combined, imputed data amount to about 15 percent of the sales estimates and 25 percent for inventories.

Table A-1. Estimated Sampling Variability of Sales and Inventories by Kind of Business for the United States

1972 SIC code	Kind of business	Sales						Inventories					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total	0.8-1.1	0.9	0.8-0.9	0.9	0.4-0.5	0.5	0.8-1.0	0.9	0.7-1.0	0.9	0.2-0.5	0.4
	Total (excluding farm-product raw materials)	0.9-1.2	1.1	0.9-1.0	1.0	0.4-0.6	0.5	0.9-1.0	1.0	0.8-1.0	0.9	0.2-0.5	0.3
50	Durable goods, total	1.1-1.3	1.2	0.9-1.0	1.0	0.6-0.6	0.6	1.1-1.2	1.2	1.0-1.2	1.1	0.3-0.7	0.5
501	Motor vehicles and automotive parts and supplies	2.3-3.3	3.1	1.9-2.8	2.2	1.4-1.9	1.7	2.5-3.3	2.9	2.6-3.1	3.0	0.6-1.3	1.0
5012	Automobiles and other motor vehicles	(*)	(*)	(*)	(*)	1.7-3.9	3.1	(*)	(*)	(*)	(*)	1.7-3.0	2.8
5013,4	Automotive parts and supplies, tires and tubes	2.9-3.7	3.1	2.9-3.2	3.1	1.5-2.0	1.6	4.0-4.5	4.3	3.9-4.4	4.0	0.4-1.4	0.7
5013	Automotive parts and supplies	3.3-4.0	3.9	3.1-3.8	3.7	1.9-2.2	2.0	4.7-5.3	5.2	4.7-5.2	5.0	0.5-1.5	0.9
502	Furniture and home furnishings	4.2-5.8	4.6	4.2-4.4	4.3	1.7-2.9	2.0	3.2-4.9	3.7	3.4-4.2	3.7	0.8-2.3	2.0
5021	Furniture--household and office	6.6-7.6	6.9	5.6-7.1	6.9	4.0-5.7	4.3	(*)	(*)	(*)	(*)	1.4-3.4	2.2
5021 pt.	Household furniture	(*)	(*)	(*)	(*)	5.0-5.8	5.1	(*)	(*)	(*)	(*)	1.4-4.3	2.0
5021 pt.	Office furniture	(*)	(*)	(*)	(*)	5.7-8.0	5.9	(*)	(*)	(*)	(*)	0.7-3.7	2.1
5023	Home furnishings	5.1-7.5	6.1	5.1-6.1	5.5	1.6-3.6	2.2	4.8-6.9	5.6	4.9-6.0	5.0	1.0-3.1	2.6
503	Lumber and other construction materials	2.8-4.4	3.1	2.9-3.9	3.1	1.6-2.5	1.9	4.5-6.5	4.9	4.8-5.8	4.9	0.7-1.8	0.9
5031	Lumber, plywood, and millwork	4.1-4.6	4.3	3.3-4.6	4.0	2.1-2.5	2.4	5.9-8.2	6.5	6.0-6.9	6.5	1.0-2.6	1.8
5039	Construction materials, n.e.c	4.2-7.2	4.9	4.5-5.9	4.9	2.0-3.4	2.2	(*)	(*)	(*)	(*)	1.1-2.0	1.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(*)	(*)	(*)	(*)	2.2-2.4	2.3	(*)	(*)	(*)	(*)	1.0-2.5	1.4
505	Metals and minerals, except petroleum	4.4-6.0	4.7	4.0-5.1	4.0	1.5-3.0	2.8	3.2-3.8	3.7	3.7-4.1	4.0	0.8-1.4	1.3
5051 pt.	Ferrous metals service centers and offices	5.0-5.8	5.7	4.1-5.2	4.7	1.2-3.8	3.1	3.8-4.2	4.1	4.1-4.3	4.2	0.5-1.6	1.4
5051 pt.	Ferrous metals service centers	6.7-8.0	6.8	5.0-6.8	5.8	1.1-5.3	3.5	2.9-4.4	3.4	3.4-4.0	3.5	0.6-2.2	2.1
5051 pt.	Nonferrous metals service centers and offices	(*)	(*)	(*)	(*)	4.5-7.0	6.1	(*)	(*)	(*)	(*)	2.8-5.4	4.7
506	Electrical goods	1.9-2.6	2.3	1.6-2.1	1.7	1.3-1.6	1.4	2.5-2.9	2.6	2.2-2.8	2.4	0.5-1.0	0.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2.2-3.1	2.6	2.3-2.7	2.4	1.4-1.7	1.6	2.9-3.5	3.2	3.0-3.2	3.1	0.6-1.2	0.7
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3.4-4.0	3.8	3.0-3.2	3.1	1.6-2.8	2.5	2.9-4.2	3.2	2.7-3.8	3.0	0.7-1.6	0.9
5064	Electrical appliances, TV and radio sets	3.0-3.8	3.6	2.6-3.7	3.1	1.7-2.7	2.5	(*)	(*)	(*)	(*)	0.9-1.7	1.4
507	Hardware, plumbing, heating equipment, and supplies	2.7-3.0	2.9	2.4-2.6	2.5	1.1-1.9	1.5	2.4-2.8	2.6	2.4-2.9	2.7	0.3-1.4	0.6
5072	Hardware	3.6-4.2	3.8	2.6-3.1	3.0	1.3-2.4	1.9	2.0-4.1	2.7	2.2-3.5	2.8	0.4-2.1	0.8
5074	Plumbing and heating equipment and supplies (hydronics)	4.1-5.3	4.2	3.9-5.1	4.2	1.6-3.8	2.1	5.0-7.0	6.0	4.5-7.1	5.3	0.5-3.1	0.9
5075	Warm air heating and air conditioning equipment and supplies	(*)	(*)	(*)	(*)	2.0-4.4	2.7	(*)	(*)	(*)	(*)	1.1-4.3	1.4
508	Machinery, equipment, and supplies	2.3-2.7	2.6	1.8-2.5	2.1	1.2-1.5	1.4	2.0-2.6	2.3	1.7-2.1	1.9	0.4-1.8	1.1
5081	Commercial machines and equipment	(*)	(*)	(*)	(*)	2.9-4.3	4.1	(*)	(*)	(*)	(*)	1.6-8.5	1.9
5082	Construction and mining machinery and equipment	5.0-7.3	5.8	3.3-5.8	4.9	3.9-4.6	4.4	2.9-7.0	4.0	3.2-4.1	3.3	0.7-5.3	1.0
5083	Farm and garden machinery and equipment	(*)	(*)	(*)	(*)	4.1-6.6	6.0	(*)	(*)	(*)	(*)	1.1-2.9	1.2
5084,5	Industrial machinery, equipment, and supplies	3.1-3.4	3.2	2.8-3.0	2.9	1.1-2.3	1.6	2.4-3.0	2.9	2.4-3.0	2.7	0.5-1.6	0.6
5086	Professional equipment and supplies	3.7-7.5	4.3	4.0-5.5	5.2	1.8-3.3	2.0	(*)	(*)	(*)	(*)	0.6-5.2	0.7
5086 pt.	Surgical, medical, hospital, and supplies	(*)	(*)	(*)	(*)	1.7-3.8	2.5	(*)	(*)	(*)	(*)	0.7-5.4	1.0
5087	Service establishment equipment and supplies	(*)	(*)	(*)	(*)	1.8-11.0	2.9	(*)	(*)	(*)	(*)	1.0-3.4	1.3
5093	Scrap and waste materials	4.6-13.3	9.0	4.6-8.8	5.0	2.2-4.9	2.7	(*)	(*)	(*)	(*)	0.7-3.8	0.9
5093 pt.	Iron and steel scrap	(*)	(*)	(*)	(*)	2.6-3.5	3.1	(*)	(*)	(*)	(*)	0.8-1.4	1.0
5093 pt.	Waste materials	(*)	(*)	(*)	(*)	2.6-8.8	4.8	(*)	(*)	(*)	(*)	1.2-9.1	1.6
51	Nondurable goods, total	1.0-1.3	1.1	1.0-1.1	1.1	0.4-0.7	0.6	1.5-1.7	1.6	1.4-1.6	1.5	0.3-0.7	0.4
	Total (excluding farm-product raw materials)	1.0-1.6	1.2	1.3-1.4	1.4	0.5-0.8	0.6	1.7-2.0	1.9	1.6-1.8	1.7	0.3-0.7	0.4
511	Paper and paper products	2.6-4.0	3.7	2.4-4.1	3.1	1.0-1.4	1.3	2.5-3.4	2.7	2.4-3.2	2.8	0.4-1.5	0.6
5111,3	Printing, writing, industrial, and personal service paper	2.4-3.1	2.7	2.3-2.8	2.4	1.3-1.5	1.4	2.9-3.4	3.1	2.7-3.2	2.8	0.4-1.3	0.9
5112	Stationery supplies	(*)	(*)	(*)	(*)	2.4-3.4	2.5	3.2-6.1	5.8	3.6-5.1	4.4	0.9-4.8	1.4
512	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	5.6-6.3	5.7	5.6-5.7	5.7	0.6-2.2	0.7
5122	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	(*)	(*)	(*)	(*)	0.6-2.2	0.7
5122 pt.	General-line drugs	7.2-9.8	7.9	7.5-8.5	7.6	0.7-3.0	1.0	(*)	(*)	(*)	(*)	0.5-3.1	1.0
513	Apparel, piece goods, and notions	8.3-12.4	8.8	8.6-9.3	9.1	2.6-4.0	3.3	(*)	(*)	(*)	(*)	(*)	(*)
514	Groceries and related products	1.7-2.2	2.0	1.6-2.0	1.9	0.4-1.2	0.5	1.5-2.5	1.8	1.8-2.1	1.9	0.4-1.3	0.6
5141	Groceries, general-line	1.9-2.7	2.1	1.7-2.7	2.0	0.4-1.5	0.7	1.8-2.7	2.3	1.7-2.0	1.8	0.3-1.2	0.8
5141 pt.	Voluntary groups	(*)	(*)	(*)	(*)	0.5-1.7	0.6	(*)	(*)	(*)	(*)	0.4-1.7	0.5
5141 pt.	Retailer cooperatives	(*)	(*)	(*)	(*)	0.6-1.6	1.1	(*)	(*)	(*)	(*)	0.4-2.4	0.7
5141 pt.	Other general-lines	(*)	(*)	(*)	(*)	0.9-3.1	1.8	(*)	(*)	(*)	(*)	0.5-1.3	0.7
5142,3,6,9	Specialty-line groceries	(*)	(*)	(*)	(*)	0.7-3.4	1.3	(*)	(*)	(*)	(*)	0.9-2.4	1.0
5144	Poultry and poultry products	3.4-5.5	4.4	4.0-4.4	4.2	0.6-2.2	1.5	(*)	(*)	(*)	(*)	2.1-4.1	2.3
5145	Confectionery	4.7-6.3	4.7	3.6-5.4	4.3	2.0-3.2	2.2	(*)	(*)	(*)	(*)	0.8-2.4	2.3
5147	Meats and meat products	4.5-4.8	4.7	4.6-4.6	4.6	1.4-2.9	1.7	(*)	(*)	(*)	(*)	1.7-3.9	2.2
5148	Fresh fruits and vegetables	4.7-5.4	4.9	3.9-4.1	4.0	1.9-4.2	2.7	(*)	(*)	(*)	(*)	2.9-4.4	3.9
515	Farm-product raw materials	1.8-2.2	2.0	1.6-2.0	1.7	1.1-1.7	1.3	(*)	(*)	(*)	(*)	1.1-2.8	2.4
5152	Cotton	(*)	(*)	(*)	(*)	1.8-4.9	2.8	(*)	(*)	(*)	(*)	1.3-2.9	2.4
5153	Grain	2.4-2.7	2.6	2.2-2.4	2.3	1.0-1.7	1.3	(*)	(*)	(*)	(*)	1.6-3.3	1.9
517	Petroleum and petroleum products	4.0-5.0	4.7	4.2-4.6	4.5	1.1-1.9	1.5	4.1-5.2	5.0	4.4-5.4	4.7	1.6-3.0	2.3
5171	Petroleum bulk stations and terminals	2.8-3.3	2.9	2.8-3.0	2.9	0.9-1.4	1.2	(*)	(*)	(*)	(*)	1.7-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages	3.4-3.9	3.7	3.1-3.7	3.2	0.8-1.8	1.7	3.9-4.2	4.1	4.0-4.3	4.2	1.0-2.0	1.3
5181	Beer and ale	2.2-4.4	3.1	2.8-3.2	2.9	1.0-2.5	2.0	3.6-5.5	3.8	3.6-4.1	3.8	1.7-2.7	2.1
5182	Wines and distilled alcoholic beverages	5.2-6.3	5.4	4.6-5.6	4.7	1.2-3.4	1.7	4.6-5.4	4.8	5.0-5.6	5.3	1.4-2.3	1.6
'9	Miscellaneous nondurable goods	2.4-3.2	2.9	2.4-2.7	2.5	1.4-2.3	1.6	(*)	(*)	(*)	(*)	0.8-1.7	1.4
91	Farm supplies	(*)	(*)	(*)	(*)	3.2-3.6	3.3	(*)	(*)	(*)	(*)	1.7-3.9	2.0
.94	Tobacco and tobacco products	4.0-5.2	4.1	3.4-4.5	4.2	1.3-2.4	1.7	(*)	(*)	(*)	(*)	0.8-4.3	1.0
5198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.8-3.8	3.0	(*)	(*)	(*)	(*)	1.5-3.1	2.9
5199 pt.	Books, magazines, newspapers	(*)	(*)	(*)	(*)	3.2-8.0	5.6	(*)	(*)	(*)	(*)	2.0-6.5	5.1

Note: Measures of sampling variability are based on data unadjusted for seasonal variations or trading-day differences. The range of sampling error of the monthly dollar estimates and the ratio of current month to previous month for sales and inventories is based on data for July, August, and September 1977.

*Measures of sampling variability are not shown since sales and/or inventory estimates for these kinds of business are not published.

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

Seasonal factors for adjusting data in this historical publication have been developed by the method described in the **X-11 Variant of the Census Method II Seasonal Adjustment Program**, U.S. Bureau of the Census Technical Paper No. 15, Revised 1967. Trading-day factors for adjusting sales were also derived from the X-11 program.

Adjustment of estimates is an approximation based on past experiences, and therefore, will be less precise to the extent that current competitive pressures, changes in economic condition, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of trading-day adjustment factors may be found in **Estimating Trading-Day Variation in Monthly Economic Time Series**, Bureau of the Census Technical Paper No. 12, 1965. Additional details concerning the adjustment factors may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.7	91.8	107.1	97.7	104.3	104.7	95.6	104.7	98.3	102.2	100.6	96.3
	Total (excluding farm-product raw materials)	91.6	91.6	106.6	97.8	105.1	105.8	95.8	106.1	100.3	102.3	99.3	95.0
50	Durable goods, total	89.6	89.0	105.7	99.0	106.5	107.3	96.4	107.7	101.9	104.1	98.6	91.5
501	Motor vehicles and automotive parts and supplies	93.3	89.8	107.6	107.7	108.4	107.5	98.6	106.9	96.1	98.3	93.3	90.5
502	Furniture and home furnishings	84.8	89.8	105.2	96.8	101.6	106.6	89.2	105.2	103.9	112.1	107.2	95.2
503	Lumber and other construction materials	80.6	80.2	100.9	94.6	109.8	112.2	102.4	117.4	106.2	109.9	100.0	84.0
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	78.7	88.7	104.5	101.5	109.3	97.0	96.1	105.2	105.4	106.0	108.0	95.5
505	Metals and minerals, except petroleum	98.2	91.4	108.2	98.6	107.6	104.4	91.2	108.6	103.1	100.0	97.1	90.3
506	Electrical goods	89.3	89.1	102.0	96.0	99.4	106.5	99.0	104.8	100.8	107.5	103.5	98.8
507	Hardware, plumbing, heating equipment, and supplies	89.2	87.4	99.9	97.9	106.7	108.0	100.7	109.2	102.4	107.2	100.6	88.3
508	Machinery, equipment, and supplies	88.1	88.6	107.9	99.9	107.7	108.8	95.4	104.6	103.3	103.5	96.5	92.3
509	Miscellaneous durable goods	86.2	89.8	106.2	96.2	100.2	110.7	88.4	109.5	101.9	108.1	103.7	96.0
51	Nondurable goods, total	96.4	93.8	108.5	97.1	103.5	102.3	94.9	102.1	96.1	100.2	101.8	100.1
	Total (excluding farm-product raw materials)	94.3	94.0	106.8	96.6	103.2	104.5	95.5	104.5	97.6	100.6	100.6	98.4
511	Paper and paper products	95.5	92.6	106.3	93.4	103.3	103.6	95.6	107.3	102.6	104.0	99.4	92.6
512	Drugs, drug proprietaries, and druggists' sundries	97.8	92.6	106.0	96.3	100.3	99.8	92.9	104.7	100.8	108.1	101.0	96.6
513	Apparel, piece goods, and notions	90.1	94.4	107.1	91.8	101.2	98.8	93.7	115.6	106.3	107.7	103.4	87.1
514	Groceries and related products	94.7	91.1	104.2	97.2	105.4	105.0	99.0	105.3	98.9	101.0	99.8	95.0
515	Farm-product raw materials[1]	103.1	94.7	112.6	98.0	103.9	96.9	93.0	92.4	91.5	100.8	108.3	99.9
516	Chemicals and allied products	90.2	89.2	106.3	98.0	107.1	108.3	96.1	108.0	97.8	105.0	98.8	93.3
517	Petroleum and petroleum products	99.7	102.3	107.7	96.2	95.9	100.0	96.5	100.2	93.1	100.9	100.3	104.8
518	Beer, wine, and distilled alcoholic beverages	77.8	81.4	102.2	90.7	106.8	113.9	97.6	107.8	97.8	100.6	106.9	113.5
519	Miscellaneous nondurable goods	96.0	100.5	116.6	102.4	107.4	105.2	88.2	95.5	95.4	96.8	95.6	96.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.8	101.2	101.7	100.7	99.4	99.3	98.6	98.1	98.7	100.1	100.9	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.0	100.3	100.6	100.7	100.2	99.4	99.6	99.9	99.7	99.1
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.5
501	Motor vehicles and automotive parts and supplies	101.3	103.0	101.6	100.6	102.0	100.5	99.2	97.0	97.4	98.1	99.0	99.9
502	Furniture and home furnishings	99.1	99.3	99.7	99.5	100.8	101.9	100.5	100.6	101.2	100.2	99.5	97.3
503	Lumber and other construction materials	98.4	99.1	103.6	102.7	103.6	101.7	101.4	99.8	99.2	96.7	96.2	97.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.6	99.8	100.7	102.4	106.5	105.3	100.9	101.5	100.9	93.9	89.9
505	Metals and minerals, except petroleum	99.4	98.2	100.2	100.8	100.2	100.2	102.8	102.8	99.9	96.7	98.9	99.7
506	Electrical goods	96.7	96.8	99.0	99.6	101.2	102.6	101.4	100.7	101.3	101.2	100.5	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.4	103.2	102.6	101.6	100.6	98.4	98.7	97.1	96.1
508	Machinery, equipment, and supplies	99.0	101.0	101.6	100.1	101.0	102.1	100.3	99.0	99.4	99.0	98.7	98.7
509	Miscellaneous durable goods	97.0	97.6	96.0	97.5	96.4	100.8	102.4	102.6	102.9	103.8	102.4	100.5
51	Nondurable goods, total	104.1	103.2	103.3	99.4	96.7	95.1	94.7	95.3	97.4	102.1	104.6	103.4
	Total (excluding farm-product raw materials)	100.0	100.0	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.6	100.5
511	Paper and paper products	97.8	98.3	99.1	101.1	100.4	102.6	100.0	100.2	100.7	100.0	99.6	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.1	99.8	100.6	97.9	100.6	99.0	100.0	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.0	100.2	101.9	101.5	99.8	99.0	98.6	99.3
514	Groceries and related products	98.7	100.2	102.1	100.5	99.2	98.7	98.5	98.0	99.9	102.0	100.9	101.0
515	Farm-product raw materials[1]	118.8	115.2	112.2	100.3	88.9	84.6	78.8	79.4	83.8	103.8	117.4	115.3
516	Chemicals and allied products	98.0	100.0	101.9	101.6	102.4	100.9	101.6	100.2	100.4	96.9	97.0	98.7
517	Petroleum and petroleum products	104.4	99.3	99.2	94.2	96.0	94.3	96.3	100.7	102.9	104.8	104.2	103.4
518	Beer, wine, and distilled alcoholic beverages	96.3	95.8	97.4	99.1	102.3	102.9	99.9	97.9	100.3	107.0	105.7	95.3
519	Miscellaneous nondurable goods	103.6	104.6	105.0	102.1	97.2	93.2	95.1	96.0	97.4	99.7	101.9	104.0

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979—Continued

1972 SIC code	Kind of business	1979											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	95.9	91.8	104.7	100.0	105.3	101.5	98.4	104.2	95.8	104.5	100.4	96.2
	Total (excluding farm-product raw materials)	94.0	91.6	103.9	99.8	106.1	102.9	98.6	105.7	97.6	104.9	99.2	94.5
50	Durable goods, total	91.9	89.1	103.2	101.1	107.3	104.3	99.4	107.0	99.3	106.8	98.4	91.2
501	Motor vehicles and automotive parts and supplies	94.0	89.9	106.2	108.4	110.5	104.7	102.9	104.4	94.7	99.1	93.7	89.3
502	Furniture and home furnishings	87.1	89.8	101.8	98.4	102.6	104.0	91.2	105.5	101.7	115.1	106.5	94.2
503	Lumber and other construction materials	83.0	80.2	97.3	98.0	110.4	107.7	107.0	117.2	102.4	113.5	100.3	83.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	84.3	88.7	102.1	101.4	107.8	98.7	95.0	103.6	103.6	113.3	102.3	97.8
505	Metals and minerals, except petroleum	100.7	91.4	102.7	101.4	107.6	101.3	95.4	108.3	101.3	102.6	96.1	89.0
506	Electrical goods	92.0	89.1	99.9	99.3	98.8	103.9	100.6	104.5	98.2	110.6	102.9	100.1
507	Hardware, plumbing, heating equipment, and supplies	91.0	87.4	97.8	100.1	108.1	104.5	103.4	108.6	100.5	109.2	100.3	88.6
508	Machinery, equipment, and supplies	90.9	88.7	106.1	102.1	108.9	105.2	97.1	104.4	100.1	106.7	96.3	92.9
509	Miscellaneous durable goods	86.8	89.8	105.0	99.4	101.6	105.4	92.6	109.0	98.1	109.1	106.2	95.5
51	Nondurable goods, total	93.8	93.7	106.2	99.2	104.4	99.5	97.2	101.8	93.9	102.7	101.5	99.8
	Total (excluding farm-product raw materials)	96.8	94.0	104.0	99.0	104.1	101.2	98.0	104.7	94.9	103.2	100.7	98.0
511	Paper and paper products	100.0	92.7	103.2	94.8	103.3	102.4	97.4	107.1	99.3	108.7	97.7	92.2
512	Drugs, drug proprietaries, and druggists' sundries	99.7	92.6	104.0	98.9	100.6	96.9	96.6	103.9	97.6	110.1	101.8	96.1
513	Apparel, piece goods, and notions	93.9	94.4	103.7	92.4	101.8	97.8	95.7	115.5	102.9	112.3	102.1	85.9
514	Groceries and related products	97.5	91.0	103.1	98.3	106.3	103.0	100.0	105.0	96.2	104.0	99.5	95.1
515	Farm-product raw materials[1]	106.7	94.5	111.9	100.2	102.7	97.1	94.1	91.8	87.9	104.3	108.3	100.5
516	Chemicals and allied products	92.5	89.2	101.9	100.8	107.7	105.0	100.2	108.2	94.8	107.6	98.9	91.7
517	Petroleum and petroleum products	99.2	102.1	106.6	99.2	95.9	96.9	100.0	100.7	90.7	100.1	103.6	103.5
518	Beer, wine, and distilled alcoholic beverages	81.1	81.5	98.0	93.8	107.9	109.4	101.0	108.2	94.0	104.8	106.4	112.3
519	Miscellaneous nondurable goods	97.5	100.5	114.0	106.1	108.2	101.4	90.4	96.3	92.4	98.3	96.6	96.6
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.7	101.2	101.7	100.8	99.5	99.3	98.6	98.1	98.7	100.1	100.8	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.1	100.4	100.6	100.7	100.2	99.4	99.6	99.9	99.6	99.0
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.4
501	Motor vehicles and automotive parts and supplies	101.3	103.1	101.6	100.6	102.0	100.5	99.3	97.0	97.4	98.2	99.0	99.8
502	Furniture and home furnishings	99.2	99.3	99.7	99.5	100.9	102.0	100.4	100.6	101.2	100.2	99.5	97.2
503	Lumber and other construction materials	98.5	99.1	103.7	102.7	103.4	101.5	101.3	99.8	99.2	96.8	96.2	97.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.7	99.8	100.7	102.3	106.4	105.3	100.9	101.6	100.9	93.8	90.0
505	Metals and minerals, except petroleum	99.3	98.3	100.2	100.8	100.2	100.2	102.8	102.9	100.0	96.6	98.8	99.6
506	Electrical goods	96.7	96.7	99.0	99.7	101.3	102.7	101.4	100.7	101.4	101.1	100.4	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.6	103.3	102.6	101.6	100.6	98.4	98.7	97.0	96.0
508	Machinery, equipment, and supplies	99.0	101.0	101.5	100.1	101.0	102.1	100.3	99.1	99.4	98.9	98.6	98.7
509	Miscellaneous durable goods	97.1	97.5	96.0	97.4	96.4	100.9	102.4	102.6	103.0	103.8	102.4	100.5
51	Nondurable goods, total	103.9	103.2	103.4	99.5	96.9	95.3	94.7	95.3	97.4	102.0	104.5	103.4
	Total (excluding farm-product raw materials)	100.0	99.9	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.5	100.5
511	Paper and paper products	97.7	98.3	99.1	101.1	100.5	102.7	99.9	100.1	100.7	100.0	99.5	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.0	99.8	100.5	97.8	100.6	99.0	100.1	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.1	100.2	101.8	101.6	99.8	99.1	98.5	99.2
514	Groceries and related products	98.7	100.2	102.1	100.5	99.3	98.7	98.5	98.0	99.9	102.0	100.8	101.0
515	Farm-product raw materials[1]	118.5	115.2	112.3	100.8	89.6	85.4	78.5	79.2	83.5	103.3	117.1	115.1
516	Chemicals and allied products	98.0	100.0	102.0	101.6	102.4	101.0	101.6	100.2	100.5	96.9	96.8	98.6
517	Petroleum and petroleum products	104.4	99.4	99.4	94.2	95.9	94.2	96.2	100.9	102.9	104.7	104.2	103.2
518	Beer, wine, and distilled alcoholic beverages	96.3	95.7	97.4	99.1	102.3	102.8	99.9	97.9	100.3	106.9	105.7	95.3
519	Miscellaneous nondurable goods	103.7	104.6	105.1	102.1	97.2	93.1	95.1	95.9	97.3	99.7	101.8	104.0

Note: The adjustment factors shown above for sales are a combination of the seasonal and trading-day factors. These are separately available, however, upon request. Adjustment factors are included in this table for some kinds of business for which adjusted data are not published separately.

Adjusted sales and inventory data shown in table 4 are obtained by dividing the unadjusted data shown in tables 1 and 2 by the adjustment factors shown above for the corresponding kinds of business. Adjusted data for the summary trade totals are obtained by summarizing the adjusted data for the individual kinds of business. Seasonal factors shown for the summary trade totals provide an approximation to these totals but may show small differences from the published data. The seasonally adjusted data for 1978 may vary slightly from the method shown above because of insignificant rounding differences.

[1]There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table B-2. Average Month-to-Month Percent Changes and Related Summary Measures for Sales and Inventories of Merchant Wholesalers

1972 SIC code	Kind of business	$\bar{O}$	$\bar{S}$	$\bar{CI}$	$\bar{I}$	$\bar{C}$	$\bar{I}/\bar{C}$	MCD	Average duration of run			
									CI	I	C	MCD
		Sales										
	Merchant wholesalers, total	4.74	3.10	1.31	.82	.96	.86	1	3.10	1.57	14.11	3.10
50	Durable goods, total	5.30	4.84	1.43	.89	1.08	.82	1	3.53	1.63	15.87	3.53
501	Motor vehicles and automotive parts and supplies	5.53	4.22	2.67	2.33	1.24	1.87	3	2.05	1.59	25.40	5.43
502	Furniture and home furnishings	6.00	7.29	2.06	1.68	1.07	1.57	2	2.27	1.55	9.07	3.00
503	Lumber and other construction materials	7.40	6.25	2.67	1.72	1.76	.98	1	2.76	1.51	14.11	2.76
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	9.79	9.32	4.02	3.74	1.20	3.12	4	1.81	1.67	7.06	3.44
505	Metals and minerals, except petroleum	6.79	3.78	3.10	2.38	1.63	1.46	2	2.19	1.41	9.07	3.71
506	Electrical goods	5.79	5.17	1.89	1.52	1.04	1.47	2	2.08	1.46	10.58	3.32
507	Hardware, plumbing, heating equipment, and supplies	5.42	4.86	1.78	1.33	1.09	1.22	2	1.98	1.41	12.70	3.94
508	Machinery, equipment, and supplies	6.10	5.41	1.87	1.51	.97	1.56	2	1.92	1.46	7.94	3.32
509	Miscellaneous durable goods	7.66	6.11	3.51	2.79	1.79	1.56	2	1.87	1.48	9.77	2.93
51	Nondurable goods, total	5.07	2.80	1.58	1.10	.95	1.16	2	2.59	1.43	9.07	3.60
511	Paper and paper products	5.41	3.16	1.99	1.44	1.10	1.30	2	1.98	1.48	7.94	3.60
512	Drugs, drug proprietaries, and druggists' sundries	5.97	3.89	1.90	1.64	.76	2.15	3	1.95	1.57	9.77	4.31
513	Apparel, piece goods, and notions	7.73	6.91	2.70	2.36	1.01	2.34	3	1.72	1.38	10.58	4.17
514	Groceries and related products	4.44	2.01	1.67	1.41	.82	1.72	2	1.92	1.51	12.70	3.15
515	Farm-product raw materials	9.27	5.04	4.87	4.29	1.59	2.70	4	1.90	1.53	6.68	3.54
516	Chemicals and allied products	6.21	4.53	2.47	1.93	1.46	1.32	2	2.19	1.49	8.47	3.32
517	Petroleum and petroleum products	7.38	4.71	4.81	4.47	1.35	3.30	4	1.67	1.55	9.07	2.70
518	Beer, wine, and distilled alcoholic beverages	10.94	8.71	1.86	1.64	.69	2.39	3	1.76	1.59	21.17	3.68
519	Miscellaneous nondurable goods	5.89	4.84	2.53	2.23	.96	2.32	3	1.92	1.63	8.47	3.47
		Inventories										
	Merchant wholesalers, total	1.10	.72	.94	.39	.83	.47	1	4.88	1.79	18.14	4.88
50	Durable goods, total	1.07	.57	.89	.35	.86	.41	1	7.94	1.46	31.75	7.94
501	Motor vehicles and automotive parts and supplies	2.20	1.22	1.69	1.13	1.21	.93	1	2.54	1.63	12.70	2.54
502	Furniture and home furnishings	2.13	1.28	1.60	1.19	1.00	1.19	2	2.40	1.57	21.17	5.25
503	Lumber and other construction materials	2.60	1.77	1.83	1.28	1.09	1.17	2	2.54	1.67	15.87	4.20
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	3.60	2.92	2.17	1.80	1.20	1.50	2	2.27	1.48	25.40	3.60
505	Metals and minerals, except petroleum	3.14	2.53	1.79	1.01	1.33	.76	1	3.26	1.72	8.47	3.26
506	Electrical goods	1.75	1.08	1.32	.90	.92	.98	1	2.49	1.31	42.33	2.49
507	Hardware, plumbing, heating equipment, and supplies	1.69	1.10	1.23	.87	.89	.98	1	2.70	1.53	18.14	2.70
508	Machinery, equipment, and supplies	1.36	.92	1.03	.66	.82	.82	1	2.65	1.65	31.75	2.65
509	Miscellaneous durable goods	2.29	1.47	1.85	1.28	1.18	1.08	2	1.95	1.53	25.40	4.34
51	Nondurable goods, total	2.49	2.19	1.44	.83	1.07	.78	1	3.74	1.74	7.06	3.74
511	Paper and paper products	1.82	.94	1.38	1.04	.75	.94	2	2.12	1.44	9.07	4.20
512	Drugs, drug proprietaries, and druggists' sundries	2.39	1.46	1.60	1.37	.67	2.04	3	1.81	1.51	31.75	3.38
513	Apparel, piece goods, and notions	2.28	1.43	1.86	1.43	1.05	1.35	2	2.40	1.74	9.07	3.15
514	Groceries and related products	1.87	1.29	1.43	.92	1.01	.91	1	2.54	1.38	11.55	2.54
515	Farm-product raw materials	8.88	8.22	4.86	3.99	2.03	1.96	3	2.49	1.90	8.47	3.91
516	Chemicals and allied products	3.14	1.58	1.36	1.89	1.39	1.36	2	2.35	1.49	12.70	3.71
517	Petroleum and petroleum products	6.09	3.19	5.01	4.34	2.00	2.17	3	1.87	1.59	15.87	3.68
518	Beer, wine, and distilled alcoholic beverages	4.28	3.68	1.76	1.46	.74	1.98	3	2.35	1.63	9.77	4.03
519	Miscellaneous nondurable goods	2.53	1.52	1.88	1.48	.84	1.75	2	2.19	1.59	7.06	3.15

Description of Measures Shown Above

The following are brief descriptions of the measures shown in this table. More complete explanations appear in "Electronic Computers and Business Indicators," Occasional Paper 57, National Bureau of Economic Research, Inc., New York, 1957.

$\bar{O}$ is the average month-to-month percentage change, without regard to sign, in the original series before seasonal or trading-day adjustment.

$\bar{S}$ is the average month-to-month percentage change, without regard to sign, in the seasonal component. It is a measure of the average monthly seasonal change in the unadjusted series.

$\bar{CI}$ is the average month-to-month percentage change, without regard to sign, in the seasonally adjusted series.

$\bar{I}$ is the average month-to-month percentage change without regard to sign, for the irregular component. The irregular component is obtained by dividing the seasonally adjusted series by the cyclical component.

$\bar{C}$ is the average month-to-month percentage change, without regard to sign, for the cyclical component, which is a smooth, flexible moving average.

$\bar{I}/\bar{C}$ is a measure of the relative smoothness (small values) or irregularity (large values) of the seasonally adjusted series.

MCD (months for cyclical dominance) gives an estimate of the appropriate time span over which to observe cyclical movements in a monthly series. In deriving MCD, the average (without regard to sign) percentage changes in the irregular and cyclical components are computed for 1-month spans (Jan.-Feb., Feb.-Mar., etc.) 2-months spans (Jan.-Mar., Feb.-Apr., etc.), and so on. MCD is the shortest span for which the average change (without regard to sign) in the cyclical component is larger than the average change (without regard to sign) in the irregular component; that is, it indicates the point at which fluctuations begin to be more attributable to cyclical than to irregular movements. MCD is small for smooth series and large for erratic series.

Average duration of run (ADR) is a measure of smoothness, and is equal to the avera number of consecutive monthly changes in the same direction in any series of observatio When there is no change between 2 months, a change in the same direction as the precedi change is assumed. The ADR is shown for the seasonally adjusted series CI, irregular co ponent I, cyclical component C, and the MCD moving average. The MCD moving averag an unweighted moving average (with the number of terms equal to MCD) of the seasona adjusted series.

A comparison of these measures with the expected ADR of a random series gives an indication of whether the changes approximate those of a random series. (The expected value of ADR for a random series is 1.5 and it falls between 1.36 and 1.75 about 95 percent of the time. For a moving average of a random series the expected value is 2.0). For example, the ADR of CI is 2.08 for electrical goods sales. This indicates that 1-month changes in the seasonally adjusted series, on the average, reverse sign slightly less often than a random series. In the next two columns, 1.46 for I and 10.58 for C indicate the separation of the seasonally adjusted series into an essentially random component and the cyclical (nonrandom) component. Finally, 3.32 for MCD indicates that a 2-month moving average of the seasonally adjusted series (2 months being the MCD span) reverses direction on the average about every 3 months. The increase in the average duration of run from 2.08 for CI to 3.32 for the MCD moving average indicates that for this series the use of MCD spans reduces the effect of the irregular component upon the seasonally adjusted series.

These averages are based on a seasonally adjusted series which is adjusted historically; that is, the months used to compute the measures were the same months used to estimate the seasonal factors. Current data, however, are adjusted by use of factors projected 1 year ahead, and are thus subject to additional error. Therefore, current data are probably somewhat more irregular and subject to larger MCD than shown above.

APPENDIX C. Explanatory Material

I. SCOPE OF THE SURVEY

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the Standard Industrial Classification (SIC) Manual[1] and as covered in the 1972 census, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm or professional business users; or to other wholesalers; or acting as agents or brokers in buying merchandise for or selling merchandise to such persons or companies.

The principal types of establishments included are: (1) merchant wholesalers who take title to the goods they sell, such as wholesale merchants or jobbers, industrial distributors, voluntary group wholesalers, exporters, importers, cash-and-carry wholesalers, drop shippers, major distributors, retailer cooperative warehouses, terminal elevators, and cooperative buying associations; (2) sales branches and sales offices (but not retail stores) maintained by domestic manufacturing or mining enterprises apart from their plants or mines for the purpose of marketing their products; (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), which constitute the major portion of the broad field of wholesale trade, and excludes the other types of wholesale trade. All kinds of business in which merchant wholesalers operate are represented in this survey.

Kind-of-business classifications are not interchangeable with commodity classifications. Most businesses sell several kinds of commodities. The kind-of-business code assigned generally reflects either the individual commodity or the commodity group which is the primary source of the establishments receipts, or some mixture of commodities which characterizes the establishment's business. Thus, the classification of establishments by kind of business generally does not make it possible to determine either the number of establishments handling a particular commodity or the sales of that commodity. For example, the "grocery" classification excludes establishments selling groceries if the sale of groceries is not the primary source of receipts; moreover, even though establishments are classified as "grocery wholesalers" some of their sales may be derived from the sale of nonfood products.

A description of each kind of business included in the accompanying statistical data is shown in appendix D.

II. SAMPLE DESIGN AND ESTIMATION PROCEDURES

Framework of old series—The first publication in this series based on probability sampling, was the January 1954 report. Effective with the July 1956 publication an entirely new sample was selected from the 1954 Census of Business. Other changes in the sample have been made since 1956, representing, for the most part, revisions to reflect the findings of successive censuses of wholesale trade.

Selection of sample for new series—The new sample[2] like the old is a probability sample, and the estimating procedures used are similar in many respects to the old sample.

The new sample originally was drawn from the Standard Statistical Establishment List (SSEL) as updated to December 31, 1974. The initial SSEL consisted of two lists. One list was composed of all Employer Identification (EI) numbers issued by the Internal Revenue Service (IRS) with reported payroll in at least one quarter of 1973 or 1974, with payroll in the 1972 census, or with sales/receipts greater than $100,000 in the 1972 census. The second list consisted of all establishments of known multiestablishment companies as of December 31, 1974. These lists contained information on sales/receipts, payroll, employment, name and address, kind-of-business classification, etc.

Before the 1974 SSEL was available, a study was made, using files from the 1972 Census of Wholesale Trade. This study determined the stratification of the sampling units based on 1972 sales, inventories, and kind of business, and also determined the optimal allocation of the sample necessary to meet specified variance objectives for sales and inventory estimates for different kind-of-business groups. The primary stratum boundary determined in the study was the certainty cutoff to be used for each kind of business. The cutoff was particularly important since it also determined the type of sampling unit.

The sampling units for the new sample consisted of both companies and EI's. To be eligible for the initial sampling, an EI had to be active, i.e., had payroll in 1974 and was on the Internal Revenue Service mailing list for Federal Insurance Contribution Act (FICA) taxpayers. If a known multiestablishment company had total merchant wholesale sales (on a 1972 basis) above the cutoff for its major kind of business, the company was selected for the sample with certainty. Single establishment companies, whether or not selected with certainty, were considered as EI sampling units.

All merchant wholesale companies below the certainty cutoff were treated on an EI basis; that is, the EI was the sampling unit. The EI's were then stratified according to their major kind of business and their estimated sales (on a 1972

[1] Executive Office of the President, Office of Management and Budget, **Standard Industrial Classification Manual**, 1972.

[2] For a complete exposition of the new sample, see C. T. Isaki et al., "Sample Redesign Aspects of the Census Bureau's Monthly Business Surveys" and K. M. Wolter et al., "Sample Selection and Estimation Aspects of the Census Bureau's Monthly Business Surveys," **Proceedings of the Business and Economic Statistics Section: American Statistical Association**, 1976.

basis). Within each stratum, a simple random sample of EI's was selected. The sampling rates for these EI's varied between 1 in 3 and 1 in 600.

For those EI's in the inital sample that did not have kind-of-business classifications and for all EI "births" after the initial selection, a two-phase selection procedure was used. EI "births," as used here, are new EI's recently assigned by SSA and currently on the IRS mailing list for FICA taxpayers. In the first phase, "births" were stratified by kind of business and size (expected employment or quarterly payroll). A relatively large sample was drawn and canvassed in order to obtain a more reliable measure of size (sales in two recent months) and a more detailed kind-of-business code, if needed.

Using this more reliable information, the cases were re-stratified and the final sample drawn with overall probabilities equivalent to those used in drawing the initial sample from the 1974 SSEL. Because of the lag in reporting "births" to the IRS and Social Security Administration (SSA) and the time needed to accomplish the two-phase birth-selection procedure, "births" are actually added to the sample about eight or nine months after they begin operation. The ongoing birth-selection procedure is carried out quarterly.

Since "births" are not represented in the sample, until they go through the selection procedure described above, an interium procedure is required to account for "births" during the period between the onset of activity and the time of birth selection. This consists of imputing for all cases which go out of business, but which are still on the IRS mailing list. This imputation procedure was also used in the old series. However, because of recent delays in obtaining "births," this procedure now accounts for a larger percentage of the estimates.

To be eligible for the sample canvass and tabulation in a given month, a merchant wholesale business must meet both of the following requirements:

1. It must be on the IRS mailing list for FICA taxpayers from the previous quarter.

2. It must have been selected from either the SSEL or the file of employer "births." For this purpose, a universe file of all businesses ever given a chance of selection is maintained. This file shows, among other things, which EI numbers actually have been selected.

In the case of businesses that were selected into the sample with certainty, the first requirement is changed. These certainty sampling units are not dropped from canvass and tabulation if they are no longer on the IRS mailing list. If there are successor businesses, they are added to the survey. This is a tighter form of control used for these larger businesses.

Use of the rotating sample and composite estimating procedures—Rotating samples or panels are used except for very large businesses which are selected with certainty. For sampling units in the rotating panels, two months of data are obtained at each enumeration. For example, February rotating panel cases report data for February (the current month) and January (the previous month). In the following month, a different rotating panel (the March panel) reports figures for March and February. Three sample panels are used. This permits the use of a composite estimating procedure which provides estimates more reliable than those which would be obtained from a completely fixed sample of about twice the size. In addition, this procedure reduces the reporting burden of selected businesses.

The first estimate issued each month, based on the full sample, is called the preliminary estimate. The preliminary composite estimate for the current month is a weighted average of two estimates: (1) the current month unbiased estimate (weight .35), and (2) a ratio estimate (weight .65) obtained by multiplying the preliminary composite estimate for the previous month by the current-to-previous-month ratio obtained from the current month reports. Preliminary inventory estimates have been modified, prior to publication, based on past relationships between preliminary and final estimates.

A final estimate is developed one month later using information available from the following month's enumeration. The final composite estimate is also a weighted average of two estimates: (1) the preliminary composite estimate for a given month (weight .7), and (2) the unbiased estimate (weight .3) for the same month as obtained from the next month's reporting panel.

The preliminary composite estimates provide a measure of the dollar volume level that is considerably more reliable than the unbiased estimates, and the final composite estimates are generally more reliable than the preliminary composite estimates. The indication of the month-to-month trend considered to be most reliable is the ratio of the current month's preliminary composite estimate divided by the previous month's final composite estimate. This is true because the numerator and denominator of this ratio are more highly correlated than would be the case if the numerator and denominator were two preliminary estimates or two final estimates. The trend of the preliminary/final ratio, therefore, has less variability than one based on two preliminary figures or two final figures.

Another advantage of the use of the rotating panel system is that the frequency of canvass of very large noncertainty cases can be increased with a consequent reduction, in an unbiased manner, of their statistical weight. This increases the reliability of the estimates, particularly the measure of month-to-month change.

III. PREVIOUSLY PUBLISHED DATA

Data developed from the new sample are not comparable with data previously published in this series. Sales and inventory estimates prior to September 1977 have been revised to reflect: (1) a new sample design; (2) benchmarking of sales to the results of the 1967 and 1972 censuses of wholesale trade; (3) conversion of classifications based on the 1967 SIC manual to classifications based on the 1972 SIC manual (4) addition

of farm assemblers and bulk petroleum establishments; and (5) revision and updating of seasonal adjustment factors.

The revised historical sales series were derived in a manner designed to minimize the changes to the month-to-month trends in the old series. The inventory series were revised by applying the stock-sales ratios from the old series to the revised sales series to obtain the preliminary revised inventory series. These preliminary series were then revised slightly so that August 1977 estimates would equal the new sample estimates.

Although the month-to-month movements in the old and new series show very little change, the level of the revised series show substantial change from the old series for some kinds of business. The change in levels depends on the difference between the old series for census years and the benchmark levels and on the difference between the new series level and the old series level for the link month, August 1977.

Additional details concerning the sample design, and revised estimates of merchant wholesale sales and inventories from January 1967 through August 1977, have been provided in a special supplementary publication **Monthly Wholesale, Sales and Inventories: January 1967-August 1977, Revised BW-13-77S.** This report may be obtained from Subscriber Services (Publications), Bureau of the Census, Washington, D.C. 20233 at $.90 per copy.

IV. UNPUBLISHED DATA

Additional data, such as dollar volume estimates for some kinds of business not separately shown in this report, are produced as a byproduct of the regularly published statistics. These additional data have not been included in this publication because the sampling variability associated with these data does not meet the Census Bureau's publication criteria. The Census Bureau, on written request will release these data for individual use, though not for publication.

V. DEFINITION OF TERMS

Sales–Sales include the following: merchandise sold for cash or credit at wholesale and retail by establishments primarily engaged in merchant wholesale trade; receipts from customers for rental or leasing of equipment, instruments, tools, etc.; receipts for delivery, installation, alteration, maintenance, repair, storage, and other services; and gasoline, liquor, tobacco and other excise taxes which are paid by the manufacturer and passed along to the wholesaler. Sales are net after deductions for refunds and allowances for merchandise returned by customers. Sales which are made on an agency basis for others are included as gross sales. Direct shipments on orders from wholesalers are also included in sales. Total sales do not include nonoperating income from such sources as investments, rental or sale of real estate, etc.

In the new series, sales exclude sales and excise taxes collected directly from customers and paid directly to a local, State, or Federal tax agency. Also excluded are receipts from customers for carrying or other credit charges. In the old series respondents were requested to include these taxes and credit charges in the reported sales. The impact of this change is considered minimal.

Inventories–Inventories represent stocks, at cost, of merchandise on hand for sale at the end of the month regardless of location, except for goods outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included.

Stock-sales ratios–The stock-sales ratios are percentages derived by dividing the dollar value of inventories, at cost, by the dollar value of sales. No adjustment is made in these ratios for the markup in sales which may vary from trade to trade.

The sales and inventory figures represent total sales and inventories of all establishments primarily engaged in merchant wholesale trade. Also included are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments.

APPENDIX D. Kind-of-Business Classifications

DURABLE GOODS
(SIC Major Group 50)

This major group includes establishments primarily engaged in the wholesale distribution of durable goods.

MOTOR VEHICLES AND AUTOMOTIVE PARTS AND SUPPLIES
(SIC 501)

Automobiles and Other Motor Vehicles (SIC 5012)[1]—Establishments primarily engaged in the wholesale distribution of new and used passenger automobiles, trucks, and other motor vehicles. Automotive distributors primarily engaged in selling at retail to individual consumers for personal use, and also selling a limited amount of new and used passenger automobiles and trucks at wholesale to dealers, are classified in retail trade, industry 5511.

Automotive Parts and Supplies (SIC 5013)—Establishments primarily engaged in the wholesale distribution of automotive parts, supplies, accessories, tools and equipment.

Tires and Tubes (SIC 5014)[1]—Establishments primarily engaged in the wholesale distribution of rubber tires and tubes for passenger and commercial vehicles.

FURNITURE AND HOME FURNISHINGS
(SIC 502)

Furniture (SIC 5021)—Establishments primarily engaged in the wholesale distribution of furniture, including bedsprings, mattresses, and other household furniture; office furniture; and furniture for public parks, buildings, etc.

SIC 5021 is subdivided into—

1. Household and lawn furniture.
2. Office and business furniture.

Home Furnishings (SIC 5023)—Establishments primarily engaged in the wholesale distribution of home furnishings and homewares, including antiques; china; glassware and earthenware; lamps; curtains and draperies; linens and towels; carpets, linoleum, and all other types of hard and soft surface floor coverings. Establishments primarily engaged in the wholesale distribution of electrical household goods are classified in industry 5064.

[1] Data for this kind of business are not shown separately but are included in the group total.

LUMBER AND OTHER CONSTRUCTION MATERIALS
(SIC 503)

Lumber, Plywood, and Millwork (SIC 5031)—Establishments, with or without yards, primarily engaged in the wholesale distribution of rough, dressed, and finished lumber (but not timber); plywood; door and window frames (wood or metal); and other wood and metal millwork. Establishments selling lumber, plywood and millwork to the general public and known as "retail" in the trade are classified in industry 521.

Construction Materials, Not Elsewhere Classified (SIC 5039)—Establishments primarily engaged in the wholesale distribution of such building materials as brick, building stone, cement, granite, gravel, lime, marble, plaster, building glass, roofing materials, sand, and tile. Establishments selling construction materials to the general public and known as "retail" in the trade are classified in industry 521. Establishments primarily engaged in marketing heavy structural metal products are classified in industry 5051. Establishments primarily selling readymade concrete are classified in manufacturing.

SPORTING, RECREATIONAL, PHOTOGRAPHIC, AND HOBBY GOODS, TOYS, AND SUPPLIES
(SIC 504)[1]

Establishments primarily engaged in the wholesale distribution of all types of amusement and sporting goods and accessories—billiard and pool supplies; cameras and photographic equipment; coin-operated game machines; games, toys; ammunition and fireworks; etc.

METALS AND MINERALS, EXCEPT PETROLEUM
(SIC 505)

Ferrous Metals Service Centers and Offices (SIC 5051 pt.)—Establishments primarily engaged in marketing ferrous metal semifinished products such as nails, pig iron, steel and tin bars. Establishments in this industry may operate with warehouses (ferrous metals service centers) or without warehouses (ferrous metals sales offices).

Sales branches of domestic manufacturers are included in this category if the establishment is separate from the manufacturing plant and has warehouse space greater than 5,000 square feet.

Nonferrous Metals Service Centers and Offices and Other Minerals and Ores (SIC 5051 pt. and SIC 5052 pt.)[1]—Establishments primarily engaged in marketing nonferrous metal semifinished products such as aluminum bars and copper rods. Establishments in this industry may operate with warehouses (nonferrous metals service centers) or without warehouses (nonferrous metals sales offices). Also included are establishments primarily engaged in the wholesale distribution of copper, iron, lead, and other metallic ores except precious; and crude nonmetallic minerals (including concentrates) except crude petroleum. Establishments primarily engaged in the wholesale distribution of nonmetallic minerals used in construction, such as sand and gravel, are included in industry 5039.

Coal (SIC 5052 pt.)[1]—Establishments primarily engaged in the wholesale distribution of coal and coke. Included are establishments which have products shipped direct from mine to customer, and establishments operating yards and dock space and making deliveries therefrom at wholesale as well as other coal merchants.

ELECTRICAL GOODS (SIC 506)

Electrical Apparatus and Equipment, Wiring Supplies, and Construction Materials (SIC 5063)—Establishments primarily engaged in the wholesale distribution of electrical power equipment for the generation, transmission, or utilization of electric energy; and electrical construction materials for outside power transmission lines and for electrical systems. Construction contractors primarily engaged in installing electrical systems and equipment from their own stock are classified in industry 1731.

Electrical Appliances, TV and Radio Sets (SIC 5064)—Establishments primarily engaged in the wholesale distribution of radio and television sets and household electrical appliances.

Electronic Parts and Equipment (SIC 5065)[1]—Establishments primarily engaged in the wholesale distribution of electronic parts and equipment, such as industrial and radio and television receiving and transmitting electronic tubes; electronic intercommunication equipment; radio parts and accessories; and electronic sound equipment. Establishments primarily engaged in the wholesale distribution of radio and television receiving sets and phonographs are classified in industry 5064.

HARDWARE, PLUMBING, HEATING EQUIPMENT, AND SUPPLIES (SIC 507)

Hardware (SIC 5072)—Establishments primarily engaged in the wholesale distribution of hardware, such as builders; shelf or light hardware; handtools (except automotive and machinists' precision); handsaws and cutlery; brads, staples, and tacks; and bolts, nuts, rivets, and screws. Establishments primarily engaged in the wholesale distribution of nails, noninsulated wire, and screening are classified in industry 5051.

Plumbing and Heating Equipment and Supplies (Hydronics) (SIC 5074)—Establishments primarily engaged in the wholesale distribution of hydronic plumbing and heating equipment and supplies. Construction contractors primarily engaged in installing plumbing and heating equipment from their own stock are classified in industry 1711.

Warm Air Heating and Air-Conditioning Equipment and Supplies (SIC 5075)[1]—Establishments primarily engaged in the distribution of warm air heating and air-conditioning equipment and supplies. Construction contractors primarily engaged in installing warm air heating and air-conditioning equipment are classified in industry 1711.

Refrigeration Equipment and Supplies (SIC 5078)[1]—Establishments primarily engaged in the distribution of refrigeration equipment and supplies. Construction contractors primarily engaged in installing refrigeration equipment from their own stock are classified in industry 1711.

MACHINERY, EQUIPMENT, AND SUPPLIES (SIC 508)

Commercial Machines and Equipment (SIC 5081)[1]—Establishments primarily engaged in wholesaling commercial machines and equipment, such as office, store, and business machines and equipment; commercial food service equipment; and fountain and store fixtures.

Construction and Mining Machinery and Equipment (SIC 5082)—Establishments primarily engaged in marketing cranes, excavating machinery and equipment, power shovels, road construction and maintenance machinery, tractor-mounting equipment and other specialized machinery and equipment used in the construction, mining, and logging industries. Establishments engaged in marketing oil well machinery and equipment are classified in industry 5084.

Farm and Garden Machinery and Equipment (SIC 5083)[1]—Establishments primarily engaged in marketing agricultural machinery and equipment for use in the preparation and maintenance of the soil, the planting and harvesting of crops, and other operations and processes pertaining to work on the farm or the lawn or garden; and dairy and other livestock equipment.

Industrial Machinery and Equipment (SIC 5084)[1]—Establishments primarily engaged in marketing industrial machinery and equipment, such as metal working tools, food industries machinery, oil well and oil refining machinery, industrial

[1] Data for this kind of business are not shown separately but are included in the group total.

trucks and tractors (except over-the-road types), printing machinery, and machinery and equipment for other manufacturing industries.

Industrial Supplies (SIC 5085)[1]—Establishments primarily engaged in marketing industrial supplies, such as abrasives and materials, rope and cordage, and mechanical rubber goods; welding supplies; mechanical power transmission supplies, including bearings; industrial valves and fittings; metal containers; industrial leather; and reconditioned barrels and drums.

Professional Equipment and Supplies (SIC 5086)—Establishments primarily engaged in the wholesale distribution of mechanical devices and other equipment used by architects, dentists, engineers, physicians, surgeons, veterinarians, optometrists, osteopaths, and other professional groups.

Surgical, Medical, Hospital Supplies (SIC 5086 pt.)[1]—Establishments primarily engaged in selling surgical and medical instruments; doctors' apparatus and equipment; orthopedic appliances; artifical limbs; operating room and other hospital equipment, X-ray machines and accessories and other scientific instruments used by physicians and in hospitals.

Service Establishment Equipment and Supplies (SIC 5087)[1]—Establishments primarily engaged in the wholesale distribution of equipment and supplies for barber shops, beauty parlors power laundries, dry-cleaning plants, upholsterers, undertakers, and related personal service establishments.

Transportation Equipment and Supplies, Except Motor Vehicles (SIC 5088)[1]—Establishments primarily engaged in the wholesale distribution of transportation equipment and supplies. Establishments primarily engaged in the wholesale distribution of motor vehicles and motor vehicle parts are classified in group 501.

MISCELLANEOUS DURABLE GOODS (SIC 509)[1]

Scrap and Waste Materials (SIC 5093)—Establishments primarily engaged in assembling, breaking up, sorting and wholesale distribution of scrap and waste materials. This industry includes auto wreckers engaged in dismantling automobiles for scrap. However, those engaged in dismantling cars for the purpose of selling secondhand parts at retail are classified in industry 5931.

SIC 5093 is subdivided into—

1. *Iron and Steel scrap.*
2. *Waste and secondary materials dealers.*

[1] Data for this kind of business are not shown separately but are included in the group total.

Jewelry, Watches, Diamonds, and Other Precious Stones (SIC 5094)[1]—Establishments primarily engaged in the wholesale distribution of jewelry, precious stones and metals, costume jewelry, watches, clocks, silverware, and jewelers' findings.

Durable Goods, Not Elsewhere Classified (SIC 5099)[1]—Establishments primarily engaged in the wholesale distribution of durable goods, not elsewhere classified, such as musical instruments and forest products, except lumber.

NONDURABLE GOODS (SIC Major Group 51)

This major group includes establishments primarily engaged in the wholesale distribution of nondurable goods.

PAPER AND PAPER PRODUCTS (SIC 511)

Printing and Writing Paper (SIC 5111)[1]—Establishments primarily engaged in the wholesale distribution of writing paper, including envelope paper, fine paper, and ground wood, printing, and rotogravure paper.

Stationery Supplies (SIC 5112)[1]—Establishments primarily engaged in the wholesale distribution of stationery and office supplies, including envelopes, typewriter and mimeograph paper, file cards and folders, pens, social stationery, and greeting cards.

Industrial and Personal Service Paper (SIC 5113)[1]—Establishments primarily engaged in the wholesale distribution of wrapping and other coarse paper, paperboard, cellophane, and converted paper products, such as bags, boxes, dishes, napkins, and shipping supplies.

DRUGS, DRUG PROPRIETARIES, AND DRUGGISTS' SUNDRIES (SIC 512)

Drugs, Drug Proprietaries, and Druggists' Sundries (SIC 5122)—Establishments primarily engaged in the wholesale distribution of drugs, drug proprietaries, druggists' sundries, and toiletries. Establishments primarily engaged in the wholesale distribution of surgical, dental, and hospital equipment are classified in industry 5086.

SIC 5122 is subdivided into—

1. *General-line drugs*—These are distinguished from specialty-line drug and toiletries wholesalers on the basis of their commodity-line mix. Drug wholesalers were classified as general line if they reported a substantial portion of their sales in "pharmaceuticals, antibiotics, druggists' chemicals, biologicals, botanicals" and "proprietary products, toilet-

ries, druggists' sundries," and if annual sales volume was $1 million or more.

2. *Specialty-line pharmaceuticals, cosmetics, and toiletries.*

APPAREL, PIECE GOODS, AND NOTIONS (SIC 513)

Piece Goods (SIC 5133)[1]—Establishments primarily engaged in the wholesale distribution of woven piece goods or yard goods of natural or manmade fibers. "Converters" who buy goods in the grey, have them finished on contract, and sell at wholesale are included here. This industry does not include establishments primarily engaged in the wholesale distribution of home furnishings, which are classified in industry 5023.

Notions and Other Dry Goods (SIC 5134)[1]—Establishments primarily engaged in the wholesale distribution of notions (sewing and hair accessories, etc.), knit goods, and other dry goods, except piece goods.

Men's and Boys' Clothing and Furnishings (SIC 5136)[1]—Establishments primarily engaged in the wholesale distribution of men's and boys' apparel and furnishings, sportswear, hosiery, underwear, nightwear, and work clothing.

Women's Children's, and Infants' Clothing and Accessories (SIC 5137)[1]—Establishments primarily engaged in the wholesale distribution of women's, children's, and infants' clothing and accessories, including hosiery, lingerie, millinery and millinery supplies, and furs.

Footwear (SIC 5139)[1]—Establishments primarily engaged in the wholesale distribution of footwear of leather, rubber, and other materials.

GROCERIES AND RELATED PRODUCTS (SIC 514)

Groceries, General-Line (SIC 5141)—Establishments primarily engaged in the wholesale distribution of a general line of groceries. Establishments primarily engaged in roasting coffee and establishments primarily engaged in blending tea or grinding and packaging spices are classified in major group 20.

SIC 5141 is subdivided into—

1. *Voluntary group wholesalers.*
2. *Retailer cooperative wholesalers.*
3. *Other general-line wholesalers.*

Frozen Foods (SIC 5142)[1]—Establishments primarily engaged in the wholesale distribution of packaged quick-frozen vegetables, juices, meats, fish, poultry, pastries, and other "deep freeze" products. Establishments primarily engaged in the wholesale distribution of frozen dairy products are classified in industry 5143. Frozen poultry, fish, and meat which are not packaged are classified in industries 5144, 5146, and 5147, respectively.

Dairy Products (SIC 5143)[1]—Establishments primarily engaged in the wholesale distribution of dairy products, such as butter, cheese, ice cream and ices, and fluid milk and cream. This industry does not include establishments primarily engaged in pasteurizing and bottling milk, which are classified in group 202.

Poultry and Poultry Products (SIC 5144)—Establishments primarily engaged in the wholesale distribution of poultry and poultry products, except canned and packaged frozen products. This industry does not include establishments primarily engaged in the killing and dressing of poultry, which are classified in industry 2016. Establishments primarily engaged in the wholesale distribution of packaged frozen poultry are classified in industry 5142, and of canned poultry in industry 5149.

Confectionery (SIC 5145)—Establishments primarily engaged in the wholesale distribution of confectionery, such as candy, chewing gum, fountain fruits, salted or roasted nuts, popcorn, and fountain syrups; and potato, corn, and similar chips.

Fish and Seafoods (SIC 5146)[1]—Establishments primarily engaged in the wholesale distribution (not packaging) of fresh, cured, and frozen fish and seafoods, except canned (industry 5149) or packaged frozen (industry 5142). The preparation, packaging, and freezing of fresh fish and other seafood, and the shucking and packing of fresh oysters in nonsealed containers, are classified in industry 2092.

Meats and Meat Products (SIC 5147)—Establishments primarily engaged in the wholesale distribution of fresh, cured, and processed (but not canned) meats and lard. The wholesale distribution of frozen packaged meats is classified in industry 5142 and canned meats in industry 5149.

Fresh Fruits and Vegetables (SIC 5148)—Establishments primarily engaged in the wholesale distribution of fresh fruits and vegetables.

Groceries and Related Products, Not Elsewhere Classified (SIC 5149)[1]—Establishments primarily engaged in the wholesale distribution of groceries and related products, not elsewhere classified. Establishments primarily engaged in the wholesale distribution of soft drinks, and in bottling and distributing natural spring and mineral waters, are classified in this industry, but establishments primarily engaged in bottling soft drinks are classified in major group 20. This industry does not include farm-product raw materials (group 515), or beer, wine, and distilled alcholic beverages (group 518).

[1] Data for this kind of business are not shown separately but are included in the group total.

FARM-PRODUCT RAW MATERIALS (SIC 515)

Cotton (SIC 5152)[1]—Establishments primarily engaged in buying and/or marketing cotton and cotton linters.

Grain (SIC 5153)—Establishments primarily engaged in buying and/or marketing grain (such as corn, wheat, oats, barley, and unpolished rice); dry beans; soybeans, and other inedible beans. Country grain elevators primarily engaged in buying or receiving grain from farmers are included as are terminal elevators and other merchants marketing grain.

Livestock (SIC 5154)[1]—Establishments primarily engaged in buying and/or marketing cattle, hogs, sheep, and goats.

Farm-Product Raw Materials, Not Elsewhere Classified (SIC 5159)[1]—Establishments primarily engaged in buying and/or marketing farm products not elsewhere classified, such as horses and mules, leaf tobacco, hides, skins, furs, wool, mohair, raw silk, hops, and nuts, except roasted or salted (industry 5145). Establishments primarily engaged in the wholesale distribution of milk are classified in industry 5143 and live poultry in industry 5144.

CHEMICALS AND ALLIED PRODUCTS (SIC 516)[1]

Chemicals and Allied Products (SIC 5161)[1]—Establishments primarily engaged in the wholesale distribution of chemicals and allied products, not elsewhere classified, such as acids, industrial and heavy chemicals, dyestuffs, industrial salts, naval stores, plastics materials, rosin, and turpentine. Establishments primarily engaged in the wholesale distribution of ammunition are classified in industry 5041; agricultural chemicals and pesticides in industry 5191; drugs in industry 5122; and paints and varnishes in industry 5198.

PETROLEUM AND PETROLEUM PRODUCTS (SIC 517)

Petroleum Bulk Stations and Terminals (SIC 5171)—Establishments primarily engaged in wholesaling petroleum products, including liquefied petroleum gas, from bulk liquid storage facilities.

Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals (SIC 5172)[1]—Establishments primarily engaged in wholesaling petroleum and petroleum products, except those with bulk liquid storage facilities. Included are packaged and bottled petroleum products distributors, truck jobbers, and others marketing petroleum and products at wholesale but without bulk liquid storage facilities.

[1] Data for this kind of business are not shown separately but are included in the group total.

BEER, WINE, AND DISTILLED ALCOHOLIC BEVERAGES (SIC 518)

Beer and Ale (SIC 5181)—Establishments primarily engaged in the wholesale distribution of beer, ale, porter, and other fermented malt beverages.

Wines and Distilled Alcoholic Beverages (SIC 5182)—Establishments primarily engaged in the wholesale distribution of distilled spirits, including neutral spirits and ethyl alcohol used in blending wines and distilled liquors.

MISCELLANEOUS NONDURABLE GOODS (SIC 519)

Farm Supplies (SIC 5191)[1]—Establishments primarily engaged in the wholesale distribution of animal feeds, fertilizers, agricultural chemicals, pesticides, seeds, and other farm supplies, except grains.

Tobacco and Tobacco Products (SIC 5194)—Establishments primarily engaged in the wholesale distribution of tobacco and tobacco products. Leaf tobacco wholesalers are classified in industry 5159 and establishments primarily engaged in stemming and redrying tobacco in industry 2141.

Paints, Varnishes, and Supplies (SIC 5198)[1]—Establishments primarily engaged in the wholesale distribution of paints, varnishes, wallpaper, and supplies, and sometimes glass. Establishments selling to the general public and known as "retail" in the trade are classified in industry 5231.

Books, Periodicals, Newspapers (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of books, lithographed matter, magazines, newspapers, and all other forms of reading material.

Nondurable Goods, Not Elsewhere Classified (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of nondurable goods, not elswhere classified, such as art goods, flowers and florist supplies, industrial yarn, textile bags, bagging and burlap.

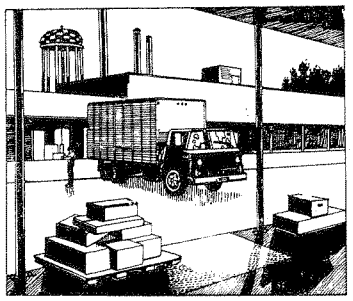
CHANGES IN WHOLESALE KIND-OF-BUSINESS CLASSIFICATIONS IN 1972 FROM 1967

The wholesale trade kind-of-business structure was expanded from one SIC major group (SIC 50) in 1967 to two major groups in 1972, "durable goods" (SIC 50) and "nondurable goods" (SIC 51). There were 61 four-digit industries in 1972 compared to 48 four-digit industries in 1967.

The definitions of some kinds of business also were changed in 1972. Establishments primarily selling farm supplies and equipment to farmers, and establishments primarily selling

plumbing, heating, and air-conditioning equipment and electrical supplies were classified in wholesale trade rather than retail trade. However, establishments primarily selling lumber and other building materials and paint, glass, and wallpaper were classified in retail trade if they sell to the public, even though sales to contractors account for a larger portion of the total. The change resulted in moving to wholesale trade those establishments primarily selling plumbing, heating, and air-conditioning equipment; electrical supplies; farm equipment; hay, grain, and feed; and other farm supplies. The change also theoretically could have shifted to wholesale trade some establishments primarily selling lumber and paint, glass and wallpaper to contractors, but not to the public.

In addition to the kind-of-business changes noted above the special nonmerchant classifications of farm assemblers and bulk petroleum were eliminated in the 1972 census. These establishments were classified in the appropriate merchant, or sales branch category.



CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued October 1979

July 1979

BW-79-07

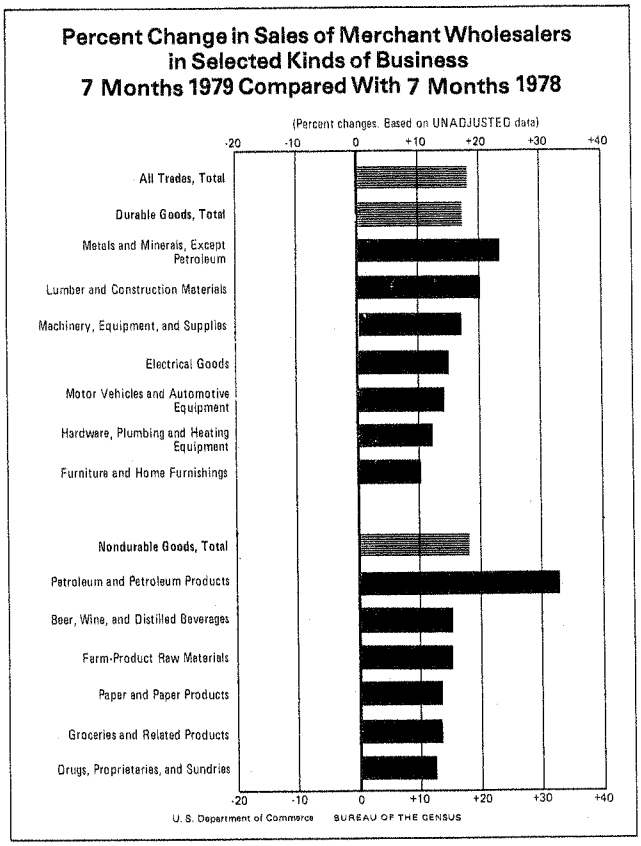
Sales—July sales of merchant wholesalers after adjustment for seasonal variation and trading-day differences, but not for price changes, were $74.8 billion, up 3 percent from the previous month, and 18 percent above July 1978. Adjusted May-through-July total sales were up 6 percent from the February-through-April period and were 16 percent above the total sales for the comparable months a year ago.

After adjustment, July sales in the durable goods and nondurable goods trades were both up 3 percent from the previous month and were 14 and 21 percent above July 1978 respectively. Total monthly sales in the durable goods group during the May-through-July period were 2 percent above the prior three months and were 15 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were 8 percent above the February-through-April period and were 18 percent above the total sales for the same period a year ago.

Based on adjusted data, comparisons with previous month sales levels showed mixed results with 10 trade groups showing gains, 2 indicating declines and 3 with no change. The largest increase was shown in sporting goods, toys, and hobby goods (17%). The largest decrease was reported in petroleum and petroleum products (-5%) Compared with sales of a year ago all trade groups showed increases with the sharper increases reported in petroleum and petroleum products (39%) and farm-product raw materials (35%).

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variations, but not for price changes, were $88.0 billion at the end of July, up 3 percent from the previous month and 16 percent above the same month a year ago. Durable goods stocks were up 2 percent from June and were 13 percent above July 1978. Nondurable goods stocks were up 5 percent from the previous month and were 22 percent above stocks on hand a year ago.

Based on adjusted data most trade groups showed increases from their previous month inventory levels with the larger increases shown in farm-product raw materials (16%) and motor vehicles and automotive equipment (7%). Compared with year-ago inventories, all trade groups reported increases. The largest increase was noted in farm-product raw materials (40%).



Stock-Sales Ratios—The July stock-sales ratio for merchant wholesalers, based on seasonally adjusted data, was 118, up 1 point from the previous month, but down 1 point from July 1978. The stock sales ratio for durable goods was 164, down 1 point from both the previous month and the year ago ratio. The ratio for nondurable goods was 79, up 2 points from June and 1 point above July 1978.

An advance release of the July 1979 data was issued on September 10, 1979.

U.S. Department of Commerce
BUREAU OF THE CENSUS

Inquiries concerning this report should be addressed to Ronald Piencykoski, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-5294/763-5295.

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Table 1. Estimated Monthly Sales of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979							1978						Total 7 months	
		Jan.	Feb.	Mar.	Apr.	May	June	July[P]	July	Aug.	Sept.	Oct.	Nov.	Dec.	1979	1978
	Merchant wholesalers, total	63,739	61,721	74,319	70,768	76,814	74,361	73,202	60,651	67,702	63,933	69,086	67,699	64,527	494,924	421,159
	Total (excluding farm-product raw materials)	56,481	55,208	66,198	63,588	68,714	66,477	64,692	54,411	60,838	57,342	61,033	59,923	57,237	441,358	374,591
50	Durable goods, total	28,284	28,141	34,689	33,429	35,723	34,447	33,673	28,701	32,279	30,404	32,242	31,037	29,340	228,384	194,616
501	Motor vehicles and automotive parts and supplies	5,634	5,650	6,888	6,845	7,013	6,364	6,189	5,552	6,134	5,381	6,009	6,013	5,510	44,583	39,252
5013,4	Automotive parts and supplies, tires and tubes	3,120	3,081	3,459	3,349	3,385	3,318	3,024	2,883	3,440	2,998	3,344	3,298	2,927	22,888	20,869
5013	Automotive parts and supplies	2,594	2,603	2,902	2,807	2,966	2,759	2,534	2,432	2,872	2,496	2,761	2,752	2,413	19,165	17,679
502	Furniture and home furnishings	1,012	950	1,199	1,130	1,214	1,185	1,151	1,013	1,133	1,162	1,174	1,218	1,140	7,840	7,140
5021	Furniture--household and office	343	332	416	413	450	422	411	328	366	379	379	411	422	2,786	2,387
5023	Home furnishings	669	618	783	717	764	763	740	685	767	783	795	807	718	5,054	4,753
503	Lumber and other construction materials	2,387	2,212	3,006	3,023	3,353	3,410	3,442	2,771	3,208	3,056	3,173	2,874	2,542	20,832	17,371
5031	Lumber, plywood, and millwork	1,672	1,544	2,047	2,067	2,269	2,250	2,245	1,845	2,105	1,949	2,083	1,915	1,682	14,093	11,665
5039	Construction materials, n.e.c.	715	668	959	957	1,084	1,160	1,197	927	1,103	1,107	1,089	959	860	6,739	5,706
505	Metals and minerals, except petroleum	3,206	3,215	3,849	3,295	3,913	3,645	3,746	2,817	3,306	3,037	3,186	3,209	2,942	24,868	20,184
5051 pt.	Ferrous metals service centers and offices	2,455	2,437	2,925	2,469	2,951	2,759	2,890	2,158	2,515	2,339	2,446	2,448	2,260	18,886	15,324
5051 pt.	Ferrous metals service centers	1,652	1,744	2,129	1,798	2,160	2,056	2,114	1,580	1,833	1,721	1,801	1,768	1,678	13,652	11,284
506	Electrical goods	3,017	3,083	3,556	3,271	3,744	3,786	3,682	3,193	3,540	3,338	3,590	3,474	3,322	24,138	21,061
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,533	1,638	1,807	1,748	2,071	2,006	2,002	1,663	1,812	1,663	1,832	1,722	1,655	12,775	10,819
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,484	1,445	1,749	1,554	1,673	1,779	1,679	1,530	1,728	1,675	1,758	1,751	1,667	11,363	10,243
5064	Electrical appliances, TV and radio sets	834	849	1,024	881	939	1,064	990	912	1,064	1,057	1,040	1,090	1,006	6,581	6,142
507	Hardware, plumbing, heating equipment, and supplies	2,142	1,984	2,319	2,374	2,592	2,461	2,472	2,247	2,412	2,159	2,455	2,250	2,057	16,344	14,535
5072	Hardware	802	758	853	852	975	877	884	760	864	771	859	830	721	6,002	5,414
5074	Plumbing and heating equipment and supplies (hydronics)	854	800	960	994	1,001	966	973	916	988	928	1,047	918	854	6,548	5,759
508	Machinery, equipment, and supplies	7,691	7,841	9,664	9,443	10,062	9,745	9,263	7,827	8,757	8,655	8,909	8,421	8,485	63,711	54,651
5082	Construction and mining machinery and equipment	895	927	1,189	1,360	1,351	1,260	1,252	1,122	1,196	1,115	1,155	1,126	1,125	8,234	7,711
5084,5	Industrial machinery, equipment, and supplies	3,390	3,464	3,940	3,615	4,004	3,964	3,586	3,049	3,532	3,450	3,573	3,474	3,623	25,963	21,649
5086	Professional equipment, supplies	907	914	1,048	972	1,055	996	966	888	990	949	941	949	975	6,857	5,833
5093	Scrap and waste materials	1,132	1,184	1,501	1,492	1,518	1,468	1,420	940	1,073	978	1,007	1,103	1,079	9,716	6,563
51	Nondurable goods, total	35,455	33,580	39,630	37,339	41,091	39,914	39,529	31,950	35,423	33,529	36,844	36,662	35,187	266,540	226,544
	Total (excluding farm-product raw materials)	28,197	27,067	31,509	30,159	32,991	32,030	31,019	25,710	28,559	26,937	28,791	28,885	27,897	212,974	179,916
511	Paper and paper products	1,540	1,479	1,688	1,551	1,692	1,651	1,576	1,384	1,581	1,456	1,598	1,569	1,489	11,177	9,892
5111,3	Printing, writing, industrial, and personal services paper	1,133	1,100	1,272	1,184	1,272	1,252	1,194	1,046	1,177	1,088	1,191	1,177	1,140	8,406	7,305
512	Drugs, drug proprietaries, and druggists' sundries	950	917	1,073	1,038	1,102	1,039	1,072	902	1,026	973	1,082	1,017	963	7,191	6,412
5122	Drugs, drug proprietaries, and druggists' sundries	950	917	1,073	1,038	1,102	1,039	1,072	902	1,026	973	1,082	1,017	963	7,191	6,412
5122 pt.	General-line drugs	423	427	507	472	509	474	484	409	482	464	494	465	445	3,295	3,013
513	Apparel, piece goods, and notions[1]	2,094	1,996	2,326	2,107	2,127	2,102	2,352	2,036	2,658	2,313	2,443	2,369	1,976	15,104	13,317
514	Groceries and related products	11,122	10,381	11,954	11,281	11,988	11,721	11,465	10,237	11,002	10,489	11,150	11,155	10,830	79,913	70,464
5141	Groceries, general-line	3,965	3,658	4,173	3,989	4,241	4,247	4,216	3,649	3,965	3,767	3,999	4,120	3,914	28,489	25,210
5144	Poultry and poultry products	518	489	559	554	592	544	549	482	539	505	525	569	536	3,806	3,243
5145	Confectionery	184	177	209	196	212	199	190	171	187	190	218	211	197	1,367	1,232
5147	Meats and meat products	1,979	1,971	2,198	2,029	2,076	1,908	1,865	1,800	1,974	1,840	1,928	1,911	1,885	14,026	11,758
5148	Fresh fruits and vegetables	1,020	961	1,203	1,086	1,202	1,242	1,067	1,044	985	890	980	974	973	7,781	7,110
515	Farm-product raw materials	7,258	6,513	8,121	7,180	8,100	7,884	8,510	6,240	6,864	6,591	8,053	7,777	7,290	53,566	46,643
5153	Grain	5,859	5,235	6,740	5,886	6,766	6,730	7,398	5,317	5,760	5,448	6,623	6,391	5,912	44,613	38,414
517	Petroleum and petroleum products	4,837	5,008	5,282	5,221	6,078	5,851	5,750	4,000	4,441	4,136	4,431	4,554	4,598	38,028	28,661
5171	Petroleum bulk stations and terminals	2,738	2,785	2,997	2,857	3,306	3,170	3,140	2,190	2,378	2,280	2,449	2,507	2,678	20,992	16,225
518	Beer, wine, and distilled alcoholic beverages	2,020	1,952	2,490	2,453	2,726	2,704	2,[illegible]	2,191	2,463	2,254	2,347	2,547	2,709	16,987	14,708
5181	Beer and ale	999	953	1,223	1,258	1,513	1,523	1,[illegible]	1,217	1,328	1,119	1,105	1,088	1,108	8,988	7,533
5182	Wine and distilled alcoholic beverages	1,021	999	1,267	1,195	1,214	1,181	1,123	974	1,134	1,135	1,242	1,459	1,601	7,998	7,174
519	Miscellaneous nondurable goods	4,529	4,383	5,528	5,406	6,001	5,801	5,151	4,040	4,297	4,311	4,510	4,486	4,425	36,799	30,097
5194	Tobacco and tobacco products	823	749	852	848	891	863	883	838	871	814	848	831	846	5,908	5,460

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. [P]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]The apparel piece goods and notions group is subject to a sampling variability of 15 percent for July 1979.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations)

1972 SIC code	Kind of business	1979							1978					
		Jan.	Feb.	Mar.	Apr.	May	June	July[p]	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	81,896	83,917	85,436	85,345	85,199	84,942	86,733	74,874	74,943	76,074	78,715	80,100	80,922
	Total (excluding farm-product raw materials)	75,593	77,627	79,311	79,626	80,246	79,964	81,441	71,073	71,138	71,889	73,327	73,947	74,898
50	Durable goods, total	51,860	53,807	54,381	54,731	55,566	55,523	56,389	49,900	49,841	49,944	50,462	50,971	51,646
501	Motor vehicles and automotive parts and supplies	9,512	10,189	9,797	9,663	9,631	9,207	9,736	8,367	8,378	8,099	8,701	9,326	9,227
5013,4	Automotive parts and supplies, tires and tubes	5,758	5,888	5,781	5,809	5,970	5,753	6,060	5,034	5,206	5,172	5,298	5,635	5,552
5013	Automotive parts and supplies	4,881	5,003	4,870	4,917	5,035	4,818	5,064	4,288	4,415	4,345	4,489	4,792	4,674
502	Furniture and home furnishings	1,764	1,753	1,872	1,837	1,815	1,903	1,905	1,764	1,760	1,810	1,780	1,774	1,752
5023	Home furnishings	1,292	1,282	1,355	1,332	1,309	1,361	1,373	1,305	1,306	1,326	1,315	1,305	1,251
503	Lumber and other construction materials	3,113	3,178	3,337	3,404	3,468	3,496	3,481	3,095	3,007	3,076	3,076	2,995	3,117
5031	Lumber, plywood, and millwork[1]	2,030	2,082	2,116	2,152	2,244	2,204	2,169	1,967	1,929	1,932	1,946	1,918	2,009
505	Metals and minerals, except petroleum	5,106	5,434	5,285	5,254	5,528	5,582	5,734	5,305	5,437	5,285	5,095	5,208	5,151
5051 pt.	Ferrous metals service centers and offices	4,191	4,425	4,365	4,239	4,455	4,586	4,745	4,104	4,232	4,148	3,976	4,150	4,191
5051 pt.	Ferrous metals service centers	3,241	3,459	3,433	3,269	3,506	3,643	3,813	3,191	3,308	3,299	3,098	3,236	3,336
506	Electrical goods	5,509	5,582	5,706	5,737	5,976	6,040	6,162	5,266	5,264	5,416	5,500	5,526	5,577
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2,542	2,684	2,676	2,730	2,946	2,838	2,774	2,283	2,367	2,356	2,399	2,534	2,558
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,966	2,898	3,030	3,007	3,030	3,202	3,388	2,983	2,899	3,059	3,101	3,016	3,023
507	Hardware, plumbing, heating equipment, and supplies	4,251	4,461	4,497	4,719	4,590	4,631	4,560	4,215	4,117	4,032	4,152	4,033	4,063
5072	Hardware	1,476	1,540	1,539	1,598	1,622	1,643	1,653	1,410	1,369	1,417	1,466	1,382	1,407
5074	Plumbing and heating equipment and supplies (hydronics)	1,819	1,900	1,899	1,985	1,848	1,896	1,842	1,839	1,800	1,805	1,738	1,737	1,760
508	Machinery, equipment, and supplies	17,748	18,254	18,807	18,924	19,370	19,465	19,577	17,057	17,183	17,405	17,352	17,428	18,012
5082	Construction and mining machinery and equipment	3,932	4,152	4,334	4,280	4,430	4,512	4,565	3,637	3,793	3,899	3,937	4,002	4,109
5084,5	Industrial machinery, equipment, and supplies	5,728	5,800	6,015	6,030	6,073	6,006	5,990	5,301	5,317	5,519	5,508	5,570	5,752
51	Nondurable goods, total	30,036	30,110	31,055	30,614	29,633	29,419	30,344	24,974	25,102	26,130	28,253	29,129	29,276
	Total (excluding farm-product raw materials)	23,733	23,820	24,930	24,895	24,680	24,441	25,052	21,173	21,297	21,946	22,865	22,976	23,252
511	Paper and paper products	1,424	1,468	1,547	1,501	1,542	1,616	1,651	1,341	1,361	1,414	1,419	1,441	1,482
5111,3	Printing, writing, industrial, and personal service paper	986	1,010	1,053	1,018	1,050	1,090	1,107	938	921	976	969	967	1,025
512	Drugs, drug proprietaries, and druggists' sundries	1,465	1,484	1,612	1,617	1,585	1,609	1,683	1,368	1,410	1,489	1,502	1,476	1,440
514	Groceries and related products	6,408	6,346	6,719	6,644	6,644	6,686	6,753	5,833	5,803	6,186	6,469	6,412	6,497
5141	Groceries, general-line	2,696	2,744	2,895	2,846	2,785	2,802	2,903	2,480	2,505	2,641	2,811	2,814	2,761
517	Petroleum and petroleum products	2,106	2,101	2,224	2,177	2,401	2,263	2,459	1,974	2,093	2,098	2,151	2,151	2,153
518	Beer, wine, and distilled alcoholic beverages	2,462	2,427	2,684	2,806	2,760	2,732	2,676	2,178	2,158	2,221	2,453	2,513	2,290
5181	Beer and ale[2]	800	845	1,040	1,085	1,089	1,072	1,048	709	679	720	769	777	729
5182	Wines and distilled alcoholic beverages	1,662	1,582	1,645	1,721	1,671	1,660	1,629	1,469	1,480	1,501	1,684	1,736	1,561

See footnotes at end of table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Percent. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979							1978					
		Jan.	Feb.	Mar.	Apr.	May	June	July[p]	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	128	136	115	121	111	114	118	123	111	119	114	118	125
	Total (excluding farm-product raw materials)	134	141	120	125	117	120	126	131	117	125	120	123	131
50	Durable goods, total	183	191	157	164	156	161	167	174	154	164	157	164	176
501	Motor vehicles and automotive parts and supplies	169	180	142	141	137	145	157	151	137	151	145	155	167
5013,4	Automotive parts and supplies; tires and tubes	185	191	167	173	169	173	200	172	151	173	158	171	190
5013	Automotive parts and supplies	188	192	168	175	170	175	200	176	154	174	163	174	194
502	Furniture and home furnishings	174	185	156	163	150	161	166	174	155	156	152	146	154
5023	Home furnishings	193	208	173	186	171	178	185	190	170	169	165	162	174
503	Lumber and other construction materials	130	144	111	113	103	103	101	112	94	101	97	104	123
5031	Lumber, plywood, and millwork	121	135	103	104	99	98	97	107	92	99	93	100	119
505	Metals and minerals, except petroleum	159	169	137	159	141	153	153	188	164	174	160	162	175
5051 pt.	Ferrous metals service centers and offices	171	182	149	172	151	166	164	190	168	177	163	170	185
5051 pt.	Ferrous metals service centers	196	198	161	182	162	177	180	202	181	192	172	183	199
506	Electrical goods	183	181	160	175	160	160	167	165	149	162	153	159	168
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	166	164	148	156	142	141	139	137	131	142	131	147	155
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	200	201	173	194	181	180	202	195	168	183	176	171	181
507	Hardware, plumbing, heating equipment, and supplies	198	225	194	199	177	188	184	188	171	187	169	179	198
5072	Hardware	184	203	180	188	166	187	187	185	158	179	171	167	195
5074	Plumbing and heating equipment and supplies (hydronics)	213	237	198	200	185	196	189	201	182	188	166	189	206
508	Machinery, equipment, and supplies	231	238	195	200	192	200	211	218	196	201	195	207	212
5082	Construction and mining machinery and equipment	439	448	364	315	328	358	365	324	317	350	341	356	365
5084,5	Industrial machinery, equipment, and supplies	168	167	153	167	152	152	167	174	151	160	154	160	159
51	Nondurable goods, total	85	90	78	82	72	74	77	78	71	78	77	79	83
	Total (excluding farm-product raw materials)	84	88	79	83	75	76	81	82	75	81	79	80	83
511	Paper and paper products	92	99	92	97	91	98	105	97	86	97	89	92	100
5111,3	Printing, writing, industrial, and personal service paper	87	92	83	86	83	87	93	90	78	90	81	82	90
512	Drugs, drug proprietaries, and druggists' sundries	154	162	150	156	144	155	157	152	137	153	139	145	150
514	Groceries and related products	58	61	56	59	55	57	58	57	53	59	58	57	60
5141	Groceries, general-line	68	75	69	71	66	66	69	68	63	70	70	68	71
517	Petroleum and petroleum products	44	42	42	42	40	39	43	49	47	51	49	47	47
518	Beer, wine, and distilled alcoholic beverages	122	124	108	114	101	101	101	99	88	99	105	99	85
5181	Beer and ale	80	89	85	86	72	70	69	58	51	64	70	71	66
5182	Wines and distilled alcoholic beverages	163	158	130	144	138	141	145	151	130	132	136	119	97

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. [p]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]The lumber, plywood, and millwork group is subject to a sampling variability of 8 percent for July 1979.
[2]The beer and ale group is subject to a sampling variability of 11 percent for July 1979.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1979 and 1978

(Sales and inventories in millions of dollars. Stock-sales ratios in percent)

1972 SIC code	Kind of business	1979 Jan.	Feb.	Mar.	Apr.	May	June	July[p]	1978 July	Aug.	Sept.	Oct.	Nov.	Dec.
		Sales ADJUSTED for seasonal variations and trading-day differences												
	Merchant wholesalers, total	67,148	67,495	70,824	70,444	72,937	72,625	74,778	63,425	64,894	64,531	67,338	67,552	67,823
	Total (excluding farm-product raw materials)	60,346	60,603	63,567	63,278	65,050	64,506	65,734	56,716	57,461	57,326	59,349	60,373	60,526
50	Durable goods, total	31,012	31,769	33,570	32,770	33,354	32,956	34,010	29,859	30,043	29,863	30,953	31,498	31,939
501	Motor vehicles and automotive parts and supplies	5,994	6,285	6,486	6,315	6,347	6,078	6,015	5,631	5,739	5,598	6,113	6,442	6,088
502	Furniture and home furnishings	1,162	1,058	1,178	1,148	1,183	1,139	1,262	1,136	1,077	1,118	1,047	1,136	1,197
503	Lumber and other construction materials	2,876	2,758	3,089	3,085	3,037	3,166	3,217	2,705	2,732	2,878	2,887	2,874	3,026
505	Metals and minerals, except petroleum	3,184	3,518	3,748	3,250	3,637	3,598	3,927	3,090	3,045	2,947	3,188	3,305	3,258
506	Electrical goods	3,279	3,460	3,560	3,294	3,789	3,644	3,660	3,225	3,377	3,311	3,340	3,356	3,362
507	Hardware, plumbing, heating equipment, and supplies	2,354	2,270	2,371	2,372	2,398	2,355	2,391	2,232	2,209	2,108	2,290	2,237	2,330
508	Machinery, equipment, and supplies	8,461	8,840	9,108	9,249	9,240	9,263	9,540	8,201	8,372	8,382	8,607	8,730	9,193
51	Nondurable goods, total	36,136	35,726	37,254	37,674	39,583	39,669	40,768	33,566	34,851	34,668	36,385	36,054	35,884
	Total (excluding farm-product raw materials)	29,334	28,834	29,997	30,508	31,696	31,550	31,724	26,857	27,418	27,463	28,396	28,875	28,587
511	Paper and paper products	1,540	1,595	1,636	1,636	1,638	1,612	1,618	1,447	1,473	1,419	1,536	1,579	1,608
512	Drugs, drug proprietaries, and druggists' sundries	953	990	1,032	1,050	1,095	1,072	1,110	971	980	965	1,000	1,007	997
513	Apparel, piece goods, and notions	2,230	2,114	2,243	2,280	2,089	2,149	2,458	2,173	2,299	2,177	2,268	2,291	2,269
514	Groceries and related products	11,407	11,408	11,595	11,476	11,278	11,380	11,465	10,340	10,443	10,607	11,039	11,178	11,400
515	Farm-product raw materials[1]	6,802	6,892	7,257	7,166	7,887	8,119	9,044	6,709	7,433	7,205	7,989	7,179	7,297
517	Petroleum and petroleum products	4,876	4,905	4,955	5,263	6,338	6,038	5,750	4,144	4,430	4,442	4,390	4,542	4,387
518	Beer, wine, and distilled alcoholic beverages	2,491	2,395	2,541	2,615	2,526	2,472	2,616	2,245	2,284	2,305	2,333	2,383	2,387
519	Miscellaneous nondurable goods	4,645	4,361	4,849	5,095	5,546	5,721	5,698	4,580	4,499	4,521	4,657	4,693	4,567
		Inventories ADJUSTED for seasonal variations												
	Merchant wholesalers, total	81,543	83,005	84,078	84,973	85,257	85,245	88,040	75,744	76,338	77,113	78,625	79,526	80,771
	Total (excluding farm-product raw materials)	76,224	77,545	78,624	79,299	79,729	79,416	81,299	70,920	71,546	72,119	73,434	74,285	75,546
50	Durable goods, total	52,490	53,773	53,937	54,408	54,886	54,542	55,853	49,414	49,972	50,160	50,948	51,625	52,460
501	Motor vehicles and automotive parts and supplies	9,390	9,883	9,643	9,605	9,442	9,161	9,805	8,434	8,637	8,315	8,870	9,420	9,236
502	Furniture and home furnishings	1,778	1,765	1,878	1,846	1,799	1,866	1,897	1,755	1,750	1,789	1,776	1,782	1,801
503	Lumber and other construction materials	3,160	3,207	3,218	3,315	3,354	3,444	3,436	3,052	3,013	3,101	3,181	3,113	3,190
505	Metals and minerals, except petroleum	5,142	5,528	5,274	5,212	5,517	5,571	5,578	5,161	5,289	5,290	5,269	5,266	5,166
506	Electrical goods	5,697	5,772	5,764	5,754	5,899	5,881	6,077	5,193	5,227	5,346	5,435	5,499	5,650
507	Hardware, plumbing, heating equipment, and supplies	4,382	4,543	4,422	4,511	4,443	4,514	4,488	4,149	4,092	4,098	4,207	4,153	4,228
508	Machinery, equipment, and supplies	17,927	18,073	18,529	18,905	19,178	19,065	19,518	17,006	17,357	17,510	17,527	17,658	18,249
51	Nondurable goods, total	29,053	29,232	30,141	30,565	30,371	30,703	32,187	26,330	26,366	26,953	27,677	27,901	28,311
	Total (excluding farm-product raw materials)	23,734	23,772	24,687	24,891	24,843	24,874	25,446	21,506	21,574	21,959	22,486	22,660	23,086
511	Paper and paper products	1,458	1,493	1,561	1,485	1,534	1,574	1,653	1,341	1,358	1,404	1,419	1,447	1,482
512	Drugs, drug proprietaries, and druggists' sundries	1,528	1,530	1,615	1,609	1,621	1,599	1,700	1,382	1,410	1,453	1,435	1,446	1,444
514	Groceries and related products	6,492	6,333	6,581	6,611	6,691	6,774	6,856	5,922	5,921	6,192	6,342	6,355	6,433
517	Petroleum and petroleum products	2,017	2,114	2,237	2,311	2,504	2,402	2,556	2,050	2,078	2,039	2,052	2,064	2,082
518	Beer, wine, and distilled alcoholic beverages	2,557	2,536	2,756	2,831	2,698	2,658	2,680	2,180	2,204	2,214	2,293	2,377	2,403
		Stock-sales ratios based on ADJUSTED data												
	Merchant wholesalers, total	121	123	119	121	117	117	118	119	118	119	117	118	119
	Total (excluding farm-product raw materials)	126	128	124	125	123	123	124	125	125	126	123	123	125
50	Durable goods, total	169	169	161	166	165	165	164	165	166	168	165	164	164
501	Motor vehicles and automotive parts and supplies	157	157	149	152	149	151	163	150	150	149	145	146	152
502	Furniture and home furnishings	153	167	159	161	152	164	150	154	162	160	170	157	150
503	Lumber and other construction materials	110	116	104	107	110	109	107	113	110	108	110	108	105
505	Metals and minerals, except petroleum	161	157	141	160	152	155	142	167	174	179	165	159	159
506	Electrical goods	174	167	162	175	156	161	166	161	155	161	163	164	168
507	Hardware, plumbing, heating equipment, and supplies	186	200	187	190	185	192	188	186	185	194	184	186	181
508	Machinery, equipment, and supplies	212	204	203	204	208	206	205	207	207	209	204	202	199
51	Nondurable goods, total	80	82	81	81	77	77	79	78	76	78	76	77	79
	Total (excluding farm-product raw materials)	81	82	82	82	78	79	80	80	79	80	79	78	81
511	Paper and paper products	95	94	95	91	94	98	102	92	92	99	92	92	92
512	Drugs, drug proprietaries, and druggists' sundries	160	155	156	153	148	149	153	142	144	151	144	144	145
514	Groceries and related products	57	56	57	58	59	60	60	57	57	58	57	57	56
517	Petroleum and petroleum products	41	43	45	44	40	40	44	49	47	46	47	45	47
518	Beer, wine, and distilled alcoholic beverages	103	106	108	108	107	108	102	97	97	96	98	100	101

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions. All data for 1978 have been revised to reflect recomputed factors for seasonal adjustment.

NA Not available. [p]Preliminary estimates. See p. 15, Sample Design and Estimation Procedures.

[1]There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table 4B. Percent Change Between Selected 3-Month Periods Sales of Merchant Wholesalers, United States

(Based on seasonally-adjusted data)

Item	3 month period, May 1979-July 1979 from--			
	Feb. 1979-Apr. 1979 (3 months ago)	Nov. 1978-Jan. 1979 (6 months ago)	Aug. 1978-Oct. 1978 (9 months ago)	May 1978-July 1978 (12 months ago)
Merchant wholesalers, total.....	+6	+9	+12	+16
Durable goods, total.....	+2	+6	+10	+15
Nondurable goods, total...	+8	+11	+13	+18

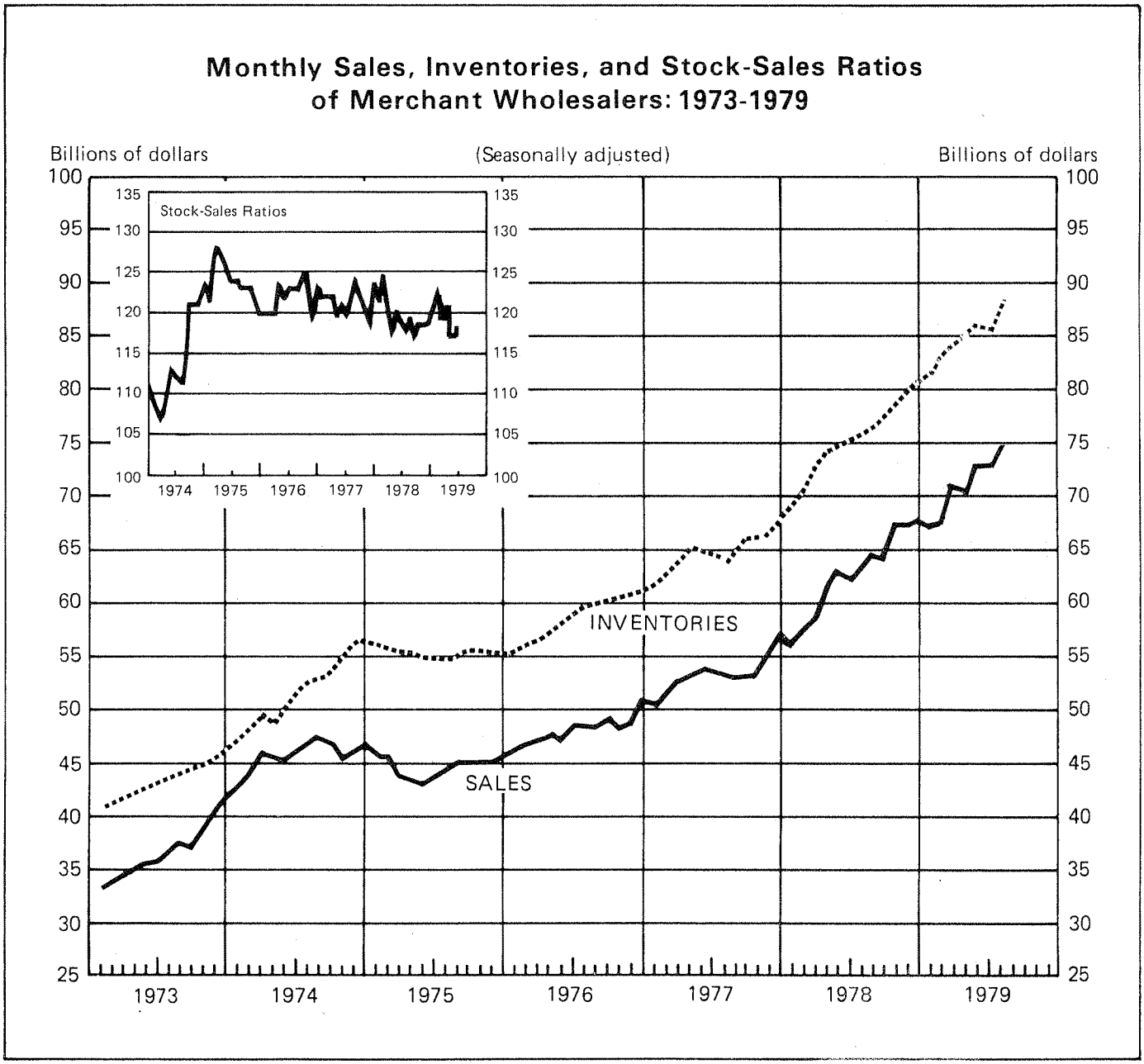


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: July 1979

1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		July 1979 from June 1979	July 1979 from July 1978	7 months 1979 from 7 months 1978	July 1979 from June 1979	July 1979 from June 1978	July 1979 from June 1979	July 1979 from June 1978	July 1979 from June 1979	July 1979 from July 1978
	Merchant wholesalers, total	r-2	+21	+18	+2	+16	+3	+18	+3	+16
	Total (excluding farm-product raw materials)	-3	+19	+18	+2	+15	+2	+16	+2	+15
50	Durable goods, total	-2	+17	+17	+2	+13	+3	+14	+2	+13
501	Motor vehicles and automotive parts and supplies	-3	+11	+14	+6	+16	-1	+7	+7	+16
5012	Automobiles and other motor vehicles	+4	+21	+19	+6	+10	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	-9	+5	+10	+5	+20	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	-8	+4	+8	+5	+18	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	-3	+14	+10	0	+8	+11	+11	+2	+8
5021	Furniture--household and office	-3	+26	+17	-2	+16	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	+3	+8	+6		+13	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	-5	+36	+23	-3	+18	(*)	(*)	(*)	(*)
5023	Home furnishings	-3	+8	+6	0	+5	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	+1	+24	+20	0	+12	+2	+19	0	+13
5031	Lumber, plywood, and millwork	0	+22	+21	-2	+10	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c.	+3	+29	+18	+1	+16	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	+12	+32	+18	-3	+6	+17	+34	-1	+7
505	Metals and minerals, except petroleum	+3	+33	+23	+3	+8	+9	+27	0	+8
5051 pt.	Ferrous metals service centers and offices	+5	+34	+23	+3	+16	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	+3	+34	+21	+5	+20	(*)	(*)	(*)	(*)
5051 pt.	Nonferrous metals service centers and offices	-3	+34	+27	-2	~14	(*)	(*)	(*)	(*)
506	Electrical goods	-3	+15	+15	+2	+17	0	+13	+3	+17
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	0	+20	+18	-2	+21	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-6	+10	+11	+5	+13	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	-7	+9	+7	+4	+10	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	0	+10	+12	-2	+8	+2	+7	-1	+8
5072	Hardware	+1	+16	+11	0	+17	(*)	(*)	(*)	(*)
5074	Plumbing and heating equipment and supplies (hydronics)	+1	+6	+14	-3	0	(*)	(*)	(*)	(*)
5075	Warm air heating and air conditioning equipment and supplies	0	+7	+13	-4	+8	(*)	(*)	(*)	(*)
508	Machinery, equipment, and supplies	-5	+18	+17	+1	+15	+3	+16	+2	+15
5081	Commercial machines and equipment	+7	+16	+5	0	+5	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	-1	+12	+7	+1	+25	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	-2	+32	+21	+1	+14	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	-10	+18	+20	-1	+13	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	-3	+9	+18	0	+4	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	-3	+51	+48	-2	+4	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	-4	+50	+53	-2	+6	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	-2	+53	+40	0	-1	(*)	(*)	(*)	(*)
51	Nondurable goods, total	-1	+24	+18	+3	+22	+3	+21	+5	+22
	Total (excluding farm-product raw materials)	-3	+21	+18	+2	+18	+1	+18	+2	+18
511	Paper and paper products	-5	+14	+13	+1	+23	0	+12	+5	+23
5111,3	Printing, writing, industrial, and personal service paper	-5	+14	+15	+2	+18	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	+3	+19	+12	+5	+23	+4	+14	+6	+23
5122	Drugs, drug proprietaries, and druggists' sundries	+3	+19	+12	+5	+23	(*)	(*)	(*)	(*)
5122 pt.	General-line drugs	+2	+18	+9	+2	+16	(*)	(*)	(*)	(*)
514	Groceries and related products	-2	+12	+13	+1	+16	+1	+11	+1	+16
5141	Groceries, general-line	-1	+16	+13	+4	+17	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	-4	+9	+12	+3	+14	(*)	(*)	(*)	(*)
5141 pt.	Retailer cooperatives	+1	+20	+12	+2	+19	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	+1	+17	+14	+4	+17	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	0	+16	+12	-1	+13	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	+1	+14	+17	+2	+12	(*)	(*)	(*)	(*)
5145	Confectionery	-5	+11	+11	+1	+23	(*)	(*)	(*)	(*)
5147	Meats and meat products	-2	+4	+19	-3	+16	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	-14	+2	+9	-4	+20	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	+8	+36	+15	+6	+39	+11	+35	+16	+40
5152	Cotton	-22	+12	+1	-21	-17	(*)	(*)	(*)	(*)
5153	Grain	+10	+39	+16	+14	+53	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	-2	+44	+33	+9	+25	-5	+39	+6	+25
5171	Petroleum bulk stations and terminals	-1	+43	+29	+14	+29	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	-2	+21	+15	-2	+23	+6	+17	+1	+23
5181	Beer and ale	0	+25	+19	-3	+47	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	-5	+15	+11	+2	+10	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	-11	+28	+22	+5	+13	0	+24	+3	+13
5191	Farm supplies	-18	+30	+25	+10	+20	(*)	(*)	(*)	(*)
5194	Tobacco and tobacco products	+2	+5	+8	+6	+10	(*)	(*)	(*)	(*)
5198	Paints, varnishes, and supplies	+1	+22	+16	+3	+28	(*)	(*)	(*)	(*)
5199 pt.	Books, periodicals, newspapers	-2	+7	+11	-5	-21	(*)	(*)	(*)	(*)

*Adjusted data are available only for summary group totals.
(S) Does not meet publication standards because of extreme variability or high nonresponse rate. r Revised.

[1]Adjusted for seasonal variations and, in the case of sales, also for trading-day differences. Adjusted data are only available for the summary kind-of-business groups shown.
[2]There are indications that the seasonal adjustment factors for this trade group may not reflect recent trends. The seasonally adjusted data for this trade group and also for the summary group totals should, therefore, be used with caution.

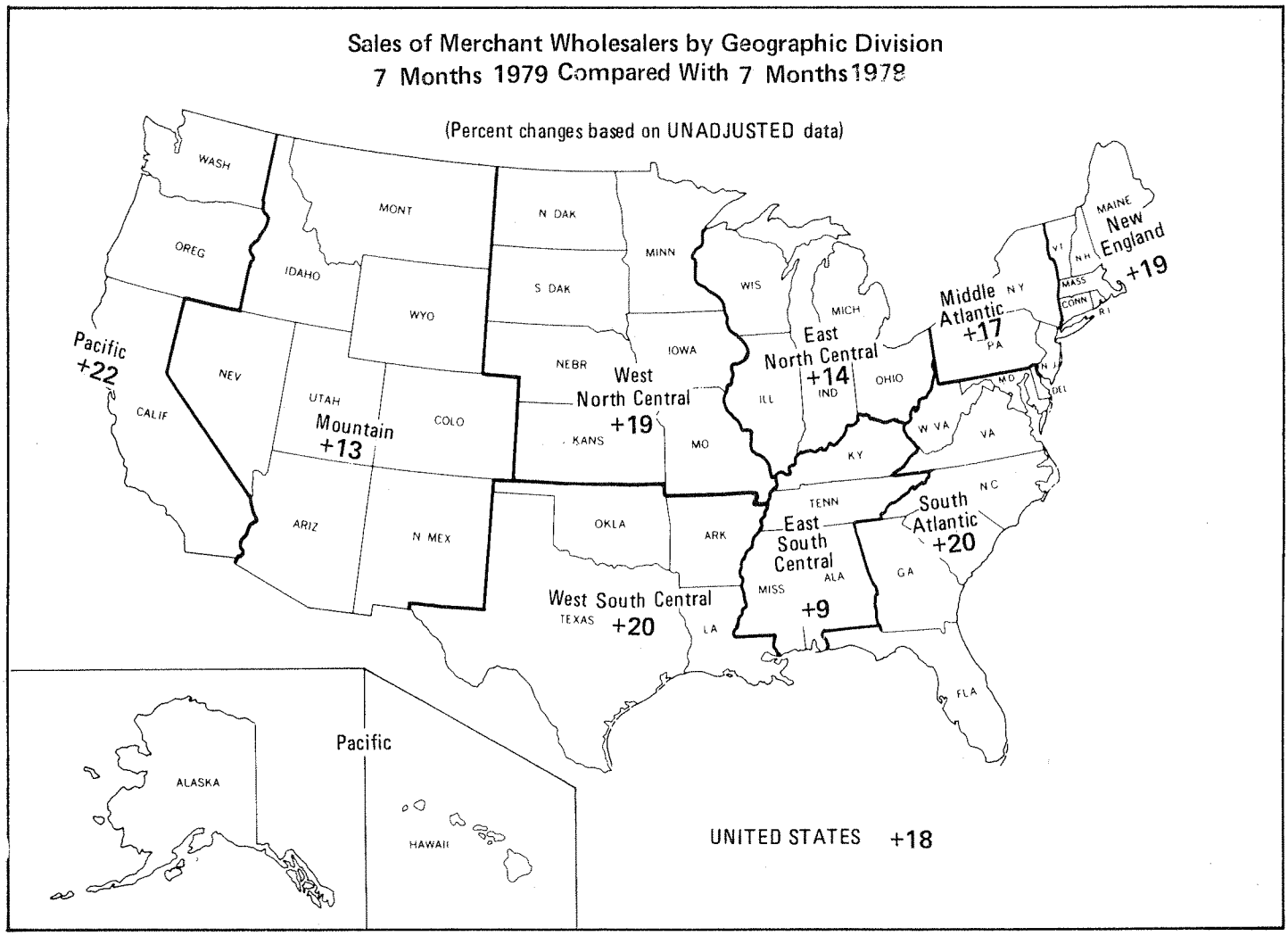


Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1979 and 1978

(Sales, in millions of dollars, are NOT ADJUSTED for seasonal variations or trading-day differences; sampling errors in percent)

1972 SIC code	Kind of business and geographic division[1]	1979							1978						Total 7 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.	Apr.	May	June	July[P]	July	Aug.	Sept.	Oct.	Nov.	Dec.	1979	1978	Range[2]	Median
	Merchant wholesalers, total	63,739	61,721	74,319	70,768	76,814	74,361	73,202	60,651	67,702	63,933	69,086	67,699	64,527	494,924	421,159	0.8-0.9	0.9
	New England	3,393	3,289	3,835	3,652	3,915	3,782	3,632	3,206	3,654	3,472	3,638	3,678	3,652	25,497	21,342	5-6	6
	Middle Atlantic	14,513	13,785	16,692	15,218	16,416	16,288	16,208	13,281	15,382	14,387	15,123	15,304	14,529	109,120	93,385	2-2	2
	East North Central	10,573	10,454	12,314	11,906	13,356	12,632	11,972	10,461	11,636	10,821	12,195	11,757	10,882	83,207	73,343	2-3	3
	West North Central	6,695	6,589	7,834	7,506	8,614	7,793	8,268	6,513	7,373	6,836	7,790	7,471	6,894	53,479	44,991	2-3	2
	South Atlantic	7,023	6,620	8,329	7,929	8,401	8,074	7,711	6,523	7,139	6,877	7,449	7,106	6,979	54,088	45,103	2-3	2
	East South Central	2,961	2,801	3,505	3,461	3,557	3,372	3,255	2,962	3,127	2,938	3,213	3,075	2,922	22,912	21,022	4-5	4
	West South Central	6,703	6,648	7,785	7,673	8,443	8,314	8,172	6,382	6,890	6,717	7,036	6,885	6,680	53,738	44,720	3-4	4
	Mountain	2,337	2,253	2,904	2,659	2,786	2,851	2,914	2,456	2,620	2,693	2,583	2,477	2,540	18,705	16,551	5-5	5
	Pacific	9,540	9,281	11,121	10,765	11,325	11,077	11,070	8,868	9,881	9,191	10,058	9,946	9,448	74,178	60,603	2-3	3
50	Durable goods, total	28,284	28,141	34,689	33,429	35,723	34,447	33,673	28,701	32,279	30,404	32,242	31,037	29,340	228,384	194,616	0.8-1.0	0.9
	Middle Atlantic	5,936	5,892	7,165	6,601	7,191	6,961	6,708	5,808	6,765	6,303	6,618	6,516	6,094	46,454	40,812	4-5	4
	East North Central	4,818	4,975	6,057	5,863	6,467	6,023	5,689	4,958	5,793	5,342	5,801	5,674	5,177	39,894	34,366	3-4	4
	West North Central	2,157	2,208	2,718	2,746	3,009	2,778	2,894	2,383	2,695	2,504	2,740	2,652	2,379	18,511	15,563	5-6	5
	South Atlantic	3,515	3,211	4,246	4,111	4,269	4,172	4,038	3,480	3,738	3,689	3,869	3,608	3,513	27,562	23,280	4-5	4
	West South Central	3,020	3,067	3,649	3,637	3,863	3,900	3,695	3,135	3,403	3,224	3,438	3,160	3,144	24,831	21,119	4-4	4
	Mountain	1,076	1,043	1,408	1,309	1,355	1,358	1,378	1,303	1,372	1,340	1,283	1,172	1,207	8,927	8,178	6-7	7
	Pacific	5,259	5,268	6,330	6,173	6,433	6,265	6,367	5,026	5,641	5,214	5,597	5,524	5,250	42,095	33,903	2-3	3
51	Nondurable goods, total	35,455	33,580	39,630	37,339	41,091	39,914	39,529	31,950	35,423	33,529	36,844	36,662	35,187	266,540	226,544	1.0-1.2	1.0
	New England	2,166	2,066	2,335	2,200	2,377	2,343	2,261	1,988	2,293	2,117	2,245	2,316	2,349	15,747	13,387	5-7	6
	Middle Atlantic	8,577	7,893	9,527	8,616	9,226	9,327	9,500	7,473	8,617	8,084	8,505	8,788	8,435	62,666	52,573	3-3	3
	East North Central	5,755	5,479	6,256	6,042	6,888	6,609	6,282	5,504	5,843	5,479	6,394	6,083	5,704	43,313	38,977	3-4	3
	West North Central	4,538	4,381	5,115	4,760	5,606	5,195	5,373	4,129	4,678	4,331	5,050	4,820	4,515	34,967	29,428	3-4	3
	South Atlantic	3,508	3,409	4,084	3,818	4,132	3,902	3,673	3,044	3,400	3,188	3,580	3,498	3,466	26,526	21,822	3-5	3
	East South Central	1,685	1,549	1,889	1,925	1,959	1,820	1,723	1,572	1,616	1,505	1,710	1,706	1,650	12,551	11,584	3-4	4
	West South Central	3,683	3,581	4,136	4,036	4,580	4,414	4,478	3,248	3,487	3,493	3,598	3,725	3,536	28,907	23,601	5-5	5
	Pacific	4,281	4,013	4,790	4,591	4,893	4,812	4,702	3,842	4,241	3,978	4,461	4,422	4,199	32,083	26,799	4-5	4

Note: Detail may not add to totals due to rounding and minor revisions.

[P]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]See map on page 7.

[2]The range of sampling error of the estimate is based on data for August, September, and October 1977.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: July 1979

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in-- Sales: July 1979 from June 1979	Sales: July 1979 from July 1978	Sales: 7 months 1979 from 7 months 1978	Inventories: July 1979 from June 1979	Inventories: July 1979 from July 1978	Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		A	B	C[1]	D	E	A	D
	Merchant wholesalers, total	r-2	+21	+18	+2	+16	0.4	0.2
	New England	-4	+13	+19	+4	+12	2.0	1.9
	Middle Atlantic	0	+22	+17	+2	+13	1.1	0.6
	East North Central	-5	+15	+14	+2	+11	1.2	0.8
	West North Central	+4	+28	+19	+7	+25	1.3	1.1
	South Atlantic	-4	+18	+20	+1	+12	1.6	1.0
	East South Central	-3	+10	+9	-1	+12	1.7	1.4
	West South Central	-2	+28	+20	+2	+23	1.4	0.8
	Mountain	+2	+19	+13	0	+16	2.4	1.3
	Pacific	0	+25	+22	0	+18	1.2	0.5
50	Durable goods, total	-2	+17	+17	+2	+13	0.6	0.3
	New England	-5	+13	+23	+5	+7	2.4	1.3
	Middle Atlantic	-4	+15	+14	+2	+11	1.7	1.0
	East North Central	-6	+15	+16	+1	+6	1.9	1.0
	West North Central	+4	+21	+19	+2	+16	3.3	1.7
	South Atlantic	-3	+16	+18	+1	+12	1.9	1.2
	East South Central	-1	+10	+10	-1	+13	3.9	2.5
	West South Central	-5	+18	+18	0	+20	2.1	1.2
	Mountain	+1	+6	+9	0	+11	2.9	1.7
	Pacific	+2	+27	+24	0	+18	1.9	0.7
51	Nondurable goods, total	-1	+24	+18	+3	+22	0.6	0.4
	New England	-3	+14	+18	+2	+19	1.9	2.7
	Middle Atlantic	+2	+27	+19	+1	+16	1.9	0.9
	East North Central	-4	+15	+11	+5	+23	1.4	1.1
	West North Central	+4	+32	+19	+14	+38	1.6	1.4
	South Atlantic	-6	+21	+22	0	+13	2.4	1.8
	East South Central	-5	+10	+8	-3	+8	1.7	2.4
	West South Central	+1	+38	+22	+7	+31	2.2	1.3
	Mountain	+3	+33	+17	+2	+29	3.2	1.2
	Pacific	-2	+22	+20	-1	+17	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	-9	+5	+10	+5	+20	2	1
	New England	-7	+8	+15	(S)	+37	7	4
	Middle Atlantic	-15	0	-5	+6	+31	4	2
	East North Central	-15	+6	+20	+2	+14	7	1
	West North Central	-5	+19	+14	+2	+27	5	2
	South Atlantic	+1	+10	+16	+5	+18	4	2
	East South Central	-18	-7	+12	+7	+20	4	3
	West South Central	-16	-3	+8	+6	+32	5	2
	Mountain	(S)	(S)	(S)	+3	(S)	7	3
	Pacific	-4	+10	+13	+1	+16	3	2
502	Furniture and home furnishings	-3	+14	+10	0	+8	2	1
	Middle Atlantic	-5	+8	+14	+1	+7	4	2
	East North Central	-3	+23	+24	-4	+12	7	2
	West North Central	-11	(S)	(S)	-1	(S)	5	4
	West South Central	-6	(S)	+5	-2	+6	5	7
	Pacific	+10	+50	+12	-1	+12	5	3
503	Lumber and other construction materials	+1	+24	+20	0	+12	2	1
	New England	-2	+27	+17	-3	+8	4	5
	Middle Atlantic	+6	+23	+13	-4	0	4	2
	East North Central	-6	+22	+11	-2	+11	3	2
	West North Central	+15	+40	+33	+3	+9	7	7
	South Atlantic	+1	+12	+19	-3	+8	4	2
	East South Central	+7	+7	+3	-4	+3	4	3
	West South Central	-1	+16	+12	+2	+10	6	5
	Pacific	-2	+33	+30	+2	+24	5	1
5051 pt.	Ferrous metals service centers	+3	+34	+21	+5	+20	2	1
	New England	+4	+30	+22	(S)	+29	6	2
	Middle Atlantic	-2	+36	+21	+6	+38	5	2
	East North Central	-0	+33	+22	+4	+4	5	2
	West North Central	+3	+25	+23	+2	+13	5	2
	South Atlantic	-1	+24	+11	+4	+11	3	2
	East South Central	+14	+48	+21	+1	+34	4	4
	West South Central	+12	+15	+16	+1	+19	4	2
	Mountain	(S)	(S)	(S)	+5	+37	2	2
	Pacific	+2	+46	+36	-2	+32	2	3
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	0	+20	+18	-2	+21	2	1
	New England	+2	+7	+24	-5	+1	3	2
	Middle Atlantic	-6	+26	+14	-3	+6	5	2
	East North Central	+8	+37	+26	-1	+26	3	2
	West North Central	-6	-8	+5	-6	+13	5	3
	South Atlantic	+3	+13	+14	-3	+24	3	2
	East South Central	-7	+28	+15	-2	+52	3	5
	West South Central	-4	+28	+28	-3	+32	4	2
	Mountain	-3	-6	+11	-4	(S)	4	2
	Pacific	+3	+20	+20	-2	+27	4	2

See footnotes at end of table.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: July 1979—Continued

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in--					Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		Sales			Inventories			
		July 1979 from June 1979	July 1979 from July 1978	7 months 1979 from 7 months 1978	July 1979 from June 1979	July 1979 from July 1978		
		A	B	C[2]	D	E	A	D
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-6	+10	+11	+5	+13	3	1
	Middle Atlantic	-2	+8	+11	+7	+9	3	2
	East North Central	-9	+7	+18	+4	+8	4	1
	West North Central	-1	+1	-8	+3	+24	4	4
	South Atlantic	-5	+18	+15	+6	+11	6	4
	West South Central	-1	(S)	+24	+2	+16	4	4
	Mountain	+12	+26	+22	+9	+13	6	3
	Pacific	-11	+2	+9	+7	+18	3	2
5072	Hardware	+1	+16	+11	0	+17	1	1
	New England	-5	+10	+13	-2	+4	6	3
	Middle Atlantic	-5	+14	+10	-1	+32	6	2
	East North Central	+9	+13	+8	+3	+11	4	2
	West North Central	+7	+13	+15	-4	+4	3	3
	South Atlantic	+4	+38	+13	+1	+27	4	2
	East South Central	+3	-7	-3	+1	-12	4	1
	Pacific	-4	+33	+22	+1	+27	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	+1	+6	+14	-3	0	2	1
	Middle Atlantic	+3	+32	+25	-2	+29	6	3
	East North Central	-3	-22	-3	-4	(S)	3	3
	South Atlantic	+1	+16	+22	-3	+3	3	2
	Mountain	-6	-12	-10	-3	+22	7	4
	Pacific	+2	+22	+20	-5	+26	5	4
5084,5	Industrial machinery, equipment, and supplies	-10	+18	+20	-1	+13	2	1
	Middle Atlantic	-9	+20	+12	+1	+11	7	2
	East North Central	-12	+11	+21	-2	+6	3	2
	West South Central	-12	+33	+24	-2	+12	4	3
	Pacific	-14	+19	+28	0	+22	5	2
512	Drugs, drug proprietaries, and druggists' sundries	+3	+19	+12	+5	+23	1	1
	New England	+2	+34	+20	+6	+39	5	3
	Middle Atlantic	+5	+5	+5	+8	+35	3	2
	East North Central	(S)	+14	+13	+2	+14	6	3
	West North Central	+4	+31	+15	+1	+27	2	2
	South Atlantic	+5	+14	+10	+2	+11	6	5
	East South Central	+10	+6	+4	+7	+5	6	5
	West South Central	+6	+25	+11	0	(S)	3	2
	Mountain	+2	+31	+18	+1	+32	3	2
	Pacific	+1	+43	+24	+4	+39	3	3
5141	Groceries, general-line	-1	+16	+13	+4	+17	1	1
	New England	-7	+1	+12	+3	+21	2	1
	Middle Atlantic	+1	+28	+14	+3	+26	1	2
	East North Central	+6	+24	+11	+3	+16	3	1
	West North Central	-2	+2	+6	+5	+9	1	1
	South Atlantic	-2	+10	+18	+1	+12	2	1
	West South Central	0	+14	+14	+3	+11	2	1
	Mountain	0	+28	+18	+7	+42	2	2
	Pacific	-8	+14	+16	+1	+12	1	1
5142,3,6,9	Specialty-line groceries	0	+16	+12	-1	+13	1	1
	Middle Atlantic	+3	+21	+10	-10	+10	4	2
	East North Central	-1	-1	+8	+11	+8	3	2
	West North Central	+7	+27	+11	+2	+52	3	1
	South Atlantic	(S)	+16	+16	+11	+28	5	6
	East South Central	-6	-7	+12	+6	-12	2	2
5148	Fresh fruits and vegetables	-14	+2	+9	-4	+20	2	4
	Middle Atlantic	-7	-2	+7	-4	+7	7	5
	East North Central	-12	-8	-1	-2	(S)	6	6
	West North Central	-3	+29	+12	-8	+40	6	3
	West South Central	-18	-3	+9	-2	+1	5	3
	Pacific	-14	+7	+10	+3	+43	4	4
5194	Tobacco and tobacco products	+2	+5	+8	+6	+10	1	1
	New England	+12	-9	-8	+10	-11	5	3
	Middle Atlantic	+1	-4	+8	+3	+8	4	3
	East North Central	+2	+12	+10	+12	+17	4	3
	West North Central	+5	-3	+3	+5	+10	4	2
	South Atlantic	0	+14	+15	+3	+12	6	6
	East South Central	-3	+4	0	+1	+12	7	4
	West South Central	-2	+5	+7	+2	0	7	6
	Mountain	+9	-9	+5	+13	-11	6	2
	Pacific	+5	+25	+20	+7	+24	2	5

Note: Data at the United States level are generally more reliable than data by geographic division. In those kinds of business where the geographic division trends are subject to a high sampling error, it may be desirable to use the United States total trends for the kinds of business rather than the geographic division trends.

(S) Does not meet publication standards because of extreme variability or high nonresponse rate. r Revised.

[1] See map on page 7.

[2] The sampling errors (in percent) shown in columns A and D are based on medians or measurements on data for August, September, and October 1977. For SIC's 5051 pt., and 5063 the medians of measurements in columns A and D are based on data for June, July, and August 1978.

APPENDIX A. Reliability of Data

There are two types of errors possible in an estimate based on a sample survey—sampling and nonsampling. Sampling errors occur because observations are made only on a sample, not on the entire population. Nonsampling errors can be attributed to many sources in the collection and processing of data. The accuracy of a survey result is determined by the joint effects of sampling and nonsampling errors.

Measures of sampling variability—The particular sample used in this survey is one of a large number of all possible samples of the same size that could have been selected using the same design. Estimates derived from the different samples would differ from each other. The average of these estimates would be close to the estimate derived from a complete enumeration of the population (assuming that a complete enumeration has the same nonsampling errors as the sample survey). The average of the estimates differs from the estimate from a complete census because of the composite estimation technique. Disregarding this difference, the sampling error or standard error of the estimate is a measure of the variability among the estimates from all possible samples of the same size and design and, thus, is a measure of the precision with which an estimate from a particular sample approximates the results of a complete enumeration. The coefficient of variation (expressed as a percent) is the standard error of the estimate times 100 percent, divided by the value being estimated. Note that any measures of sampling variability, such as the standard error or coefficient of variation, are estimates derived from the sample and are also subject to sampling variability.

Estimates of sampling variability (the coefficients of variation in percent) for sales and inventories at the kind-of-business detail provided in this publication are shown in table A-1. These coefficients of variation permit certain confidence statements about the sample estimates. As noted above, the particular sample used in this survey is one of a large number of all possible samples of about the same size that could have been selected using the same design. In about two out of three (67 percent) of these samples, the estimate would differ from a complete enumeration by less than the corresponding percent for that estimate shown in the sampling variability table. In about 19 out of 20 (95 percent) of these samples, the estimate would differ from the results of a complete enumeration by less than twice the percentages shown.

To illustrate the computations involved in the above confidence statements for monthly dollar volume estimates, assume that an estimate for a kind of business published in table 1 for a particular month is $5,000 million and that the median coefficient of variation for this statistic, is 0.9 percent or .009. Multiplying $5,000 million by .009 yields $45 million. Therefore, a 67 percent confidence interval is $4,955 million to $5,045 million (i.e. $5,000 million plus or minus $45 million). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately two out of three (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Similarly a 95 percent confidence interval is $4,910 million to $5,090 million (i.e., $5,000 million plus or minus $90 million).

As an example of the use of the coefficients of variation with ratios, assume that an estimated month-to-month percent change published in table 5 is -1.0 percent for a particular kind of business. This is equivalent to a month-to-month ratio of .990. Assume the median coefficient of variation for this ratio as shown in table A-1 is 0.5 percent (or .005). Multiplying .990 by .005 yields .005. Therefore, a 67 percent confidence interval is .985 to .995 (i.e., .990 plus or minus .005) and a 95 percent confidence interval is .980 to 1.000 (i.e., .990 plus or minus .010).

Nonsampling errors—As calculated for this report, the coefficient of variation measures certain nonsampling errors but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples of the same size and design, between the estimate and the true value being estimated. The accuracy of the tabulated data is determined by the joint effects of the sampling and nonsampling errors.

Nonsampling errors can be attributed to many sources: (1) inability to obtain information about all cases in the sample, (2) response errors, (3) definitional difficulties, (4) differences in the interpretation of questions, (5) mistakes in recording or coding the data obtained, and (6) other errors of collection, response, coverage, and estimation for missing data. These nonsampling errors also occur in complete censuses.

Although no direct measurement of the biases due to nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is due to imputing data for nonrespondents, for late reporters, and for data which fail edit. For all kinds of business combined, imputed data amount to about 15 percent of the sales estimates and 25 percent for inventories.

Table A-1. Estimated Sampling Variability of Sales and Inventories by Kind of Business for the United States

1972 SIC code	Kind of business	Sales						Inventories					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total	0.8-1.1	0.9	0.8-0.9	0.9	0.4-0.5	0.5	0.8-1.0	0.9	0.7-1.0	0.9	0.2-0.5	0.4
	Total (excluding farm-product raw materials)	0.9-1.2	1.1	0.9-1.0	1.0	0.4-0.6	0.5	0.9-1.0	1.0	0.8-1.0	0.9	0.2-0.5	0.3
50	Durable goods, total	1.1-1.3	1.2	0.9-1.0	1.0	0.6-0.6	0.6	1.1-1.2	1.2	1.0-1.2	1.1	0.3-0.7	0.5
501	Motor vehicles and automotive parts and supplies	2.3-3.3	3.1	1.9-2.8	2.2	1.4-1.9	1.7	2.5-3.3	2.9	2.6-3.1	3.0	0.6-1.3	1.0
5012	Automobiles and other motor vehicles	(*)	(*)	(*)	(*)	1.7-3.9	3.1	(*)	(*)	(*)	(*)	1.7-3.0	2.8
5013,4	Automotive parts and supplies, tires and tubes	2.9-3.7	3.1	2.9-3.2	3.1	1.5-2.0	1.6	4.0-4.5	4.3	3.9-4.4	4.0	0.4-1.4	0.7
5013	Automotive parts and supplies	3.3-4.0	3.9	3.1-3.8	3.7	1.9-2.2	2.0	4.7-5.3	5.2	4.7-5.2	5.0	0.5-1.5	0.9
502	Furniture and home furnishings	4.2-5.8	4.6	4.2-4.4	4.3	1.7-2.9	2.0	3.2-4.9	3.7	3.4-4.2	3.7	0.8-2.3	2.0
5021	Furniture--household and office	6.6-7.6	6.9	5.6-7.1	6.9	4.0-5.7	4.3	(*)	(*)	(*)	(*)	1.4-3.4	2.2
5021 pt.	Household furniture	(*)	(*)	(*)	(*)	5.0-5.8	5.1	(*)	(*)	(*)	(*)	1.4-4.3	2.0
5021 pt.	Office furniture	(*)	(*)	(*)	(*)	5.7-8.0	5.9	(*)	(*)	(*)	(*)	0.7-3.7	2.1
5023	Home furnishings	5.1-7.5	6.1	5.1-6.1	5.5	1.6-3.6	2.2	4.8-6.9	5.6	4.9-6.0	5.0	1.0-3.1	2.6
503	Lumber and other construction materials	2.8-4.4	3.1	2.9-3.9	3.1	1.6-2.5	1.9	4.5-6.5	4.9	4.8-5.8	4.9	0.7-1.8	0.9
5031	Lumber, plywood, and millwork	4.1-4.6	4.3	3.3-4.6	4.0	2.1-2.5	2.4	5.9-8.2	6.5	6.0-6.9	6.5	1.0-2.6	1.8
5039	Construction materials, n.e.c.	4.2-7.2	4.9	4.5-5.9	4.9	2.0-3.4	2.2	(*)	(*)	(*)	(*)	1.1-2.0	1.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(*)	(*)	(*)	(*)	2.2-2.4	2.3	(*)	(*)	(*)	(*)	1.0-2.5	1.4
505	Metals and minerals, except petroleum	4.4-6.0	4.7	4.0-5.1	4.0	1.5-3.0	2.8	3.2-3.8	3.7	3.7-4.1	4.0	0.8-1.4	1.3
5051 pt.	Ferrous metals service centers and offices	5.0-5.8	5.7	4.1-5.2	4.7	1.2-3.8	3.1	3.8-4.2	4.1	4.1-4.3	4.2	0.5-1.6	1.4
5051 pt.	Ferrous metals service centers	6.7-8.0	6.8	5.0-6.8	5.8	1.1-5.3	3.5	2.9-4.4	3.4	3.4-4.0	3.5	0.6-2.2	2.1
5051 pt.	Nonferrous metals service centers and offices	(*)	(*)	(*)	(*)	4.5-7.0	6.1	(*)	(*)	(*)	(*)	2.8-5.4	4.7
506	Electrical goods	1.9-2.6	2.3	1.6-2.1	1.7	1.3-1.6	1.4	2.5-2.9	2.6	2.2-2.8	2.4	0.5-1.0	0.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2.2-3.1	2.6	2.3-2.7	2.4	1.4-1.7	1.6	2.9-3.5	3.2	3.0-3.2	3.1	0.6-1.2	0.7
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3.4-4.0	3.8	3.0-3.2	3.1	1.6-2.8	2.5	2.9-4.2	3.2	2.7-3.8	3.0	0.7-1.6	0.9
5064	Electrical appliances, TV and radio sets	3.0-3.8	3.6	2.6-3.7	3.1	1.7-2.7	2.5	(*)	(*)	(*)	(*)	0.9-1.7	1.4
507	Hardware, plumbing, heating equipment, and supplies	2.7-3.0	2.9	2.4-2.6	2.5	1.1-1.9	1.5	2.4-2.8	2.6	2.4-2.9	2.7	0.3-1.4	0.6
5072	Hardware	3.6-4.2	3.8	2.6-3.1	3.0	1.3-2.4	1.9	2.0-4.1	2.7	2.2-3.5	2.8	0.4-2.1	0.8
5074	Plumbing and heating equipment and supplies (hydronics)	4.1-5.3	4.2	3.9-5.1	4.2	1.6-3.8	2.1	5.0-7.0	6.0	4.5-7.1	5.3	0.5-3.1	0.9
5075	Warm air heating and air conditioning equipment and supplies	(*)	(*)	(*)	(*)	2.0-4.4	2.7	(*)	(*)	(*)	(*)	1.1-4.3	1.4
508	Machinery, equipment, and supplies	2.3-2.7	2.6	1.8-2.5	2.1	1.2-1.5	1.4	2.0-2.6	2.3	1.7-2.1	1.9	0.4-1.8	1.1
5081	Commercial machines and equipment	(*)	(*)	(*)	(*)	2.9-4.3	4.1	(*)	(*)	(*)	(*)	1.6-8.5	1.9
5082	Construction and mining machinery and equipment	5.0-7.3	5.8	3.3-5.8	4.9	3.9-4.6	4.4	2.9-7.0	4.0	3.2-4.1	3.3	0.7-5.3	1.0
5083	Farm and garden machinery and equipment	(*)	(*)	(*)	(*)	4.1-6.6	6.0	(*)	(*)	(*)	(*)	1.1-2.9	1.2
5084,5	Industrial machinery, equipment, and supplies	3.1-3.4	3.2	2.8-3.0	2.9	1.1-2.3	1.6	2.4-3.0	2.9	2.4-3.0	2.7	0.5-1.6	0.6
5086	Professional equipment and supplies	3.7-7.5	4.3	4.0-5.5	5.2	1.8-3.3	2.0	(*)	(*)	(*)	(*)	0.6-5.2	0.7
5086 pt.	Surgical, medical, hospital, and supplies	(*)	(*)	(*)	(*)	1.7-3.8	2.5	(*)	(*)	(*)	(*)	0.7-5.4	1.0
5087	Service establishment equipment and supplies	(*)	(*)	(*)	(*)	1.8-11.0	2.9	(*)	(*)	(*)	(*)	1.0-3.4	1.3
5093	Scrap and waste materials	4.6-13.3	9.0	4.6-8.8	5.0	2.2-4.9	2.7	(*)	(*)	(*)	(*)	0.7-3.8	0.9
5093 pt.	Iron and steel scrap	(*)	(*)	(*)	(*)	2.6-3.5	3.1	(*)	(*)	(*)	(*)	0.8-1.4	1.0
5093 pt.	Waste materials	(*)	(*)	(*)	(*)	2.6-8.8	4.8	(*)	(*)	(*)	(*)	1.2-9.1	1.6
51	Nondurable goods, total	1.0-1.3	1.1	1.0-1.1	1.1	0.4-0.7	0.6	1.5-1.7	1.6	1.4-1.6	1.5	0.3-0.7	0.4
	Total (excluding farm-product raw materials)	1.0-1.6	1.2	1.3-1.4	1.4	0.5-0.8	0.6	1.7-2.0	1.9	1.6-1.8	1.7	0.3-0.7	0.4
511	Paper and paper products	2.6-4.0	3.7	2.4-4.1	3.1	1.0-1.4	1.3	2.5-3.4	2.7	2.4-3.2	2.8	0.4-1.5	0.6
5111,3	Printing, writing, industrial, and personal service paper	2.4-3.1	2.7	2.3-2.8	2.4	1.3-1.5	1.4	2.9-3.4	3.1	2.7-3.2	2.8	0.4-1.3	0.9
5112	Stationery supplies	(*)	(*)	(*)	(*)	2.4-3.4	2.5	3.2-6.1	5.8	3.6-5.1	4.4	0.9-4.8	1.4
512	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	5.6-6.3	5.7	5.6-5.7	5.7	0.6-2.2	0.7
5122	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	(*)	(*)	(*)	(*)	0.6-2.2	0.7
5122 pt.	General-line drugs	7.2-9.8	7.9	7.5-8.5	7.6	0.7-3.0	1.0	(*)	(*)	(*)	(*)	0.5-3.1	1.0
513	Apparel, piece goods, and notions	8.3-12.4	8.8	8.6-9.3	9.1	2.6-4.0	3.3	(*)	(*)	(*)	(*)	(*)	(*)
514	Groceries and related products	1.7-2.2	2.0	1.6-2.0	1.9	0.4-1.2	0.5	1.5-2.5	1.8	1.8-2.1	1.9	0.4-1.3	0.6
5141	Groceries, general-line	1.9-2.7	2.1	1.7-2.7	2.0	0.4-1.5	0.7	1.8-2.7	2.3	1.7-2.0	1.8	0.3-1.2	0.8
5141 pt.	Voluntary groups	(*)	(*)	(*)	(*)	0.5-1.7	0.6	(*)	(*)	(*)	(*)	0.4-1.7	0.5
5141 pt.	Retailer cooperatives	(*)	(*)	(*)	(*)	0.6-1.6	1.1	(*)	(*)	(*)	(*)	0.4-2.4	0.7
5141 pt.	Other general-lines	(*)	(*)	(*)	(*)	0.9-3.1	1.8	(*)	(*)	(*)	(*)	0.5-1.3	0.7
5142,3,6,9	Specialty-line groceries	(*)	(*)	(*)	(*)	0.7-3.4	1.3	(*)	(*)	(*)	(*)	0.9-2.4	1.0
5144	Poultry and poultry products	3.4-5.5	4.4	4.0-4.4	4.2	0.6-2.2	1.5	(*)	(*)	(*)	(*)	2.1-4.1	2.3
5145	Confectionery	4.7-6.3	4.7	3.6-5.4	4.3	2.0-3.2	2.2	(*)	(*)	(*)	(*)	0.8-2.4	2.3
5147	Meats and meat products	4.5-4.8	4.7	4.6-4.6	4.6	1.4-2.9	1.7	(*)	(*)	(*)	(*)	1.7-3.9	2.2
5148	Fresh fruits and vegetables	4.7-5.4	4.9	3.9-4.1	4.0	1.9-4.2	2.7	(*)	(*)	(*)	(*)	2.9-4.4	3.9
515	Farm-product raw materials	1.8-2.2	2.0	1.6-2.0	1.7	1.1-1.7	1.3	(*)	(*)	(*)	(*)	1.1-2.8	2.4
5152	Cotton	(*)	(*)	(*)	(*)	1.8-4.9	2.8	(*)	(*)	(*)	(*)	1.3-2.9	2.4
5153	Grain	2.4-2.7	2.6	2.2-2.4	2.3	1.0-1.7	1.3	(*)	(*)	(*)	(*)	1.6-3.3	1.9
517	Petroleum and petroleum products	4.0-5.0	4.7	4.2-4.6	4.5	1.1-1.9	1.5	4.1-5.2	5.0	4.4-5.4	4.7	1.6-3.0	2.3
5171	Petroleum bulk stations and terminals	2.8-3.3	2.9	2.8-3.0	2.9	0.9-1.4	1.2	(*)	(*)	(*)	(*)	1.7-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages	3.4-3.9	3.7	3.1-3.7	3.2	0.8-1.8	1.7	3.9-4.2	4.1	4.0-4.3	4.2	1.0-2.0	1.3
5181	Beer and ale	2.2-4.4	3.1	2.8-3.2	2.9	1.0-2.5	2.0	3.6-5.5	3.8	3.6-4.1	3.8	1.7-2.7	2.1
5182	Wines and distilled alcoholic beverages	5.2-6.3	5.4	4.6-5.6	4.7	1.2-3.4	1.7	4.6-5.4	4.8	5.0-5.6	5.3	1.4-2.3	1.6
519	Miscellaneous nondurable goods	2.4-3.2	2.9	2.4-2.7	2.5	1.4-2.3	1.6	(*)	(*)	(*)	(*)	0.8-1.7	1.4
5191	Farm supplies	(*)	(*)	(*)	(*)	3.2-3.6	3.3	(*)	(*)	(*)	(*)	1.7-3.9	2.0
5194	Tobacco and tobacco products	4.0-5.2	4.1	3.4-4.5	4.2	1.3-2.4	1.7	(*)	(*)	(*)	(*)	0.8-4.3	1.0
5198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.8-3.8	3.0	(*)	(*)	(*)	(*)	1.5-3.1	2.9
5199 pt.	Books, magazines, newspapers	(*)	(*)	(*)	(*)	3.2-8.0	5.6	(*)	(*)	(*)	(*)	2.0-6.5	5.1

Note: Measures of sampling variability are based on data unadjusted for seasonal variations or trading-day differences. The range of sampling error of the monthly dollar estimates and the ratio of current month to previous month for sales and inventories is based on data for July, August, and September 1977.

*Measures of sampling variability are not shown since sales and/or inventory estimates for these kinds of business are not published.

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

Seasonal factors for adjusting data in this historical publication have been developed by the method described in the X-11 Variant of the Census Method II Seasonal Adjustment Program, U.S. Bureau of the Census Technical Paper No. 15, Revised 1967. Trading-day factors for adjusting sales were also derived from the X-11 program.

Adjustment of estimates is an approximation based on past experiences, and therefore, will be less precise to the extent that current competitive pressures, changes in economic condition, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of trading-day adjustment factors may be found in Estimating Trading-Day Variation in Monthly Economic Time Series, Bureau of the Census Technical Paper No. 12, 1965. Additional details concerning the adjustment factors may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.7	91.8	107.1	97.7	104.3	104.7	95.6	104.7	98.3	102.2	100.6	96.3
	Total (excluding farm-product raw materials)	91.6	91.6	106.6	97.8	105.1	105.8	95.8	106.1	100.3	102.3	99.3	95.0
50	Durable goods, total	89.6	89.0	105.7	99.0	106.5	107.3	96.4	107.7	101.9	104.1	98.6	91.5
501	Motor vehicles and automotive parts and supplies	93.3	89.8	107.6	107.7	108.4	107.5	98.6	106.9	96.1	98.3	93.3	90.5
502	Furniture and home furnishings	84.8	89.8	105.2	96.8	101.6	106.6	89.2	105.2	103.9	112.1	107.2	95.2
503	Lumber and other construction materials	80.6	80.2	100.9	94.6	109.8	112.2	102.4	117.4	106.2	109.9	100.0	84.0
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	78.7	88.7	104.5	101.5	109.3	97.0	96.1	105.2	105.4	106.0	108.0	95.5
505	Metals and minerals, except petroleum	98.2	91.4	108.2	98.6	107.6	104.4	91.2	108.6	103.1	100.0	97.1	90.3
506	Electrical goods	89.3	89.1	102.0	96.0	99.4	106.5	99.0	104.8	100.8	107.5	103.5	98.8
507	Hardware, plumbing, heating equipment, and supplies	89.2	87.4	99.9	97.9	106.7	108.0	100.7	109.2	102.4	107.2	100.6	88.3
508	Machinery, equipment, and supplies	88.1	88.6	107.9	99.9	107.7	108.8	95.4	104.6	103.3	103.5	96.5	92.3
509	Miscellaneous durable goods	86.2	89.8	106.2	96.2	100.2	110.7	88.4	109.5	101.9	108.1	103.7	96.0
51	Nondurable goods, total	96.4	93.8	108.5	97.1	103.5	102.3	94.9	102.1	96.1	100.2	101.8	100.1
	Total (excluding farm-product raw materials)	94.3	94.0	106.8	96.6	103.2	104.5	95.5	104.5	97.6	100.6	100.6	98.4
511	Paper and paper products	95.5	92.6	106.3	93.4	103.3	103.6	95.6	107.3	102.6	104.0	99.4	92.6
512	Drugs, drug proprietaries, and druggists' sundries	97.8	92.6	106.0	96.3	100.3	99.8	92.9	104.7	100.8	108.1	101.0	96.6
513	Apparel, piece goods, and notions	90.1	94.4	107.1	91.8	101.2	98.8	93.7	115.6	106.3	107.7	103.4	87.1
514	Groceries and related products	94.7	91.1	104.2	97.2	105.4	105.0	99.0	105.3	98.9	101.0	99.8	95.0
515	Farm-product raw materials[1]	103.1	94.7	112.6	98.0	103.9	96.9	93.0	92.4	91.5	100.8	108.3	99.9
516	Chemicals and allied products	90.2	89.2	106.3	98.0	107.1	108.3	96.1	108.0	97.8	105.0	98.8	93.3
517	Petroleum and petroleum products	99.7	102.3	107.7	96.2	95.9	100.0	96.5	100.2	93.1	100.9	100.3	104.8
518	Beer, wine, and distilled alcoholic beverages	77.8	81.4	102.2	90.7	106.8	113.9	97.6	107.8	97.8	100.6	106.9	113.5
519	Miscellaneous nondurable goods	96.0	100.5	116.6	102.4	107.4	105.2	88.2	95.5	95.4	96.8	95.6	96.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.8	101.2	101.7	100.7	99.4	99.3	98.6	98.1	98.7	100.1	100.9	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.0	100.3	100.6	100.7	100.2	99.4	99.6	99.9	99.7	99.1
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.5
501	Motor vehicles and automotive parts and supplies	101.3	103.0	101.6	100.6	102.0	100.5	99.2	97.0	97.4	98.1	99.0	99.9
502	Furniture and home furnishings	99.1	99.3	99.7	99.5	100.8	101.9	100.5	100.6	101.2	100.2	99.5	97.3
503	Lumber and other construction materials	98.4	99.1	103.6	102.7	103.6	101.7	101.4	99.8	99.2	96.7	96.2	97.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.6	99.8	100.7	102.4	106.5	105.3	100.9	101.5	100.9	93.9	89.9
505	Metals and minerals, except petroleum	99.4	98.2	100.2	100.8	100.2	100.2	102.8	102.8	99.9	96.7	98.9	99.7
506	Electrical goods	96.7	96.8	99.0	99.6	101.2	102.6	101.4	100.7	101.3	101.2	100.5	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.4	103.2	102.6	101.6	100.6	98.4	98.7	97.1	96.1
508	Machinery, equipment, and supplies	99.0	101.0	101.6	100.1	101.0	102.1	100.3	99.0	99.4	99.0	98.7	98.7
509	Miscellaneous durable goods	97.0	97.6	96.0	97.5	96.4	100.8	102.4	102.6	102.9	103.8	102.4	100.5
51	Nondurable goods, total	104.1	103.2	103.3	99.4	96.7	95.1	94.7	95.3	97.4	102.1	104.6	103.4
	Total (excluding farm-product raw materials)	100.0	100.0	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.6	100.5
511	Paper and paper products	97.8	98.3	99.1	101.1	100.4	102.6	100.0	100.2	100.7	100.0	99.6	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.1	99.8	100.6	97.9	100.6	99.0	100.0	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.0	100.2	101.9	101.5	99.8	99.0	98.6	99.3
514	Groceries and related products	98.7	100.2	102.1	100.5	99.2	98.7	98.5	98.0	99.9	102.0	100.9	101.0
515	Farm-product raw materials[1]	118.8	115.2	112.2	100.3	88.9	84.6	78.8	79.4	83.8	103.8	117.4	115.3
516	Chemicals and allied products	98.0	100.0	101.9	101.6	102.4	100.9	101.6	100.2	100.4	96.9	97.0	98.7
517	Petroleum and petroleum products	104.4	99.3	99.2	94.2	96.0	94.3	96.3	100.7	102.9	104.8	104.2	103.4
518	Beer, wine, and distilled alcoholic beverages	96.3	95.8	97.4	99.1	102.3	102.9	99.9	97.9	100.3	107.0	105.7	95.3
519	Miscellaneous nondurable goods	103.6	104.6	105.0	102.1	97.2	93.2	95.1	96.0	97.4	99.7	101.9	104.0

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979—Continued

1972 SIC code	Kind of business	1979											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	95.9	91.8	104.7	100.0	105.3	101.5	98.4	104.2	95.8	104.5	100.4	96.2
	Total (excluding farm-product raw materials)	94.0	91.6	103.9	99.8	106.1	102.9	98.6	105.7	97.6	104.9	99.2	94.5
50	Durable goods, total	91.9	89.1	103.2	101.1	107.3	104.3	99.4	107.0	99.3	106.8	98.4	91.2
501	Motor vehicles and automotive parts and supplies	94.0	89.9	106.2	108.4	110.5	104.7	102.9	104.4	94.7	99.1	93.7	89.3
502	Furniture and home furnishings	87.1	89.8	101.8	98.4	102.6	104.0	91.2	105.5	101.7	115.1	106.5	94.2
503	Lumber and other construction materials	83.0	80.2	97.3	98.0	110.4	107.7	107.0	117.2	102.4	113.5	100.3	83.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	84.3	88.7	102.1	101.4	107.8	98.7	95.0	103.6	103.6	113.3	102.3	97.8
505	Metals and minerals, except petroleum	100.7	91.4	102.7	101.4	107.6	101.3	95.4	108.3	101.3	102.6	96.1	89.0
506	Electrical goods	92.0	89.1	99.9	99.3	98.8	103.9	100.6	104.5	98.2	110.6	102.9	100.1
507	Hardware, plumbing, heating equipment, and supplies	91.0	87.4	97.8	100.1	108.1	104.5	103.4	108.6	100.5	109.2	100.3	88.6
508	Machinery, equipment, and supplies	90.9	88.7	106.1	102.1	108.9	105.2	97.1	104.4	100.1	106.7	96.3	92.9
509	Miscellaneous durable goods	86.8	89.8	105.0	99.4	101.6	105.4	92.6	109.0	98.1	109.1	106.2	95.5
51	Nondurable goods, total	93.8	93.7	106.2	99.2	104.4	99.5	97.2	101.8	93.9	102.7	101.5	99.8
	Total (excluding farm-product raw materials)	96.8	94.0	104.0	99.0	104.1	101.2	98.0	104.7	94.9	103.2	100.7	98.0
511	Paper and paper products	100.0	92.7	103.2	94.8	103.3	102.4	97.4	107.1	99.3	108.7	97.7	92.2
512	Drugs, drug proprietaries, and druggists' sundries	99.7	92.6	104.0	98.9	100.6	96.9	96.6	103.9	97.6	110.1	101.8	96.1
513	Apparel, piece goods, and notions	93.9	94.4	103.7	92.4	101.8	97.8	95.7	115.5	102.9	112.3	102.1	85.9
514	Groceries and related products	97.5	91.0	103.1	98.3	106.3	103.0	100.0	105.0	96.2	104.0	99.5	95.1
515	Farm-product raw materials[1]	106.7	94.5	111.9	100.2	102.7	97.1	94.1	91.8	87.9	104.3	108.3	100.5
516	Chemicals and allied products	92.5	89.2	101.9	100.8	107.7	105.0	100.2	108.2	94.8	107.6	98.9	91.7
517	Petroleum and petroleum products	99.2	102.1	106.6	99.2	95.9	96.9	100.0	100.7	90.7	100.1	103.6	103.5
518	Beer, wine, and distilled alcoholic beverages	81.1	81.5	98.0	93.8	107.9	109.4	101.0	108.2	94.0	104.8	106.4	112.3
519	Miscellaneous nondurable goods	97.5	100.5	114.0	106.1	108.2	101.4	90.4	96.3	92.4	98.3	96.6	96.6
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.7	101.2	101.7	100.8	99.5	99.3	98.6	98.1	98.7	100.1	100.8	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.1	100.4	100.6	100.7	100.2	99.4	99.6	99.9	99.6	99.0
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.4
501	Motor vehicles and automotive parts and supplies	101.3	103.1	101.6	100.6	102.0	100.5	99.3	97.0	97.4	98.2	99.0	99.8
502	Furniture and home furnishings	99.2	99.3	99.7	99.5	100.9	102.0	100.4	100.6	101.2	100.2	99.5	97.2
503	Lumber and other construction materials	98.5	99.1	103.7	102.7	103.4	101.5	101.3	99.8	99.2	96.8	96.2	97.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.7	99.8	100.7	102.3	106.4	105.3	100.9	101.6	100.9	93.8	90.0
505	Metals and minerals, except petroleum	99.3	98.3	100.2	100.8	100.2	100.2	102.8	102.9	100.0	96.6	98.8	99.6
506	Electrical goods	96.7	96.7	99.0	99.7	101.3	102.7	101.4	100.7	101.4	101.1	100.4	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.6	103.3	102.6	101.6	100.6	98.4	98.7	97.0	96.0
508	Machinery, equipment, and supplies	99.0	101.0	101.5	100.1	101.0	102.1	100.3	99.1	99.4	98.9	98.6	98.7
509	Miscellaneous durable goods	97.1	97.5	96.0	97.4	96.4	100.9	102.4	102.6	103.0	103.8	102.4	100.5
51	Nondurable goods, total	103.9	103.2	103.4	99.5	96.9	95.3	94.7	95.3	97.4	102.0	104.5	103.4
	Total (excluding farm-product raw materials)	100.0	99.9	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.5	100.5
511	Paper and paper products	97.7	98.3	99.1	101.1	100.5	102.7	99.9	100.1	100.7	100.0	99.5	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.0	99.8	100.5	97.8	100.6	99.0	100.1	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.1	100.2	101.8	101.6	99.8	99.1	98.5	99.2
514	Groceries and related products	98.7	100.2	102.1	100.5	99.3	98.7	98.5	98.0	99.9	102.0	100.8	101.0
515	Farm-product raw materials[1]	118.5	115.2	112.3	100.8	89.6	85.4	78.5	79.2	83.5	103.3	117.1	115.1
516	Chemicals and allied products	98.0	100.0	102.0	101.6	102.4	101.0	101.6	100.2	100.5	96.9	96.8	98.6
517	Petroleum and petroleum products	104.4	99.4	99.4	94.2	95.9	94.2	96.2	100.9	102.9	104.7	104.2	103.2
518	Beer, wine, and distilled alcoholic beverages	96.3	95.7	97.4	99.1	102.3	102.8	99.9	97.9	100.3	106.9	105.7	95.3
519	Miscellaneous nondurable goods	103.7	104.6	105.1	102.1	97.2	93.1	95.1	95.9	97.3	99.7	101.8	104.0

Note: The adjustment factors shown above for sales are a combination of the seasonal and trading-day factors. These are separately available, however, upon request. Adjustment factors are included in this table for some kinds of business for which adjusted data are not published separately.

Adjusted sales and inventory data shown in table 4 are obtained by dividing the unadjusted data shown in tables 1 and 2 by the adjustment factors shown above for the corresponding kinds of business. Adjusted data for the summary trade totals are obtained by summarizing the adjusted data for the individual kinds of business. Seasonal factors shown for the summary trade totals provide an approximation to these totals but may show small differences from the published data. The seasonally adjusted data for 1978 may vary slightly from the method shown above because of insignificant rounding differences.

[1]There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table B-2. Average Month-to-Month Percent Changes and Related Summary Measures for Sales and Inventories of Merchant Wholesalers

1972 SIC code	Kind of business	$\bar{O}$	$\bar{S}$	$\bar{CI}$	$\bar{I}$	$\bar{C}$	$\bar{I}/\bar{C}$	MCD	Average duration of run			
									CI	I	C	MCD
		Sales										
	Merchant wholesalers, total	4.74	3.10	1.31	.82	.96	.86	1	3.10	1.57	14.11	3.10
50	Durable goods, total	5.30	4.84	1.43	.89	1.08	.82	1	3.53	1.63	15.87	3.53
501	Motor vehicles and automotive parts and supplies	5.53	4.22	2.67	2.33	1.24	1.87	3	2.05	1.59	25.40	5.43
502	Furniture and home furnishings	6.00	7.29	2.06	1.68	1.07	1.57	2	2.27	1.55	9.07	3.00
503	Lumber and other construction materials	7.40	6.25	2.67	1.72	1.76	.98	1	2.76	1.51	14.11	2.76
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	9.79	9.32	4.02	3.74	1.20	3.12	4	1.81	1.67	7.06	3.44
505	Metals and minerals, except petroleum	6.79	3.78	3.10	2.38	1.63	1.46	2	2.19	1.41	9.07	3.71
506	Electrical goods	5.79	5.17	1.89	1.52	1.04	1.47	2	2.08	1.46	10.58	3.32
507	Hardware, plumbing, heating equipment, and supplies	5.42	4.86	1.78	1.33	1.09	1.22	2	1.98	1.41	12.70	3.94
508	Machinery, equipment, and supplies	6.10	5.41	1.87	1.51	.97	1.56	2	1.92	1.46	7.94	3.32
509	Miscellaneous durable goods	7.66	6.11	3.51	2.79	1.79	1.56	2	1.87	1.48	9.77	2.93
51	Nondurable goods, total	5.07	2.80	1.58	1.10	.95	1.16	2	2.59	1.43	9.07	3.60
511	Paper and paper products	5.41	3.16	1.99	1.44	1.10	1.30	2	1.98	1.48	7.94	3.60
512	Drugs, drug proprietaries, and druggists' sundries	5.97	3.89	1.90	1.64	.76	2.15	3	1.95	1.57	9.77	4.31
513	Apparel, piece goods, and notions	7.73	6.91	2.70	2.36	1.01	2.34	3	1.72	1.38	10.58	4.17
514	Groceries and related products	4.44	2.01	1.67	1.41	.82	1.72	2	1.92	1.51	12.70	3.15
515	Farm-product raw materials	9.27	5.04	4.87	4.29	1.59	2.70	4	1.90	1.53	6.68	3.54
516	Chemicals and allied products	6.21	4.53	2.47	1.93	1.46	1.32	2	2.19	1.49	8.47	3.32
517	Petroleum and petroleum products	7.38	4.71	4.81	4.47	1.35	3.30	4	1.67	1.55	9.07	2.70
518	Beer, wine, and distilled alcoholic beverages	10.94	8.71	1.86	1.64	.69	2.39	3	1.76	1.59	21.17	3.68
519	Miscellaneous nondurable goods	5.89	4.84	2.53	2.23	.96	2.32	3	1.92	1.63	8.47	3.47
		Inventories										
	Merchant wholesalers, total	1.10	.72	.94	.39	.83	.47	1	4.88	1.79	18.14	4.88
50	Durable goods, total	1.07	.57	.89	.35	.86	.41	1	7.94	1.46	31.75	7.94
501	Motor vehicles and automotive parts and supplies	2.20	1.22	1.69	1.13	1.21	.93	1	2.54	1.63	12.70	2.54
502	Furniture and home furnishings	2.13	1.28	1.60	1.19	1.00	1.19	2	2.40	1.57	21.17	5.25
503	Lumber and other construction materials	2.60	1.77	1.83	1.28	1.09	1.17	2	2.54	1.67	15.87	4.20
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	3.60	2.92	2.17	1.80	1.20	1.50	2	2.27	1.48	25.40	3.60
505	Metals and minerals, except petroleum	3.14	2.53	1.79	1.01	1.33	.76	1	3.26	1.72	8.47	3.26
506	Electrical goods	1.75	1.08	1.32	.90	.92	.98	1	2.49	1.31	42.33	2.49
507	Hardware, plumbing, heating equipment, and supplies	1.69	1.10	1.23	.87	.89	.98	1	2.70	1.53	18.14	2.70
508	Machinery, equipment, and supplies	1.36	.92	1.03	.66	.82	.82	1	2.65	1.65	31.75	2.65
509	Miscellaneous durable goods	2.29	1.47	1.85	1.28	1.18	1.08	2	1.95	1.53	25.40	4.34
51	Nondurable goods, total	2.49	2.19	1.44	.83	1.07	.78	1	3.74	1.74	7.06	3.74
511	Paper and paper products	1.82	.94	1.38	1.04	.75	.94	2	2.12	1.44	9.07	4.20
512	Drugs, drug proprietaries, and druggists' sundries	2.39	1.46	1.60	1.37	.67	2.04	3	1.81	1.51	31.75	3.38
513	Apparel, piece goods, and notions	2.28	1.43	1.86	1.43	1.05	1.35	2	2.40	1.74	9.07	3.15
514	Groceries and related products	1.87	1.29	1.43	.92	1.01	.91	1	2.54	1.38	11.55	2.54
515	Farm-product raw materials	8.88	8.22	4.86	3.99	2.03	1.96	3	2.49	1.90	8.47	3.91
516	Chemicals and allied products	3.14	1.58	1.36	1.89	1.39	1.36	2	2.35	1.49	12.70	3.71
517	Petroleum and petroleum products	6.09	3.19	5.01	4.34	2.00	2.17	3	1.87	1.59	15.87	3.68
518	Beer, wine, and distilled alcoholic beverages	4.28	3.68	1.76	1.46	.74	1.98	3	2.35	1.63	9.77	4.03
519	Miscellaneous nondurable goods	2.53	1.52	1.88	1.48	.84	1.75	2	2.19	1.59	7.06	3.15

Description of Measures Shown Above

The following are brief descriptions of the measures shown in this table. More complete explanations appear in "Electronic Computers and Business Indicators," Occasional Paper 57, National Bureau of Economic Research, Inc., New York, 1957.

$\bar{O}$ is the average month-to-month percentage change, without regard to sign, in the original series before seasonal or trading-day adjustment.

$\bar{S}$ is the average month-to-month percentage change, without regard to sign, in the seasonal component. It is a measure of the average monthly seasonal change in the unadjusted series.

$\bar{CI}$ is the average month-to-month percentage change, without regard to sign, in the seasonally adjusted series.

$\bar{I}$ is the average month-to-month percentage change without regard to sign, for the irregular component. The irregular component is obtained by dividing the seasonally adjusted series by the cyclical component.

$\bar{C}$ is the average month-to-month percentage change, without regard to sign, for the cyclical component, which is a smooth, flexible moving average.

$\bar{I}/\bar{C}$ is a measure of the relative smoothness (small values) or irregularity (large values) of the seasonally adjusted series.

MCD (months for cyclical dominance) gives an estimate of the appropriate time span over which to observe cyclical movements in a monthly series. In deriving MCD, the average (without regard to sign) percentage changes in the irregular and cyclical components are computed for 1-month spans (Jan.-Feb., Feb.-Mar., etc.) 2-months spans (Jan.-Mar., Feb.-Apr., etc.), and so on. MCD is the shortest span for which the average change (without regard to sign) in the cyclical component is larger than the average change (without regard to sign) in the irregular component; that is, it indicates the point at which fluctuations begin to be more attributable to cyclical than to irregular movements. MCD is small for smooth series and large for erratic series.

Average duration of run (ADR) is a measure of smoothness, and is equal to the average number of consecutive monthly changes in the same direction in any series of observations. When there is no change between 2 months, a change in the same direction as the preceding change is assumed. The ADR is shown for the seasonally adjusted series CI, irregular component I, cyclical component C, and the MCD moving average. The MCD moving average is an unweighted moving average (with the number of terms equal to MCD) of the seasonally adjusted series.

A comparison of these measures with the expected ADR of a random series gives an indication of whether the changes approximate those of a random series. (The expected value of ADR for a random series is 1.5 and it falls between 1.36 and 1.75 about 95 percent of the time. For a moving average of a random series the expected value is 2.0). For example, the ADR of CI is 2.08 for electrical goods sales. This indicates that 1-month changes in the seasonally adjusted series, on the average, reverse sign slightly less often than a random series. In the next two columns, 1.46 for I and 10.58 for C indicate the separation of the seasonally adjusted series into an essentially random component and the cyclical (nonrandom) component. Finally, 3.32 for MCD indicates that a 2-month moving average of the seasonally adjusted series (2 months being the MCD span) reverses direction on the average about every 3 months. The increase in the average duration of run from 2.08 for CI to 3.32 for the MCD moving average indicates that for this series the use of MCD spans reduces the effect of the irregular component upon the seasonally adjusted series.

These averages are based on a seasonally adjusted series which is adjusted historically; that is, the months used to compute the measures were the same months used to estimate the seasonal factors. Current data, however, are adjusted by use of factors projected 1 year ahead, and are thus subject to additional error. Therefore, current data are probably somewhat more irregular and subject to larger MCD than shown above.

APPENDIX C. Explanatory Material

I. SCOPE OF THE SURVEY

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the Standard Industrial Classification (SIC) Manual[1] and as covered in the 1972 census, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm or professional business users; or to other wholesalers; or acting as agents or brokers in buying merchandise for or selling merchandise to such persons or companies.

The principal types of establishments included are: (1) merchant wholesalers who take title to the goods they sell, such as wholesale merchants or jobbers, industrial distributors, voluntary group wholesalers, exporters, importers, cash-and-carry wholesalers, drop shippers, major distributors, retailer cooperative warehouses, terminal elevators, and cooperative buying associations; (2) sales branches and sales offices (but not retail stores) maintained by domestic manufacturing or mining enterprises apart from their plants or mines for the purpose of marketing their products; (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), which constitute the major portion of the broad field of wholesale trade, and excludes the other types of wholesale trade. All kinds of business in which merchant wholesalers operate are represented in this survey.

Kind-of-business classifications are not interchangeable with commodity classifications. Most businesses sell several kinds of commodities. The kind-of-business code assigned generally reflects either the individual commodity or the commodity group which is the primary source of the establishments receipts, or some mixture of commodities which characterizes the establishment's business. Thus, the classification of establishments by kind of business generally does not make it possible to determine either the number of establishments handling a particular commodity or the sales of that commodity. For example, the "grocery" classification excludes establishments selling groceries if the sale of groceries is not the primary source of receipts; moreover, even though establishments are classified as "grocery wholesalers" some of their sales may be derived from the sale of nonfood products.

A description of each kind of business included in the accompanying statistical data is shown in appendix D.

II. SAMPLE DESIGN AND ESTIMATION PROCEDURES

Framework of old series—The first publication in this series based on probability sampling, was the January 1954 report. Effective with the July 1956 publication an entirely new sample was selected from the 1954 Census of Business. Other changes in the sample have been made since 1956, representing, for the most part, revisions to reflect the findings of successive censuses of wholesale trade.

Selection of sample for new series—The new sample[2] like the old is a probability sample, and the estimating procedures used are similar in many respects to the old sample.

The new sample originally was drawn from the Standard Statistical Establishment List (SSEL) as updated to December 31, 1974. The initial SSEL consisted of two lists. One list was composed of all Employer Identification (EI) numbers issued by the Internal Revenue Service (IRS) with reported payroll in at least one quarter of 1973 or 1974, with payroll in the 1972 census, or with sales/receipts greater than $100,000 in the 1972 census. The second list consisted of all establishments of known multiestablishment companies as of December 31, 1974. These lists contained information on sales/receipts, payroll, employment, name and address, kind-of-business classification, etc.

Before the 1974 SSEL was available, a study was made, using files from the 1972 Census of Wholesale Trade. This study determined the stratification of the sampling units based on 1972 sales, inventories, and kind of business, and also determined the optimal allocation of the sample necessary to meet specified variance objectives for sales and inventory estimates for different kind-of-business groups. The primary stratum boundary determined in the study was the certainty cutoff to be used for each kind of business. The cutoff was particularly important since it also determined the type of sampling unit.

The sampling units for the new sample consisted of both companies and EI's. To be eligible for the initial sampling, an EI had to be active, i.e., had payroll in 1974 and was on the Internal Revenue Service mailing list for Federal Insurance Contribution Act (FICA) taxpayers. If a known multiestablishment company had total merchant wholesale sales (on a 1972 basis) above the cutoff for its major kind of business, the company was selected for the sample with certainty. Single establishment companies, whether or not selected with certainty, were considered as EI sampling units.

All merchant wholesale companies below the certainty cutoff were treated on an EI basis; that is, the EI was the sampling unit. The EI's were then stratified according to their major kind of business and their estimated sales (on a 1972

[1] Executive Office of the President, Office of Management and Budget, **Standard Industrial Classification Manual,** 1972.

[2] For a complete exposition of the new sample, see C. T. Isaki et al., "Sample Redesign Aspects of the Census Bureau's Monthly Business Surveys" and K. M. Wolter et al., "Sample Selection and Estimation Aspects of the Census Bureau's Monthly Business Surveys," **Proceedings of the Business and Economic Statistics Section: American Statistical Association,** 1976.

basis). Within each stratum, a simple random sample of EI's was selected. The sampling rates for these EI's varied between 1 in 3 and 1 in 600.

For those EI's in the inital sample that did not have kind-of-business classifications and for all EI "births" after the initial selection, a two-phase selection procedure was used. EI "births," as used here, are new EI's recently assigned by SSA and currently on the IRS mailing list for FICA taxpayers. In the first phase, "births" were stratified by kind of business and size (expected employment or quarterly payroll). A relatively large sample was drawn and canvassed in order to obtain a more reliable measure of size (sales in two recent months) and a more detailed kind-of-business code, if needed.

Using this more reliable information, the cases were re-stratified and the final sample drawn with overall probabilities equivalent to those used in drawing the initial sample from the 1974 SSEL. Because of the lag in reporting "births" to the IRS and Social Security Administration (SSA) and the time needed to accomplish the two-phase birth-selection procedure, "births" are actually added to the sample about eight or nine months after they begin operation. The ongoing birth-selection procedure is carried out quarterly.

Since "births" are not represented in the sample, until they go through the selection procedure described above, an interium procedure is required to account for "births" during the period between the onset of activity and the time of birth selection. This consists of imputing for all cases which go out of business, but which are still on the IRS mailing list. This imputation procedure was also used in the old series. However, because of recent delays in obtaining "births," this procedure now accounts for a larger percentage of the estimates.

To be eligible for the sample canvass and tabulation in a given month, a merchant wholesale business must meet both of the following requirements:

1. It must be on the IRS mailing list for FICA taxpayers from the previous quarter.

2. It must have been selected from either the SSEL or the file of employer "births." For this purpose, a universe file of all businesses ever given a chance of selection is maintained. This file shows, among other things, which EI numbers actually have been selected.

In the case of businesses that were selected into the sample with certainty, the first requirement is changed. These certainty sampling units are not dropped from canvass and tabulation if they are no longer on the IRS mailing list. If there are successor businesses, they are added to the survey. This is a tighter form of control used for these larger businesses.

Use of the rotating sample and composite estimating procedures—Rotating samples or panels are used except for very large businesses which are selected with certainty. For sampling units in the rotating panels, two months of data are obtained at each enumeration. For example, February rotating panel cases report data for February (the current month) and January (the previous month). In the following month, a different rotating panel (the March panel) reports figures for March and February. Three sample panels are used. This permits the use of a composite estimating procedure which provides estimates more reliable than those which would be obtained from a completely fixed sample of about twice the size. In addition, this procedure reduces the reporting burden of selected businesses.

The first estimate issued each month, based on the full sample, is called the preliminary estimate. The preliminary composite estimate for the current month is a weighted average of two estimates: (1) the current month unbiased estimate (weight .35), and (2) a ratio estimate (weight .65) obtained by multiplying the preliminary composite estimate for the previous month by the current-to-previous-month ratio obtained from the current month reports. Preliminary inventory estimates have been modified, prior to publication, based on past relationships between preliminary and final estimates.

A final estimate is developed one month later using information available from the following month's enumeration. The final composite estimate is also a weighted average of two estimates: (1) the preliminary composite estimate for a given month (weight .7), and (2) the unbiased estimate (weight .3) for the same month as obtained from the next month's reporting panel.

The preliminary composite estimates provide a measure of the dollar volume level that is considerably more reliable than the unbiased estimates, and the final composite estimates are generally more reliable than the preliminary composite estimates. The indication of the month-to-month trend considered to be most reliable is the ratio of the current month's preliminary composite estimate divided by the previous month's final composite estimate. This is true because the numerator and denominator of this ratio are more highly correlated than would be the case if the numerator and denominator were two preliminary estimates or two final estimates. The trend of the preliminary/final ratio, therefore, has less variability than one based on two preliminary figures or two final figures.

Another advantage of the use of the rotating panel system is that the frequency of canvass of very large noncertainty cases can be increased with a consequent reduction, in an unbiased manner, of their statistical weight. This increases the reliability of the estimates, particularly the measure of month-to-month change.

III. PREVIOUSLY PUBLISHED DATA

Data developed from the new sample are not comparable with data previously published in this series. Sales and inventory estimates prior to September 1977 have been revised to reflect: (1) a new sample design; (2) benchmarking of sales to the results of the 1967 and 1972 censuses of wholesale trade; (3) conversion of classifications based on the 1967 SIC manual to classifications based on the 1972 SIC manual (4) addition

of farm assemblers and bulk petroleum establishments; and (5) revision and updating of seasonal adjustment factors.

The revised historical sales series were derived in a manner designed to minimize the changes to the month-to-month trends in the old series. The inventory series were revised by applying the stock-sales ratios from the old series to the revised sales series to obtain the preliminary revised inventory series. These preliminary series were then revised slightly so that August 1977 estimates would equal the new sample estimates.

Although the month-to-month movements in the old and new series show very little change, the level of the revised series show substantial change from the old series for some kinds of business. The change in levels depends on the difference between the old series for census years and the benchmark levels and on the difference between the new series level and the old series level for the link month, August 1977.

Additional details concerning the sample design, and revised estimates of merchant wholesale sales and inventories from January 1967 through August 1977, have been provided in a special supplementary publication **Monthly Wholesale, Sales and Inventories: January 1967-August 1977, Revised BW-13-77S.** This report may be obtained from Subscriber Services (Publications), Bureau of the Census, Washington, D.C. 20233 at $.90 per copy.

IV. UNPUBLISHED DATA

Additional data, such as dollar volume estimates for some kinds of business not separately shown in this report, are produced as a byproduct of the regularly published statistics. These additional data have not been included in this publication because the sampling variability associated with these data does not meet the Census Bureau's publication criteria. The Census Bureau, on written request will release these data for individual use, though not for publication.

V. DEFINITION OF TERMS

Sales–Sales include the following: merchandise sold for cash or credit at wholesale and retail by establishments primarily engaged in merchant wholesale trade; receipts from customers for rental or leasing of equipment, instruments, tools, etc.; receipts for delivery, installation, alteration, maintenance, repair, storage, and other services; and gasoline, liquor, tobacco and other excise taxes which are paid by the manufacturer and passed along to the wholesaler. Sales are net after deductions for refunds and allowances for merchandise returned by customers. Sales which are made on an agency basis for others are included as gross sales. Direct shipments on orders from wholesalers are also included in sales. Total sales do not include nonoperating income from such sources as investments, rental or sale of real estate, etc.

In the new series, sales exclude sales and excise taxes collected directly from customers and paid directly to a local, State, or Federal tax agency. Also excluded are receipts from customers for carrying or other credit charges. In the old series respondents were requested to include these taxes and credit charges in the reported sales. The impact of this change is considered minimal.

Inventories–Inventories represent stocks, at cost, of merchandise on hand for sale at the end of the month regardless of location, except for goods outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included.

Stock-sales ratios–The stock-sales ratios are percentages derived by dividing the dollar value of inventories, at cost, by the dollar value of sales. No adjustment is made in these ratios for the markup in sales which may vary from trade to trade.

The sales and inventory figures represent total sales and inventories of all establishments primarily engaged in merchant wholesale trade. Also included are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments.

APPENDIX D. **Kind-of-Business Classifications**

DURABLE GOODS (SIC Major Group 50)

This major group includes establishments primarily engaged in the wholesale distribution of durable goods.

MOTOR VEHICLES AND AUTOMOTIVE PARTS AND SUPPLIES (SIC 501)

Automobiles and Other Motor Vehicles (SIC 5012)[1]—Establishments primarily engaged in the wholesale distribution of new and used passenger automobiles, trucks, and other motor vehicles. Automotive distributors primarily engaged in selling at retail to individual consumers for personal use, and also selling a limited amount of new and used passenger automobiles and trucks at wholesale to dealers, are classified in retail trade, industry 5511.

Automotive Parts and Supplies (SIC 5013)—Establishments primarily engaged in the wholesale distribution of automotive parts, supplies, accessories, tools and equipment.

Tires and Tubes (SIC 5014)[1]—Establishments primarily engaged in the wholesale distribution of rubber tires and tubes for passenger and commercial vehicles.

FURNITURE AND HOME FURNISHINGS (SIC 502)

Furniture (SIC 5021)—Establishments primarily engaged in the wholesale distribution of furniture, including bedsprings, mattresses, and other household furniture; office furniture; and furniture for public parks, buildings, etc.

SIC 5021 is subdivided into—

1. Household and lawn furniture.
2. Office and business furniture.

Home Furnishings (SIC 5023)—Establishments primarily engaged in the wholesale distribution of home furnishings and homewares, including antiques; china; glassware and earthenware; lamps; curtains and draperies; linens and towels; carpets, linoleum, and all other types of hard and soft surface floor coverings. Establishments primarily engaged in the wholesale distribution of electrical household goods are classified in industry 5064.

[1] Data for this kind of business are not shown separately but are included in the group total.

LUMBER AND OTHER CONSTRUCTION MATERIALS (SIC 503)

Lumber, Plywood, and Millwork (SIC 5031)—Establishments, with or without yards, primarily engaged in the wholesale distribution of rough, dressed, and finished lumber (but not timber); plywood; door and window frames (wood or metal); and other wood and metal millwork. Establishments selling lumber, plywood and millwork to the general public and known as "retail" in the trade are classified in industry 521.

Construction Materials, Not Elsewhere Classified (SIC 5039)—Establishments primarily engaged in the wholesale distribution of such building materials as brick, building stone, cement, granite, gravel, lime, marble, plaster, building glass, roofing materials, sand, and tile. Establishments selling construction materials to the general public and known as "retail" in the trade are classified in industry 521. Establishments primarily engaged in marketing heavy structural metal products are classified in industry 5051. Establishments primarily selling readymade concrete are classified in manufacturing.

SPORTING, RECREATIONAL, PHOTOGRAPHIC, AND HOBBY GOODS, TOYS, AND SUPPLIES (SIC 504)[1]

Establishments primarily engaged in the wholesale distribution of all types of amusement and sporting goods and accessories—billiard and pool supplies; cameras and photographic equipment; coin-operated game machines; games, toys; ammunition and fireworks; etc.

METALS AND MINERALS, EXCEPT PETROLEUM (SIC 505)

Ferrous Metals Service Centers and Offices (SIC 5051 pt.)—Establishments primarily engaged in marketing ferrous metal semifinished products such as nails, pig iron, steel and tin bars. Establishments in this industry may operate with warehouses (ferrous metals service centers) or without warehouses (ferrous metals sales offices).

Sales branches of domestic manufacturers are included in this category if the establishment is separate from the manufacturing plant and has warehouse space greater than 5,000 square feet.

Nonferrous Metals Service Centers and Offices and Other Minerals and Ores (SIC 5051 pt. and SIC 5052 pt.)[1]—Establishments primarily engaged in marketing nonferrous metal semifinished products such as aluminum bars and copper rods. Establishments in this industry may operate with warehouses (nonferrous metals service centers) or without warehouses (nonferrous metals sales offices). Also included are establishments primarily engaged in the wholesale distribution of copper, iron, lead, and other metallic ores except precious; and crude nonmetallic minerals (including concentrates) except crude petroleum. Establishments primarily engaged in the wholesale distribution of nonmetallic minerals used in construction, such as sand and gravel, are included in industry 5039.

Coal (SIC 5052 pt.)[1]—Establishments primarily engaged in the wholesale distribution of coal and coke. Included are establishments which have products shipped direct from mine to customer, and establishments operating yards and dock space and making deliveries therefrom at wholesale as well as other coal merchants.

ELECTRICAL GOODS (SIC 506)

Electrical Apparatus and Equipment, Wiring Supplies, and Construction Materials (SIC 5063)—Establishments primarily engaged in the wholesale distribution of electrical power equipment for the generation, transmission, or utilization of electric energy; and electrical construction materials for outside power transmission lines and for electrical systems. Construction contractors primarily engaged in installing electrical systems and equipment from their own stock are classified in industry 1731.

Electrical Appliances, TV and Radio Sets (SIC 5064)—Establishments primarily engaged in the wholesale distribution of radio and television sets and household electrical appliances.

Electronic Parts and Equipment (SIC 5065)[1]—Establishments primarily engaged in the wholesale distribution of electronic parts and equipment, such as industrial and radio and television receiving and transmitting electronic tubes; electronic intercommunication equipment; radio parts and accessories; and electronic sound equipment. Establishments primarily engaged in the wholesale distribution of radio and television receiving sets and phonographs are classified in industry 5064.

HARDWARE, PLUMBING, HEATING EQUIPMENT, AND SUPPLIES (SIC 507)

Hardware (SIC 5072)—Establishments primarily engaged in the wholesale distribution of hardware, such as builders; shelf or light hardware; handtools (except automotive and machinists' precision); handsaws and cutlery; brads, staples, and tacks; and bolts, nuts, rivets, and screws. Establishments primarily engaged in the wholesale distribution of nails, noninsulated wire, and screening are classified in industry 5051.

Plumbing and Heating Equipment and Supplies (Hydronics) (SIC 5074)—Establishments primarily engaged in the wholesale distribution of hydronic plumbing and heating equipment and supplies. Construction contractors primarily engaged in installing plumbing and heating equipment from their own stock are classified in industry 1711.

Warm Air Heating and Air-Conditioning Equipment and Supplies (SIC 5075)[1]—Establishments primarily engaged in the distribution of warm air heating and air-conditioning equipment and supplies. Construction contractors primarily engaged in installing warm air heating and air-conditioning equipment are classified in industry 1711.

Refrigeration Equipment and Supplies (SIC 5078)[1]—Establishments primarily engaged in the distribution of refrigeration equipment and supplies. Construction contractors primarily engaged in installing refrigeration equipment from their own stock are classified in industry 1711.

MACHINERY, EQUIPMENT, AND SUPPLIES (SIC 508)

Commercial Machines and Equipment (SIC 5081)[1]—Establishments primarily engaged in wholesaling commercial machines and equipment, such as office, store, and business machines and equipment; commercial food service equipment; and fountain and store fixtures.

Construction and Mining Machinery and Equipment (SIC 5082)—Establishments primarily engaged in marketing cranes, excavating machinery and equipment, power shovels, road construction and maintenance machinery, tractor-mounting equipment and other specialized machinery and equipment used in the construction, mining, and logging industries. Establishments engaged in marketing oil well machinery and equipment are classified in industry 5084.

Farm and Garden Machinery and Equipment (SIC 5083)[1]—Establishments primarily engaged in marketing agricultural machinery and equipment for use in the preparation and maintenance of the soil, the planting and harvesting of crops, and other operations and processes pertaining to work on the farm or the lawn or garden; and dairy and other livestock equipment.

Industrial Machinery and Equipment (SIC 5084)[1]—Establishments primarily engaged in marketing industrial machinery and equipment, such as metal working tools, food industries machinery, oil well and oil refining machinery, industrial

[1] Data for this kind of business are not shown separately but are included in the group total.

trucks and tractors (except over-the-road types), printing machinery, and machinery and equipment for other manufacturing industries.

Industrial Supplies (SIC 5085)[1]—Establishments primarily engaged in marketing industrial supplies, such as abrasives and materials, rope and cordage, and mechanical rubber goods; welding supplies; mechanical power transmission supplies, including bearings; industrial valves and fittings; metal containers; industrial leather; and reconditioned barrels and drums.

Professional Equipment and Supplies (SIC 5086)—Establishments primarily engaged in the wholesale distribution of mechanical devices and other equipment used by architects, dentists, engineers, physicians, surgeons, veterinarians, optometrists, osteopaths, and other professional groups.

Surgical, Medical, Hospital Supplies (SIC 5086 pt.)[1]—Establishments primarily engaged in selling surgical and medical instruments; doctors' apparatus and equipment; orthopedic appliances; artifical limbs; operating room and other hospital equipment, X-ray machines and accessories and other scientific instruments used by physicians and in hospitals.

Service Establishment Equipment and Supplies (SIC 5087)[1]—Establishments primarily engaged in the wholesale distribution of equipment and supplies for barber shops, beauty parlors power laundries, dry-cleaning plants, upholsterers, undertakers, and related personal service establishments.

Transportation Equipment and Supplies, Except Motor Vehicles (SIC 5088)[1]—Establishments primarily engaged in the wholesale distribution of transportation equipment and supplies. Establishments primarily engaged in the wholesale distribution of motor vehicles and motor vehicle parts are classified in group 501.

MISCELLANEOUS DURABLE GOODS (SIC 509)[1]

Scrap and Waste Materials (SIC 5093)—Establishments primarily engaged in assembling, breaking up, sorting and wholesale distribution of scrap and waste materials. This industry includes auto wreckers engaged in dismantling automobiles for scrap. However, those engaged in dismantling cars for the purpose of selling secondhand parts at retail are classified in industry 5931.

SIC 5093 is subdivided into—

1. *Iron and Steel scrap.*
2. *Waste and secondary materials dealers.*

[1] Data for this kind of business are not shown separately but are included in the group total.

Jewelry, Watches, Diamonds, and Other Precious Stones (SIC 5094)[1]—Establishments primarily engaged in the wholesale distribution of jewelry, precious stones and metals, costume jewelry, watches, clocks, silverware, and jewelers' findings.

Durable Goods, Not Elsewhere Classified (SIC 5099)[1]—Establishments primarily engaged in the wholesale distribution of durable goods, not elsewhere classified, such as musical instruments and forest products, except lumber.

NONDURABLE GOODS (SIC Major Group 51)

This major group includes establishments primarily engaged in the wholesale distribution of nondurable goods.

PAPER AND PAPER PRODUCTS (SIC 511)

Printing and Writing Paper (SIC 5111)[1]—Establishments primarily engaged in the wholesale distribution of writing paper, including envelope paper, fine paper, and ground wood, printing, and rotogravure paper.

Stationery Supplies (SIC 5112)[1]—Establishments primarily engaged in the wholesale distribution of stationery and office supplies, including envelopes, typewriter and mimeograph paper, file cards and folders, pens, social stationery, and greeting cards.

Industrial and Personal Service Paper (SIC 5113)[1]—Establishments primarily engaged in the wholesale distribution of wrapping and other coarse paper, paperboard, cellophane, and converted paper products, such as bags, boxes, dishes, napkins, and shipping supplies.

DRUGS, DRUG PROPRIETARIES, AND DRUGGISTS' SUNDRIES (SIC 512)

Drugs, Drug Proprietaries, and Druggists' Sundries (SIC 5122)—Establishments primarily engaged in the wholesale distribution of drugs, drug proprietaries, druggists' sundries, and toiletries. Establishments primarily engaged in the wholesale distribution of surgical, dental, and hospital equipment are classified in industry 5086.

SIC 5122 is subdivided into—

1. *General-line drugs*—These are distinguished from specialty-line drug and toiletries wholesalers on the basis of their commodity-line mix. Drug wholesalers were classified as general line if they reported a substantial portion of their sales in "pharmaceuticals, antibiotics, druggists' chemicals, biologicals, botanicals" and "proprietary products, toilet-

ries, druggists' sundries," and if annual sales volume was $1 million or more.

2. *Specialty-line pharmaceuticals, cosmetics, and toiletries.*

APPAREL, PIECE GOODS, AND NOTIONS (SIC 513)

Piece Goods (SIC 5133)[1]—Establishments primarily engaged in the wholesale distribution of woven piece goods or yard goods of natural or manmade fibers. "Converters" who buy goods in the grey, have them finished on contract, and sell at wholesale are included here. This industry does not include establishments primarily engaged in the wholesale distribution of home furnishings, which are classified in industry 5023.

Notions and Other Dry Goods (SIC 5134)[1]—Establishments primarily engaged in the wholesale distribution of notions (sewing and hair accessories, etc.), knit goods, and other dry goods, except piece goods.

Men's and Boys' Clothing and Furnishings (SIC 5136)[1]—Establishments primarily engaged in the wholesale distribution of men's and boys' apparel and furnishings, sportswear, hosiery, underwear, nightwear, and work clothing.

Women's Children's, and Infants' Clothing and Accessories (SIC 5137)[1]—Establishments primarily engaged in the wholesale distribution of women's, children's, and infants' clothing and accessories, including hosiery, lingerie, millinery and millinery supplies, and furs.

Footwear (SIC 5139)[1]—Establishments primarily engaged in the wholesale distribution of footwear of leather, rubber, and other materials.

GROCERIES AND RELATED PRODUCTS (SIC 514)

Groceries, General-Line (SIC 5141)—Establishments primarily engaged in the wholesale distribution of a general line of groceries. Establishments primarily engaged in roasting coffee and establishments primarily engaged in blending tea or grinding and packaging spices are classified in major group 20.

SIC 5141 is subdivided into—

1. *Voluntary group wholesalers.*
2. *Retailer cooperative wholesalers.*
3. *Other general-line wholesalers.*

Frozen Foods (SIC 5142)[1]—Establishments primarily engaged in the wholesale distribution of packaged quick-frozen vegetables, juices, meats, fish, poultry, pastries, and other "deep freeze" products. Establishments primarily engaged in the wholesale distribution of frozen dairy products are classified in industry 5143. Frozen poultry, fish, and meat which are not packaged are classified in industries 5144, 5146, and 5147, respectively.

Dairy Products (SIC 5143)[1]—Establishments primarily engaged in the wholesale distribution of dairy products, such as butter, cheese, ice cream and ices, and fluid milk and cream. This industry does not include establishments primarily engaged in pasteurizing and bottling milk, which are classified in group 202.

Poultry and Poultry Products (SIC 5144)—Establishments primarily engaged in the wholesale distribution of poultry and poultry products, except canned and packaged frozen products. This industry does not include establishments primarily engaged in the killing and dressing of poultry, which are classified in industry 2016. Establishments primarily engaged in the wholesale distribution of packaged frozen poultry are classified in industry 5142, and of canned poultry in industry 5149.

Confectionery (SIC 5145)—Establishments primarily engaged in the wholesale distribution of confectionery, such as candy, chewing gum, fountain fruits, salted or roasted nuts, popcorn, and fountain syrups; and potato, corn, and similar chips.

Fish and Seafoods (SIC 5146)[1]—Establishments primarily engaged in the wholesale distribution (not packaging) of fresh, cured, and frozen fish and seafoods, except canned (industry 5149) or packaged frozen (industry 5142). The preparation, packaging, and freezing of fresh fish and other seafood, and the shucking and packing of fresh oysters in nonsealed containers, are classified in industry 2092.

Meats and Meat Products (SIC 5147)—Establishments primarily engaged in the wholesale distribution of fresh, cured, and processed (but not canned) meats and lard. The wholesale distribution of frozen packaged meats is classified in industry 5142 and canned meats in industry 5149.

Fresh Fruits and Vegetables (SIC 5148)—Establishments primarily engaged in the wholesale distribution of fresh fruits and vegetables.

Groceries and Related Products, Not Elsewhere Classified (SIC 5149)[1]—Establishments primarily engaged in the wholesale distribution of groceries and related products, not elsewhere classified. Establishments primarily engaged in the wholesale distribution of soft drinks, and in bottling and distributing natural spring and mineral waters, are classified in this industry, but establishments primarily engaged in bottling soft drinks are classified in major group 20. This industry does not include farm-product raw materials (group 515), or beer, wine, and distilled alcholic beverages (group 518).

[1] Data for this kind of business are not shown separately but are included in the group total.

FARM-PRODUCT RAW MATERIALS (SIC 515)

Cotton (SIC 5152)[1]—Establishments primarily engaged in buying and/or marketing cotton and cotton linters.

Grain (SIC 5153)—Establishments primarily engaged in buying and/or marketing grain (such as corn, wheat, oats, barley, and unpolished rice); dry beans; soybeans, and other inedible beans. Country grain elevators primarily engaged in buying or receiving grain from farmers are included as are terminal elevators and other merchants marketing grain.

Livestock (SIC 5154)[1]—Establishments primarily engaged in buying and/or marketing cattle, hogs, sheep, and goats.

Farm-Product Raw Materials, Not Elsewhere Classified (SIC 5159)[1]—Establishments primarily engaged in buying and/or marketing farm products not elsewhere classified, such as horses and mules, leaf tobacco, hides, skins, furs, wool, mohair, raw silk, hops, and nuts, except roasted or salted (industry 5145). Establishments primarily engaged in the wholesale distribution of milk are classified in industry 5143 and live poultry in industry 5144.

CHEMICALS AND ALLIED PRODUCTS (SIC 516)[1]

Chemicals and Allied Products (SIC 5161)[1]—Establishments primarily engaged in the wholesale distribution of chemicals and allied products, not elsewhere classified, such as acids, industrial and heavy chemicals, dyestuffs, industrial salts, naval stores, plastics materials, rosin, and turpentine. Establishments primarily engaged in the wholesale distribution of ammunition are classified in industry 5041; agricultural chemicals and pesticides in industry 5191; drugs in industry 5122; and paints and varnishes in industry 5198.

PETROLEUM AND PETROLEUM PRODUCTS (SIC 517)

Petroleum Bulk Stations and Terminals (SIC 5171)—Establishments primarily engaged in wholesaling petroleum products, including liquefied petroleum gas, from bulk liquid storage facilities.

Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals (SIC 5172)[1]—Establishments primarily engaged in wholesaling petroleum and petroleum products, except those with bulk liquid storage facilities. Included are packaged and bottled petroleum products distributors, truck jobbers, and others marketing petroleum and products at wholesale but without bulk liquid storage facilities.

[1] Data for this kind of business are not shown separately but are included in the group total.

BEER, WINE, AND DISTILLED ALCOHOLIC BEVERAGES (SIC 518)

Beer and Ale (SIC 5181)—Establishments primarily engaged in the wholesale distribution of beer, ale, porter, and other fermented malt beverages.

Wines and Distilled Alcoholic Beverages (SIC 5182)—Establishments primarily engaged in the wholesale distribution of distilled spirits, including neutral spirits and ethyl alcohol used in blending wines and distilled liquors.

MISCELLANEOUS NONDURABLE GOODS (SIC 519)

Farm Supplies (SIC 5191)[1]—Establishments primarily engaged in the wholesale distribution of animal feeds, fertilizers, agricultural chemicals, pesticides, seeds, and other farm supplies, except grains.

Tobacco and Tobacco Products (SIC 5194)—Establishments primarily engaged in the wholesale distribution of tobacco and tobacco products. Leaf tobacco wholesalers are classified in industry 5159 and establishments primarily engaged in stemming and redrying tobacco in industry 2141.

Paints, Varnishes, and Supplies (SIC 5198)[1]—Establishments primarily engaged in the wholesale distribution of paints, varnishes, wallpaper, and supplies, and sometimes glass. Establishments selling to the general public and known as "retail" in the trade are classified in industry 5231.

Books, Periodicals, Newspapers (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of books, lithographed matter, magazines, newspapers, and all other forms of reading material.

Nondurable Goods, Not Elsewhere Classified (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of nondurable goods, not elswhere classified, such as art goods, flowers and florist supplies, industrial yarn, textile bags, bagging and burlap.

CHANGES IN WHOLESALE KIND-OF-BUSINESS CLASSIFICATIONS IN 1972 FROM 1967

The wholesale trade kind-of-business structure was expanded from one SIC major group (SIC 50) in 1967 to two major groups in 1972, "durable goods" (SIC 50) and "nondurable goods" (SIC 51). There were 61 four-digit industries in 1972 compared to 48 four-digit industries in 1967.

The definitions of some kinds of business also were changed in 1972. Establishments primarily selling farm supplies and equipment to farmers, and establishments primarily selling

plumbing, heating, and air-conditioning equipment and electrical supplies were classified in wholesale trade rather than retail trade. However, establishments primarily selling lumber and other building materials and paint, glass, and wallpaper were classified in retail trade if they sell to the public, even though sales to contractors account for a larger portion of the total. The change resulted in moving to wholesale trade those establishments primarily selling plumbing, heating, and air-conditioning equipment; electrical supplies; farm equipment; hay, grain, and feed; and other farm supplies. The change also theoretically could have shifted to wholesale trade some establishments primarily selling lumber and paint, glass and wallpaper to contractors, but not to the public.

In addition to the kind-of-business changes noted above the special nonmerchant classifications of farm assemblers and bulk petroleum were eliminated in the 1972 census. These establishments were classified in the appropriate merchant, or sales branch category.

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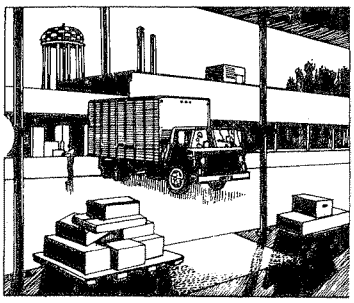
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued November 1979

August 1979

BW-79-8

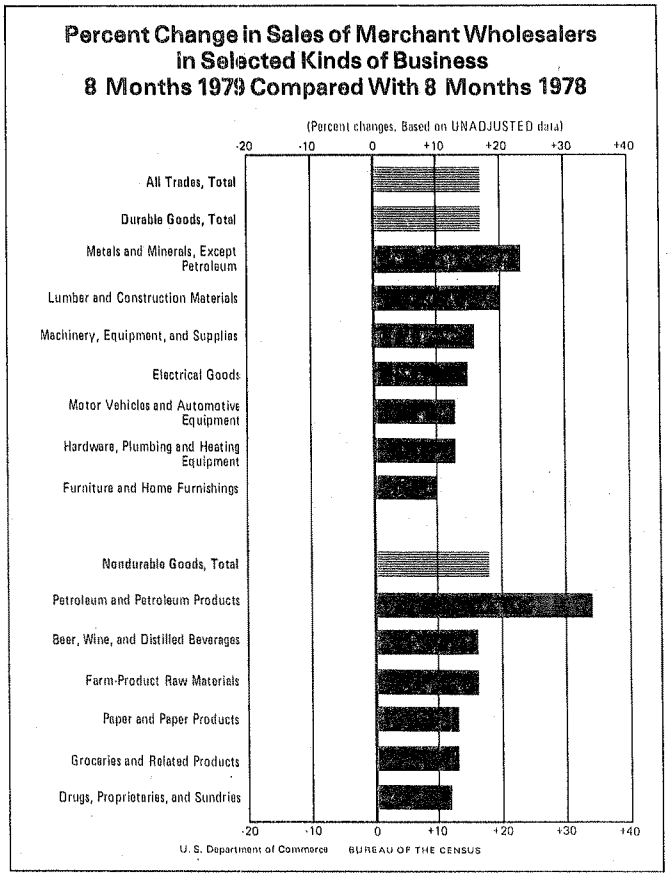
Sales—August 1979 sales of merchant wholesalers after adjustment for seasonal variation and trading-day differences, but not for price changes, were $75.6 billion, up 1 percent from the previous month and 17 percent above August 1978. Adjusted June-through-August total sales were up 5 percent from the March-through-May period and were 17 percent above the total sales for the comparable months a year ago.

After adjustment, August sales in the durable goods trades were up 1 percent from the previous month and were 14 percent above sales for the same month a year ago. Nondurable goods sales were up 1 percent from July and were 18 percent above August 1978. Total monthly sales in the durable goods group during the June-through-August period were 2 percent above the prior three months and were 16 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were 7 percent above the March-through-May period and were 19 percent above the total sales for the same period a year ago.

Based on adjusted data, comparisons with previous month sales levels showed mixed results with 8 trade groups showing gains, 6 indicating declines and 1 with no change. The largest increases were shown in electrical goods (9%) and petroleum and petroleum products (6%). The largest decrease was reported in metals and minerals, except petroleum (-7%). Compared with sales of a year ago all trade groups showed increases with the sharper increases reported in petroleum and petroleum products (40%) and sporting goods, toys, and hobby goods (31%).

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variation, but not for price changes, were valued at $88.9 billion at the end of August, up 1 percent from the previous month and 16 percent above the same month a year ago. Durable goods trades were up 1 percent from July and 14 percent above August 1978. Nondurable goods stocks were virtually unchanged from the previous month, but were 22 percent above the same month a year ago.

Based on adjusted data, comparisons with previous month inventory levels showed mixed results with 7 trade groups showing gains, 6 indicating declines, and 2 with no change. The largest increase was reported in metals and minerals, except petroleum (5%). Compared with year-ago inventories, all trade groups reported increases. The sharper increases were noted in farm-product raw materials (45%) and petroleum and petroleum products (23%).



Stock-Sales Ratios—The August stock-sales ratio for merchant wholesalers, based on seasonally adjusted data, was 118, up 1 point from the previous month, but virtually unchanged from August 1978. The stock-sales ratio for durable goods was 165, unchanged from last month but down 1 point from the previous year. The ratio for nondurable goods was 78, unchanged from July but 2 points above the August 1978 ratio.

An advance release of the August 1979 data was issued on October 12, 1979.

U.S. Department of Commerce
BUREAU OF THE CENSUS

Inquiries concerning this report should be addressed to Ronald Piencykoski, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-5294/763-5295.

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Table 1. Estimated Monthly Sales of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979								1978					Total 8 months	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.[p]	Aug.	Sept.	Oct.	Nov.	Dec.	1979	1978
	Merchant wholesalers, total	63,739	61,721	74,319	70,768	76,814	74,361	73,537	78,441	67,702	63,933	69,086	67,699	64,527	573,700	488,862
	Total (excluding farm-product raw materials)	56,481	55,208	66,198	63,588	68,714	66,477	64,932	70,142	60,838	57,342	61,033	59,923	57,237	511,740	435,430
50	Durable goods, total	28,284	28,141	34,689	33,429	35,723	34,447	33,750	36,666	32,279	30,404	32,242	31,037	29,340	265,128	226,896
501	Motor vehicles and automotive parts and supplies	5,634	5,650	6,888	6,845	7,013	6,364	6,259	6,617	6,134	5,381	6,009	6,013	5,510	51,271	45,386
5013,4	Automotive parts and supplies, tires and tubes	3,120	3,081	3,459	3,349	3,385	3,318	3,091	3,344	3,440	2,998	3,344	3,298	2,927	26,299	24,309
5013	Automotive parts and supplies	2,594	2,603	2,902	2,807	2,966	2,759	2,600	2,797	2,872	2,496	2,761	2,752	2,413	22,027	20,551
502	Furniture and home furnishings	1,012	950	1,199	1,130	1,214	1,185	1,121	1,261	1,133	1,162	1,174	1,218	1,140	9,071	8,273
5021	Furniture--household and office	343	332	416	413	450	422	399	449	366	379	379	411	422	3,223	2,753
5023	Home furnishings	669	618	783	717	764	763	722	812	767	783	795	807	718	5,848	5,520
503	Lumber and other construction materials	2,387	2,212	3,006	3,023	3,353	3,410	3,411	3,840	3,208	3,056	3,173	2,874	2,542	24,641	20,579
5031	Lumber, plywood, and millwork[1]	1,672	1,544	2,047	2,067	2,269	2,250	2,250	2,591	2,105	1,949	2,083	1,915	1,682	16,690	13,769
5039	Construction materials, n.e.c.	715	668	959	957	1,084	1,160	1,161	1,249	1,103	1,107	1,089	959	860	7,951	6,809
505	Metals and minerals, except petroleum	3,206	3,215	3,849	3,295	3,913	3,645	3,824	4,025	3,306	3,037	3,186	3,209	2,942	28,971	23,490
5051 pt.	Ferrous metals service centers and offices	2,455	2,437	2,925	2,469	2,951	2,759	2,865	2,976	2,515	2,339	2,446	2,448	2,260	21,837	17,840
5051 pt.	Ferrous metals service centers	1,652	1,744	2,129	1,798	2,160	2,056	2,046	2,118	1,833	1,721	1,801	1,768	1,678	15,702	13,117
506	Electrical goods	3,017	3,083	3,556	3,271	3,744	3,786	3,712	4,184	3,540	3,338	3,590	3,474	3,322	28,353	24,601
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,533	1,638	1,807	1,748	2,071	2,006	1,991	2,126	1,812	1,663	1,832	1,722	1,655	14,890	12,630
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,484	1,445	1,749	1,554	1,673	1,779	1,700	2,058	1,728	1,675	1,758	1,751	1,667	13,442	11,971
5064	Electrical appliances, TV and radio sets	834	849	1,024	881	939	1,064	986	1,146	1,064	1,057	1,040	1,090	1,006	7,724	7,206
507	Hardware, plumbing, heating equipment, and supplies	2,142	1,984	2,319	2,374	2,592	2,461	2,524	2,709	2,412	2,159	2,455	2,250	2,057	19,105	16,947
5072	Hardware	802	758	853	852	975	877	892	979	864	771	859	830	721	6,989	6,278
5074	Plumbing and heating equipment and supplies (hydronics)	854	800	960	994	1,001	966	1,015	1,101	988	928	1,047	918	854	7,691	6,747
508	Machinery, equipment, and supplies	7,691	7,841	9,664	9,443	10,062	9,745	9,222	9,936	8,757	8,655	8,909	8,421	8,485	73,606	63,408
5082	Construction and mining machinery and equipment	895	927	1,189	1,360	1,351	1,260	1,258	1,374	1,196	1,115	1,155	1,126	1,125	9,615	8,908
5084,5	Industrial machinery, equipment, and supplies	3,390	3,464	3,940	3,615	4,004	3,964	3,613	3,885	3,532	3,450	3,573	3,474	3,623	29,874	25,181
5086	Professional equipment, supplies	907	914	1,048	972	1,055	996	996	1,074	990	949	941	949	975	7,961	6,823
5093	Scrap and waste materials	1,132	1,184	1,501	1,492	1,518	1,468	1,395	1,471	1,073	978	1,007	1,103	1,079	11,163	7,636
51	Nondurable goods, total	35,455	33,580	39,630	37,339	41,091	39,914	39,787	41,775	35,423	33,529	36,844	36,662	35,187	308,572	261,968
	Total (excluding farm-product raw materials)	28,197	27,067	31,509	30,159	32,991	32,030	31,182	33,476	28,559	26,937	28,791	28,885	27,897	246,612	208,475
511	Paper and paper products	1,540	1,479	1,688	1,551	1,692	1,651	1,585	1,770	1,581	1,456	1,598	1,569	1,489	12,956	11,474
5111,3	Printing, writing, industrial, and personal services paper	1,133	1,100	1,272	1,184	1,272	1,252	1,192	1,328	1,177	1,088	1,191	1,177	1,140	9,732	8,482
512	Drugs, drug proprietaries, and druggists' sundries	950	917	1,073	1,038	1,102	1,039	1,066	1,115	1,026	973	1,082	1,017	963	8,300	7,438
5122	Drugs, drug proprietaries, and druggists' suntries	950	917	1,073	1,038	1,102	1,039	1,066	1,115	1,026	973	1,082	1,017	963	8,300	7,438
5122 pt.	General-line drugs	423	427	507	472	509	474	458	479	482	464	494	465	445	3,748	3,496
513	Apparel, piece goods, and notions[2]	2,094	1,996	2,326	2,107	2,127	2,102	2,389	2,680	2,658	2,313	2,443	2,369	1,976	17,821	15,975
514	Groceries and related products	11,122	10,381	11,954	11,281	11,988	11,721	11,500	11,920	11,002	10,489	11,150	11,155	10,830	91,867	81,466
5141	Groceries, general-line	3,965	3,658	4,173	3,989	4,241	4,247	4,245	4,446	3,965	3,767	3,999	4,120	3,914	32,964	29,175
5144	Poultry and poultry products	518	489	559	554	592	544	563	563	539	505	525	569	536	4,381	3,782
5145	Confectionery	184	177	209	196	212	199	192	207	187	190	218	211	197	1,577	1,419
5147	Meats and meat products	1,979	1,971	2,198	2,029	2,076	1,908	1,872	2,021	1,974	1,840	1,928	1,911	1,885	16,054	13,732
5148	Fresh fruits and vegetables	1,020	961	1,203	1,086	1,202	1,242	1,063	1,020	985	890	980	974	973	8,797	8,095
515	Farm-product raw materials	7,258	6,513	8,121	7,180	8,100	7,884	8,605	8,299	6,864	6,591	8,053	7,777	7,290	61,960	53,507
5153	Grain	5,859	5,235	6,740	5,886	6,766	6,730	7,516	7,236	5,760	5,448	6,623	6,391	5,912	51,967	44,175
517	Petroleum and petroleum products	4,837	5,008	5,282	5,221	6,078	5,851	5,863	6,243	4,441	4,136	4,431	4,554	4,598	44,384	33,103
5171	Petroleum bulk stations and terminals	2,738	2,785	2,997	2,857	3,306	3,170	3,121	3,478	2,378	2,280	2,449	2,507	2,678	24,452	18,603
518	Beer, wine, and distilled alcoholic beverages	2,020	1,952	2,490	2,453	2,726	2,704	2,636	2,893	2,463	2,254	2,347	2,547	2,709	19,874	17,171
5181	Beer and ale	999	953	1,223	1,258	1,513	1,523	1,507	1,618	1,328	1,119	1,105	1,088	1,108	10,594	8,862
5182	Wine and distilled alcoholic beverages	1,021	999	1,267	1,195	1,214	1,181	1,129	1,276	1,134	1,135	1,242	1,459	1,601	9,280	8,309
519	Miscellaneous nondurable goods	4,529	4,383	5,528	5,406	6,001	5,801	5,105	5,504	4,297	4,311	4,510	4,486	4,425	42,256	34,394
5194	Tobacco and tobacco products	823	749	852	848	891	863	881	932	871	814	848	831	846	6,837	6,332

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. [p]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]The lumber, plywood, and millwork group is subject to a sampling variability of 8 percent for August 1979.
[2]The apparel piece goods and notions group is subject to a sampling variability of 12 percent for August 1979.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations)

1972 SIC code	Kind of business	1979								1978				
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.[p]	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	81,896	83,917	85,436	85,345	85,199	84,942	86,829	87,010	74,943	76,074	78,715	80,100	80,922
	Total (excluding farm-product raw materials)	75,593	77,627	79,311	79,626	80,246	79,964	81,487	81,515	71,138	71,889	73,327	73,947	74,898
50	Durable goods, total	51,860	53,807	54,381	54,731	55,566	55,523	56,602	56,607	49,841	49,944	50,462	50,971	51,646
501	Motor vehicles and automotive parts and supplies	9,512	10,189	9,797	9,663	9,631	9,207	9,760	9,478	8,378	8,099	8,701	9,326	9,227
5013,4	Automotive parts and supplies, tires and tubes	5,758	5,888	5,781	5,809	5,970	5,753	6,051	5,997	5,206	5,172	5,298	5,635	5,552
5013	Automotive parts and supplies	4,881	5,003	4,870	4,917	5,035	4,818	5,082	5,053	4,415	4,345	4,489	4,792	4,674
502	Furniture and home furnishings	1,764	1,753	1,872	1,837	1,815	1,903	1,847	1,867	1,760	1,810	1,780	1,774	1,752
5023	Home furnishings	1,292	1,282	1,355	1,332	1,309	1,361	1,347	1,361	1,306	1,326	1,315	1,305	1,251
503	Lumber and other construction materials	3,113	3,178	3,337	3,404	3,468	3,496	3,526	3,506	3,007	3,076	3,076	2,995	3,117
5031	Lumber, plywood, and millwork[1]	2,030	2,082	2,116	2,152	2,244	2,204	2,220	2,227	1,929	1,932	1,946	1,918	2,009
505	Metals and minerals, except petroleum	5,106	5,434	5,285	5,254	5,528	5,582	5,763	6,032	5,437	5,285	5,095	5,208	5,151
5051 pt.	Ferrous metals service centers and offices	4,191	4,425	4,365	4,239	4,455	4,586	4,655	4,754	4,232	4,148	3,976	4,150	4,191
5051 pt.	Ferrous metals service centers	3,241	3,459	3,433	3,269	3,506	3,643	3,665	3,741	3,308	3,299	3,098	3,236	3,336
506	Electrical goods	5,509	5,582	5,706	5,737	5,976	6,040	6,223	6,109	5,264	5,416	5,500	5,526	5,577
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2,542	2,684	2,676	2,730	2,946	2,838	2,840	2,797	2,367	2,356	2,399	2,534	2,558
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,966	2,898	3,030	3,007	3,030	3,202	3,383	3,312	2,899	3,059	3,101	3,016	3,023
507	Hardware, plumbing, heating equipment, and supplies	4,251	4,461	4,497	4,719	4,590	4,631	4,628	4,592	4,117	4,032	4,152	4,033	4,063
5072	Hardware	1,476	1,540	1,539	1,598	1,622	1,643	1,659	1,662	1,369	1,417	1,466	1,382	1,407
5074	Plumbing and heating equipment and supplies (hydronics)	1,819	1,900	1,899	1,985	1,848	1,896	1,902	1,872	1,800	1,805	1,738	1,737	1,760
508	Machinery, equipment, and supplies	17,748	18,254	18,807	18,924	19,370	19,465	19,576	19,817	17,183	17,405	17,352	17,428	18,012
5082	Construction and mining machinery and equipment	3,932	4,152	4,334	4,280	4,430	4,512	4,488	4,522	3,793	3,899	3,937	4,002	4,109
5084,5	Industrial machinery, equipment, and supplies	5,728	5,800	6,015	6,030	6,073	6,006	5,979	6,132	5,317	5,519	5,508	5,570	5,752
51	Nondurable goods, total	30,036	30,110	31,055	30,614	29,633	29,419	30,227	30,403	25,102	26,130	28,253	29,129	29,276
	Total (excluding farm-product raw materials)	23,733	23,820	24,930	24,895	24,680	24,441	24,885	24,908	21,297	21,946	22,865	22,976	23,252
511	Paper and paper products	1,424	1,468	1,547	1,501	1,542	1,616	1,608	1,606	1,361	1,414	1,419	1,441	1,482
5111,3	Printing, writing, industrial, and personal service paper	986	1,010	1,053	1,018	1,050	1,090	1,079	1,070	921	976	969	967	1,025
512	Drugs, drug proprietaries, and druggists' sundries	1,465	1,484	1,612	1,617	1,585	1,609	1,646	1,626	1,410	1,489	1,502	1,476	1,440
514	Groceries and related products	6,408	6,346	6,719	6,644	6,644	6,686	6,674	6,720	5,803	6,186	6,469	6,412	6,497
5141	Groceries, general-line	2,696	2,744	2,895	2,846	2,785	2,802	2,899	2,951	2,505	2,641	2,811	2,814	2,761
517	Petroleum and petroleum products	2,106	2,101	2,224	2,177	2,401	2,263	2,492	2,588	2,093	2,098	2,151	2,151	2,153
518	Beer, wine, and distilled alcoholic beverages	2,462	2,427	2,684	2,806	2,760	2,732	2,693	2,580	2,158	2,221	2,453	2,513	2,290
5181	Beer and ale[2]	800	845	1,040	1,085	1,089	1,072	1,030	928	679	720	769	777	729
5182	Wines and distilled alcoholic beverages	1,662	1,582	1,645	1,721	1,671	1,660	1,663	1,652	1,480	1,501	1,684	1,736	1,561

See footnotes at end of table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Percent. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979								1978				
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.[p]	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	128	136	115	121	111	114	118	109	111	119	114	118	125
	Total (excluding farm-product raw materials)	134	141	120	125	117	120	125	116	117	125	120	123	131
50	Durable goods, total	183	191	157	164	156	161	168	154	154	164	157	164	176
501	Motor vehicles and automotive parts and supplies	169	180	142	141	137	145	156	143	137	151	145	155	167
5013,4	Automotive parts and supplies, tires and tubes	185	191	167	173	169	173	196	179	151	173	158	171	190
5013	Automotive parts and supplies	188	192	168	175	170	175	195	181	154	174	163	174	194
502	Furniture and home furnishings	174	185	156	163	150	161	165	148	155	156	152	146	154
5023	Home furnishings	193	208	173	186	171	178	187	168	170	169	165	162	174
503	Lumber and other construction materials	130	144	111	113	103	102	103	91	94	101	97	104	123
5031	Lumber, plywood, and millwork	121	135	103	104	99	98	99	86	92	99	93	100	119
505	Metals and minerals, except petroleum	159	169	137	159	141	153	151	150	164	174	160	162	175
5051 pt.	Ferrous metals service centers and offices	171	182	149	172	151	166	162	160	168	177	163	170	185
5051 pt.	Ferrous metals service centers	196	198	161	182	162	177	179	177	181	192	172	183	199
506	Electrical goods	183	181	160	175	160	160	168	146	149	162	153	159	168
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	166	164	148	156	142	141	143	132	131	142	131	147	155
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	200	201	173	194	181	180	197	161	168	183	176	171	181
507	Hardware, plumbing, heating equipment, and supplies	198	225	194	199	177	188	183	170	171	187	169	179	198
5072	Hardware	184	203	180	188	166	187	186	170	158	179	171	167	195
5074	Plumbing and heating equipment and supplies (hydronics)	213	237	198	200	185	196	188	170	182	188	166	189	206
508	Machinery, equipment, and supplies	231	238	195	200	192	200	212	199	196	201	195	207	212
5082	Construction and mining machinery and equipment	439	448	364	315	328	358	357	329	317	350	341	356	365
5084,5	Industrial machinery, equipment, and supplies	168	167	153	167	152	152	165	158	151	160	154	160	159
51	Nondurable goods, total	85	90	78	82	72	74	76	73	71	78	77	79	83
	Total (excluding farm-product raw materials)	84	88	79	83	75	76	80	74	75	81	79	80	83
511	Paper and paper products	92	99	92	97	91	98	101	91	86	97	89	92	100
5111,3	Printing, writing, industrial, and personal service paper	87	92	83	86	83	87	90	81	78	90	81	82	90
512	Drugs, drug proprietaries, and druggists' sundries	154	162	150	156	144	155	154	146	137	153	139	145	150
514	Groceries and related products	58	61	56	59	55	57	58	56	53	59	58	57	60
5141	Groceries, general-line	68	75	69	71	66	66	68	66	63	70	70	68	71
517	Petroleum and petroleum products	44	42	42	42	40	39	43	41	47	51	49	47	47
518	Beer, wine, and distilled alcoholic beverages	122	124	108	114	101	101	102	89	88	99	105	99	85
5181	Beer and ale	80	89	85	86	72	70	68	57	51	64	70	71	66
5182	Wines and distilled alcoholic beverages	163	158	130	144	138	141	147	130	130	132	136	119	97

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. [p]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]The lumber, plywood, and millwork group is subject to a sampling variability of 9 percent for August 1979.
[2]The beer and ale group is subject to a sampling variability of 10 percent for August 1979.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1979 and 1978

(Sales and inventories in millions of dollars. Stock-sales ratios in percent)

1972 SIC code	Kind of businedd	1979								1978				
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug[P]	Aug.	Sept.	Oct.	Nov.	Dec.
	Sales ADJUSTED for seasonal variations and trading-day differences													
	Merchant wholesales, total	67,148	67,495	70,824	70,444	72,937	72,625	75,106	75,626	64,894	64,531	67,338	67,552	67,823
	Total (excluding farm-product raw materials)	60,346	60,603	63,567	63,278	65,050	64,506	65,961	66,586	57,461	57,326	59,349	60,373	60,526
50	Durable goods, total	31,012	31,769	33,570	32,770	33,354	32,956	34,078	34,350	30,043	29,863	30,953	31,498	31,939
501	Motor vehicles and automotive parts and supplies	5,994	6,285	6,486	6,315	6,347	6,078	6,083	6,338	5,739	5,598	6,113	6,442	6,088
502	Furniture and home furnishings	1,162	1,058	1,178	1,148	1,183	1,139	1,229	1,195	1,077	1,118	1,047	1,136	1,197
503	Lumber and other construction materials	2,876	2,758	3,089	3,085	3,037	3,166	3,188	3,276	2,732	2,878	2,887	2,874	3,026
505	Metals and minerals, except petroleum	3,184	3,518	3,748	3,250	3,637	3,598	4,008	3,717	3,045	2,947	3,188	3,305	3,259
506	Electrical goods	3,279	3,460	3,560	3,294	3,789	3,644	3,690	4,004	3,377	3,311	3,340	3,356	3,362
507	Hardware, plumbing, heating equipment, and supplies	2,354	2,270	2,371	2,372	2,398	2,355	2,441	2,494	2,209	2,108	2,290	2,237	2,330
508	Machinery, equipment, and supplies	8,461	8,840	9,108	9,249	9,240	9,263	9,497	9,517	8,372	8,382	8,607	8,730	9,193
51	Nondurable goods, total	36,136	35,726	37,254	37,674	39,583	39,669	41,028	41,276	34,851	34,668	36,385	36,054	35,884
	Total (excluding farm-product raw materials)	29,334	28,834	29,997	30,508	31,696	31,550	31,883	32,236	27,418	27,463	28,396	28,875	28,587
511	Paper and paper products	1,340	1,595	1,636	1,636	1,638	1,612	1,627	1,653	1,473	1,419	1,536	1,579	1,608
512	Drugs, drug proprietaries, and druggists' sundries	953	990	1,032	1,050	1,095	1,072	1,104	1,073	980	965	1,000	1,007	997
513	Apparel, piece goods, and notions	2,230	2,114	2,243	2,280	2,089	2,149	2,496	2,320	2,299	2,177	2,268	2,291	2,269
514	Groceries and related products	11,407	11,408	11,595	11,476	11,278	11,380	11,500	11,352	10,443	10,607	11,039	11,178	11,400
515	Farm-product raw materials[1]	6,802	6,892	7,257	7,166	7,887	8,119	9,145	9,040	7,433	7,205	7,989	7,179	7,297
517	Petroleum and petroleum products	4,876	4,905	4,955	5,263	6,338	6,038	5,863	6,200	4,430	4,442	4,390	4,542	4,387
518	Beer, wine, and distilled alcoholic beverages	2,491	2,395	2,541	2,615	2,526	2,472	2,610	2,674	2,284	2,305	2,333	2,383	2,387
519	Miscellaneous nondurable goods	4,645	4,361	4,849	5,095	5,546	5,721	5,647	5,715	4,499	4,521	4,657	4,693	4,567
	Inventories ADJUSTED for seasonal variations													
	Merchant wholesalers, total	81,543	83,005	84,078	84,973	85,257	85,245	88,144	88,899	76,338	77,113	78,625	79,526	80,771
	Total (excluding farm-product raw materials)	76,224	77,545	78,624	79,299	79,729	79,416	81,339	81,961	71,546	72,119	73,434	74,285	75,546
50	Durable goods, total	52,490	53,773	53,937	54,408	54,886	54,542	56,062	56,741	49,972	50,160	50,948	51,625	52,460
501	Motor vehicles and automotive parts and supplies	9,390	9,883	9,643	9,605	9,442	9,161	9,829	9,771	8,637	8,315	8,870	9,420	9,236
502	Furniture and home furnishings	1,778	1,765	1,878	1,846	1,799	1,866	1,840	1,856	1,750	1,789	1,776	1,782	1,801
503	Lumber and other construction materials	3,160	3,207	3,218	3,315	3,354	3,444	3,481	3,513	3,013	3,101	3,181	3,113	3,190
505	Metals and minerals, except petroleum	5,142	5,528	5,274	5,212	5,517	5,571	5,606	5,862	5,289	5,290	5,269	5,266	5,166
506	Electrical goods	5,697	5,772	5,764	5,754	5,899	5,881	6,137	6,067	5,227	5,346	5,435	5,499	5,650
507	Hardware, plumbing, heating equipment and supplies	4,382	4,543	4,422	4,511	4,443	4,514	4,555	4,565	4,092	4,098	4,207	4,153	4,228
508	Machinery, equipment, and supplies	17,927	18,073	18,529	18,905	19,178	19,065	19,517	19,997	17,357	17,510	17,527	17,658	18,249
51	Nondurable goods, total	29,053	29,232	30,141	30,565	30,371	30,703	32,082	32,158	26,366	26,953	27,677	27,901	28,311
	Total (excluding farm-product raw materials)	23,734	23,772	24,687	24,891	24,843	24,874	25,277	25,220	21,574	21,959	22,486	22,660	23,086
511	Paper and paper products	1,458	1,493	1,561	1,485	1,534	1,574	1,610	1,604	1,358	1,404	1,419	1,447	1,482
512	Drugs, drug proprietaries, and druggists' sundries	1,528	1,530	1,615	1,609	1,621	1,599	1,663	1,624	1,410	1,453	1,435	1,446	1,444
514	Groceries and related products	6,492	6,333	6,581	6,611	6,691	6,774	6,776	6,857	5,921	6,192	6,342	6,355	6,433
517	Petroleum and petroleum products	2,017	2,114	2,237	2,311	2,504	2,402	2,590	2,565	2,078	2,039	2,052	2,064	2,082
518	Beer, wine, and distilled alcoholic beverages	2,557	2,536	2,756	2,831	2,698	2,658	2,696	2,635	2,204	2,214	2,293	2,377	2,403
	Stock-sales ratios based on ADJUSTED data													
	Merchant wholesalers, total	121	123	119	121	117	117	117	118	118	119	117	118	119
	Total (excluding farm-product raw materials)	126	128	124	125	123	123	123	123	125	126	123	123	125
50	Durable goods, total	169	169	161	166	165	165	165	165	166	168	165	164	164
501	Motor vehicles and automotive parts and supplies	157	157	149	152	149	151	162	154	150	149	145	146	152
502	Furniture and home furnishings	153	167	159	161	152	164	150	155	162	160	170	157	150
503	Lumber and other construction materials	110	116	104	107	110	109	109	107	110	108	110	109	105
505	Metals and minerals, except petroleum	161	157	141	160	152	155	140	158	174	179	165	159	159
506	Electrical goods	174	167	162	175	156	161	166	152	155	161	163	164	168
507	Hardware, plumbing, heating equipment, and supplies	186	200	187	190	185	192	187	183	185	194	184	186	181
508	Machinery, equipment, and supplies	212	204	203	204	208	206	206	210	207	209	204	202	199
51	Nondurable goods, total	80	82	81	81	77	77	78	78	76	78	76	77	79
	Total (excluding farm-product raw materials)	81	82	82	82	78	79	79	78	79	80	79	78	81
511	Paper and paper products	93	94	95	91	94	98	99	97	92	99	92	92	92
512	Drugs, drug proprietaries, and druggists' sundries	160	155	156	153	148	149	151	151	144	151	144	144	145
514	Groceries and related products	57	56	57	58	59	60	59	60	57	58	57	57	56
517	Petroleum and petroleum products	41	43	45	44	40	40	44	41	47	45	47	45	47
518	Beer, wine, and distilled alcoholic beverages	103	106	108	108	107	108	103	99	97	96	98	100	101

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions. All data for 1978 have been revised to reflect recomputed factors for seasonal adjustment.

NA Not available. [P]Preliminary estimates. See p. 15, Sample Design and Estimation Procedures.

[1]There are indications that the sensonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table 4B. Percent Change Between Selected 3-Month Periods Sales of Merchant Wholesalers, United States

(Based on seasonally-adjusted data)

Item	3 month period, June 1979-Aug. 1979 from--			
	Mar. 1979-May 1979 (3 months ago)	Dec. 1978-Feb. 1979 (6 months ago)	Sept. 1978-Nov. 1978 (9 months ago)	June 1978-Aug. 1978 (12 months ago)
Merchant wholesalers, total.....	+5	+10	+12	+17
Durable goods, total.....	+2	+9	+11	+16
Nondurable goods, total...	+7	+13	+14	+19

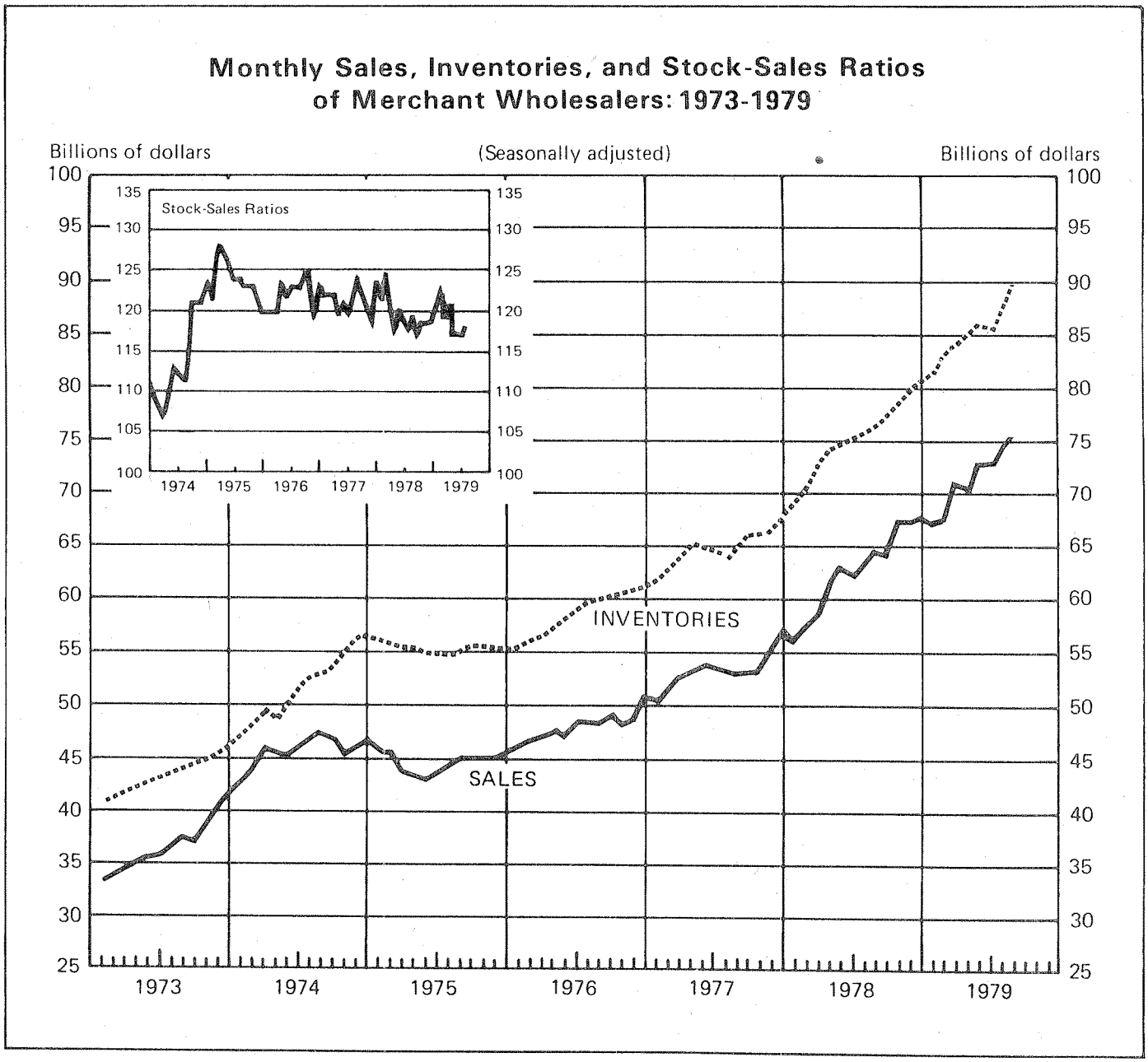


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: August 1979

1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		Aug. 1979 from July 1979	Aug. 1979 from Aug. 1978	8 months 1979 from 8 months 1978	Aug. 1979 from July 1979	Aug. 1979 from Aug. 1978	Aug. 1979 from July 1979	Aug. 1979 from Aug. 1978	Aug. 1979 from July 1979	Aug. 1979 from Aug. 1978
	Merchant wholesalers, total	+7	+16	+17	0	+16	+1	+17	+1	+16
	Total (excluding farm-product raw materials)	+8	+15	+18	0	+15	+1	+16	+1	+15
50	Durable goods, total	+9	+14	+17	0	+14	+1	+14	+1	+14
501	Motor vehicles and automotive parts and supplies	+6	+8	+13	-3	+13	+4	+10	-1	+13
5012	Automobiles and other motor vehicles	+3	+21	+20	-6	+10	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	+8	-3	+8	-1	+15	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	+8	-3	+7	-1	+14	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	+12	+11	+10	+1	+6	-3	+11	+1	+6
5021	Furniture--household and office	+12	+23	+17	+1	+11	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	+10	+10	+6	+2	+10	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	+14	+30	+23	+1	+13	(*)	(*)	(*)	(*)
5023	Home furnishings	+13	+6	+6	+1	+4	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	+13	+20	+20	-1	+17	+3	+20	+1	+17
5031	Lumber, plywood, and millwork	+15	+23	+21	0	+15	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c.	+8	+13	+17	-2	+19	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	+6	+29	+19	-2	+14	-2	+31	+3	+14
505	Metals and minerals, except petroleum	+5	+22	+23	+5	+11	-7	+22	+5	+11
5051 pt.	Ferrous metals service centers and offices	+4	+18	+22	+2	+12	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	+4	+16	+20	+2	+13	(*)	(*)	(*)	(*)
5051 pt.	Nonferrous metals service centers and offices	+4	+35	+30	+17	+13	(*)	(*)	(*)	(*)
506	Electrical goods	+13	+18	+15	-2	+16	+9	+19	-1	+16
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+7	+17	+18	-2	+18	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+21	+19	+12	-2	+14	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	+16	+8	+7	0	+11	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	+7	+12	+13	-1	+12	+2	+13	0	+12
5072	Hardware	+10	+13	+11	0	+21	(*)	(*)	(*)	(*)
5074	Plumbing and heating equipment and supplies (hydronics)	+9	+12	+14	-2	+4	(*)	(*)	(*)	(*)
5075	Warm air heating and air conditioning equipment and supplies	0	+10	+13	0	+10	(*)	(*)	(*)	(*)
508	Machinery, equipment, and supplies	+8	+13	+16	+1	+15	0	+14	+2	+15
5081	Commercial machines and equipment	+22	+16	+6	-3	+5	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	+9	+15	+8	+1	+19	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	+1	+20	+20	+2	+18	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	+8	+10	+19	+3	+15	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	+8	+9	+17	-2	+4	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	+5	+37	+46	-2	+5	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	+2	+35	+50	-2	+1	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	+10	+40	+40	0	+14	(*)	(*)	(*)	(*)
51	Nondurable goods, total	+5	+18	+18	+1	+21	+1	+18	0	+22
	Total (excluding farm-product raw materials)	+7	+17	+18	0	+17	+1	+18	0	+17
511	Paper and paper products	+12	+12	+13	0	+18	+2	+12	0	+18
5111,3	Printing, writing, industrial, and personal service paper	+11	+13	+15	-1	+16	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	+5	+9	+12	-1	+15	-3	+9	-2	+15
5122	Drugs, drug proprietaries, and druggists' sundries	+5	+9	+12	-1	+15	(*)	(*)	(*)	(*)
5122 pt.	General-line drugs	+5	-1	+7	+1	+1	(*)	(*)	(*)	(*)
514	Groceries and related products	+4	+8	+13	+1	+16	-1	+9	+1	+16
5141	Groceries, general-line	+5	+12	+13	+2	+18	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	+5	+10	+12	+3	+19	(*)	(*)	(*)	(*)
5141 pt.	Retailer cooperatives	+4	+17	+13	+1	+18	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	+5	+11	+14	+1	+16	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	+3	+10	+11	+1	+17	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	0	+4	+16	-1	+6	(*)	(*)	(*)	(*)
5145	Confectionery	+8	+11	+11	+5	+23	(*)	(*)	(*)	(*)
5147	Meats and meat products	-8	+2	+17	-3	+13	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	-4	+5	+9	-4	+3	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	-4	+21	+16	+3	+44	-1	+22	+2	+45
5152	Cotton	-8	-7	0	-12	-23	(*)	(*)	(*)	(*)
5153	Grain	-4	+26	+18	+3	+60	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	+6	+41	+34	+4	+24	+6	+40	-1	+23
5171	Petroleum bulk stations and terminals	+11	+46	+31	+8	+27	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	+10	+17	+16	-4	+20	+2	+17	-2	+20
5181	Beer and ale	+7	+22	+20	-10	+37	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	+13	+12	+12	-1	+12	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	+8	+28	+23	-1	+13	+1	+27	-2	+13
5191	Farm supplies	+2	+26	+25	-1	+13	(*)	(*)	(*)	(*)
5194	Tobacco and tobacco products	+6	+7	+8	-7	+1	(*)	(*)	(*)	(*)
5198	Paints, varnishes, and supplies	+4	+14	+16	+1	+26	(*)	(*)	(*)	(*)
5199 pt.	Books, periodicals, newspapers	-6	+10	+12	+4	+8	(*)	(*)	(*)	(*)

Sales of Merchant Wholesalers by Geographic Division
8 Months 1979 Compared with 8 Months 1978

(Percent changes based on UNADJUSTED data)

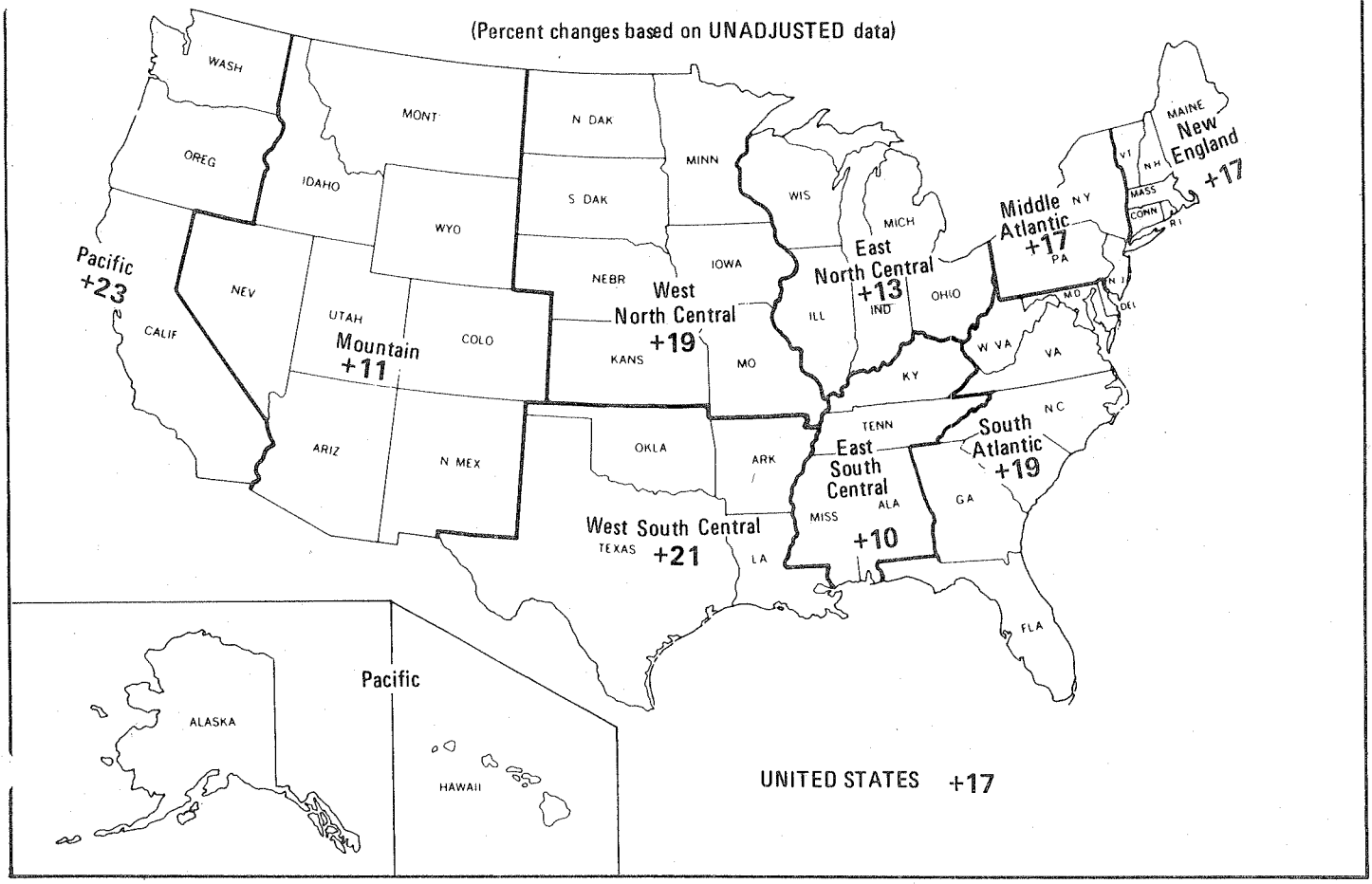


Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1979 and 1978

(Sales, in millions of dollars, are NOT ADJUSTED for seasonal variation or trading-day differences; sampling errors in percent)

1972 SIC code	Kind of business and geographic division[1]	1979								1978					Total 8 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.[P]	Aug.	Sept.	Oct.	Nov.	Dec.	1979	1978	Range[2]	Median
	Merchant wholesalers, total	63,739	61,721	74,319	70,768	76,814	74,361	73,537	78,441	67,702	63,933	69,086	67,699	64,527	573,700	488,862	0.8-0.9	0.9
	New England	3,393	3,289	3,835	3,652	3,915	3,782	3,572	3,901	3,654	3,472	3,638	3,678	3,652	29,339	24,996	5-6	6
	Middle Atlantic	14,513	13,785	16,692	15,218	16,416	16,288	16,256	17,819	15,382	14,387	15,123	15,304	14,529	126,987	108,767	2-2	2
	East North Central	10,573	10,454	12,314	11,906	13,356	12,661	12,182	12,806	11,636	10,821	12,195	11,757	10,882	96,251	84,979	2-3	3
	West North Central	6,695	6,589	7,834	7,506	8,614	8,005	8,385	8,482	7,373	6,836	7,790	7,471	6,894	62,110	52,365	2-3	2
	South Atlantic	7,023	6,620	8,329	7,929	8,401	8,074	7,720	8,156	7,139	6,877	7,449	7,106	6,979	62,254	52,241	2-3	2
	East South Central	2,961	2,801	3,505	3,461	3,557	3,372	3,292	3,579	3,127	2,938	3,213	3,075	2,922	26,527	24,149	4-5	4
	West South Central	6,703	6,648	7,785	7,673	8,443	8,314	8,248	8,667	6,890	6,717	7,036	6,885	6,680	62,480	51,610	3-4	4
	Mountain	2,337	2,253	2,904	2,659	2,786	2,851	2,704	2,834	2,620	2,693	2,583	2,477	2,540	21,330	19,172	5-5	5
	Pacific	9,540	9,281	11,121	10,765	11,325	11,077	11,178	12,196	9,881	9,191	10,058	9,946	9,448	86,482	70,584	2-3	3
50	Durable goods, total	28,284	28,141	34,689	33,429	35,723	34,447	33,750	36,666	32,279	30,404	32,242	31,037	29,340	265,128	226,896	0.8-1.0	0.9
	Middle Atlantic	5,936	5,892	7,165	6,601	7,191	6,961	6,769	7,394	6,765	6,303	6,618	6,516	6,094	53,909	47,577	4-5	4
	East North Central	4,818	4,975	6,057	5,863	6,467	6,023	5,801	6,224	5,793	5,342	5,801	5,674	5,177	46,230	40,159	3-4	4
	West North Central	2,157	2,208	2,718	2,746	3,009	2,778	2,873	3,143	2,695	2,504	2,740	2,652	2,379	21,632	18,258	5-6	5
	South Atlantic	3,515	3,211	4,246	4,111	4,269	4,172	4,074	4,314	3,738	3,689	3,869	3,608	3,513	31,911	27,019	4-5	4
	West South Central	3,020	3,067	3,649	3,637	3,863	3,900	3,702	3,924	3,403	3,224	3,438	3,160	3,144	28,761	24,522	4-4	4
	Mountain	1,076	1,043	1,408	1,309	1,355	1,358	1,322	1,381	1,372	1,340	1,283	1,172	1,207	10,253	9,551	6-7	7
	Pacific	5,259	5,268	6,330	6,173	6,433	6,265	6,388	7,102	5,641	5,214	5,597	5,524	5,250	49,218	39,544	2-3	3
51	Nondurable goods, total	35,455	33,580	39,630	37,339	41,091	39,914	39,787	41,775	35,423	33,529	36,844	36,662	35,187	308,572	261,968	1.0-1.2	1.0
	New England	2,166	2,066	2,335	2,200	2,377	2,343	2,225	2,395	2,293	2,117	2,245	2,316	2,349	18,107	15,680	5-7	6
	Middle Atlantic	8,577	7,893	9,527	8,616	9,226	9,327	9,487	10,426	8,617	8,084	8,505	8,788	8,435	73,078	61,190	3-3	3
	East North Central	5,755	5,479	6,256	6,042	6,888	6,638	6,380	6,582	5,843	5,479	6,394	6,083	5,704	50,021	44,820	3-4	3
	West North Central	4,538	4,381	5,115	4,760	5,606	5,227	5,512	5,340	4,678	4,331	5,050	4,820	4,515	40,478	34,106	3-4	3
	South Atlantic	3,508	3,409	4,084	3,818	4,132	3,902	3,646	3,843	3,400	3,188	3,580	3,498	3,466	30,343	25,223	3-5	3
	East South Central	1,685	1,549	1,889	1,925	1,959	1,820	1,817	1,900	1,616	1,505	1,710	1,706	1,650	14,545	13,200	3-4	4
	West South Central	3,683	3,581	4,136	4,036	4,580	4,414	4,546	4,743	3,487	3,493	3,598	3,725	3,536	33,719	27,087	5-5	5
	Pacific	4,281	4,013	4,790	4,591	4,893	4,812	4,790	5,094	4,241	3,978	4,461	4,422	4,199	37,264	31,040	4-5	4

Note: Detail may not add to totals due to rounding and minor revisions.

[P]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]See map on page 7.

[2]The range of sampling error of the estimate is based on data for August, September, and October 1977.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: August 1979

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in-- Sales: August 1979 from July 1979	Sales: August 1979 from August 1978	Sales: 8 months 1979 from 8 months 1978	Inventories: August 1979 from July 1979	Inventories: August 1979 from August 1978	Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		A	B	C[1]	D	E	A	D
	Merchant wholesalers, total	+7	+16	+17	0	+16	0.4	0.2
	New England	+9	+7	+17	-1	+9	2.0	1.9
	Middle Atlantic	+10	+16	+17	0	+14	1.1	0.6
	East North Central	+5	+10	+13	0	+12	1.2	0.8
	West North Central	+1	+15	+19	+2	+28	1.3	1.1
	South Atlantic	+6	+14	+19	-1	+13	1.6	1.0
	East South Central	+9	+14	+10	-1	+12	1.7	1.4
	West South Central	+5	+26	+21	-1	+23	1.4	0.8
	Mountain	+5	+8	+11	-3	+10	2.4	1.3
	Pacific	+9	+23	+23	-2	+16	1.2	0.5
50	Durable goods, total	+9	+14	+17	0	+14	0.6	0.3
	New England	+12	+11	+21	-3	+3	2.4	1.3
	Middle Atlantic	+9	+9	+13	0	+12	1.7	1.0
	East North Central	+7	+7	+15	+1	+9	1.9	1.0
	West North Central	+9	+17	+18	+1	+19	3.3	1.7
	South Atlantic	+6	+15	+18	-2	+13	1.9	1.2
	East South Central	+14	+11	+9	-2	+6	3.9	2.5
	West South Central	+6	+15	+17	-1	+20	2.1	1.2
	Mountain	+4	+1	+7	-3	+8	2.9	1.7
	Pacific	+11	+26	+24	-2	+16	1.9	0.7
51	Nondurable goods, total	+5	+18	+18	+1	+21	0.6	0.4
	New England	+8	+4	+15	+1	+17	1.9	2.7
	Middle Atlantic	+10	+21	+19	+1	+15	1.9	0.9
	East North Central	+3	+13	+12	-2	+19	1.4	1.1
	West North Central	-3	+14	+19	+3	+40	1.6	1.4
	South Atlantic	+5	+13	+20	+2	+12	2.4	1.8
	East South Central	+5	+18	+10	0	+21	1.7	2.4
	West South Central	+4	+36	+24	-1	+30	2.2	1.3
	Mountain	+5	+16	+15	-2	+15	3.2	1.2
	Pacific	+6	+20	+20	-2	+15	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	+8	-3	+8	-1	+15	2	1
	New England	+13	+26	+18	-5	(S)	7	4
	Middle Atlantic	+20	0	-3	+5	+18	4	2
	East North Central	+6	-13	+15	-1	+6	7	1
	West North Central	+2	-14	+9	-3	-5	5	2
	South Atlantic	+2	+1	+14	-4	+6	4	2
	East South Central	+2	-10	+9	-4	+5	4	3
	West South Central	+12	+3	+8	-8	+30	5	2
	Mountain	+10	(S)	(S)	-4	+6	7	3
	Pacific	+6	+1	+12	+2	+24	3	2
502	Furniture and home furnishings	+12	+11	+10	+1	+6	2	1
	Middle Atlantic	+7	-10	+10	-3	-3	4	2
	East North Central	+6	+13	+22	+2	+6	7	2
	West North Central	+18	(S)	(S)	+8	+7	5	4
	West South Central	+24	+17	+9	0	+5	5	7
	Pacific	+18	+50	+16	+2	+23	5	3
503	Lumber and other construction materials	+13	+20	+20	-1	+17	2	1
	New England	0	+6	+15	-4	+2	4	5
	Middle Atlantic	(S)	+6	+12	-2	-1	4	2
	East North Central	+7	(S)	+9	-2	-1	3	2
	West North Central	+25	+49	+36	-5	+30	7	7
	South Atlantic	+7	+10	+19	+2	+26	4	2
	East South Central	+6	+5	+3	-2	+18	4	3
	West South Central	+7	+22	+13	0	+27	6	5
	Pacific	+27	(S)	+32	-3	+27	5	1
5051 pt.	Ferrous metals service centers	+4	+16	+20	+2	+13	2	1
	New England	+6	+21	+20	0	+6	6	2
	Middle Atlantic	-1	+18	+20	+1	+25	5	2
	East North Central	+1	+9	+20	+4	+8	5	2
	West North Central	+11	+19	+22	+4	+18	5	2
	South Atlantic	+8	+12	+10	0	0	3	2
	East South Central	+6	+18	+18	+2	+9	4	4
	West South Central	-2	+3	+14	-2	+11	4	2
	Mountain	-2	+99	(S)	-1	(S)	2	2
	Pacific	+19	+31	+35	-2	+17	2	3
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+7	+17	+18	-2	+18	2	1
	New England	+17	+64	+33	-11	+9	3	2
	Middle Atlantic	+9	+26	+15	-3	+6	5	2
	East North Central	+3	+30	+26	0	+26	3	2
	West North Central	+9	+3	+9	0	+20	5	3
	South Atlantic	+8	+8	+13	-2	+8	3	2
	East South Central	(S)	-9	+10	-6	+14	3	5
	West South Central	+18	+21	+26	+1	+58	4	2
	Mountain	+9	-5	+9	+3	+4	4	2
	Pacific	+7	+13	+20	-3	+11	4	2

See footnotes at end of table.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: August 1979—Continued

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in-- Sales: Aug. 1979 from July 1979	Sales: Aug. 1979 from Aug. 1978	Sales: 8 months 1979 from 8 months 1978	Inventories: Aug. 1979 from July 1979	Inventories: Aug. 1979 from Aug. 1978	Sampling errors of the ratio corresponding to the percent change in columns[2]-- A	D
		A	B	C	D	E		
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+21	+19	+12	-2	+14	1	1
	Middle Atlantic	+13	+12	+11	-1	+17	3	2
	East North Central	+24	+40	+24	-6	+11	4	1
	West North Central	+24	(S)	-7	-6	(S)	4	4
	South Atlantic	+11	+17	+15	-3	+9	6	4
	West South Central	+10	+34	+25	-3	+20	4	4
	Mountain	-1	+31	+21	-2	+20	6	3
	Pacific	+39	+27	+11	-4	+28	3	2
5072	Hardware	+10	+13	+11	0	+21	1	1
	New England	+16	+11	+14	-2	+12	6	3
	Middle Atlantic	+11	+14	+10	-4	+25	6	2
	East North Central	+10	+24	+11	-1	+29	4	2
	West North Central	+6	+12	+16	(S)	+28	3	3
	South Atlantic	+11	+28	+14	-3	+24	4	2
	East South Central	+13	0	-2	-2	+20	4	1
	Pacific	+7	+15	+20	-2	+10	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	+9	+12	+14	-2	+4	2	1
	Middle Atlantic	+8	+20	+23	-1	+13	6	3
	East North Central	+9	-15	-2	+3	(S)	7	3
	South Atlantic	+10	+21	+22	-2	+6	3	2
	Mountain	-4	-12	-10	-10	+47	7	4
	Pacific	+18	+49	+26	-2	+23	5	4
5084,5	Industrial machinery, equipment, and supplies	+8	+10	+19	+3	+15	2	1
	Middle Atlantic	+3	+12	+12	+2	+25	7	2
	East North Central	+9	+9	+20	+7	+25	3	2
	West South Central	+9	+19	+23	+4	+12	4	3
	Pacific	+3	+1	+24	-1	+10	5	2
512	Drugs, drug proprietaries, and druggists' sundries	+5	+9	+12	-1	+15	1	1
	New England	+1	+16	+19	-3	+28	5	3
	Middle Atlantic	+9	+8	+6	-7	+28	3	2
	East North Central	+9	+24	+15	0	+18	6	3
	West North Central	+4	-2	+11	-1	0	2	2
	South Atlantic	-4	-1	+8	+1	+5	6	5
	East South Central	+6	+9	+6	+8	+16	6	5
	West South Central	+2	-7	+8	+1	(S)	3	2
	Mountain	+12	+23	+19	-1	+22	3	2
	Pacific	+5	+15	+21	-3	+19	3	3
5141	Groceries, general-line	+5	+12	+13	+2	+18	1	1
	New England	+4	+12	+13	+5	+33	2	1
	Middle Atlantic	+1	+16	+13	0	+23	1	2
	East North Central	+3	+15	+12	+1	+10	3	1
	West North Central	+10	+14	+8	+6	+25	1	1
	South Atlantic	+6	+2	+16	-1	+6	2	1
	West South Central	+4	+17	+15	+2	+23	2	1
	Mountain	+5	+10	+15	+7	+34	2	2
	Pacific	+6	+9	+16	-1	+10	1	1
5142,3,6,9	Specialty-line groceries	+3	+10	+11	+1	+17	1	1
	Middle Atlantic	-1	+7	+9	+4	+9	4	2
	East North Central	+4	+4	+8	+1	+21	3	2
	West North Central	-1	+19	+11	-4	+46	3	1
	South Atlantic	+6	+11	+15	-2	+20	5	6
	East South Central	+5	+5	+12	+4	+66	2	2
5148	Fresh fruits and vegetables	-4	+5	+9	-4	+3	2	4
	Middle Atlantic	-7	+1	+6	-7	-15	7	5
	East North Central	-9	-1	-1	-4	-2	6	6
	West North Central	-10	+10	+10	-6	+24	6	3
	West South Central	+5	+10	+10	+1	+1	5	3
	Pacific	0	+13	+10	-1	+1	4	4
5194	Tobacco and tobacco products	+6	+7	+8	-7	+1	1	1
	New England	+6	+1	-6	-1	+1	5	3
	Middle Atlantic	+6	-2	+6	-3	-13	4	3
	East North Central	+4	+8	+9	-9	+5	4	3
	West North Central	+14	+43	+11	0	+11	4	2
	South Atlantic	(S)	-25	+7	-10	-26	6	6
	East South Central	+4	+2	0	-6	-4	7	4
	West South Central	+12	+22	+12	+9	+20	7	6
	Mountain	+13	+66	+15	-21	-6	6	2
	Pacific	+8	+22	+20	-20	+26	2	5

Note: Data at the United States level are generally more reliable than data by geographic division. In those kinds of business where the geographic division trends are subject to a high sampling error, it may be desirable to use the United States total trends for the kinds of business rather than the geogrpahic division trends.

(S) Does not meet publication standards because of extreme variability or high nonresponse rate.

[1]See map on page 7.

[2]The sampling errors (in percent) shown in columns A and D are based on medians or measurements on data for August, September, and October 1977. For SIC's 5051 pt., and 5063 the medians of measurements in columns A and D are based on data for June, July, and August 1978.

APPENDIX A. Reliability of Data

There are two types of errors possible in an estimate based on a sample survey—sampling and nonsampling. Sampling errors occur because observations are made only on a sample, not on the entire population. Nonsampling errors can be attributed to many sources in the collection and processing of data. The accuracy of a survey result is determined by the joint effects of sampling and nonsampling errors.

Measures of sampling variability—The particular sample used in this survey is one of a large number of all possible samples of the same size that could have been selected using the same design. Estimates derived from the different samples would differ from each other. The average of these estimates would be close to the estimate derived from a complete enumeration of the population (assuming that a complete enumeration has the same nonsampling errors as the sample survey). The average of the estimates differs from the estimate from a complete census because of the composite estimation technique. Disregarding this difference, the sampling error or standard error of the estimate is a measure of the variability among the estimates from all possible samples of the same size and design and, thus, is a measure of the precision with which an estimate from a particular sample approximates the results of a complete enumeration. The coefficient of variation (expressed as a percent) is the standard error of the estimate times 100 percent, divided by the value being estimated. Note that any measures of sampling variability, such as the standard error or coefficient of variation, are estimates derived from the sample and are also subject to sampling variability.

Estimates of sampling variability (the coefficients of variation in percent) for sales and inventories at the kind-of-business detail provided in this publication are shown in table A-1. These coefficients of variation permit certain confidence statements about the sample estimates. As noted above, the particular sample used in this survey is one of a large number of all possible samples of about the same size that could have been selected using the same design. In about two out of three (67 percent) of these samples, the estimate would differ from a complete enumeration by less than the corresponding percent for that estimate shown in the sampling variability table. In about 19 out of 20 (95 percent) of these samples, the estimate would differ from the results of a complete enumeration by less than twice the percentages shown.

To illustrate the computations involved in the above confidence statements for monthly dollar volume estimates, assume that an estimate for a kind of business published in table 1 for a particular month is $5,000 million and that the median coefficient of variation for this statistic, is 0.9 percent or .009. Multiplying $5,000 million by .009 yields $45 million. Therefore, a 67 percent confidence interval is $4,955 million to $5,045 million (i.e. $5,000 million plus or minus $45 million). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately two out of three (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Similarly a 95 percent confidence interval is $4,910 million to $5,090 million (i.e., $5,000 million plus or minus $90 million).

As an example of the use of the coefficients of variation with ratios, assume that an estimated month-to-month percent change published in table 5 is -1.0 percent for a particular kind of business. This is equivalent to a month-to-month ratio of .990. Assume the median coefficient of variation for this ratio as shown in table A-1 is 0.5 percent (or .005). Multiplying .990 by .005 yields .005. Therefore, a 67 percent confidence interval is .985 to .995 (i.e., .990 plus or minus .005) and a 95 percent confidence interval is .980 to 1.000 (i.e., .990 plus or minus .010).

Nonsampling errors—As calculated for this report, the coefficient of variation measures certain nonsampling errors but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples of the same size and design, between the estimate and the true value being estimated. The accuracy of the tabulated data is determined by the joint effects of the sampling and nonsampling errors.

Nonsampling errors can be attributed to many sources: (1) inability to obtain information about all cases in the sample, (2) response errors, (3) definitional difficulties, (4) differences in the interpretation of questions, (5) mistakes in recording or coding the data obtained, and (6) other errors of collection, response, coverage, and estimation for missing data. These nonsampling errors also occur in complete censuses.

Although no direct measurement of the biases due to nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is due to imputing data for nonrespondents, for late reporters, and for data which fail edit. For all kinds of business combined, imputed data amount to about 15 percent of the sales estimates and 25 percent for inventories.

Table A-1. Estimated Sampling Variability of Sales and Inventories by Kind of Business for the United States

1972 SIC code	Kind of business	Sales						Inventories					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total	0.8-1.1	0.9	0.8-0.9	0.9	0.4-0.5	0.5	0.8-1.0	0.9	0.7-1.0	0.9	0.2-0.5	0.4
	Total (excluding farm-product raw materials)	0.9-1.2	1.1	0.9-1.0	1.0	0.4-0.6	0.5	0.9-1.0	1.0	0.8-1.0	0.9	0.2-0.5	0.3
50	Durable goods, total	1.1-1.3	1.2	0.9-1.0	1.0	0.6-0.6	0.6	1.1-1.2	1.2	1.0-1.2	1.1	0.3-0.7	0.5
501	Motor vehicles and automotive parts and supplies	2.3-3.3	3.1	1.9-2.8	2.2	1.4-1.9	1.7	2.5-3.3	2.9	2.6-3.1	3.0	0.6-1.3	1.0
5012	Automobiles and other motor vehicles	(*)	(*)	(*)	(*)	1.7-3.9	3.1	(*)	(*)	(*)	(*)	1.7-3.0	2.8
5013,4	Automotive parts and supplies, tires and tubes	2.9-3.7	3.1	2.9-3.2	3.1	1.5-2.0	1.6	4.0-4.5	4.3	3.9-4.4	4.0	0.4-1.4	0.7
5013	Automotive parts and supplies	3.3-4.0	3.9	3.1-3.8	3.7	1.9-2.2	2.0	4.7-5.3	5.2	4.7-5.2	5.0	0.5-1.5	0.9
502	Furniture and home furnishings	4.2-5.8	4.6	4.2-4.4	4.3	1.7-2.9	2.0	3.2-4.9	3.7	3.4-4.2	3.7	0.8-2.3	2.0
5021	Furniture--household and office	6.6-7.6	6.9	5.6-7.1	6.9	4.0-5.7	4.3	(*)	(*)	(*)	(*)	1.4-3.4	2.2
5021 pt.	Household furniture	(*)	(*)	(*)	(*)	5.0-5.8	5.1	(*)	(*)	(*)	(*)	1.4-4.3	2.0
5021 pt.	Office furniture	(*)	(*)	(*)	(*)	5.7-8.0	5.9	(*)	(*)	(*)	(*)	0.7-3.7	2.1
5023	Home furnishings	5.1-7.5	6.1	5.1-6.1	5.5	1.6-3.6	2.2	4.8-6.9	5.6	4.9-6.0	5.0	1.0-3.1	2.6
503	Lumber and other construction materials	2.8-4.4	3.1	2.9-3.9	3.1	1.6-2.5	1.9	4.5-6.5	4.9	4.8-5.8	4.9	0.7-1.8	0.9
5031	Lumber, plywood, and millwork	4.1-4.6	4.3	3.3-4.6	4.0	2.1-2.5	2.4	5.9-8.2	6.5	6.0-6.9	6.5	1.0-2.6	1.8
5039	Construction materials, n.e.c.	4.2-7.2	4.9	4.5-5.9	4.9	2.0-3.4	2.2	(*)	(*)	(*)	(*)	1.1-2.0	1.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(*)	(*)	(*)	(*)	2.2-2.4	2.3	(*)	(*)	(*)	(*)	1.0-2.5	1.4
505	Metals and minerals, except petroleum	4.4-6.0	4.7	4.0-5.1	4.0	1.5-3.0	2.8	3.2-3.8	3.7	3.7-4.1	4.0	0.8-1.4	1.3
5051 pt.	Ferrous metals service centers and offices	5.0-5.8	5.7	4.1-5.2	4.7	1.2-3.8	3.1	3.8-4.2	4.1	4.1-4.3	4.2	0.5-1.6	1.4
5051 pt.	Ferrous metals service centers	6.7-8.0	6.8	5.0-6.8	5.8	1.1-5.3	3.5	2.9-4.4	3.4	3.4-4.0	3.5	0.6-2.2	2.1
5051 pt.	Nonferrous metals service centers and offices	(*)	(*)	(*)	(*)	4.5-7.0	6.1	(*)	(*)	(*)	(*)	2.8-5.4	4.7
506	Electrical goods	1.9-2.6	2.3	1.6-2.1	1.7	1.3-1.6	1.4	2.5-2.9	2.6	2.2-2.8	2.4	0.5-1.0	0.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2.2-3.1	2.6	2.3-2.7	2.4	1.4-1.7	1.6	2.9-3.5	3.2	3.0-3.2	3.1	0.6-1.2	0.7
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3.4-4.0	3.8	3.0-3.2	3.1	1.6-2.8	2.5	2.9-4.2	3.2	2.7-3.8	3.0	0.7-1.6	0.9
5064	Electrical appliances, TV and radio sets	3.0-3.8	3.6	2.6-3.7	3.1	1.7-2.7	2.5	(*)	(*)	(*)	(*)	0.9-1.7	1.4
507	Hardware, plumbing, heating equipment, and supplies	2.7-3.0	2.9	2.4-2.6	2.5	1.1-1.9	1.5	2.4-2.8	2.6	2.4-2.9	2.7	0.3-1.4	0.6
5072	Hardware	3.6-4.2	3.8	2.6-3.1	3.0	1.3-2.4	1.9	2.0-4.1	2.7	2.2-3.5	2.8	0.4-2.1	0.8
5074	Plumbing and heating equipment and supplies (hydronics)	4.1-5.3	4.2	3.9-5.1	4.2	1.6-3.8	2.1	5.0-7.0	6.0	4.5-7.1	5.3	0.5-3.1	0.9
5075	Warm air heating and air conditioning equipment and supplies	(*)	(*)	(*)	(*)	2.0-4.4	2.7	(*)	(*)	(*)	(*)	1.1-4.3	1.4
508	Machinery, equipment, and supplies	2.3-2.7	2.6	1.8-2.5	2.1	1.2-1.5	1.4	2.0-2.6	2.3	1.7-2.1	1.9	0.4-1.8	1.1
511	Commercial machines and equipment	(*)	(*)	(*)	(*)	2.9-4.3	4.1	(*)	(*)	(*)	(*)	1.6-8.5	1.9
512	Construction and mining machinery and equipment	5.0-7.3	5.8	3.3-5.8	4.9	3.9-4.6	4.4	2.9-7.0	4.0	3.2-4.1	3.3	0.7-5.3	1.0
5083	Farm and garden machinery and equipment	(*)	(*)	(*)	(*)	4.1-6.6	6.0	(*)	(*)	(*)	(*)	1.1-2.9	1.2
5084,5	Industrial machinery, equipment, and supplies	3.1-3.4	3.2	2.8-3.0	2.9	1.1-2.3	1.6	2.4-3.0	2.9	2.4-3.0	2.7	0.5-1.6	0.6
5086	Professional equipment and supplies	3.7-7.5	4.3	4.0-5.5	5.2	1.8-3.3	2.0	(*)	(*)	(*)	(*)	0.6-5.2	0.7
5086 pt.	Surgical, medical, hospital, and supplies	(*)	(*)	(*)	(*)	1.7-3.8	2.5	(*)	(*)	(*)	(*)	0.7-5.4	1.0
5087	Service establishment equipment and supplies	(*)	(*)	(*)	(*)	1.8-11.0	2.9	(*)	(*)	(*)	(*)	1.0-3.4	1.3
5093	Scrap and waste materials	4.6-13.3	9.0	4.6-8.8	5.0	2.2-4.9	2.7	(*)	(*)	(*)	(*)	0.7-3.8	0.9
5093 pt.	Iron and steel scrap	(*)	(*)	(*)	(*)	2.6-3.5	3.1	(*)	(*)	(*)	(*)	0.8-1.4	1.0
5093 pt.	Waste materials	(*)	(*)	(*)	(*)	2.6-8.8	4.8	(*)	(*)	(*)	(*)	1.2-9.1	1.6
51	Nondurable goods, total	1.0-1.3	1.1	1.0-1.1	1.1	0.4-0.7	0.6	1.5-1.7	1.6	1.4-1.6	1.5	0.3-0.7	0.4
	Total (excluding farm-product raw materials)	1.0-1.6	1.2	1.3-1.4	1.4	0.5-0.8	0.6	1.7-2.0	1.9	1.6-1.8	1.7	0.3-0.7	0.4
511	Paper and paper products	2.6-4.0	3.7	2.4-4.1	3.1	1.0-1.4	1.3	2.5-3.4	2.7	2.4-3.2	2.8	0.4-1.5	0.6
5111,3	Printing, writing, industrial, and personal service paper	2.4-3.1	2.7	2.3-2.8	2.4	1.3-1.5	1.4	2.9-3.4	3.1	2.7-3.2	2.8	0.4-1.3	0.9
5112	Stationery supplies	(*)	(*)	(*)	(*)	2.4-3.4	2.5	3.2-6.1	5.8	3.6-5.1	4.4	0.9-4.8	1.4
512	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	5.6-6.3	5.7	5.6-5.7	5.7	0.6-2.2	0.7
5122	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	(*)	(*)	(*)	(*)	0.6-2.2	0.7
5122 pt.	General-line drugs	7.2-9.8	7.9	7.5-8.5	7.6	0.7-3.0	1.0	(*)	(*)	(*)	(*)	0.5-3.1	1.0
513	Apparel, piece goods, and notions	8.3-12.4	8.8	8.6-9.3	9.1	2.6-4.0	3.3	(*)	(*)	(*)	(*)	(*)	(*)
514	Groceries and related products	1.7-2.2	2.0	1.6-2.0	1.9	0.4-1.2	0.5	1.5-2.5	1.8	1.8-2.1	1.9	0.4-1.3	0.6
5141	Groceries, general-line	1.9-2.7	2.1	1.7-2.7	2.0	0.4-1.5	0.7	1.8-2.7	2.3	1.7-2.0	1.8	0.3-1.2	0.8
5141 pt.	Voluntary groups	(*)	(*)	(*)	(*)	0.5-1.7	0.6	(*)	(*)	(*)	(*)	0.4-1.7	0.5
5141 pt.	Retailer cooperatives	(*)	(*)	(*)	(*)	0.6-1.6	1.1	(*)	(*)	(*)	(*)	0.4-2.4	0.7
5141 pt.	Other general-lines	(*)	(*)	(*)	(*)	0.9-3.1	1.8	(*)	(*)	(*)	(*)	0.5-1.3	0.7
5142,3,6,9	Specialty-line groceries	(*)	(*)	(*)	(*)	0.7-3.4	1.3	(*)	(*)	(*)	(*)	0.9-2.4	1.0
5144	Poultry and poultry products	3.4-5.5	4.4	4.0-4.4	4.2	0.6-2.2	1.5	(*)	(*)	(*)	(*)	2.1-4.1	2.3
5145	Confectionery	4.7-6.3	4.7	3.6-5.4	4.3	2.0-3.2	2.2	(*)	(*)	(*)	(*)	0.8-2.4	2.3
5147	Meats and meat products	4.5-4.8	4.7	4.6-4.6	4.6	1.4-2.9	1.7	(*)	(*)	(*)	(*)	1.7-3.9	2.2
5148	Fresh fruits and vegetables	4.7-5.4	4.9	3.9-4.1	4.0	1.9-4.2	2.7	(*)	(*)	(*)	(*)	2.9-4.4	3.9
515	Farm-product raw materials	1.8-2.2	2.0	1.6-2.0	1.7	1.1-1.7	1.3	(*)	(*)	(*)	(*)	1.1-2.8	2.4
5152	Cotton	(*)	(*)	(*)	(*)	1.8-4.9	2.8	(*)	(*)	(*)	(*)	1.3-2.9	2.4
5153	Grain	2.4-2.7	2.6	2.2-2.4	2.3	1.0-1.7	1.3	(*)	(*)	(*)	(*)	1.6-3.3	1.9
517	Petroleum and petroleum products	4.0-5.0	4.7	4.2-4.6	4.5	1.1-1.9	1.5	4.1-5.2	5.0	4.4-5.4	4.7	1.6-3.0	2.3
5171	Petroleum bulk stations and terminals	2.8-3.3	2.9	2.8-3.0	2.9	0.9-1.4	1.2	(*)	(*)	(*)	(*)	1.7-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages	3.4-3.9	3.7	3.1-3.7	3.2	0.8-1.8	1.7	3.9-4.2	4.1	4.0-4.3	4.2	1.0-2.0	1.3
5181	Beer and ale	2.2-4.4	3.1	2.8-3.2	2.9	1.0-2.5	2.0	3.6-5.5	3.8	3.6-4.1	3.8	1.7-2.7	2.1
5182	Wines and distilled alcoholic beverages	5.2-6.3	5.4	4.6-5.6	4.7	1.2-3.4	1.7	4.6-5.4	4.8	5.0-5.6	5.3	1.4-2.3	1.6
519	Miscellaneous nondurable goods	2.4-3.2	2.9	2.4-2.7	2.5	1.4-2.3	1.6	(*)	(*)	(*)	(*)	0.8-1.7	1.4
5191	Farm supplies	(*)	(*)	(*)	(*)	3.2-3.6	3.3	(*)	(*)	(*)	(*)	1.7-3.9	2.0
5194	Tobacco and tobacco products	4.0-5.2	4.1	3.4-4.5	4.2	1.3-2.4	1.7	(*)	(*)	(*)	(*)	0.8-4.3	1.0
5198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.8-3.8	3.0	(*)	(*)	(*)	(*)	1.5-3.1	2.9
5199 pt.	Books, magazines, newspapers	(*)	(*)	(*)	(*)	3.2-8.0	5.6	(*)	(*)	(*)	(*)	2.0-6.5	5.1

Note: Measures of sampling variability are based on data unadjusted for seasonal variations or trading-day differences. The range of sampling error of the monthly dollar estimates and the ratio of current month to previous month for sales and inventories is based on data for July, August, and September 1977.

*Measures of sampling variability are not shown since sales and/or inventory estimates for these kinds of business are not published.

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

Seasonal factors for adjusting data in this historical publication have been developed by the method described in the **X-11 Variant of the Census Method II Seasonal Adjustment Program**, U.S. Bureau of the Census Technical Paper No. 15, Revised 1967. Trading-day factors for adjusting sales were also derived from the X-11 program.

Adjustment of estimates is an approximation based on past experiences, and therefore, will be less precise to the extent that current competitive pressures, changes in economic condition, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of trading-day adjustment factors may be found in **Estimating Trading-Day Variation in Monthly Economic Time Series**, Bureau of the Census Technical Paper No. 12, 1965. Additional details concerning the adjustment factors may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.7	91.8	107.1	97.7	104.3	104.7	95.6	104.7	98.3	102.2	100.6	96.3
	Total (excluding farm-product raw materials)	91.6	91.6	106.6	97.8	105.1	105.8	95.8	106.1	100.3	102.3	99.3	95.0
50	Durable goods, total	89.6	89.0	105.7	99.0	106.5	107.3	96.4	107.7	101.9	104.1	98.6	91.5
501	Motor vehicles and automotive parts and supplies	93.3	89.8	107.6	107.7	108.4	107.5	98.6	106.9	96.1	98.3	93.3	90.5
502	Furniture and home furnishings	84.8	89.8	105.2	96.8	101.6	106.6	89.2	105.2	103.9	112.1	107.2	95.2
503	Lumber and other construction materials	80.6	80.2	100.9	94.6	109.8	112.2	102.4	117.4	106.2	109.9	100.0	84.0
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	78.7	88.7	104.5	101.5	109.3	97.0	96.1	105.2	105.4	106.0	108.0	95.5
505	Metals and minerals, except petroleum	98.2	91.4	108.2	98.6	107.6	104.4	91.2	108.6	103.1	100.0	97.1	90.3
506	Electrical goods	89.3	89.1	102.0	96.0	99.4	106.5	99.0	104.8	100.8	107.5	103.5	98.8
507	Hardware, plumbing, heating equipment, and supplies	89.2	87.4	99.9	97.9	106.7	108.0	100.7	109.2	102.4	107.2	100.6	88.3
508	Machinery, equipment, and supplies	88.1	88.6	107.9	99.9	107.7	108.8	95.4	104.6	103.3	103.5	96.5	92.3
509	Miscellaneous durable goods	86.2	89.8	106.2	96.2	100.2	110.7	88.4	109.5	101.9	108.1	103.7	96.0
51	Nondurable goods, total	96.4	93.8	108.5	97.1	103.5	102.3	94.9	102.1	96.1	100.2	101.8	100.1
	Total (excluding farm-product raw materials)	94.3	94.0	106.8	96.6	103.2	104.5	95.5	104.5	97.6	100.6	100.6	98.4
511	Paper and paper products	95.5	92.6	106.3	93.4	103.3	103.6	95.6	107.3	102.6	104.0	99.4	92.6
512	Drugs, drug proprietaries, and druggists' sundries	97.8	92.6	106.0	96.3	100.3	99.8	92.9	104.7	100.8	108.1	101.0	96.6
513	Apparel, piece goods, and notions	90.1	94.4	107.1	91.8	101.2	98.8	93.7	115.6	106.3	107.7	103.4	87.1
514	Groceries and related products	94.7	91.1	104.2	97.2	105.4	105.0	99.0	105.3	98.9	101.0	99.8	95.0
515	Farm-product raw materials[1]	103.1	94.7	112.6	98.0	103.9	96.9	93.0	92.4	91.5	100.8	108.3	99.9
516	Chemicals and allied products	90.2	89.2	106.3	98.0	107.1	108.3	96.1	108.0	97.8	105.0	98.8	93.3
517	Petroleum and petroleum products	99.7	102.3	107.7	96.2	95.9	100.0	96.5	100.2	93.1	100.9	100.3	104.8
518	Beer, wine, and distilled alcoholic beverages	77.8	81.4	102.2	90.7	106.8	113.9	97.6	107.8	97.8	100.6	106.9	113.5
519	Miscellaneous nondurable goods	96.0	100.5	116.6	102.4	107.4	105.2	88.2	95.5	95.4	96.8	95.6	96.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.8	101.2	101.7	100.7	99.4	99.3	98.6	98.1	98.7	100.1	100.9	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.0	100.3	100.6	100.7	100.2	99.4	99.6	99.9	99.7	99.1
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.5
501	Motor vehicles and automotive parts and supplies	101.3	103.0	101.6	100.6	102.0	100.5	99.2	97.0	97.4	98.1	99.0	99.9
502	Furniture and home furnishings	99.1	99.3	99.7	99.5	100.8	101.9	100.5	100.6	101.2	100.2	99.5	97.3
503	Lumber and other construction materials	98.4	99.1	103.6	102.7	103.6	101.7	101.4	99.8	99.2	96.7	96.2	97.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.6	99.8	100.7	102.4	106.5	105.3	100.9	101.5	100.9	93.9	89.9
505	Metals and minerals, except petroleum	99.4	98.2	100.2	100.8	100.2	100.2	102.8	102.8	99.9	96.7	98.9	99.7
506	Electrical goods	96.7	96.8	99.0	99.6	101.2	102.6	101.4	100.7	101.3	101.2	100.5	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.4	103.2	102.6	101.6	100.6	98.4	98.7	97.1	96.1
508	Machinery, equipment, and supplies	99.0	101.0	101.6	100.1	101.0	102.1	100.3	99.0	99.4	99.0	98.7	98.7
509	Miscellaneous durable goods	97.0	97.6	96.0	97.5	96.4	100.8	102.4	102.6	102.9	103.8	102.4	100.5
51	Nondurable goods, total	104.1	103.2	103.3	99.4	96.7	95.1	94.7	95.3	97.4	102.1	104.6	103.4
	Total (excluding farm-product raw materials)	100.0	100.0	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.6	100.5
511	Paper and paper products	97.8	98.3	99.1	101.1	100.4	102.6	100.0	100.2	100.7	100.0	99.6	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.1	99.8	100.6	97.9	100.6	99.0	100.0	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.0	100.2	101.9	101.5	99.8	99.0	98.6	99.3
514	Groceries and related products	98.7	100.2	102.1	100.5	99.2	98.7	98.5	98.0	99.9	102.0	100.9	101.0
515	Farm-product raw materials[1]	118.8	115.2	112.2	100.3	88.9	84.6	78.8	79.4	83.8	103.8	117.4	115.3
516	Chemicals and allied products	98.0	100.0	101.9	101.6	102.4	100.9	101.6	100.2	100.4	96.9	97.0	98.7
517	Petroleum and petroleum products	104.4	99.3	99.2	94.2	96.0	94.3	96.3	100.7	102.9	104.8	104.2	103.4
518	Beer, wine, and distilled alcoholic beverages	96.3	95.8	97.4	99.1	102.3	102.9	99.9	97.9	100.3	107.0	105.7	95.3
519	Miscellaneous nondurable goods	103.6	104.6	105.0	102.1	97.2	93.2	95.1	96.0	97.4	99.7	101.9	104.0

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979—Continued

1972 SIC code	Kind of business	1979											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	95.9	91.8	104.7	100.0	105.3	101.5	98.4	104.2	95.8	104.5	100.4	96.2
	Total (excluding farm-product raw materials)	94.0	91.6	103.9	99.8	106.1	102.9	98.6	105.7	97.6	104.9	99.2	94.5
50	Durable goods, total	91.9	89.1	103.2	101.1	107.3	104.3	99.4	107.0	99.3	106.8	98.4	91.2
501	Motor vehicles and automotive parts and supplies	94.0	89.9	106.2	108.4	110.5	104.7	102.9	104.4	94.7	99.1	93.7	89.3
502	Furniture and home furnishings	87.1	89.8	101.8	98.4	102.6	104.0	91.2	105.5	101.7	115.1	106.5	94.2
503	Lumber and other construction materials	83.0	80.2	97.3	98.0	110.4	107.7	107.0	117.2	102.4	113.5	100.3	83.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	84.3	88.7	102.1	101.4	107.8	98.7	95.0	103.6	103.6	113.3	102.3	97.8
505	Metals and minerals, except petroleum	100.7	91.4	102.7	101.4	107.6	101.3	95.4	108.3	101.3	102.6	96.1	89.0
506	Electrical goods	92.0	89.1	99.9	99.3	98.8	103.9	100.6	104.5	98.2	110.6	102.9	100.1
507	Hardware, plumbing, heating equipment, and supplies	91.0	87.4	97.8	100.1	108.1	104.5	103.4	108.6	100.5	109.2	100.3	88.6
508	Machinery, equipment, and supplies	90.9	88.7	106.1	102.1	108.9	105.2	97.1	104.4	100.1	106.7	96.3	92.9
509	Miscellaneous durable goods	86.8	89.8	105.0	99.4	101.6	105.4	92.6	109.0	98.1	109.1	106.2	95.5
51	Nondurable goods, total	93.8	93.7	106.2	99.2	104.4	99.5	97.2	101.8	93.9	102.7	101.5	99.8
	Total (excluding farm-product raw materials)	96.8	94.0	104.0	99.0	104.1	101.2	98.0	104.7	94.9	103.2	100.7	98.0
511	Paper and paper products	100.0	92.7	103.2	94.8	103.3	102.4	97.4	107.1	99.3	108.7	97.7	92.2
512	Drugs, drug proprietaries, and druggists' sundries	99.7	92.6	104.0	98.9	100.6	96.9	96.6	103.9	97.6	110.1	101.8	96.1
513	Apparel, piece goods, and notions	93.9	94.4	103.7	92.4	101.8	97.8	95.7	115.5	102.9	112.3	102.1	85.9
514	Groceries and related products	97.5	91.0	103.1	98.3	106.3	103.0	100.0	105.0	96.2	104.0	99.5	95.1
515	Farm-product raw materials[1]	106.7	94.5	111.9	100.2	102.7	97.1	94.1	91.8	87.9	104.3	108.3	100.5
516	Chemicals and allied products	92.5	89.2	101.9	100.8	107.7	105.0	100.2	108.2	94.8	107.6	98.9	91.7
517	Petroleum and petroleum products	99.2	102.1	106.6	99.2	95.9	96.9	100.0	100.7	90.7	100.1	103.6	103.5
518	Beer, wine, and distilled alcoholic beverages	81.1	81.5	98.0	93.8	107.9	109.4	101.0	108.2	94.0	104.8	106.4	112.3
519	Miscellaneous nondurable goods	97.5	100.5	114.0	106.1	108.2	101.4	90.4	96.3	92.4	98.3	96.6	96.6
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.7	101.2	101.7	100.8	99.5	99.3	98.6	98.1	98.7	100.1	100.8	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.1	100.4	100.6	100.7	100.2	99.4	99.6	99.9	99.6	99.0
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.4
501	Motor vehicles and automotive parts and supplies	101.3	103.1	101.6	100.6	102.0	100.5	99.3	97.0	97.4	98.2	99.0	99.8
502	Furniture and home furnishings	99.2	99.3	99.7	99.5	100.9	102.0	100.4	100.6	101.2	100.2	99.5	97.2
503	Lumber and other construction materials	98.5	99.1	103.7	102.7	103.4	101.5	101.3	99.8	99.2	96.8	96.2	97.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.7	99.8	100.7	102.3	106.4	105.3	100.9	101.6	100.9	93.8	90.0
505	Metals and minerals, except petroleum	99.3	98.3	100.2	100.8	100.2	100.2	102.8	102.9	100.0	96.6	98.8	99.6
506	Electrical goods	96.7	96.7	99.0	99.7	101.3	102.7	101.4	100.7	101.4	101.1	100.4	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.6	103.3	102.6	101.6	100.6	98.4	98.7	97.0	96.0
508	Machinery, equipment, and supplies	99.0	101.0	101.5	100.1	101.0	102.1	100.3	99.1	99.4	98.9	98.6	98.7
509	Miscellaneous durable goods	97.1	97.5	96.0	97.4	96.4	100.9	102.4	102.6	103.0	103.8	102.4	100.5
51	Nondurable goods, total	103.9	103.2	103.4	99.5	96.9	95.3	94.7	95.3	97.4	102.0	104.5	103.4
	Total (excluding farm-product raw materials)	100.0	99.9	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.5	100.5
511	Paper and paper products	97.7	98.3	99.1	101.1	100.5	102.7	99.9	100.1	100.7	100.0	99.5	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.0	99.8	100.5	97.8	100.6	99.0	100.1	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.1	100.2	101.8	101.6	99.8	99.1	98.5	99.2
514	Groceries and related products	98.7	100.2	102.1	100.5	99.3	98.7	98.5	98.0	99.9	102.0	100.8	101.0
515	Farm-product raw materials[1]	118.5	115.2	112.3	100.8	89.6	85.4	78.5	79.2	83.5	103.3	117.1	115.1
516	Chemicals and allied products	98.0	100.0	102.0	101.6	102.4	101.0	101.6	100.2	100.5	96.9	96.8	98.6
517	Petroleum and petroleum products	104.4	99.4	99.4	94.2	95.9	94.2	96.2	100.9	102.9	104.7	104.2	103.2
518	Beer, wine, and distilled alcoholic beverages	96.3	95.7	97.4	99.1	102.3	102.8	99.9	97.9	100.3	106.9	105.7	95.3
519	Miscellaneous nondurable goods	103.7	104.6	105.1	102.1	97.2	93.1	95.1	95.9	97.3	99.7	101.8	104.0

Note: The adjustment factors shown above for sales are a combination of the seasonal and trading-day factors. These are separately available, however, upon request. Adjustment factors are included in this table for some kinds of business for which adjusted data are not published separately.

Adjusted sales and inventory data shown in table 4 are obtained by dividing the unadjusted data shown in tables 1 and 2 by the adjustment factors shown above for the corresponding kinds of business. Adjusted data for the summary trade totals are obtained by summarizing the adjusted data for the individual kinds of business. Seasonal factors shown for the summary trade totals provide an approximation to these totals but may show small differences from the published data. The seasonally adjusted data for 1978 may vary slightly from the method shown above because of insignificant rounding differences.

[1]There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table B-2. Average Month-to-Month Percent Changes and Related Summary Measures for Sales and Inventories of Merchant Wholesalers

1972 SIC code	Kind of business	$\bar{O}$	$\bar{S}$	$\overline{CI}$	$\bar{I}$	$\bar{C}$	$\bar{I}/\bar{C}$	MCD	Average duration of run			
									CI	I	C	MCD
		Sales										
	Merchant wholesalers, total	4.74	3.10	1.31	.82	.96	.86	1	3.10	1.57	14.11	3.10
50	Durable goods, total	5.30	4.84	1.43	.89	1.08	.82	1	3.53	1.63	15.87	3.53
501	Motor vehicles and automotive parts and supplies	5.53	4.22	2.67	2.33	1.24	1.87	3	2.05	1.59	25.40	5.43
502	Furniture and home furnishings	6.00	7.29	2.06	1.68	1.07	1.57	2	2.27	1.55	9.07	3.00
503	Lumber and other construction materials	7.40	6.25	2.67	1.72	1.76	.98	1	2.76	1.51	14.11	2.76
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	9.79	9.32	4.02	3.74	1.20	3.12	4	1.81	1.67	7.06	3.44
505	Metals and minerals, except petroleum	6.79	3.78	3.10	2.38	1.63	1.46	2	2.19	1.41	9.07	3.71
506	Electrical goods	5.79	5.17	1.89	1.52	1.04	1.47	2	2.08	1.46	10.58	3.32
507	Hardware, plumbing, heating equipment, and supplies	5.42	4.86	1.78	1.33	1.09	1.22	2	1.98	1.41	12.70	3.94
508	Machinery, equipment, and supplies	6.10	5.41	1.87	1.51	.97	1.56	2	1.92	1.46	7.94	3.32
509	Miscellaneous durable goods	7.66	6.11	3.51	2.79	1.79	1.56	2	1.87	1.48	9.77	2.93
51	Nondurable goods, total	5.07	2.80	1.58	1.10	.95	1.16	2	2.59	1.43	9.07	3.60
511	Paper and paper products	5.41	3.16	1.99	1.44	1.10	1.30	2	1.98	1.48	7.94	3.60
512	Drugs, drug proprietaries, and druggists' sundries	5.97	3.89	1.90	1.64	.76	2.15	3	1.95	1.57	9.77	4.31
513	Apparel, piece goods, and notions	7.73	6.91	2.70	2.36	1.01	2.34	3	1.72	1.38	10.58	4.17
514	Groceries and related products	4.44	2.01	1.67	1.41	.82	1.72	2	1.92	1.51	12.70	3.15
515	Farm-product raw materials	9.27	5.04	4.87	4.29	1.59	2.70	4	1.90	1.53	6.68	3.54
516	Chemicals and allied products	6.21	4.53	2.47	1.93	1.46	1.32	2	2.19	1.49	8.47	3.32
517	Petroleum and petroleum products	7.38	4.71	4.81	4.47	1.35	3.30	4	1.67	1.55	9.07	2.70
518	Beer, wine, and distilled alcoholic beverages	10.94	8.71	1.86	1.64	.69	2.39	3	1.76	1.59	21.17	3.68
519	Miscellaneous nondurable goods	5.89	4.84	2.53	2.23	.96	2.32	3	1.92	1.63	8.47	3.47
		Inventories										
	Merchant wholesalers, total	1.10	.72	.94	.39	.83	.47	1	4.88	1.79	18.14	4.88
50	Durable goods, total	1.07	.57	.89	.35	.86	.41	1	7.94	1.46	31.75	7.94
501	Motor vehicles and automotive parts and supplies	2.20	1.22	1.69	1.13	1.21	.93	1	2.54	1.63	12.70	2.54
502	Furniture and home furnishings	2.13	1.28	1.60	1.19	1.00	1.19	2	2.40	1.57	21.17	5.25
503	Lumber and other construction materials	2.60	1.77	1.83	1.28	1.09	1.17	2	2.54	1.67	15.87	4.20
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	3.60	2.92	2.17	1.80	1.20	1.50	2	2.27	1.48	25.40	3.60
505	Metals and minerals, except petroleum	3.14	2.53	1.79	1.01	1.33	.76	1	3.26	1.72	8.47	3.26
506	Electrical goods	1.75	1.08	1.32	.90	.92	.98	1	2.49	1.31	42.33	2.49
507	Hardware, plumbing, heating equipment, and supplies	1.69	1.10	1.23	.87	.89	.98	1	2.70	1.53	18.14	2.70
508	Machinery, equipment, and supplies	1.36	.92	1.03	.66	.82	.82	1	2.65	1.65	31.75	2.65
509	Miscellaneous durable goods	2.29	1.47	1.85	1.28	1.18	1.08	2	1.95	1.53	25.40	4.34
51	Nondurable goods, total	2.49	2.19	1.44	.83	1.07	.78	1	3.74	1.74	7.06	3.74
511	Paper and paper products	1.82	.94	1.38	1.04	.75	.94	2	2.12	1.44	9.07	4.20
512	Drugs, drug proprietaries, and druggists' sundries	2.39	1.46	1.60	1.37	.67	2.04	3	1.81	1.51	31.75	3.38
513	Apparel, piece goods, and notions	2.28	1.43	1.86	1.43	1.05	1.35	2	2.40	1.74	9.07	3.15
514	Groceries and related products	1.87	1.29	1.43	.92	1.01	.91	1	2.54	1.38	11.55	2.54
515	Farm-product raw materials	8.88	8.22	4.86	3.99	2.03	1.96	3	2.49	1.90	8.47	3.91
516	Chemicals and allied products	3.14	1.58	1.36	1.89	1.39	1.36	2	2.35	1.49	12.70	3.71
517	Petroleum and petroleum products	6.09	3.19	5.01	4.34	2.00	2.17	3	1.87	1.59	15.87	3.68
518	Beer, wine, and distilled alcoholic beverages	4.28	3.68	1.76	1.46	.74	1.98	3	2.35	1.63	9.77	4.03
519	Miscellaneous nondurable goods	2.53	1.52	1.88	1.48	.84	1.75	2	2.19	1.59	7.06	3.15

Description of Measures Shown Above

The following are brief descriptions of the measures shown in this table. More complete explanations appear in "Electronic Computers and Business Indicators," Occasional Paper 57, National Bureau of Economic Research, Inc., New York, 1957.

$\bar{O}$ is the average month-to-month percentage change, without regard to sign, in the original series before seasonal or trading-day adjustment.

$\bar{S}$ is the average month-to-month percentage change, without regard to sign, in the seasonal component. It is a measure of the average monthly seasonal change in the unadjusted series.

$\overline{CI}$ is the average month-to-month percentage change, without regard to sign, in the seasonally adjusted series.

$\bar{I}$ is the average month-to-month percentage change without regard to sign, for the irregular component. The irregular component is obtained by dividing the seasonally adjusted series by the cyclical component.

$\bar{C}$ is the average month-to-month percentage change, without regard to sign, for the cyclical component, which is a smooth, flexible moving average.

$\bar{I}/\bar{C}$ is a measure of the relative smoothness (small values) or irregularity (large values) of the seasonally adjusted series.

MCD (months for cyclical dominance) gives an estimate of the appropriate time span over which to observe cyclical movements in a monthly series. In deriving MCD, the average (without regard to sign) percentage changes in the irregular and cyclical components are computed for 1-month spans (Jan.-Feb., Feb.-Mar., etc.) 2-months spans (Jan.-Mar., Feb.-Apr., etc.), and so on. MCD is the shortest span for which the average change (without regard to sign) in the cyclical component is larger than the average change (without regard to sign) in the irregular component; that is, it indicates the point at which fluctuations begin to be more attributable to cyclical than to irregular movements. MCD is small for smooth series and large for erratic series.

Average duration of run (ADR) is a measure of smoothness, and is equal to the average number of consecutive monthly changes in the same direction in any series of observations. When there is no change between 2 months, a change in the same direction as the preceding change is assumed. The ADR is shown for the seasonally adjusted series CI, irregular component I, cyclical component C, and the MCD moving average. The MCD moving average is an unweighted moving average (with the number of terms equal to MCD) of the seasonally adjusted series.

A comparison of these measures with the expected ADR of a random series gives an indication of whether the changes approximate those of a random series. (The expected value of ADR for a random series is 1.5 and it falls between 1.36 and 1.75 about 95 percent of the time. For a moving average of a random series the expected value is 2.0). For example, the ADR of CI is 2.08 for electrical goods sales. This indicates that 1-month changes in the seasonally adjusted series, on the average, reverse sign slightly less often than a random series. In the next two columns, 1.46 for I and 10.58 for C indicate the separation of the seasonally adjusted series into an essentially random component and the cyclical (nonrandom) component. Finally, 3.32 for MCD indicates that a 2-month moving average of the seasonally adjusted series (2 months being the MCD span) reverses direction on the average about every 3 months. The increase in the average duration of run from 2.08 for CI to 3.32 for the MCD moving average indicates that for this series the use of MCD spans reduces the effect of the irregular component upon the seasonally adjusted series.

These averages are based on a seasonally adjusted series which is adjusted historically; that is, the months used to compute the measures were the same months used to estimate the seasonal factors. Current data, however, are adjusted by use of factors projected 1 year ahead, and are thus subject to additional error. Therefore, current data are probably somewhat more irregular and subject to larger MCD than shown above.

APPENDIX C. Explanatory Material

I. SCOPE OF THE SURVEY

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the Standard Industrial Classification (SIC) Manual[1] and as covered in the 1972 census, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm or professional business users; or to other wholesalers; or acting as agents or brokers in buying merchandise for or selling merchandise to such persons or companies.

The principal types of establishments included are: (1) merchant wholesalers who take title to the goods they sell, such as wholesale merchants or jobbers, industrial distributors, voluntary group wholesalers, exporters, importers, cash-and-carry wholesalers, drop shippers, major distributors, retailer cooperative warehouses, terminal elevators, and cooperative buying associations; (2) sales branches and sales offices (but not retail stores) maintained by domestic manufacturing or mining enterprises apart from their plants or mines for the purpose of marketing their products; (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), which constitute the major portion of the broad field of wholesale trade, and excludes the other types of wholesale trade. All kinds of business in which merchant wholesalers operate are represented in this survey.

Kind-of-business classifications are not interchangeable with commodity classifications. Most businesses sell several kinds of commodities. The kind-of-business code assigned generally reflects either the individual commodity or the commodity group which is the primary source of the establishments receipts, or some mixture of commodities which characterizes the establishment's business. Thus, the classification of establishments by kind of business generally does not make it possible to determine either the number of establishments handling a particular commodity or the sales of that commodity. For example, the "grocery" classification excludes establishments selling groceries if the sale of groceries is not the primary source of receipts; moreover, even though establishments are classified as "grocery wholesalers" some of their sales may be derived from the sale of nonfood products.

A description of each kind of business included in the accompanying statistical data is shown in appendix D.

II. SAMPLE DESIGN AND ESTIMATION PROCEDURES

Framework of old series—The first publication in this series based on probability sampling, was the January 1954 report. Effective with the July 1956 publication an entirely new sample was selected from the 1954 Census of Business. Other changes in the sample have been made since 1956, representing, for the most part, revisions to reflect the findings of successive censuses of wholesale trade.

Selection of sample for new series—The new sample[2] like the old is a probability sample, and the estimating procedures used are similar in many respects to the old sample.

The new sample originally was drawn from the Standard Statistical Establishment List (SSEL) as updated to December 31, 1974. The initial SSEL consisted of two lists. One list was composed of all Employer Identification (EI) numbers issued by the Internal Revenue Service (IRS) with reported payroll in at least one quarter of 1973 or 1974, with payroll in the 1972 census, or with sales/receipts greater than $100,000 in the 1972 census. The second list consisted of all establishments of known multiestablishment companies as of December 31, 1974. These lists contained information on sales/receipts, payroll, employment, name and address, kind-of-business classification, etc.

Before the 1974 SSEL was available, a study was made, using files from the 1972 Census of Wholesale Trade. This study determined the stratification of the sampling units based on 1972 sales, inventories, and kind of business, and also determined the optimal allocation of the sample necessary to meet specified variance objectives for sales and inventory estimates for different kind-of-business groups. The primary stratum boundary determined in the study was the certainty cutoff to be used for each kind of business. The cutoff was particularly important since it also determined the type of sampling unit.

The sampling units for the new sample consisted of both companies and EI's. To be eligible for the initial sampling, an EI had to be active, i.e., had payroll in 1974 and was on the Internal Revenue Service mailing list for Federal Insurance Contribution Act (FICA) taxpayers. If a known multiestablishment company had total merchant wholesale sales (on a 1972 basis) above the cutoff for its major kind of business, the company was selected for the sample with certainty. Single establishment companies, whether or not selected with certainty, were considered as EI sampling units.

All merchant wholesale companies below the certainty cutoff were treated on an EI basis; that is, the EI was the sampling unit. The EI's were then stratified according to their major kind of business and their estimated sales (on a 1972

[1] Executive Office of the President, Office of Management and Budget, **Standard Industrial Classification Manual**, 1972.

[2] For a complete exposition of the new sample, see C. T. Isaki et al., "Sample Redesign Aspects of the Census Bureau's Monthly Business Surveys" and K. M. Wolter et al., "Sample Selection and Estimation Aspects of the Census Bureau's Monthly Business Surveys," **Proceedings of the Business and Economic Statistics Section: American Statistical Association**, 1976.

basis). Within each stratum, a simple random sample of EI's was selected. The sampling rates for these EI's varied between 1 in 3 and 1 in 600.

For those EI's in the inital sample that did not have kind-of-business classifications and for all EI "births" after the initial selection, a two-phase selection procedure was used. EI "births," as used here, are new EI's recently assigned by SSA and currently on the IRS mailing list for FICA taxpayers. In the first phase, "births" were stratified by kind of business and size (expected employment or quarterly payroll). A relatively large sample was drawn and canvassed in order to obtain a more reliable measure of size (sales in two recent months) and a more detailed kind-of-business code, if needed.

Using this more reliable information, the cases were re-stratified and the final sample drawn with overall probabilities equivalent to those used in drawing the initial sample from the 1974 SSEL. Because of the lag in reporting "births" to the IRS and Social Security Administration (SSA) and the time needed to accomplish the two-phase birth-selection procedure, "births" are actually added to the sample about eight or nine months after they begin operation. The ongoing birth-selection procedure is carried out quarterly.

Since "births" are not represented in the sample, until they go through the selection procedure described above, an interium procedure is required to account for "births" during the period between the onset of activity and the time of birth selection. This consists of imputing for all cases which go out of business, but which are still on the IRS mailing list. This imputation procedure was also used in the old series. However, because of recent delays in obtaining "births," this procedure now accounts for a larger percentage of the estimates.

To be eligible for the sample canvass and tabulation in a given month, a merchant wholesale business must meet both of the following requirements:

1. It must be on the IRS mailing list for FICA taxpayers from the previous quarter.

2. It must have been selected from either the SSEL or the file of employer "births." For this purpose, a universe file of all businesses ever given a chance of selection is maintained. This file shows, among other things, which EI numbers actually have been selected.

In the case of businesses that were selected into the sample with certainty, the first requirement is changed. These certainty sampling units are not dropped from canvass and tabulation if they are no longer on the IRS mailing list. If there are successor businesses, they are added to the survey. This is a tighter form of control used for these larger businesses.

Use of the rotating sample and composite estimating procedures—Rotating samples or panels are used except for very large businesses which are selected with certainty. For sampling units in the rotating panels, two months of data are obtained at each enumeration. For example, February rotating panel cases report data for February (the current month) and January (the previous month). In the following month, a different rotating panel (the March panel) reports figures for March and February. Three sample panels are used. This permits the use of a composite estimating procedure which provides estimates more reliable than those which would be obtained from a completely fixed sample of about twice the size. In addition, this procedure reduces the reporting burden of selected businesses.

The first estimate issued each month, based on the full sample, is called the preliminary estimate. The preliminary composite estimate for the current month is a weighted average of two estimates: (1) the current month unbiased estimate (weight .35), and (2) a ratio estimate (weight .65) obtained by multiplying the preliminary composite estimate for the previous month by the current-to-previous-month ratio obtained from the current month reports. Preliminary inventory estimates have been modified, prior to publication, based on past relationships between preliminary and final estimates.

A final estimate is developed one month later using information available from the following month's enumeration. The final composite estimate is also a weighted average of two estimates: (1) the preliminary composite estimate for a given month (weight .7), and (2) the unbiased estimate (weight .3) for the same month as obtained from the next month's reporting panel.

The preliminary composite estimates provide a measure of the dollar volume level that is considerably more reliable than the unbiased estimates, and the final composite estimates are generally more reliable than the preliminary composite estimates. The indication of the month-to-month trend considered to be most reliable is the ratio of the current month's preliminary composite estimate divided by the previous month's final composite estimate. This is true because the numerator and denominator of this ratio are more highly correlated than would be the case if the numerator and denominator were two preliminary estimates or two final estimates. The trend of the preliminary/final ratio, therefore, has less variability than one based on two preliminary figures or two final figures.

Another advantage of the use of the rotating panel system is that the frequency of canvass of very large noncertainty cases can be increased with a consequent reduction, in an unbiased manner, of their statistical weight. This increases the reliability of the estimates, particularly the measure of month-to-month change.

III. PREVIOUSLY PUBLISHED DATA

Data developed from the new sample are not comparable with data previously published in this series. Sales and inventory estimates prior to September 1977 have been revised to reflect: (1) a new sample design; (2) benchmarking of sales to the results of the 1967 and 1972 censuses of wholesale trade; (3) conversion of classifications based on the 1967 SIC manual to classifications based on the 1972 SIC manual (4) addition

of farm assemblers and bulk petroleum establishments; and (5) revision and updating of seasonal adjustment factors.

The revised historical sales series were derived in a manner designed to minimize the changes to the month-to-month trends in the old series. The inventory series were revised by applying the stock-sales ratios from the old series to the revised sales series to obtain the preliminary revised inventory series. These preliminary series were then revised slightly so that August 1977 estimates would equal the new sample estimates.

Although the month-to-month movements in the old and new series show very little change, the level of the revised series show substantial change from the old series for some kinds of business. The change in levels depends on the difference between the old series for census years and the benchmark levels and on the difference between the new series level and the old series level for the link month, August 1977.

Additional details concerning the sample design, and revised estimates of merchant wholesale sales and inventories from January 1967 through August 1977, have been provided in a special supplementary publication **Monthly Wholesale, Sales and Inventories: January 1967-August 1977, Revised BW-13-77S.** This report may be obtained from Subscriber Services (Publications), Bureau of the Census, Washington, D.C. 20233 at $.90 per copy.

IV. UNPUBLISHED DATA

Additional data, such as dollar volume estimates for some kinds of business not separately shown in this report, are produced as a byproduct of the regularly published statistics. These additional data have not been included in this publication because the sampling variability associated with these data does not meet the Census Bureau's publication criteria. The Census Bureau, on written request will release these data for individual use, though not for publication.

V. DEFINITION OF TERMS

Sales—Sales include the following: merchandise sold for cash or credit at wholesale and retail by establishments primarily engaged in merchant wholesale trade; receipts from customers for rental or leasing of equipment, instruments, tools, etc.; receipts for delivery, installation, alteration, maintenance, repair, storage, and other services; and gasoline, liquor, tobacco and other excise taxes which are paid by the manufacturer and passed along to the wholesaler. Sales are net after deductions for refunds and allowances for merchandise returned by customers. Sales which are made on an agency basis for others are included as gross sales. Direct shipments on orders from wholesalers are also included in sales. Total sales do not include nonoperating income from such sources as investments, rental or sale of real estate, etc.

In the new series, sales exclude sales and excise taxes collected directly from customers and paid directly to a local, State, or Federal tax agency. Also excluded are receipts from customers for carrying or other credit charges. In the old series respondents were requested to include these taxes and credit charges in the reported sales. The impact of this change is considered minimal.

Inventories—Inventories represent stocks, at cost, of merchandise on hand for sale at the end of the month regardless of location, except for goods outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included.

Stock-sales ratios—The stock-sales ratios are percentages derived by dividing the dollar value of inventories, at cost, by the dollar value of sales. No adjustment is made in these ratios for the markup in sales which may vary from trade to trade.

The sales and inventory figures represent total sales and inventories of all establishments primarily engaged in merchant wholesale trade. Also included are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments.

APPENDIX D. Kind-of-Business Classifications

DURABLE GOODS (SIC Major Group 50)

This major group includes establishments primarily engaged in the wholesale distribution of durable goods.

MOTOR VEHICLES AND AUTOMOTIVE PARTS AND SUPPLIES (SIC 501)

Automobiles and Other Motor Vehicles (SIC 5012)[1]—Establishments primarily engaged in the wholesale distribution of new and used passenger automobiles, trucks, and other motor vehicles. Automotive distributors primarily engaged in selling at retail to individual consumers for personal use, and also selling a limited amount of new and used passenger automobiles and trucks at wholesale to dealers, are classified in retail trade, industry 5511.

Automotive Parts and Supplies (SIC 5013)—Establishments primarily engaged in the wholesale distribution of automotive parts, supplies, accessories, tools and equipment.

Tires and Tubes (SIC 5014)[1]—Establishments primarily engaged in the wholesale distribution of rubber tires and tubes for passenger and commercial vehicles.

FURNITURE AND HOME FURNISHINGS (SIC 502)

Furniture (SIC 5021)—Establishments primarily engaged in the wholesale distribution of furniture, including bedsprings, mattresses, and other household furniture; office furniture; and furniture for public parks, buildings, etc.

SIC 5021 is subdivided into—

1. Household and lawn furniture.
2. Office and business furniture.

Home Furnishings (SIC 5023)—Establishments primarily engaged in the wholesale distribution of home furnishings and homewares, including antiques; china; glassware and earthenware; lamps; curtains and draperies; linens and towels; carpets, linoleum, and all other types of hard and soft surface floor coverings. Establishments primarily engaged in the wholesale distribution of electrical household goods are classified in industry 5064.

LUMBER AND OTHER CONSTRUCTION MATERIALS (SIC 503)

Lumber, Plywood, and Millwork (SIC 5031)—Establishments, with or without yards, primarily engaged in the wholesale distribution of rough, dressed, and finished lumber (but not timber); plywood; door and window frames (wood or metal); and other wood and metal millwork. Establishments selling lumber, plywood and millwork to the general public and known as "retail" in the trade are classified in industry 521.

Construction Materials, Not Elsewhere Classified (SIC 5039)—Establishments primarily engaged in the wholesale distribution of such building materials as brick, building stone, cement, granite, gravel, lime, marble, plaster, building glass, roofing materials, sand, and tile. Establishments selling construction materials to the general public and known as "retail" in the trade are classified in industry 521. Establishments primarily engaged in marketing heavy structural metal products are classified in industry 5051. Establishments primarily selling readymade concrete are classified in manufacturing.

SPORTING, RECREATIONAL, PHOTOGRAPHIC, AND HOBBY GOODS, TOYS, AND SUPPLIES (SIC 504)[1]

Establishments primarily engaged in the wholesale distribution of all types of amusement and sporting goods and accessories—billiard and pool supplies; cameras and photographic equipment; coin-operated game machines; games, toys; ammunition and fireworks; etc.

METALS AND MINERALS, EXCEPT PETROLEUM (SIC 505)

Ferrous Metals Service Centers and Offices (SIC 5051 pt.)—Establishments primarily engaged in marketing ferrous metal semifinished products such as nails, pig iron, steel and tin bars. Establishments in this industry may operate with warehouses (ferrous metals service centers) or without warehouses (ferrous metals sales offices).

Sales branches of domestic manufacturers are included in this category if the establishment is separate from the manufacturing plant and has warehouse space greater than 5,000 square feet.

[1] Data for this kind of business are not shown separately but are included in the group total.

Nonferrous Metals Service Centers and Offices and Other Minerals and Ores (SIC 5051 pt. and SIC 5052 pt.)[1]—Establishments primarily engaged in marketing nonferrous metal semifinished products such as aluminum bars and copper rods. Establishments in this industry may operate with warehouses (nonferrous metals service centers) or without warehouses (nonferrous metals sales offices). Also included are establishments primarily engaged in the wholesale distribution of copper, iron, lead, and other metallic ores except precious; and crude nonmetallic minerals (including concentrates) except crude petroleum. Establishments primarily engaged in the wholesale distribution of nonmetallic minerals used in construction, such as sand and gravel, are included in industry 5039.

Coal (SIC 5052 pt.)[1]—Establishments primarily engaged in the wholesale distribution of coal and coke. Included are establishments which have products shipped direct from mine to customer, and establishments operating yards and dock space and making deliveries therefrom at wholesale as well as other coal merchants.

ELECTRICAL GOODS (SIC 506)

Electrical Apparatus and Equipment, Wiring Supplies, and Construction Materials (SIC 5063)—Establishments primarily engaged in the wholesale distribution of electrical power equipment for the generation, transmission, or utilization of electric energy; and electrical construction materials for outside power transmission lines and for electrical systems. Construction contractors primarily engaged in installing electrical systems and equipment from their own stock are classified in industry 1731.

Electrical Appliances, TV and Radio Sets (SIC 5064)—Establishments primarily engaged in the wholesale distribution of radio and television sets and household electrical appliances.

Electronic Parts and Equipment (SIC 5065)[1]—Establishments primarily engaged in the wholesale distribution of electronic parts and equipment, such as industrial and radio and television receiving and transmitting electronic tubes; electronic intercommunication equipment; radio parts and accessories; and electronic sound equipment. Establishments primarily engaged in the wholesale distribution of radio and television receiving sets and phonographs are classified in industry 5064.

HARDWARE, PLUMBING, HEATING EQUIPMENT, AND SUPPLIES (SIC 507)

Hardware (SIC 5072)—Establishments primarily engaged in the wholesale distribution of hardware, such as builders; shelf or light hardware; handtools (except automotive and machinists' precision); handsaws and cutlery; brads, staples, and tacks; and bolts, nuts, rivets, and screws. Establishments primarily engaged in the wholesale distribution of nails, noninsulated wire, and screening are classified in industry 5051.

Plumbing and Heating Equipment and Supplies (Hydronics) (SIC 5074)—Establishments primarily engaged in the wholesale distribution of hydronic plumbing and heating equipment and supplies. Construction contractors primarily engaged in installing plumbing and heating equipment from their own stock are classified in industry 1711.

Warm Air Heating and Air-Conditioning Equipment and Supplies (SIC 5075)[1]—Establishments primarily engaged in the distribution of warm air heating and air-conditioning equipment and supplies. Construction contractors primarily engaged in installing warm air heating and air-conditioning equipment are classified in industry 1711.

Refrigeration Equipment and Supplies (SIC 5078)[1]—Establishments primarily engaged in the distribution of refrigeration equipment and supplies. Construction contractors primarily engaged in installing refrigeration equipment from their own stock are classified in industry 1711.

MACHINERY, EQUIPMENT, AND SUPPLIES (SIC 508)

Commercial Machines and Equipment (SIC 5081)[1]—Establishments primarily engaged in wholesaling commercial machines and equipment, such as office, store, and business machines and equipment; commercial food service equipment; and fountain and store fixtures.

Construction and Mining Machinery and Equipment (SIC 5082)—Establishments primarily engaged in marketing cranes, excavating machinery and equipment, power shovels, road construction and maintenance machinery, tractor-mounting equipment and other specialized machinery and equipment used in the construction, mining, and logging industries. Establishments engaged in marketing oil well machinery and equipment are classified in industry 5084.

Farm and Garden Machinery and Equipment (SIC 5083)[1]—Establishments primarily engaged in marketing agricultural machinery and equipment for use in the preparation and maintenance of the soil, the planting and harvesting of crops, and other operations and processes pertaining to work on the farm or the lawn or garden; and dairy and other livestock equipment.

Industrial Machinery and Equipment (SIC 5084)[1]—Establishments primarily engaged in marketing industrial machinery and equipment, such as metal working tools, food industries machinery, oil well and oil refining machinery, industrial

[1] Data for this kind of business are not shown separately but are included in the group total.

trucks and tractors (except over-the-road types), printing machinery, and machinery and equipment for other manufacturing industries.

Industrial Supplies (SIC 5085)[1]—Establishments primarily engaged in marketing industrial supplies, such as abrasives and materials, rope and cordage, and mechanical rubber goods; welding supplies; mechanical power transmission supplies, including bearings; industrial valves and fittings; metal containers; industrial leather; and reconditioned barrels and drums.

Professional Equipment and Supplies (SIC 5086)—Establishments primarily engaged in the wholesale distribution of mechanical devices and other equipment used by architects, dentists, engineers, physicians, surgeons, veterinarians, optometrists, osteopaths, and other professional groups.

Surgical, Medical, Hospital Supplies (SIC 5086 pt.)[1]—Establishments primarily engaged in selling surgical and medical instruments; doctors' apparatus and equipment; orthopedic appliances; artifical limbs; operating room and other hospital equipment, X-ray machines and accessories and other scientific instruments used by physicians and in hospitals.

Service Establishment Equipment and Supplies (SIC 5087)[1]—Establishments primarily engaged in the wholesale distribution of equipment and supplies for barber shops, beauty parlors power laundries, dry-cleaning plants, upholsterers, undertakers, and related personal service establishments.

Transportation Equipment and Supplies, Except Motor Vehicles (SIC 5088)[1]—Establishments primarily engaged in the wholesale distribution of transportation equipment and supplies. Establishments primarily engaged in the wholesale distribution of motor vehicles and motor vehicle parts are classified in group 501.

MISCELLANEOUS DURABLE GOODS (SIC 509)[1]

Scrap and Waste Materials (SIC 5093)—Establishments primarily engaged in assembling, breaking up, sorting and wholesale distribution of scrap and waste materials. This industry includes auto wreckers engaged in dismantling automobiles for scrap. However, those engaged in dismantling cars for the purpose of selling secondhand parts at retail are classified in industry 5931.

SIC 5093 is subdivided into—

1. *Iron and Steel scrap.*
2. *Waste and secondary materials dealers.*

[1] Data for this kind of business are not shown separately but are included in the group total.

Jewelry, Watches, Diamonds, and Other Precious Stones (SIC 5094)[1]—Establishments primarily engaged in the wholesale distribution of jewelry, precious stones and metals, costume jewelry, watches, clocks, silverware, and jewelers' findings.

Durable Goods, Not Elsewhere Classified (SIC 5099)[1]—Establishments primarily engaged in the wholesale distribution of durable goods, not elsewhere classified, such as musical instruments and forest products, except lumber.

NONDURABLE GOODS (SIC Major Group 51)

This major group includes establishments primarily engaged in the wholesale distribution of nondurable goods.

PAPER AND PAPER PRODUCTS (SIC 511)

Printing and Writing Paper (SIC 5111)[1]—Establishments primarily engaged in the wholesale distribution of writing paper, including envelope paper, fine paper, and ground wood, printing, and rotogravure paper.

Stationery Supplies (SIC 5112)[1]—Establishments primarily engaged in the wholesale distribution of stationery and office supplies, including envelopes, typewriter and mimeograph paper, file cards and folders, pens, social stationery, and greeting cards.

Industrial and Personal Service Paper (SIC 5113)[1]—Establishments primarily engaged in the wholesale distribution of wrapping and other coarse paper, paperboard, cellophane, and converted paper products, such as bags, boxes, dishes, napkins, and shipping supplies.

DRUGS, DRUG PROPRIETARIES, AND DRUGGISTS' SUNDRIES (SIC 512)

Drugs, Drug Proprietaries, and Druggists' Sundries (SIC 5122)—Establishments primarily engaged in the wholesale distribution of drugs, drug proprietaries, druggists' sundries, and toiletries. Establishments primarily engaged in the wholesale distribution of surgical, dental, and hospital equipment are classified in industry 5086.

SIC 5122 is subdivided into—

1. *General-line drugs*—These are distinguished from specialty-line drug and toiletries wholesalers on the basis of their commodity-line mix. Drug wholesalers were classified as general line if they reported a substantial portion of their sales in "pharmaceuticals, antibiotics, druggists' chemicals, biologicals, botanicals" and "proprietary products, toilet-

ries, druggists' sundries," and if annual sales volume was $1 million or more.

2. *Specialty-line pharmaceuticals, cosmetics, and toiletries.*

APPAREL, PIECE GOODS, AND NOTIONS (SIC 513)

Piece Goods (SIC 5133)[1]—Establishments primarily engaged in the wholesale distribution of woven piece goods or yard goods of natural or manmade fibers. "Converters" who buy goods in the grey, have them finished on contract, and sell at wholesale are included here. This industry does not include establishments primarily engaged in the wholesale distribution of home furnishings, which are classified in industry 5023.

Notions and Other Dry Goods (SIC 5134)[1]—Establishments primarily engaged in the wholesale distribution of notions (sewing and hair accessories, etc.), knit goods, and other dry goods, except piece goods.

Men's and Boys' Clothing and Furnishings (SIC 5136)[1]—Establishments primarily engaged in the wholesale distribution of men's and boys' apparel and furnishings, sportswear, hosiery, underwear, nightwear, and work clothing.

Women's Children's, and Infants' Clothing and Accessories (SIC 5137)[1]—Establishments primarily engaged in the wholesale distribution of women's, children's, and infants' clothing and accessories, including hosiery, lingerie, millinery and millinery supplies, and furs.

Footwear (SIC 5139)[1]—Establishments primarily engaged in the wholesale distribution of footwear of leather, rubber, and other materials.

GROCERIES AND RELATED PRODUCTS (SIC 514)

Groceries, General-Line (SIC 5141)—Establishments primarily engaged in the wholesale distribution of a general line of groceries. Establishments primarily engaged in roasting coffee and establishments primarily engaged in blending tea or grinding and packaging spices are classified in major group 20.

SIC 5141 is subdivided into—

1. *Voluntary group wholesalers.*
2. *Retailer cooperative wholesalers.*
3. *Other general-line wholesalers.*

Frozen Foods (SIC 5142)[1]—Establishments primarily engaged in the wholesale distribution of packaged quick-frozen vegetables, juices, meats, fish, poultry, pastries, and other "deep freeze" products. Establishments primarily engaged in the wholesale distribution of frozen dairy products are classified in industry 5143. Frozen poultry, fish, and meat which are not packaged are classified in industries 5144, 5146, and 5147, respectively.

Dairy Products (SIC 5143)[1]—Establishments primarily engaged in the wholesale distribution of dairy products, such as butter, cheese, ice cream and ices, and fluid milk and cream. This industry does not include establishments primarily engaged in pasteurizing and bottling milk, which are classified in group 202.

Poultry and Poultry Products (SIC 5144)—Establishments primarily engaged in the wholesale distribution of poultry and poultry products, except canned and packaged frozen products. This industry does not include establishments primarily engaged in the killing and dressing of poultry, which are classified in industry 2016. Establishments primarily engaged in the wholesale distribution of packaged frozen poultry are classified in industry 5142, and of canned poultry in industry 5149.

Confectionery (SIC 5145)—Establishments primarily engaged in the wholesale distribution of confectionery, such as candy, chewing gum, fountain fruits, salted or roasted nuts, popcorn, and fountain syrups; and potato, corn, and similar chips.

Fish and Seafoods (SIC 5146)[1]—Establishments primarily engaged in the wholesale distribution (not packaging) of fresh, cured, and frozen fish and seafoods, except canned (industry 5149) or packaged frozen (industry 5142). The preparation, packaging, and freezing of fresh fish and other seafood, and the shucking and packing of fresh oysters in nonsealed containers, are classified in industry 2092.

Meats and Meat Products (SIC 5147)—Establishments primarily engaged in the wholesale distribution of fresh, cured, and processed (but not canned) meats and lard. The wholesale distribution of frozen packaged meats is classified in industry 5142 and canned meats in industry 5149.

Fresh Fruits and Vegetables (SIC 5148)—Establishments primarily engaged in the wholesale distribution of fresh fruits and vegetables.

Groceries and Related Products, Not Elsewhere Classified (SIC 5149)[1]—Establishments primarily engaged in the wholesale distribution of groceries and related products, not elsewhere classified. Establishments primarily engaged in the wholesale distribution of soft drinks, and in bottling and distributing natural spring and mineral waters, are classified in this industry, but establishments primarily engaged in bottling soft drinks are classified in major group 20. This industry does not include farm-product raw materials (group 515), or beer, wine, and distilled alcholic beverages (group 518).

[1] Data for this kind of business are not shown separately but are included in the group total.

FARM-PRODUCT RAW MATERIALS (SIC 515)

Cotton (SIC 5152)[1]—Establishments primarily engaged in buying and/or marketing cotton and cotton linters.

Grain (SIC 5153)—Establishments primarily engaged in buying and/or marketing grain (such as corn, wheat, oats, barley, and unpolished rice); dry beans; soybeans, and other inedible beans. Country grain elevators primarily engaged in buying or receiving grain from farmers are included as are terminal elevators and other merchants marketing grain.

Livestock (SIC 5154)[1]—Establishments primarily engaged in buying and/or marketing cattle, hogs, sheep, and goats.

Farm-Product Raw Materials, Not Elsewhere Classified (SIC 5159)[1]—Establishments primarily engaged in buying and/or marketing farm products not elsewhere classified, such as horses and mules, leaf tobacco, hides, skins, furs, wool, mohair, raw silk, hops, and nuts, except roasted or salted (industry 5145). Establishments primarily engaged in the wholesale distribution of milk are classified in industry 5143 and live poultry in industry 5144.

CHEMICALS AND ALLIED PRODUCTS (SIC 516)[1]

Chemicals and Allied Products (SIC 5161)[1]—Establishments primarily engaged in the wholesale distribution of chemicals and allied products, not elsewhere classified, such as acids, industrial and heavy chemicals, dyestuffs, industrial salts, naval stores, plastics materials, rosin, and turpentine. Establishments primarily engaged in the wholesale distribution of ammunition are classified in industry 5041; agricultural chemicals and pesticides in industry 5191; drugs in industry 5122; and paints and varnishes in industry 5198.

PETROLEUM AND PETROLEUM PRODUCTS (SIC 517)

Petroleum Bulk Stations and Terminals (SIC 5171)—Establishments primarily engaged in wholesaling petroleum products, including liquefied petroleum gas, from bulk liquid storage facilities.

Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals (SIC 5172)[1]—Establishments primarily engaged in wholesaling petroleum and petroleum products, except those with bulk liquid storage facilities. Included are packaged and bottled petroleum products distributors, truck jobbers, and others marketing petroleum and products at wholesale but without bulk liquid storage facilities.

[1] Data for this kind of business are not shown separately but are included in the group total.

BEER, WINE, AND DISTILLED ALCOHOLIC BEVERAGES (SIC 518)

Beer and Ale (SIC 5181)—Establishments primarily engaged in the wholesale distribution of beer, ale, porter, and other fermented malt beverages.

Wines and Distilled Alcoholic Beverages (SIC 5182)—Establishments primarily engaged in the wholesale distribution of distilled spirits, including neutral spirits and ethyl alcohol used in blending wines and distilled liquors.

MISCELLANEOUS NONDURABLE GOODS (SIC 519)

Farm Supplies (SIC 5191)[1]—Establishments primarily engaged in the wholesale distribution of animal feeds, fertilizers, agricultural chemicals, pesticides, seeds, and other farm supplies, except grains.

Tobacco and Tobacco Products (SIC 5194)—Establishments primarily engaged in the wholesale distribution of tobacco and tobacco products. Leaf tobacco wholesalers are classified in industry 5159 and establishments primarily engaged in stemming and redrying tobacco in industry 2141.

Paints, Varnishes, and Supplies (SIC 5198)[1]—Establishments primarily engaged in the wholesale distribution of paints, varnishes, wallpaper, and supplies, and sometimes glass. Establishments selling to the general public and known as "retail" in the trade are classified in industry 5231.

Books, Periodicals, Newspapers (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of books, lithographed matter, magazines, newspapers, and all other forms of reading material.

Nondurable Goods, Not Elsewhere Classified (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of nondurable goods, not elswhere classified, such as art goods, flowers and florist supplies, industrial yarn, textile bags, bagging and burlap.

CHANGES IN WHOLESALE KIND-OF-BUSINESS CLASSIFICATIONS IN 1972 FROM 1967

The wholesale trade kind-of-business structure was expanded from one SIC major group (SIC 50) in 1967 to two major groups in 1972, "durable goods" (SIC 50) and "nondurable goods" (SIC 51). There were 61 four-digit industries in 1972 compared to 48 four-digit industries in 1967.

The definitions of some kinds of business also were changed in 1972. Establishments primarily selling farm supplies and equipment to farmers, and establishments primarily selling

plumbing, heating, and air-conditioning equipment and electrical supplies were classified in wholesale trade rather than retail trade. However, establishments primarily selling lumber and other building materials and paint, glass, and wallpaper were classified in retail trade if they sell to the public, even though sales to contractors account for a larger portion of the total. The change resulted in moving to wholesale trade those establishments primarily selling plumbing, heating, and air-conditioning equipment; electrical supplies; farm equipment; hay, grain, and feed; and other farm supplies. The change also theoretically could have shifted to wholesale trade some establishments primarily selling lumber and paint, glass and wallpaper to contractors, but not to the public.

In addition to the kind-of-business changes noted above the special nonmerchant classifications of farm assemblers and bulk petroleum were eliminated in the 1972 census. These establishments were classified in the appropriate merchant, or sales branch category.

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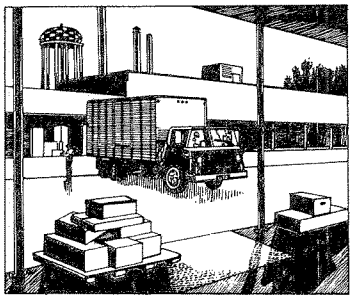
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued December 1979

September 1979

BW-79-9

Sales—September 1979 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences, but not for price changes, were $77.2 billion, up 2 percent from the previous month and 20 percent above September 1978. Adjusted July-through-September total sales were up 6 percent from the April-through-June period and were 18 percent above the total sales for the comparable months a year ago.

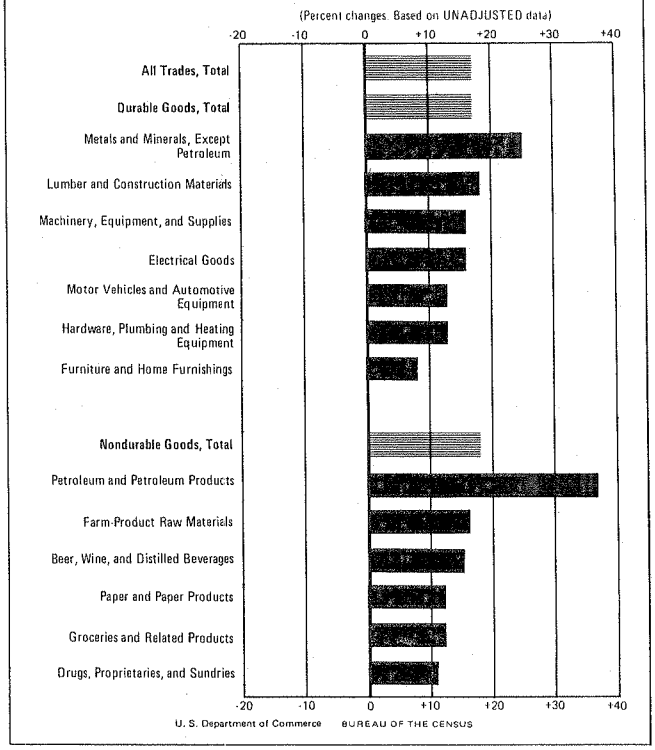
After adjustment, September sales in the durable goods trades were virtually unchanged from the previous month, but were up 16 percent from the same month a year ago. Nondurable goods sales were up 4 percent from August and were 23 percent above September 1978. Total monthly sales in the durable goods group during the July-through-September period were 4 percent above the prior three months and were 15 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were 7 percent above the April-through-June period and were 21 percent above the total sales for the same period a year ago.

Based on adjusted data, most trade groups showed decreases from their previous month sales levels. The largest increase was reported in petroleum and petroleum products (13%). Compared with sales of a year ago, all trade groups showed increases. The sharper increases were reported in petroleum and petroleum products (61%) and miscellaneous nondurable goods (35%).

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variations, but not for price changes, were valued at $89.0 billion at the end of September, virtually unchanged from last month but 15 percent above the same month a year ago. Both the durable and nondurable goods stocks were virtually unchanged from August but were 14 and 18 percent above September 1978 respectively.

Based on adjusted data, comparisons with previous month inventories showed mixed results with 6 trade groups showing gains, 7 indicating declines, and 2 with no change. The largest increase was shown in petroleum and petroleum products (7%). Compared with year ago inventories, most trade groups reported increases with the sharper increases noted in petroleum and petroleum products (37%) and farm-product raw materials (32%).

Percent Change in Sales of Merchant Wholesalers in Selected Kinds of Business
9 Months 1979 Compared With 9 Months 1978



Stock-Sales Ratios—The September stock-sales ratio for merchant wholesalers, based on seasonally adjusted data, was 115, down 2 points from the previous month and down 4 points from September 1978. The stock-sales ratio for durable goods was 165, up 1 point from the previous month, but down 3 points from the year-ago ratio. The ratio for nondurable goods was 75, down 3 points from both the previous month and the year-ago ratios.

An advance release of September 1979 data was issued November 7, 1979.

U.S. Department of Commerce
BUREAU OF THE CENSUS

Inquiries concerning this report should be addressed to Ronald Piencykoski, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-5294/763-5295.

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Table 1. Estimated Monthly Sales of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979									1978				Total 9 months	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.[p]	Sept.	Oct.	Nov.	Dec.	1979	1978
	Merchant wholesalers, total	63,739	61,721	74,319	70,768	76,814	74,361	73,537	78,567	74,092	63,933	69,086	67,699	64,527	647,918	552,795
	Total (excluding farm-product raw materials)	56,481	55,208	66,198	63,588	68,714	66,477	64,932	70,390	66,337	57,342	61,033	59,923	57,237	578,325	492,771
50	Durable goods, total	28,284	28,141	34,689	33,429	35,723	34,447	33,750	37,048	34,358	30,404	32,242	31,037	29,340	299,869	257,300
501	Motor vehicles and automotive parts and supplies	5,634	5,650	6,888	6,845	7,013	6,364	6,259	6,812	5,963	5,381	6,009	6,013	5,510	57,429	50,767
5013,4	Automotive parts and supplies, tires and tubes	3,120	3,081	3,459	3,349	3,385	3,318	3,091	3,552	3,160	2,998	3,344	3,298	2,927	29,667	27,306
5013	Automotive parts and supplies	2,594	2,603	2,902	2,807	2,966	2,759	2,600	3,014	2,697	2,496	2,761	2,752	2,413	24,941	23,047
502	Furniture and home furnishings	1,012	950	1,199	1,130	1,214	1,185	1,121	1,243	1,175	1,162	1,174	1,218	1,140	10,228	9,435
5021	Furniture--household and office	343	332	416	413	450	422	399	449	400	379	379	411	422	3,623	3,132
5023	Home furnishings[1]	669	618	783	717	764	763	722	794	775	783	795	807	718	6,605	6,303
503	Lumber and other construction materials	2,387	2,212	3,006	3,023	3,353	3,410	3,411	3,761	3,266	3,056	3,173	2,874	2,542	27,828	23,635
5031	Lumber, plywood, and millwork	1,672	1,544	2,047	2,067	2,269	2,250	2,250	2,515	2,127	1,949	2,083	1,915	1,682	18,741	15,718
5039	Construction materials, n.e.c.	715	668	959	957	1,084	1,160	1,161	1,246	1,139	1,107	1,089	959	860	9,087	7,916
505	Metals and minerals, except petroleum[2]	3,206	3,215	3,849	3,295	3,913	3,645	3,824	4,196	3,940	3,037	3,186	3,209	2,942	33,082	26,527
5051 pt.	Ferrous and metals service centers and offices	2,455	2,437	2,925	2,469	2,951	2,759	2,865	3,062	2,841	2,339	2,446	2,448	2,260	24,764	20,179
5051 pt.	Ferrous metals service centers	1,652	1,744	2,129	1,798	2,160	2,056	2,046	2,211	1,956	1,721	1,801	1,768	1,678	17,751	14,838
506	Electrical goods	3,017	3,083	3,556	3,271	3,744	3,786	3,712	4,163	4,103	3,338	3,590	3,474	3,322	32,435	27,939
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,533	1,638	1,807	1,748	2,071	2,006	1,991	2,153	2,154	1,663	1,832	1,722	1,655	17,071	14,293
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,484	1,445	1,749	1,554	1,673	1,779	1,700	2,011	1,948	1,675	1,758	1,751	1,667	15,363	13,646
5064	Electrical appliances, TV and radio sets	834	849	1,024	881	939	1,064	986	1,116	1,082	1,057	1,040	1,090	1,006	8,776	8,263
507	Hardware, plumbing, heating equipment, and supplies	2,142	1,984	2,319	2,374	2,592	2,461	2,524	2,678	2,438	2,159	2,455	2,250	2,057	21,512	19,106
5072	Hardware	802	758	853	852	975	877	892	1,003	892	771	859	830	721	7,905	7,049
5074	Plumbing and heating equipment and supplies (hydronics)	854	800	960	994	1,001	966	1,015	1,038	1,024	928	1,047	918	854	8,652	7,675
508	Machinery, equipment, and supplies	7,691	7,841	9,664	9,443	10,062	9,745	9,222	10,113	9,492	8,655	8,909	8,421	8,485	83,274	72,062
5082	Construction and mining machinery and equipment	895	927	1,189	1,360	1,351	1,260	1,258	1,366	1,275	1,115	1,155	1,126	1,125	10,881	10,023
5084,5	Industrial machinery, equipment, and supplies	3,390	3,464	3,940	3,615	4,004	3,964	3,613	4,039	3,694	3,450	3,573	3,474	3,623	33,722	28,631
5086	Professional equipment, supplies	907	914	1,048	972	1,055	996	996	1,092	972	949	941	949	975	8,952	7,772
5093	Scrap and waste materials	1,132	1,184	1,501	1,492	1,518	1,468	1,395	1,534	1,355	978	1,007	1,103	1,079	12,580	8,614
51	Nondurable goods, total	35,455	33,580	39,630	37,339	41,091	39,914	39,787	41,519	39,734	33,529	36,844	36,662	35,187	348,049	295,496
	Total (excluding farm-product raw materials)	28,197	27,067	31,509	30,159	32,991	32,030	31,182	33,342	31,979	26,937	28,791	28,885	27,897	278,456	235,413
511	Paper and paper products	1,540	1,479	1,688	1,551	1,692	1,651	1,585	1,777	1,583	1,456	1,598	1,569	1,489	14,546	12,920
5111,3	Printing, writing, industrial, and personal services paper	1,133	1,100	1,272	1,184	1,272	1,252	1,192	1,327	1,190	1,088	1,191	1,177	1,140	10,921	9,570
512	Drugs, drug proprietaries, and druggists' sundries	950	917	1,073	1,038	1,102	1,039	1,066	1,099	1,008	973	1,082	1,017	963	9,292	8,411
5122	Drugs, drug proprietaries, and druggists' sundries	950	917	1,073	1,038	1,102	1,039	1,066	1,099	1,008	973	1,082	1,017	963	9,292	8,411
5122 pt.	General-line drugs	423	427	507	472	509	474	458	477	432	464	494	465	445	4,178	3,960
513	Apparel, piece goods, and notions[3]	2,094	1,996	2,326	2,107	2,127	2,102	2,389	2,629	2,573	2,313	2,443	2,369	1,976	20,343	18,288
514	Groceries and related products	11,122	10,381	11,954	11,281	11,988	11,721	11,500	11,835	11,050	10,489	11,150	11,155	10,830	102,831	91,955
5141	Groceries, general-line	3,965	3,658	4,173	3,989	4,241	4,247	4,245	4,429	4,116	3,767	3,999	4,120	3,914	37,062	32,942
5144	Poultry and poultry products	518	489	559	554	592	544	563	569	536	505	525	569	536	4,924	4,287
5145	Confectionery	184	177	209	196	212	199	192	214	205	190	218	211	197	1,789	1,610
5147	Meats and meat products	1,979	1,971	2,198	2,029	2,076	1,908	1,872	1,959	1,804	1,840	1,928	1,911	1,885	17,796	15,572
5148	Fresh fruits and vegetables	1,020	961	1,203	1,086	1,202	1,242	1,063	1,030	920	890	980	974	973	9,727	8,985
515	Farm-product raw materials	7,258	6,513	8,121	7,180	8,100	7,884	8,605	8,177	7,755	6,591	8,053	7,777	7,290	69,593	60,098
5153	Grain	5,859	5,235	6,740	5,886	6,766	6,730	7,516	7,090	6,569	5,448	6,623	6,391	5,912	58,390	49,623
517	Petroleum and petroleum products	4,837	5,008	5,282	5,221	6,078	5,851	5,863	6,355	6,481	4,136	4,431	4,554	4,598	50,976	37,239
5171	Petroleum bulk stations and terminals	2,738	2,785	2,997	2,857	3,306	3,170	3,121	3,504	3,476	2,280	2,449	2,507	2,678	27,954	20,883
518	Beer, wine, and distilled alcoholic beverages	2,020	1,952	2,490	2,453	2,726	2,704	2,636	2,844	2,443	2,254	2,347	2,547	2,709	22,268	19,425
5181	Beer and ale	999	953	1,223	1,258	1,513	1,523	1,507	1,590	1,262	1,119	1,105	1,088	1,108	11,828	9,981
5182	Wine and distilled alcoholic beverages	1,021	999	1,267	1,195	1,214	1,181	1,129	1,254	1,181	1,135	1,242	1,459	1,601	10,439	9,444
519	Miscellaneous nondurable goods	4,529	4,383	5,528	5,406	6,001	5,801	5,105	5,468	5,631	4,311	4,510	4,486	4,425	47,852	38,705
5194	Tobacco and tobacco products	823	749	852	848	891	863	881	896	800	814	848	831	846	7,601	7,146

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. [p]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]The home furnishings group is subject to a sampling variability of 8 percent for September 1979.
[2]The metals and minerals, except petroleum group is subject to a sampling variability of 9 percent for September 1979.
[3]The apparel piece goods and notions group is subject to a sampling variability of 13 percent for September 1979.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations)

1972 SIC code	Kind of business	1979									1978			
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.[P]	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	81,896	83,917	85,436	85,345	85,199	84,942	86,829	86,890	87,672	76,074	78,715	80,100	80,922
	Total (excluding farm-product raw materials)	75,593	77,627	79,311	79,626	80,246	79,964	81,487	81,570	82,179	71,889	73,327	73,947	74,898
50	Durable goods, total	51,860	53,807	54,381	54,731	55,566	55,523	56,602	56,803	56,880	49,944	50,462	50,971	51,646
501	Motor vehicles and automotive parts and supplies	9,512	10,189	9,797	9,663	9,631	9,207	9,760	9,530	9,532	8,099	8,701	9,326	9,227
5013,4	Automotive parts and supplies, tires and tubes	5,758	5,888	5,781	5,809	5,970	5,753	6,051	6,117	6,163	5,172	5,298	5,635	5,552
5013	Automotive parts and supplies	4,881	5,003	4,870	4,917	5,035	4,818	5,082	5,188	5,247	4,345	4,489	4,792	4,674
502	Furniture and home furnishings	1,764	1,753	1,872	1,837	1,815	1,903	1,847	1,839	1,801	1,810	1,780	1,774	1,752
5023	Home furnishings	1,292	1,282	1,355	1,332	1,309	1,361	1,347	1,339	1,309	1,326	1,315	1,305	1,251
503	Lumber and other construction materials	3,113	3,178	3,337	3,404	3,468	3,496	3,526	3,442	3,380	3,076	3,076	2,995	3,117
5031	Lumber, plywood, and millwork[1]	2,030	2,082	2,116	2,152	2,244	2,204	2,220	2,204	2,168	1,932	1,946	1,918	2,009
505	Metals and minerals, except petroleum[2]	5,106	5,434	5,285	5,254	5,528	5,582	5,763	6,319	6,306	5,285	5,095	5,208	5,151
5051 pt.	Ferrous metals service centers and offices	4,191	4,425	4,365	4,239	4,455	4,586	4,655	4,947	5,005	4,148	3,976	4,150	4,191
5051 pt.	Ferrous metals service centers	3,241	3,459	3,433	3,269	3,506	3,643	3,665	3,956	4,045	3,299	3,098	3,236	3,336
506	Electrical goods	5,509	5,582	5,706	5,737	5,976	6,040	6,223	6,254	6,232	5,416	5,500	5,526	5,577
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2,542	2,684	2,676	2,730	2,946	2,838	2,840	2,841	2,858	2,356	2,399	2,534	2,558
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,966	2,898	3,030	3,007	3,030	3,202	3,383	3,274	3,200	3,059	3,101	3,016	3,023
507	Hardware, plumbing, heating equipment, and supplies	4,251	4,461	4,497	4,719	4,590	4,631	4,628	4,535	4,487	4,032	4,152	4,033	4,063
5072	Hardware	1,476	1,540	1,539	1,598	1,622	1,643	1,659	1,657	1,683	1,417	1,466	1,382	1,407
5074	Plumbing and heating equipment and supplies (hydronics)	1,819	1,900	1,899	1,985	1,848	1,896	1,902	1,828	1,790	1,805	1,738	1,737	1,760
508	Machinery, equipment, and supplies	17,748	18,254	18,807	18,924	19,370	19,465	19,576	19,778	20,076	17,405	17,352	17,428	18,012
5082	Construction and mining machinery and equipment	3,932	4,152	4,334	4,280	4,430	4,512	4,488	4,504	4,664	3,899	3,937	4,002	4,109
5084,5	Industrial machinery, equipment, and supplies	5,728	5,800	6,015	6,030	6,073	6,006	5,979	6,092	6,143	5,519	5,508	5,570	5,752
51	Nondurable goods, total	30,036	30,110	31,055	30,614	29,633	29,419	30,227	30,087	30,792	26,130	28,253	29,129	29,276
	Total (excluding farm-product raw materials)	23,733	23,820	24,930	24,895	24,680	24,441	24,885	24,767	25,299	21,946	22,865	22,976	23,252
511	Paper and paper products	1,424	1,468	1,547	1,501	1,542	1,616	1,608	1,604	1,672	1,414	1,419	1,441	1,482
5111,3	Printing, writing, industrial, and personal service paper	986	1,010	1,053	1,018	1,050	1,090	1,079	1,055	1,093	976	969	967	1,025
512	Drugs, drug proprietaries, and druggists' sundries	1,465	1,484	1,612	1,617	1,585	1,609	1,646	1,594	1,661	1,489	1,502	1,476	1,440
514	Groceries and related products	6,408	6,346	6,719	6,644	6,644	6,686	6,674	6,633	6,690	6,186	6,469	6,412	6,497
5141	Groceries, general-line	2,696	2,744	2,895	2,846	2,785	2,802	2,899	2,857	2,871	2,641	2,811	2,814	2,761
517	Petroleum and petroleum products	2,106	2,101	2,224	2,177	2,401	2,263	2,492	2,618	2,868	2,098	2,151	2,151	2,153
518	Beer, wine, and distilled alcoholic beverages	2,462	2,427	2,684	2,806	2,760	2,732	2,693	2,539	2,561	2,221	2,453	2,513	2,290
5181	Beer and ale[3]	800	845	1,040	1,085	1,089	1,072	1,030	923	916	720	769	777	729
5182	Wines and distilled alcoholic beverages	1,662	1,582	1,645	1,721	1,671	1,660	1,663	1,616	1,645	1,501	1,684	1,736	1,561

See footnotes at end of table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Percent. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979									1978			
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.[P]	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	128	136	115	121	111	114	118	111	118	119	114	118	125
	Total (excluding farm-product raw materials)	134	141	120	125	117	120	125	116	124	125	120	123	131
50	Durable goods, total	183	191	157	164	156	161	168	153	166	164	157	164	176
501	Motor vehicles and automotive parts and supplies	169	180	142	141	137	145	156	140	160	151	145	155	167
5013,4	Automotive parts and supplies, tires and tubes	185	191	167	173	169	173	196	172	195	173	158	171	190
5013	Automotive parts and supplies	188	192	168	175	170	175	195	172	195	174	163	174	194
502	Furniture and home furnishings	174	185	156	163	150	161	165	148	153	156	152	146	154
5023	Home furnishings	193	208	173	186	171	178	187	169	169	169	165	162	174
503	Lumber and other construction materials	130	144	111	113	103	102	103	92	103	101	97	104	123
5031	Lumber, plywood, and millwork	121	135	103	104	99	98	99	88	102	99	93	100	119
505	Metals and minerals, except petroleum	159	169	137	159	141	153	151	151	160	174	160	162	175
5051 pt.	Ferrous metals service centers and offices	171	182	149	172	151	166	162	162	176	177	163	170	185
5051 pt.	Ferrous metals service centers	196	198	161	182	162	177	179	179	207	192	172	183	199
506	Electrical goods	183	181	160	175	160	160	168	150	152	162	153	159	168
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	166	164	148	156	142	141	143	132	133	142	131	147	155
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	200	201	173	194	181	180	197	163	164	183	176	171	181
507	Hardware, plumbing, heating equipment, and supplies	198	225	194	199	177	188	183	169	184	187	169	179	198
5072	Hardware	184	203	180	188	166	187	186	165	189	179	171	167	195
5074	Plumbing and heating equipment and supplies (hydronics)	213	237	198	200	185	196	188	176	175	188	166	189	206
508	Machinery, equipment, and supplies	231	238	195	200	192	200	212	196	212	201	195	207	212
5082	Construction and mining machinery and equipment	439	448	364	315	328	358	357	330	366	350	341	356	365
5084,5	Industrial machinery, equipment, and supplies	168	167	153	167	152	152	165	151	166	160	154	160	159
51	Nondurable goods, total	85	90	78	82	72	74	76	72	77	78	77	79	83
	Total (excluding farm-product raw materials)	84	88	79	83	75	76	80	74	79	81	79	80	83
511	Paper and paper products	92	99	92	97	91	98	101	90	106	97	89	92	100
5111,3	Printing, writing, industrial, and personal service paper	87	92	83	86	83	87	90	79	92	90	81	82	90
512	Drugs, drug proprietaries, and druggists' sundries	154	162	150	156	144	155	154	145	165	153	139	145	150
514	Groceries and related products	58	61	56	59	55	57	58	56	61	59	58	57	60
5141	Groceries, general-line	68	75	69	71	66	66	68	64	70	70	70	68	71
517	Petroleum and petroleum products	44	42	42	42	40	39	43	41	44	51	49	47	47
518	Beer, wine, and distilled alcoholic beverages	122	124	108	114	101	101	102	89	105	99	105	99	85
5181	Beer and ale	80	89	85	86	72	70	68	58	73	64	70	71	66
5182	Wines and distilled alcoholic beverages	163	158	130	144	138	141	147	129	139	132	136	119	97

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. [P]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]The lumber, plywood, and millwork group is subject to a sampling variability of 9 percent for September 1979.
[2]The metals and minerals, except petroleum group is subject to a sampling variability of 8 percent for September 1979.
[3]The beer and ale group is subject to a sampling variability of 8 percent for September 1979.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1979 and 1978

(Sales and inventories in millions of dollars. Stock-sales ratios in percent)

1972 SIC code	Kind of business	1979									1978			
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.[P]	Sept.	Oct.	Nov.	Dec.
		Sales ADJUSTED for seasonal variations and trading-day differences												
	Merchant wholesales, total	67,148	67,495	70,824	70,444	72,937	72,625	75,106	75,733	77,172	64,531	67,338	67,552	67,823
	Total (excluding farm-product raw materials)	60,346	60,603	63,567	63,278	65,050	64,506	65,961	66,826	68,349	57,326	59,349	60,373	60,526
50	Durable goods, total	31,012	31,769	33,570	32,770	33,354	32,956	34,078	34,711	34,621	29,863	30,953	31,498	31,939
501	Motor vehicles and automotive parts and supplies	5,994	6,285	6,486	6,315	6,347	6,078	6,083	6,525	6,297	5,598	6,113	6,442	6,088
502	Furniture and home furnishings	1,162	1,058	1,178	1,148	1,183	1,139	1,229	1,178	1,155	1,118	1,047	1,136	1,197
503	Lumber and other construction materials	2,876	2,758	3,089	3,085	3,037	3,166	3,188	3,209	3,189	2,878	2,887	2,874	3,026
505	Metals and minerals, except petroleum	3,184	3,518	3,748	3,250	3,637	3,598	4,008	3,874	3,889	2,947	3,188	3,305	3,258
506	Electrical goods	3,279	3,460	3,560	3,294	3,789	3,644	3,690	3,984	4,178	3,311	3,340	3,356	3,362
507	Hardware, plumbing, heating equipment, and supplies	2,354	2,270	2,371	2,372	2,398	2,355	2,441	2,466	2,426	2,108	2,290	2,237	2,330
508	Machinery, equipment, and supplies	8,461	8,840	9,108	9,249	9,240	9,263	9,497	9,680	9,483	8,382	8,607	8,730	9,193
51	Nondurable goods, total	36,136	35,726	37,254	37,674	39,583	39,669	41,028	41,022	42,551	34,668	36,385	36,054	35,884
	Total (excluding farm-product raw materials)	29,334	28,834	29,997	30,508	31,696	31,550	31,883	32,115	33,728	27,463	28,396	28,875	28,587
511	Paper and paper products	1,540	1,595	1,636	1,636	1,638	1,612	1,627	1,659	1,594	1,419	1,536	1,579	1,608
512	Drugs, drug proprietaries, and druggists' sundries	953	990	1,032	1,050	1,095	1,072	1,104	1,058	1,033	965	1,000	1,007	997
513	Apparel, piece goods, and notions	2,230	2,114	2,243	2,280	2,089	2,149	2,496	2,276	2,500	2,177	2,268	2,291	2,269
514	Groceries and related products	11,407	11,408	11,595	11,476	11,278	11,380	11,500	11,271	11,486	10,607	11,039	11,178	11,400
515	Farm-product raw materials[1]	6,802	6,892	7,257	7,166	7,887	8,119	9,145	8,907	8,823	7,205	7,989	7,179	7,297
517	Petroleum and petroleum products	4,876	4,905	4,955	5,263	6,338	6,038	5,863	6,311	7,146	4,442	4,390	4,542	4,387
518	Beer, wine, and distilled alcoholic beverages	2,491	2,395	2,541	2,615	2,526	2,472	2,610	2,628	2,599	2,305	2,333	2,383	2,387
519	Miscellaneous nondurable goods	4,645	4,361	4,849	5,095	5,546	5,721	5,647	5,678	6,094	4,521	4,657	4,693	4,567
		Inventories ADJUSTED for seasonal variations												
	Merchant wholesalers, total	81,543	83,005	84,078	84,973	85,257	85,245	88,144	88,727	89,011	77,113	78,625	79,526	80,771
	Total (excluding farm-product raw materials)	76,224	77,545	78,624	79,299	79,729	79,416	81,339	82,010	82,433	72,119	73,434	74,285	75,546
50	Durable goods, total	52,490	53,773	53,937	54,408	54,886	54,542	56,062	56,931	57,129	50,160	50,948	51,625	52,460
501	Motor vehicles and automotive parts and supplies	9,390	9,883	9,643	9,605	9,442	9,161	9,829	9,825	9,786	8,315	8,870	9,420	9,236
502	Furniture and home furnishings	1,778	1,765	1,878	1,846	1,799	1,866	1,840	1,828	1,780	1,789	1,776	1,782	1,801
503	Lumber and other construction materials	3,160	3,207	3,218	3,315	3,354	3,444	3,481	3,449	3,407	3,101	3,181	3,113	3,190
505	Metals and minerals, except petroleum	5,142	5,528	5,274	5,212	5,517	5,571	5,606	6,141	6,306	5,290	5,269	5,266	5,166
506	Electrical goods	5,697	5,772	5,764	5,754	5,899	5,881	6,137	6,211	6,146	5,346	5,435	5,499	5,650
507	Hardware, plumbing, heating equipment and supplies	4,382	4,543	4,422	4,511	4,443	4,514	4,555	4,508	4,560	4,098	4,207	4,153	4,228
508	Machinery, equipment, and supplies	17,927	18,073	18,529	18,905	19,178	19,065	19,517	19,958	20,197	17,510	17,527	17,658	18,249
51	Nondurable goods, total	29,053	29,232	30,141	30,565	30,371	30,703	32,082	31,796	31,882	26,953	27,677	27,901	28,311
	Total (excluding farm-product raw materials)	23,734	23,772	24,687	24,891	24,843	24,874	25,277	25,079	25,304	21,959	22,486	22,660	23,086
511	Paper and paper products	1,458	1,493	1,561	1,485	1,534	1,574	1,610	1,602	1,660	1,404	1,419	1,447	1,482
512	Drugs, drug proprietaries, and druggists' sundries	1,528	1,530	1,615	1,609	1,621	1,599	1,663	1,592	1,620	1,453	1,435	1,446	1,444
514	Groceries and related products	6,492	6,333	6,581	6,611	6,691	6,774	6,776	6,768	6,697	6,192	6,342	6,355	6,433
517	Petroleum and petroleum products	2,017	2,114	2,237	2,311	2,504	2,402	2,590	2,595	2,787	2,039	2,052	2,064	2,082
518	Beer, wine, and distilled alcoholic beverages	2,557	2,536	2,756	2,831	2,698	2,658	2,696	2,593	2,553	2,214	2,293	2,377	2,403
		Stock-sales ratios based on ADJUSTED data												
	Merchant wholesalers, total	121	123	119	121	117	117	117	117	115	119	117	118	119
	Total (excluding farm-product raw materials)	126	128	124	125	123	123	123	123	121	126	123	123	125
50	Durable goods, total	169	169	161	166	165	165	165	164	165	168	165	164	164
501	Motor vehicles and automotive parts and supplies	157	157	149	152	149	151	162	151	155	149	145	146	152
502	Furniture and home furnishings	153	167	159	161	152	164	150	155	154	160	170	157	150
503	Lumber and other construction materials	110	116	104	107	110	109	109	107	107	108	110	108	105
505	Metals and minerals, except petroleum	161	157	141	160	152	155	140	159	162	179	165	159	159
506	Electrical goods	174	167	162	175	156	161	166	156	147	161	163	164	168
507	Hardware, plumbing, heating equipment, and supplies	186	200	187	190	185	192	187	183	188	194	184	186	181
508	Machinery, equipment, and supplies	212	204	203	204	208	206	206	206	213	209	204	202	199
51	Nondurable goods, total	80	82	81	81	77	77	78	78	75	78	76	77	79
	Total (excluding farm-product raw materials)	81	82	82	82	78	79	79	78	75	80	79	78	81
511	Paper and paper products	95	94	95	91	94	98	99	97	104	99	92	92	92
512	Drugs, drug proprietaries, and druggists' sundries	160	155	156	153	148	149	151	150	157	151	144	144	145
514	Groceries and related products	57	56	57	58	59	60	59	60	58	58	57	57	56
517	Petroleum and petroleum products	41	43	45	44	40	40	44	41	39	45	47	45	47
518	Beer, wine, and distilled alcoholic beverages	103	106	108	108	107	108	103	99	98	96	98	100	10

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions. All data for 1978 have been revised to reflect recomputed factors for seasonal adjustment.

NA Not available. [P]Preliminary estimates. See p. 15, Sample Design and Estimation Procedures.

[1]There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table 4B. Percent Change Between Selected 3-Month Periods Sales of Merchant Wholesalers, United States

(Based on seasonally-adjusted data)

Item	3 month period, July 1979-Sept. 1979 from--			
	April 1979-June 1979 (3 months ago)	Jan. 1979-Mar. 1979 (6 months ago)	Oct. 1978-Dec. 1978 (9 months ago)	July 1978-Sept. 1978 (12 months ago)
Merchant wholesalers, total	+6	+11	+12	+18
Durable goods, total	+4	+7	+10	+15
Nondurable goods, total	+7	+14	+15	+21

Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers: 1973-1979

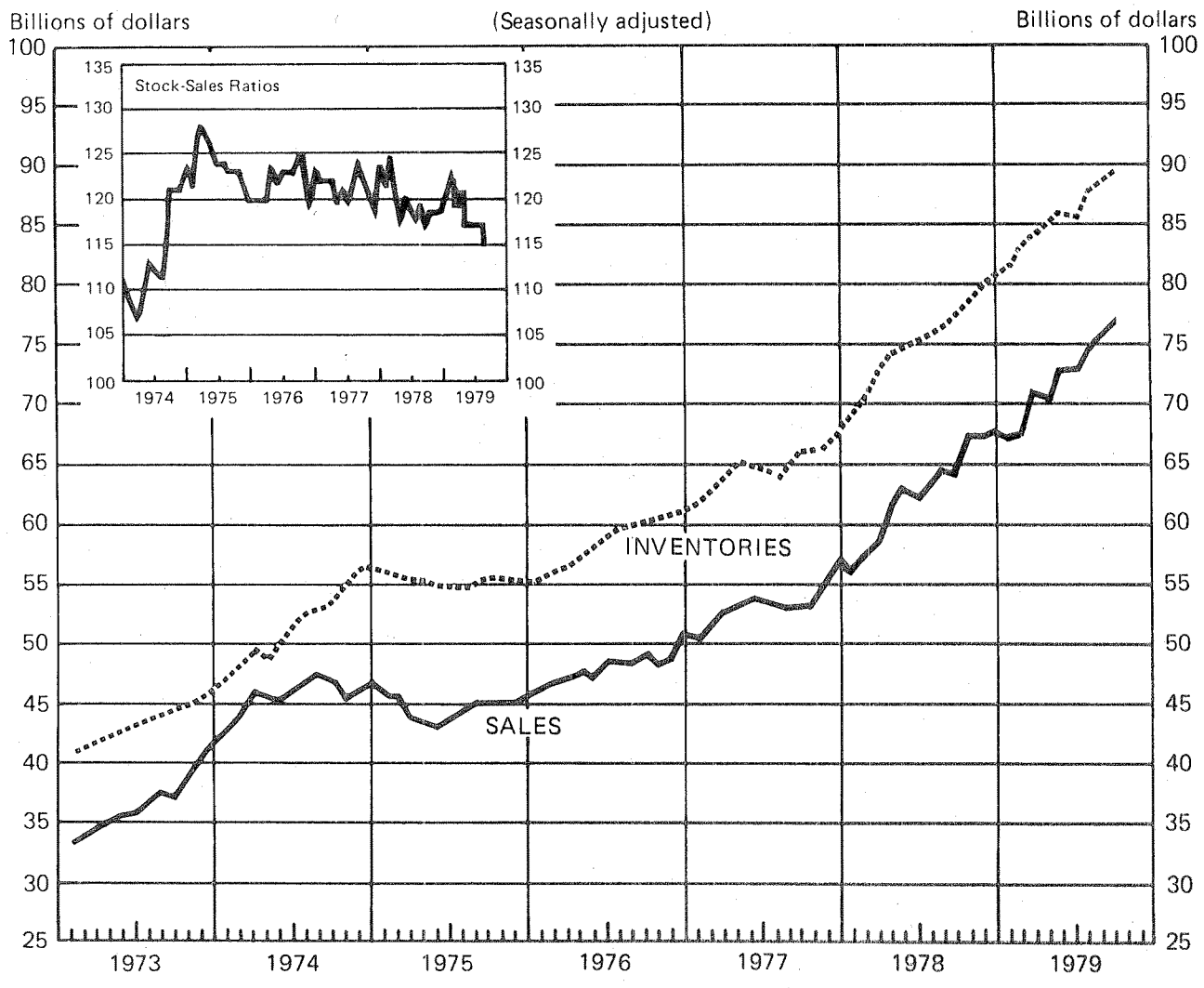


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: September 1979

1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		Sept. 1979 from Aug. 1979	Sept. 1979 from Sept. 1978	9 months 1979 from 9 months 1978	Sept. 1979 from Aug. 1979	Sept. 1979 from Sept. 1978	Sept. 1979 from Aug. 1979	Sept. 1979 from Sept. 1978	Sept. 1979 from Aug. 1979	Sept. 1979 from Sept. 1978
	Merchant wholesalers, total	-6	+16	+17	+1	+15	+2	+20	0	+15
	Total (excluding farm-product raw materials)	-6	+16	+17	+1	+14	+2	+19	+1	+14
50	Durable goods, total	-7	+13	+17	0	+14	0	+16	0	+14
501	Motor vehicles and automotive parts and supplies	-12	+11	+13	0	+18	-3	+12	0	+18
5012	Automobiles and other motor vehicles	-14	+18	+19	-1	+15	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	-11	+5	+9	+1	+19	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	-11	+8	+8	+1	+21	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	-5	+1	+8	-2	0	-2	+3	-3	-1
5021	Furniture--household and office	-11	+5	+16	-2	+2	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	-18	-10	+5	0	+3	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	-7	+14	+22	-3	+1	(*)	(*)	(*)	(*)
5023	Home furnishings	-2	-1	+5	-2	-1	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	-13	+7	+18	-2	+10	-1	+11	-1	+10
5031	Lumber, plywood, and millwork	-15	+9	+19	-2	+12	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c.	-9	+3	+15	-2	+6	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	-4	+17	+18	0	+10	-4	+19	-1	+10
505	Metals and minerals, except petroleum	-6	+30	+25	0	+19	0	+32	+3	+19
5051 pt.	Ferrous metals service centers and offices	-7	+21	+23	+1	+21	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	-12	+14	+20	+2	+23	(*)	(*)	(*)	(*)
5051 pt.	Nonferrous metals service centers and offices	+3	(S)	+37	-6	+20	(*)	(*)	(*)	(*)
506	Electrical goods	-1	+23	+16	0	+15	+5	+26	-1	+15
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	0	+30	+19	+1	+22	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-3	+16	+13	-2	+5	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	-3	+2	+6	-1	+5	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	-9	+13	+13	-1	+10	-2	+15	+1	+11
5072	Hardware	-11	+16	+12	+2	+22	(*)	(*)	(*)	(*)
5074	Plumbing and heating equipment and supplies (hydronics)	-1	+10	+13	-2	(S)	(*)	(*)	(*)	(*)
5075	Warm air heating and air conditioning equipment and supplies	-16	+19	+14	-4	+12	(*)	(*)	(*)	(*)
508	Machinery, equipment, and supplies	-6	+10	+16	+2	+15	-2	+13	+1	+15
5081	Commercial machines and equipment	-2	+11	+6	-1	+3	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	-7	+14	+9	+4	+20	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	+4	+17	+19	+1	+21	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	-9	+7	+18	+1	+11	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	-11	+2	+15	+1	+9	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	-12	+38	+46	-2	+1	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	-15	+32	+49	-2	-2	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	-7	+49	+42	-2	+9	(*)	(*)	(*)	(*)
51	Nondurable goods, total	-4	+19	+18	+2	+18	+4	+23	0	+18
	Total (excluding farm-product raw materials)	-4	+19	+18	+2	+15	+5	+23	+1	+15
511	Paper and paper products	-11	+9	+12	+4	+18	-4	+12	+4	+18
5111,3	Printing, writing, industrial, and personal service paper	-10	+9	+14	+4	+12	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	-8	+4	+11	+4	+12	-2	+7	+2	+11
5122	Drugs, drug proprietaries, and druggists' sundries	-8	+4	+11	+4	+12	(*)	(*)	(*)	(*)
5122 pt.	General-line drugs	-10	(S)	+6	+6	+1	(*)	(*)	(*)	(*)
514	Groceries and related products	-7	+5	+12	+1	+8	+2	+8	-1	+8
5141	Groceries, general-line	-7	+9	+13	-1	+9	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	-7	+9	+12	-1	+7	(*)	(*)	(*)	(*)
5141 pt.	Retailer cooperatives	-9	+12	+13	+1	+9	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	-6	+7	+13	+1	+9	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	-5	+6	+11	+2	+8	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	-6	+6	+15	+6	+17	(*)	(*)	(*)	(*)
5145	Confectionery	-4	+8	+11	-3	+17	(*)	(*)	(*)	(*)
5147	Meats and meat products	-8	-2	+14	+2	+6	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	-11	+3	+8	+9	+3	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	-5	+18	+16	+3	+31	-1	+22	-2	+32
5152	Cotton	+4	+1	+1	-13	-28	(*)	(*)	(*)	(*)
5153	Grain	-7	+21	+18	+3	+41	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	+2	+57	+37	+10	+37	+13	+61	+7	+37
5171	Petroleum bulk stations and terminals	-1	+52	+34	+8	+35	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	-14	+8	+15	+1	+15	-1	+13	-2	+15
5181	Beer and ale	-21	+13	+18	-1	+27	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	-6	+4	+11	+2	+10	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	+3	+31	+24	+1	+13	+7	+35	0	+13
5191	Farm supplies	-7	+17	+24	+2	+17	(*)	(*)	(*)	(*)
5194	Tobacco and tobacco products	-11	-2	+6	-2	+2	(*)	(*)	(*)	(*)
5198	Paints, varnishes, and supplies	-11	+5	+15	+7	+26	(*)	(*)	(*)	(*)
5199 pt.	Books, periodicals, newspapers	-3	+16	+13	-1	+9	(*)	(*)	(*)	(*)

*Adjusted data are available only for summary group totals.

(S) Does not meet publication standards because of extreme variability or high nonresponse rate.

[1]Adjusted for seasonal variations and, in the case of sales, also for trading-day differences. Adjusted data are only available for the summary kind-of-business groups shown.
[2]There are indications that the seasonal adjustment factors for this trade group may not reflect recent trends. The seasonally adjusted data for this trade group and also for the summary group totals should, therefore, be used with caution.

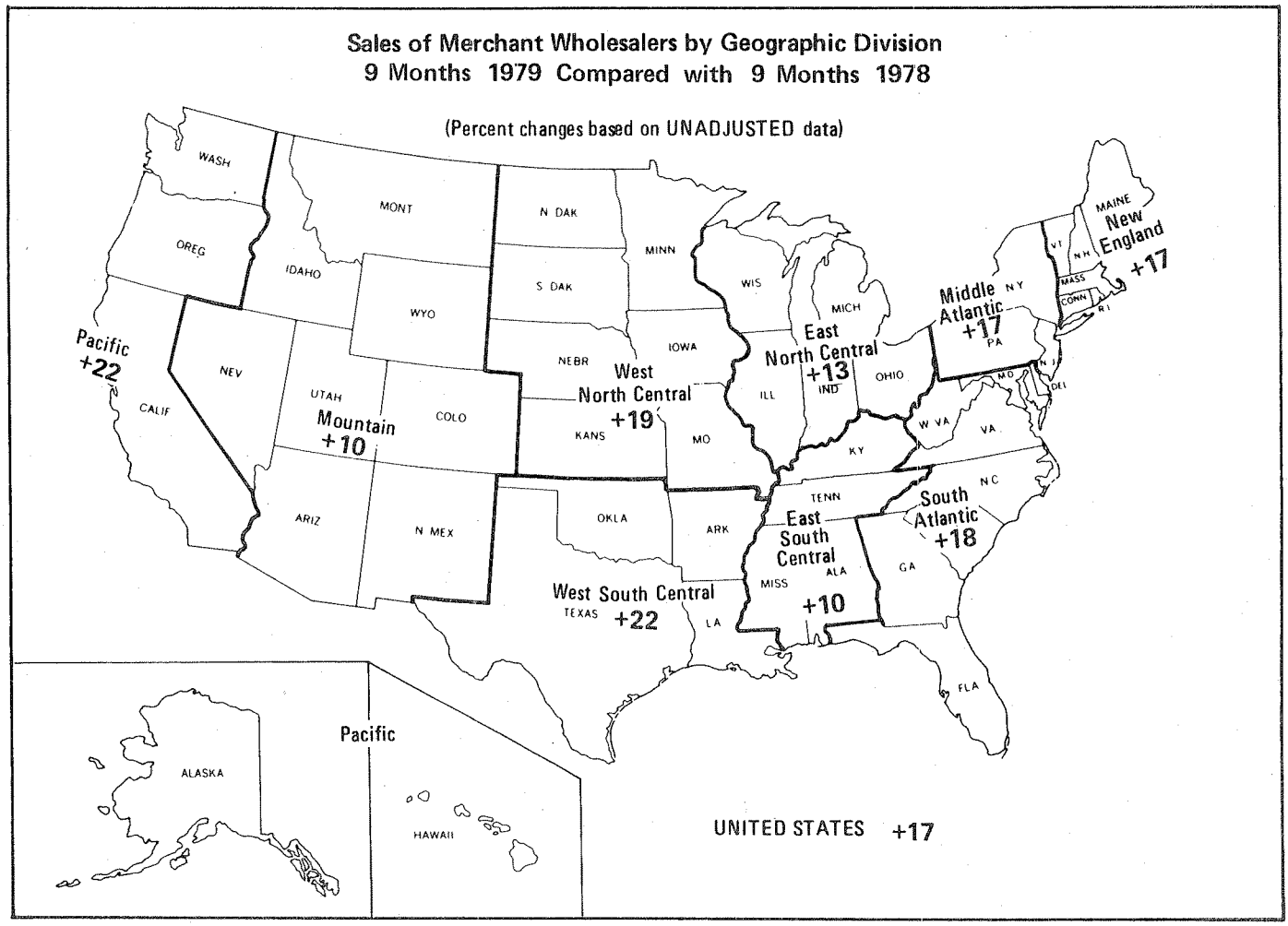


Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1979 and 1978

(Sales, in millions of dollars, are NOT ADJUSTED for seasonal variation or trading-day differences; sampling errors in percent)

1972 SIC code	Kind of business and geographic division[1]	1979									1978				Total 9 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.[p]	Sept.	Oct.	Nov.	Dec.	1979	1978	Range[2]	Median
	Merchant wholesalers, total	63,739	61,721	74,319	70,768	76,814	74,361	73,537	78,567	74,092	63,933	69,086	67,699	64,527	647,918	552,795	0.8-0.9	0.9
	New England	3,393	3,289	3,835	3,652	3,915	3,782	3,572	3,981	3,796	3,472	3,638	3,678	3,652	33,214	28,468	5-6	6
	Middle Atlantic	14,513	13,785	16,692	15,218	16,416	16,288	16,256	17,786	17,292	14,387	15,123	15,304	14,529	144,245	123,154	2-2	2
	East North Central	10,573	10,454	12,314	11,906	13,356	12,661	12,182	12,979	12,028	10,821	12,195	11,757	10,882	108,452	95,800	2-3	3
	West North Central	6,695	6,589	7,834	7,506	8,614	[r]8,005	8,385	8,510	8,113	6,836	7,790	7,471	6,894	70,251	59,200	2-3	2
	South Atlantic	7,023	6,620	8,329	7,929	8,401	[r]8,014	7,720	8,067	7,307	6,877	7,449	7,106	6,979	69,410	59,119	2-3	2
	East South Central	2,961	2,801	3,505	3,461	3,557	3,372	3,292	3,534	3,342	2,938	3,213	3,075	2,922	29,824	27,087	4-5	4
	West South Central	6,703	6,648	7,785	7,673	8,443	8,314	8,248	8,755	8,547	6,717	7,036	6,885	6,680	71,116	58,327	3-4	4
	Mountain	2,337	2,253	2,904	2,659	2,786	2,851	2,704	2,830	2,644	2,693	2,583	2,477	2,540	23,970	21,865	5-5	5
	Pacific	9,540	9,281	11,121	10,765	11,325	11,077	11,178	12,125	11,024	9,191	10,058	9,946	9,448	97,434	79,776	2-3	3
50	Durable goods, total	28,284	28,141	34,689	33,429	35,723	34,447	33,750	37,048	34,358	30,404	32,242	31,037	29,340	299,869	257,300	0.8-1.0	0.9
	Middle Atlantic	5,936	5,892	7,165	6,601	7,191	6,961	6,769	7,538	7,116	6,303	6,618	6,516	6,094	61,170	53,880	4-5	4
	East North Central	4,818	4,975	6,057	5,863	6,467	6,023	5,801	6,440	6,064	5,342	5,801	5,674	5,177	52,510	45,501	3-4	4
	West North Central	2,157	[r]2,208	2,718	2,746	3,009	2,778	2,873	3,209	3,070	2,504	2,740	2,652	2,379	24,769	20,763	5-6	5
	South Atlantic	3,515	3,211	4,246	4,111	4,269	4,172	4,074	4,173	3,645	3,689	3,869	3,608	3,513	35,415	30,708	4-5	4
	West South Central	3,020	3,067	3,649	3,637	3,863	3,900	3,702	3,970	3,644	3,224	3,438	3,160	3,144	32,452	27,746	4-4	4
	Mountain	1,076	1,043	1,408	1,309	1,355	1,358	1,322	1,356	1,251	1,340	1,283	1,172	1,207	11,478	10,891	6-7	7
	Pacific	5,259	5,268	6,330	6,173	6,433	6,265	6,388	7,143	6,395	5,214	5,597	5,524	5,250	55,683	44,758	2-3	3
51	Nondurable goods, total	35,455	33,580	39,630	37,339	41,091	39,914	39,787	41,519	39,734	33,529	36,844	36,662	35,187	348,049	295,496	1.0-1.2	1.0
	New England	2,166	2,066	2,335	2,200	2,377	2,343	2,225	2,453	2,249	2,117	2,245	2,316	2,349	20,413	17,797	5-7	6
	Middle Atlantic	8,577	7,893	9,527	8,616	9,226	9,327	9,487	10,247	10,176	8,084	8,505	8,788	8,435	83,076	69,274	3-3	3
	East North Central	5,755	5,479	6,256	6,042	6,888	6,638	6,380	6,539	5,964	5,479	6,394	6,083	5,704	55,942	50,300	3-4	3
	West North Central	4,538	4,381	5,115	4,760	5,606	[r]5,227	5,512	5,301	5,043	4,331	5,050	4,820	4,515	45,481	38,437	3-4	3
	South Atlantic	3,508	3,409	4,084	3,818	4,132	[r]3,842	3,646	3,894	3,662	3,188	3,580	3,498	3,466	33,995	28,411	3-5	3
	East South Central	1,685	1,549	1,889	1,925	1,959	1,820	1,817	1,844	1,715	1,505	1,710	1,706	1,650	16,204	14,704	3-4	4
	West South Central	3,683	3,581	4,136	4,036	4,580	4,414	4,546	4,785	4,903	3,493	3,598	3,725	3,536	38,663	30,581	5-5	5
	Pacific	4,281	4,013	4,790	4,591	4,893	4,812	4,790	4,982	4,629	3,978	4,461	4,422	4,199	41,781	35,018	4-5	4

Note: Detail may not add to totals due to rounding and minor revisions.

[p]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures. [r]Revised.

[1]See map on page 7.

[2]The range of sampling error of the estimate is based on data for August, September, and October 1977.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: September 1979

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in--					Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		Sales			Inventories			
		September 1979 from August 1979	September 1979 from September 1978	9 months 1979 from 9 months 1978	September 1979 from August 1979	September 1979 from September 1978		
		A	B	C[1]	D	E	A	D
	Merchant wholesalers, total	-6	+16	+17	+1	+15	0.4	0.2
	New England	-5	+9	+17	+2	+7	2.0	1.9
	Middle Atlantic	-3	+20	+17	0	+15	1.1	0.6
	East North Central	-7	+11	+13	+1	+14	1.2	0.8
	West North Central	-5	+19	+19	0	+32	1.3	1.1
	South Atlantic	-9	+6	+18	+2	+12	1.6	1.0
	East South Central	-5	+14	+10	0	+7	1.7	1.4
	West South Central	-2	+27	+22	+1	+21	1.4	0.8
	Mountain	-7	-2	+10	+2	+2	2.4	1.3
	Pacific	-11	+19	+22	+1	+15	1.2	0.5
50	Durable goods, total	-7	+13	+17	0	+14	0.6	0.3
	New England	+1	+14	+20	-1	-2	2.4	1.3
	Middle Atlantic	-6	+13	+14	-1	+14	1.7	1.0
	East North Central	-6	+14	+15	+1	+15	1.9	1.0
	West North Central	-4	+23	+19	-1	+32	3.3	1.7
	South Atlantic	-13	-1	+15	+1	+10	1.9	1.2
	East South Central	-4	+13	+10	+1	+4	3.9	2.5
	West South Central	-8	+13	+17	0	+16	2.1	1.2
	Mountain	-8	-7	+5	+3	+2	2.9	1.7
	Pacific	-14	+20	+24	0	+16	1.9	0.7
51	Nondurable goods, total	-4	+19	+18	+2	+18	0.6	0.4
	New England	-8	+6	+15	+5	+18	1.9	2.7
	Middle Atlantic	-1	+26	+20	+1	+15	1.9	0.9
	East North Central	-9	+9	+11	+1	+12	1.4	1.1
	West North Central	-5	+16	+18	+2	+32	1.6	1.4
	South Atlantic	-6	+15	+20	+5	+18	2.4	1.8
	East South Central	-7	+14	+10	-1	+12	1.7	2.4
	West South Central	+2	+40	+26	+4	+30	2.2	1.3
	Mountain	-5	+3	+14	+1	+3	3.2	1.2
	Pacific	-7	+16	+19	+3	+13	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	-11	+5	+9	+1	+19	2	1
	New England	+7	(S)	+23	-2	+35	7	
	Middle Atlantic	-30	+2	-1	+2	+22	4	2
	East North Central	-5	+10	+15	+4	+19	7	1
	West North Central	+10	+27	+13	+3	+27	5	2
	South Atlantic	-14	-13	+11	+3	-2	4	2
	East South Central	-14	-14	+6	+4	+3	4	3
	West South Central	-21	-5	+7	0	+35	5	2
	Mountain	-11	(S)	(S)	-3	(S)	7	3
	Pacific	-9	+11	+12	-4	+40	3	2
502	Furniture and home furnishings	-5	+1	+8	-2	0	2	1
	Middle Atlantic	-10	-12	+8	-3	-2	4	2
	East North Central	-8	-2	+19	0	-3	7	2
	West North Central	-10	(S)	(S)	0	+5	5	4
	West South Central	-4	+27	+11	-3	+17	5	7
	Pacific	-13	+14	+14	-6	0	5	3
503	Lumber and other construction materials	-13	+7	+18	-2	+10	2	1
	New England	-2	+13	+16	-1	+3	4	5
	Middle Atlantic	-9	-4	+9	-1	+3	4	2
	East North Central	-9	+10	+10	0	+5	3	2
	West North Central	-24	+14	+31	-9	+9	7	7
	South Atlantic	-12	0	+16	-2	+21	4	2
	East South Central	-21	-15	+1	0	+6	4	3
	West South Central	-6	+5	+11	-3	+6	6	5
	Pacific	-18	+13	+28	0	+19	5	1
5051 pt.	Ferrous metals service centers	-12	+14	+20	+2	+23	2	1
	New England	-11	-23	+13	+10	-3	6	2
	Middle Atlantic	-10	+17	+21	0	+23	5	2
	East North Central	-19	+6	+20	+3	+29	5	2
	West North Central	+1	+27	+22	-3	+18	5	2
	South Atlantic	-4	-10	+7	-4	-21	3	2
	East South Central	-10	+14	+18	-2	+23	4	4
	West South Central	+2	+14	+15	+3	+18	4	2
	Mountain	-10	-11	(S)	0	(S)	2	2
	Pacific	-20	+61	+41	+11	+92	2	3
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	0	+30	+19	+1	+22	2	1
	New England	-9	+43	+32	0	+12	3	2
	Middle Atlantic	-3	+20	+15	+2	+13	5	2
	East North Central	-3	+20	+24	+1	+19	3	2
	West North Central	-6	+37	+12	-3	+48	5	3
	South Atlantic	-10	+11	+13	+2	+14	3	2
	East South Central	(S)	(S)	+18	-1	+9	3	
	West South Central	-2	+51	+29	+2	+49	4	
	Mountain	+19	+26	+12	+3	+18	4	
	Pacific	-1	+33	+22	+1	+24	4	

See footnotes at end of table.

Table 7. Percent Change in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: September 1979—Continued

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in-- Sales: Sept. 1979 from Aug. 1979	Sales: Sept. 1979 from Sept. 1978	Sales: 9 months 1979 from 9 months 1978	Inventories: Sept. 1979 from Aug. 1979	Inventories: Sept. 1979 from Sept. 1978	Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		A	B	C[1]	D	E	A	D
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-3	+16	+13	-2	+5	3	1
	Middle Atlantic	0	+14	+11	-5	+14	3	2
	East North Central	-7	+37	+25	+1	+27	4	1
	West North Central	-12	+10	-4	+1	+12	4	4
	South Atlantic	-2	+10	+13	0	-2	6	4
	West South Central	+1	+49	+28	-5	-7	4	4
	Mountain	-6	-14	+14	-2	-22	6	3
	Pacific	-4	+9	+9	0	+8	3	2
5072	Hardware	-11	+16	+12	+2	+22	1	1
	New England	-17	+40	+18	-1	+42	6	3
	Middle Atlantic	-1	+20	+12	+1	+28	6	2
	East North Central	-12	+21	+12	+8	+28	4	2
	West North Central	-16	+21	+17	0	+37	3	3
	South Atlantic	-10	+16	+14	-2	+15	4	2
	East South Central	-9	0	-3	-3	(S)	4	1
	Pacific	-12	+10	+19	+1	+18	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	-1	+10	+13	-2	(S)	2	1
	Middle Atlantic	0	+8	+20	-2	-12	6	3
	East North Central	-7	+3	-2	-5	(S)	3	3
	South Atlantic	-7	+11	+20	+1	+14	3	2
	Mountain	-20	(S)	-14	-6	-3	7	4
	Pacific	-8	+24	+24	+1	+10	5	4
5084,5	Industrial machinery, equipment, and supplies	-9	+7	+18	+1	+11	2	1
	Middle Atlantic	+12	+24	+13	+3	+9	7	2
	East North Central	-8	+16	+20	0	+31	3	2
	West South Central	-12	+36	+33	+3	+6	4	3
	Pacific	-13	+10	+24	+3	+11	5	2
512	Drugs, drug proprietaries, and druggists' sundries	-8	+4	+11	+4	+12	1	1
	New England	-11	-7	+15	+6	+12	5	3
	Middle Atlantic	-8	+6	+5	+2	+24	3	2
	East North Central	-10	+1	+12	+7	-1	6	3
	West North Central	-14	+5	+12	+7	+14	2	2
	South Atlantic	-6	0	+7	+5	+4	6	5
	East South Central	-7	+16	+7	+4	+29	6	5
	West South Central	-3	+7	+9	+6	+17	3	2
	Mountain	-9	+22	+19	+6	+36	3	2
	Pacific	-7	0	+18	+1	-2	3	3
5141	Groceries, general-line	-7	+9	+13	-1	+9	1	1
	New England	-10	+3	+11	-4	+11	2	1
	Middle Atlantic	-7	+6	+13	-3	+9	1	2
	East North Central	-4	+16	+12	+3	+8	3	1
	West North Central	-5	+13	+8	-10	+4	1	1
	South Atlantic	-7	+8	+15	+1	+6	2	1
	West South Central	-7	+15	+15	+2	+16	2	1
	Mountain	-10	+6	+14	+1	+15	2	2
	Pacific	-9	+4	+14	+1	+11	1	1
5142,3,6,9	Specialty-line groceries	-5	+6	+11	+2	+8	1	1
	Middle Atlantic	+4	+6	+8	+1	-9	4	2
	East North Central	-6	+3	+7	+2	+10	3	2
	West North Central	0	+21	+13	-1	+38	3	1
	South Atlantic	-7	+6	+14	+2	+29	5	6
	East South Central	-5	-5	+9	-2	+33	2	2
5148	Fresh fruits and vegetables	-11	+3	+8	+9	+3	2	4
	Middle Atlantic	-14	+5	+6	+5	-12	7	5
	East North Central	-11	+13	+1	+8	+1	6	6
	West North Central	-16	-11	+8	+5	-24	6	3
	West South Central	+5	+20	+12	+6	+3	5	3
	Pacific	-11	-2	+9	+27	+8	4	4
5194	Tobacco and tobacco products	-11	-2	+6	-2	+2	1	1
	New England	-15	-6	-8	-7	-5	5	3
	Middle Atlantic	-11	-2	+5	-3	+9	4	3
	East North Central	-12	-13	+5	-2	-12	4	3
	West North Central	-9	+10	+8	+3	+17	4	2
	South Atlantic	-2	-14	+6	0	-12	6	6
	East South Central	-13	-22	-4	-1	-14	7	4
	West South Central	-7	(S)	+20	0	(S)	7	6
	Mountain	-3	+22	+12	+13	-14	6	2
	Pacific	-15	+5	+18	-7	0	2	5

Note: Data at the United States level are generally more relinble than data by geographic division. In those kinds of business where the geographic division trends are subject o a high sampling error, it may be desirable to use the United States total trends for the kinds of business rather than the geographic division trends.

(S) Does not meet publication standards because of extreme variability or high nonresponse rate.

[1]See map on page 7.

[2]The sampling errors (in percent) shown in columns A and D are based on medians or measurements on data for August, September, and October 1977. For SIC's 5051 pt., and 5063 the medians of measurements in columns A and D are based on data for June, July, and August 1978.

APPENDIX A. Reliability of Data

There are two types of errors possible in an estimate based on a sample survey—sampling and nonsampling. Sampling errors occur because observations are made only on a sample, not on the entire population. Nonsampling errors can be attributed to many sources in the collection and processing of data. The accuracy of a survey result is determined by the joint effects of sampling and nonsampling errors.

Measures of sampling variability—The particular sample used in this survey is one of a large number of all possible samples of the same size that could have been selected using the same design. Estimates derived from the different samples would differ from each other. The average of these estimates would be close to the estimate derived from a complete enumeration of the population (assuming that a complete enumeration has the same nonsampling errors as the sample survey). The average of the estimates differs from the estimate from a complete census because of the composite estimation technique. Disregarding this difference, the sampling error or standard error of the estimate is a measure of the variability among the estimates from all possible samples of the same size and design and, thus, is a measure of the precision with which an estimate from a particular sample approximates the results of a complete enumeration. The coefficient of variation (expressed as a percent) is the standard error of the estimate times 100 percent, divided by the value being estimated. Note that any measures of sampling variability, such as the standard error or coefficient of variation, are estimates derived from the sample and are also subject to sampling variability.

Estimates of sampling variability (the coefficients of variation in percent) for sales and inventories at the kind-of-business detail provided in this publication are shown in table A-1. These coefficients of variation permit certain confidence statements about the sample estimates. As noted above, the particular sample used in this survey is one of a large number of all possible samples of about the same size that could have been selected using the same design. In about two out of three (67 percent) of these samples, the estimate would differ from a complete enumeration by less than the corresponding percent for that estimate shown in the sampling variability table. In about 19 out of 20 (95 percent) of these samples, the estimate would differ from the results of a complete enumeration by less than twice the percentages shown.

To illustrate the computations involved in the above confidence statements for monthly dollar volume estimates, assume that an estimate for a kind of business published in table 1 for a particular month is $5,000 million and that the median coefficient of variation for this statistic, is 0.9 percent or .009. Multiplying $5,000 million by .009 yields $45 million. Therefore, a 67 percent confidence interval is $4,955 million to $5,045 million (i.e. $5,000 million plus or minus $45 million). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately two out of three (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Similarly a 95 percent confidence interval is $4,910 million to $5,090 million (i.e., $5,000 million plus or minus $90 million).

As an example of the use of the coefficients of variation with ratios, assume that an estimated month-to-month percent change published in table 5 is -1.0 percent for a particular kind of business. This is equivalent to a month-to-month ratio of .990. Assume the median coefficient of variation for this ratio as shown in table A-1 is 0.5 percent (or .005). Multiplying .990 by .005 yields .005. Therefore, a 67 percent confidence interval is .985 to .995 (i.e., .990 plus or minus .005) and a 95 percent confidence interval is .980 to 1.000 (i.e., .990 plus or minus .010).

Nonsampling errors—As calculated for this report, the coefficient of variation measures certain nonsampling errors but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples of the same size and design, between the estimate and the true value being estimated. The accuracy of the tabulated data is determined by the joint effects of the sampling and nonsampling errors.

Nonsampling errors can be attributed to many sources: (1) inability to obtain information about all cases in the sample, (2) response errors, (3) definitional difficulties, (4) differences in the interpretation of questions, (5) mistakes in recording or coding the data obtained, and (6) other errors of collection, response, coverage, and estimation for missing data. These nonsampling errors also occur in complete censuses.

Although no direct measurement of the biases due to nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is due to imputing data for nonrespondents, for late reporters, and for data which fail edit. For all kinds of business combined, imputed data amount to about 15 percent of the sales estimates and 25 percent for inventories.

Table A-1. Estimated Sampling Variability of Sales and Inventories by Kind of Business for the United States

1972 SIC code	Kind of business	Sales						Inventories					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total	0.8-1.1	0.9	0.8-0.9	0.9	0.4-0.5	0.5	0.8-1.0	0.9	0.7-1.0	0.9	0.2-0.5	0.4
	Total (excluding farm-product raw materials)	0.9-1.2	1.1	0.9-1.0	1.0	0.4-0.6	0.5	0.9-1.0	1.0	0.8-1.0	0.9	0.2-0.5	0.3
50	Durable goods, total	1.1-1.3	1.2	0.9-1.0	1.0	0.6-0.6	0.6	1.1-1.2	1.2	1.0-1.2	1.1	0.3-0.7	0.5
501	Motor vehicles and automotive parts and supplies	2.3-3.3	3.1	1.9-2.8	2.2	1.4-1.9	1.7	2.5-3.3	2.9	2.6-3.1	3.0	0.6-1.3	1.0
5012	Automobiles and other motor vehicles	(*)	(*)	(*)	(*)	1.7-3.9	3.1	(*)	(*)	(*)	(*)	1.7-3.0	2.8
5013,4	Automotive parts and supplies, tires and tubes	2.9-3.7	3.1	2.9-3.2	3.1	1.5-2.0	1.6	4.0-4.5	4.3	3.9-4.4	4.0	0.4-1.4	0.7
5013	Automotive parts and supplies	3.3-4.0	3.9	3.1-3.8	3.7	1.9-2.2	2.0	4.7-5.3	5.2	4.7-5.2	5.0	0.5-1.5	0.9
502	Furniture and home furnishings	4.2-5.8	4.6	4.2-4.4	4.3	1.7-2.9	2.0	3.2-4.9	3.7	3.4-4.2	3.7	0.8-2.3	2.0
5021	Furniture--household and office	6.6-7.6	6.9	5.6-7.1	6.9	4.0-5.7	4.3	(*)	(*)	(*)	(*)	1.4-3.4	2.2
5021 pt.	Household furniture	(*)	(*)	(*)	(*)	5.0-5.8	5.1	(*)	(*)	(*)	(*)	1.4-4.3	2.0
5021 pt.	Office furniture	(*)	(*)	(*)	(*)	5.7-8.0	5.9	(*)	(*)	(*)	(*)	0.7-3.7	2.1
5023	Home furnishings	5.1-7.5	6.1	5.1-6.1	5.5	1.6-3.6	2.2	4.8-6.9	5.6	4.9-6.0	5.0	1.0-3.1	2.6
503	Lumber and other construction materials	2.8-4.4	3.1	2.9-3.9	3.1	1.6-2.5	1.9	4.5-6.5	4.9	4.8-5.8	4.9	0.7-1.8	0.9
5031	Lumber, plywood, and millwork	4.1-4.6	4.3	3.3-4.6	4.0	2.1-2.5	2.4	5.9-8.2	6.5	6.0-6.9	6.5	1.0-2.6	1.8
5039	Construction materials, n.e.c	4.2-7.2	4.9	4.5-5.9	4.9	2.0-3.4	2.2	(*)	(*)	(*)	(*)	1.1-2.0	1.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(*)	(*)	(*)	(*)	2.2-2.4	2.3	(*)	(*)	(*)	(*)	1.0-2.5	1.4
505	Metals and minerals, except petroleum	4.4-6.0	4.7	4.0-5.1	4.0	1.5-3.0	2.8	3.2-3.8	3.7	3.7-4.1	4.0	0.8-1.4	1.3
5051 pt.	Ferrous metals service centers and offices	5.0-5.8	5.7	4.1-5.2	4.7	1.2-3.8	3.1	3.8-4.2	4.1	4.1-4.3	4.2	0.5-1.6	1.4
5051 pt.	Ferrous metals service centers	6.7-8.0	6.8	5.0-6.8	5.8	1.1-5.3	3.5	2.9-4.4	3.4	3.4-4.0	3.5	0.6-2.2	2.1
5051 pt.	Nonferrous metals service centers and offices	(*)	(*)	(*)	(*)	4.5-7.0	6.1	(*)	(*)	(*)	(*)	2.8-5.4	4.7
506	Electrical goods	1.9-2.6	2.3	1.6-2.1	1.7	1.3-1.6	1.4	2.5-2.9	2.6	2.2-2.8	2.4	0.5-1.0	0.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2.2-3.1	2.6	2.3-2.7	2.4	1.4-1.7	1.6	2.9-3.5	3.2	3.0-3.2	3.1	0.6-1.2	0.7
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3.4-4.0	3.8	3.0-3.2	3.1	1.6-2.8	2.5	2.9-4.2	3.2	2.7-3.8	3.0	0.7-1.6	0.9
5064	Electrical appliances, TV and radio sets	3.0-3.8	3.6	2.6-3.7	3.1	1.7-2.7	2.5	(*)	(*)	(*)	(*)	0.9-1.7	1.4
507	Hardware, plumbing, heating equipment, and supplies	2.7-3.0	2.9	2.4-2.6	2.5	1.1-1.9	1.5	2.4-2.8	2.6	2.4-2.9	2.7	0.3-1.4	0.6
5072	Hardware	3.6-4.2	3.8	2.6-3.1	3.0	1.3-2.4	1.9	2.0-4.1	2.7	2.2-3.5	2.8	0.4-2.1	0.8
5074	Plumbing and heating equipment and supplies (hydronics)	4.1-5.3	4.2	3.9-5.1	4.2	1.6-3.8	2.1	5.0-7.0	6.0	4.5-7.1	5.3	0.5-3.1	0.9
5075	Warm air heating and air conditioning equipment and supplies	(*)	(*)	(*)	(*)	2.0-4.4	2.7	(*)	(*)	(*)	(*)	1.1-4.3	1.4
08	Machinery, equipment, and supplies	2.3-2.7	2.6	1.8-2.5	2.1	1.2-1.5	1.4	2.0-2.6	2.3	1.7-2.1	1.9	0.4-1.8	1.1
081	Commercial machines and equipment	(*)	(*)	(*)	(*)	2.9-4.3	4.1	(*)	(*)	(*)	(*)	1.6-8.5	1.9
5082	Construction and mining machinery and equipment	5.0-7.3	5.8	3.3-5.8	4.9	3.9-4.6	4.4	2.9-7.0	4.0	3.2-4.1	3.3	0.7-5.3	1.0
5083	Farm and garden machinery and equipment	(*)	(*)	(*)	(*)	4.1-6.6	6.0	(*)	(*)	(*)	(*)	1.1-2.9	1.2
5084,5	Industrial machinery, equipment, and supplies	3.1-3.4	3.2	2.8-3.0	2.9	1.1-2.3	1.6	2.4-3.0	2.9	2.4-3.0	2.7	0.5-1.6	0.6
5086	Professional equipment and supplies	3.7-7.5	4.3	4.0-5.5	5.2	1.8-3.3	2.0	(*)	(*)	(*)	(*)	0.6-5.2	0.7
5086 pt.	Surgical, medical, hospital, and supplies	(*)	(*)	(*)	(*)	1.7-3.8	2.5	(*)	(*)	(*)	(*)	0.7-5.4	1.0
5087	Service establishment equipment and supplies	(*)	(*)	(*)	(*)	1.8-11.0	2.9	(*)	(*)	(*)	(*)	1.0-3.4	1.3
5093	Scrap and waste materials	4.6-13.3	9.0	4.6-8.8	5.0	2.2-4.9	2.7	(*)	(*)	(*)	(*)	0.7-3.8	0.9
5093 pt.	Iron and steel scrap	(*)	(*)	(*)	(*)	2.6-3.5	3.1	(*)	(*)	(*)	(*)	0.8-1.4	1.0
5093 pt.	Waste materials	(*)	(*)	(*)	(*)	2.6-8.8	4.8	(*)	(*)	(*)	(*)	1.2-9.1	1.6
51	Nondurable goods, total	1.0-1.3	1.1	1.0-1.1	1.1	0.4-0.7	0.6	1.5-1.7	1.6	1.4-1.6	1.5	0.3-0.7	0.4
	Total (excluding farm-product raw materials)	1.0-1.6	1.2	1.3-1.4	1.4	0.5-0.8	0.6	1.7-2.0	1.9	1.6-1.8	1.7	0.3-0.7	0.4
511	Paper and paper products	2.6-4.0	3.7	2.4-4.1	3.1	1.0-1.4	1.3	2.5-3.4	2.7	2.4-3.2	2.8	0.4-1.5	0.6
5111,3	Printing, writing, industrial, and personal service paper	2.4-3.1	2.7	2.3-2.8	2.4	1.3-1.5	1.4	2.9-3.4	3.1	2.7-3.2	2.8	0.4-1.3	0.9
5112	Stationery supplies	(*)	(*)	(*)	(*)	2.4-3.4	2.5	3.2-6.1	5.8	3.6-5.1	4.4	0.9-4.8	1.4
512	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	5.6-6.3	5.7	5.6-5.7	5.7	0.6-2.2	0.7
5122	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	(*)	(*)	(*)	(*)	0.6-2.2	0.7
5122 pt.	General-line drugs	7.2-9.8	7.9	7.5-8.5	7.6	0.7-3.0	1.0	(*)	(*)	(*)	(*)	0.5-3.1	1.0
513	Apparel, piece goods, and notions	8.3-12.4	8.8	8.6-9.3	9.1	2.6-4.0	3.3	(*)	(*)	(*)	(*)	(*)	(*)
514	Groceries and related products	1.7-2.2	2.0	1.6-2.0	1.9	0.4-1.2	0.5	1.5-2.5	1.8	1.8-2.1	1.9	0.4-1.3	0.6
5141	Groceries, general-line	1.9-2.7	2.1	1.7-2.7	2.0	0.4-1.5	0.7	1.8-2.7	2.3	1.7-2.0	1.8	0.3-1.2	0.8
5141 pt.	Voluntary groups	(*)	(*)	(*)	(*)	0.5-1.7	0.6	(*)	(*)	(*)	(*)	0.4-1.7	0.5
5141 pt.	Retailer cooperatives	(*)	(*)	(*)	(*)	0.6-1.6	1.1	(*)	(*)	(*)	(*)	0.4-2.4	0.7
5141 pt.	Other general-lines	(*)	(*)	(*)	(*)	0.9-3.1	1.8	(*)	(*)	(*)	(*)	0.5-1.3	0.7
5142,3,6,9	Specialty-line groceries	(*)	(*)	(*)	(*)	0.7-3.4	1.3	(*)	(*)	(*)	(*)	0.9-2.4	1.0
5144	Poultry and poultry products	3.4-5.5	4.4	4.0-4.4	4.2	0.6-2.2	1.5	(*)	(*)	(*)	(*)	2.1-4.1	2.3
5145	Confectionery	4.7-6.3	4.7	3.6-5.4	4.3	2.0-3.2	2.2	(*)	(*)	(*)	(*)	0.8-2.4	2.3
5147	Meats and meat products	4.5-4.8	4.7	4.6-4.6	4.6	1.4-2.9	1.7	(*)	(*)	(*)	(*)	1.7-3.9	2.2
5148	Fresh fruits and vegetables	4.7-5.4	4.9	3.9-4.1	4.0	1.9-4.2	2.7	(*)	(*)	(*)	(*)	2.9-4.4	3.9
515	Farm-product raw materials	1.8-2.2	2.0	1.6-2.0	1.7	1.1-1.7	1.3	(*)	(*)	(*)	(*)	1.1-2.8	2.4
5152	Cotton	(*)	(*)	(*)	(*)	1.8-4.9	2.8	(*)	(*)	(*)	(*)	1.3-2.9	2.4
5153	Grain	2.4-2.7	2.6	2.2-2.4	2.3	1.0-1.7	1.3	(*)	(*)	(*)	(*)	1.6-3.3	1.9
517	Petroleum and petroleum products	4.0-5.0	4.7	4.2-4.6	4.5	1.1-1.9	1.5	4.1-5.2	5.0	4.4-5.4	4.7	1.6-3.0	2.3
5171	Petroleum bulk stations and terminals	2.8-3.3	2.9	2.8-3.0	2.9	0.9-1.4	1.2	(*)	(*)	(*)	(*)	1.7-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages	3.4-3.9	3.7	3.1-3.7	3.2	0.8-1.8	1.7	3.9-4.2	4.1	4.0-4.3	4.2	1.0-2.0	1.3
5181	Beer and ale	2.2-4.4	3.1	2.8-3.2	2.9	1.0-2.5	2.0	3.6-5.5	3.8	3.6-4.1	3.8	1.7-2.7	2.1
5182	Wines and distilled alcoholic beverages	5.2-6.3	5.4	4.6-5.6	4.7	1.2-3.4	1.7	4.6-5.4	4.8	5.0-5.6	5.3	1.4-2.3	1.6
59	Miscellaneous nondurable goods	2.4-3.2	2.9	2.4-2.7	2.5	1.4-2.3	1.6	(*)	(*)	(*)	(*)	0.8-1.7	1.4
91	Farm supplies	(*)	(*)	(*)	(*)	3.2-3.6	3.3	(*)	(*)	(*)	(*)	1.7-3.9	2.0
94	Tobacco and tobacco products	4.0-5.2	4.1	3.4-4.5	4.2	1.3-2.4	1.7	(*)	(*)	(*)	(*)	0.8-4.3	1.0
5198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.8-3.8	3.0	(*)	(*)	(*)	(*)	1.5-3.1	2.9
5199 pt.	Books, magazines, newspapers	(*)	(*)	(*)	(*)	3.2-8.0	5.6	(*)	(*)	(*)	(*)	2.0-6.5	5.1

Note: Measures of sampling variability are based on data unadjusted for seasonal variations or trading-day differences. The range of sampling error of the monthly dollar estimates and the ratio of current month to previous month for sales and inventories is based on data for July, August, and September 1977.

*Measures of sampling variability are not shown since sales and/or inventory estimates for these kinds of business are not published.

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

Seasonal factors for adjusting data in this historical publication have been developed by the method described in the **X-11 Variant of the Census Method II Seasonal Adjustment Program**, U.S. Bureau of the Census Technical Paper No. 15, Revised 1967. Trading-day factors for adjusting sales were also derived from the X-11 program.

Adjustment of estimates is an approximation based on past experiences, and therefore, will be less precise to the extent that current competitive pressures, changes in economic condition, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of trading-day adjustment factors may be found in **Estimating Trading-Day Variation in Monthly Economic Time Series**, Bureau of the Census Technical Paper No. 12, 1965. Additional details concerning the adjustment factors may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.7	91.8	107.1	97.7	104.3	104.7	95.6	104.7	98.3	102.2	100.6	96.3
	Total (excluding farm-product raw materials)	91.6	91.6	106.6	97.8	105.1	105.8	95.8	106.1	100.3	102.3	99.3	95.0
50	Durable goods, total	89.6	89.0	105.7	99.0	106.5	107.3	96.4	107.7	101.9	104.1	98.6	91.5
501	Motor vehicles and automotive parts and supplies	93.3	89.8	107.6	107.7	108.4	107.5	98.6	106.9	96.1	98.3	93.3	90.5
502	Furniture and home furnishings	84.8	89.8	105.2	96.8	101.6	106.6	89.2	105.2	103.9	112.1	107.2	95.2
503	Lumber and other construction materials	80.6	80.2	100.9	94.6	109.8	112.2	102.4	117.4	106.2	109.9	100.0	84.0
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	78.7	88.7	104.5	101.5	109.3	97.0	96.1	105.2	105.4	106.0	108.0	95.5
505	Metals and minerals, except petroleum	98.2	91.4	108.2	98.6	107.6	104.4	91.2	108.6	103.1	100.0	97.1	90.3
506	Electrical goods	89.3	89.1	102.0	96.0	99.4	106.5	99.0	104.8	100.8	107.5	103.5	98.8
507	Hardware, plumbing, heating equipment, and supplies	89.2	87.4	99.9	97.9	106.7	108.0	100.7	109.2	102.4	107.2	100.6	88.3
508	Machinery, equipment, and supplies	88.1	88.6	107.9	99.9	107.7	108.8	95.4	104.6	103.3	103.5	96.5	92.3
509	Miscellaneous durable goods	86.2	89.8	106.2	96.2	100.2	110.7	88.4	109.5	101.9	108.1	103.7	96.0
51	Nondurable goods, total	96.4	93.8	108.5	97.1	103.5	102.3	94.9	102.1	96.1	100.2	101.8	100.1
	Total (excluding farm-product raw materials)	94.3	94.0	106.8	96.6	103.2	104.5	95.5	104.5	97.6	100.6	100.6	98.4
511	Paper and paper products	95.5	92.6	106.3	93.4	103.3	103.6	95.6	107.3	102.6	104.0	99.4	92.6
512	Drugs, drug proprietaries, and druggists' sundries	97.8	92.6	106.0	96.3	100.3	99.8	92.9	104.7	100.8	108.1	101.0	96.6
513	Apparel, piece goods, and notions	90.1	94.4	107.1	91.8	101.2	98.8	93.7	115.6	106.3	107.7	103.4	87.1
514	Groceries and related products	94.7	91.1	104.2	97.2	105.4	105.0	99.0	105.3	98.9	101.0	99.8	95.0
515	Farm-product raw materials[1]	103.1	94.7	112.6	98.0	103.9	96.9	93.0	92.4	91.5	100.8	108.3	99.9
516	Chemicals and allied products	90.2	89.2	106.3	98.0	107.1	108.3	96.1	108.0	97.8	105.0	98.8	93.3
517	Petroleum and petroleum products	99.7	102.3	107.7	96.2	95.9	100.0	96.5	100.2	93.1	100.9	100.3	104.8
518	Beer, wine, and distilled alcoholic beverages	77.8	81.4	102.2	90.7	106.8	113.9	97.6	107.8	97.8	100.6	106.9	113.5
519	Miscellaneous nondurable goods	96.0	100.5	116.6	102.4	107.4	105.2	88.2	95.5	95.4	96.8	95.6	96.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.8	101.2	101.7	100.7	99.4	99.3	98.6	98.1	98.7	100.1	100.9	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.0	100.3	100.6	100.7	100.2	99.4	99.6	99.9	99.7	99.1
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.5
501	Motor vehicles and automotive parts and supplies	101.3	103.0	101.6	100.6	102.0	100.5	99.2	97.0	97.4	98.1	99.0	99.9
502	Furniture and home furnishings	99.1	99.3	99.7	99.5	100.8	101.9	100.5	100.6	101.2	100.2	99.5	97.3
503	Lumber and other construction materials	98.4	99.1	103.6	102.7	103.6	101.7	101.4	99.8	99.2	96.7	96.2	97.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.6	99.8	100.7	102.4	106.5	105.3	100.9	101.5	100.9	93.9	89.9
505	Metals and minerals, except petroleum	99.4	98.2	100.2	100.8	100.2	100.2	102.8	102.8	99.9	96.7	98.9	99.7
506	Electrical goods	96.7	96.8	99.0	99.6	101.2	102.6	101.4	100.7	101.3	101.2	100.5	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.4	103.2	102.6	101.6	100.6	98.4	98.7	97.1	96.1
508	Machinery, equipment, and supplies	99.0	101.0	101.6	100.1	101.0	102.1	100.3	99.0	99.4	99.0	98.7	98.7
509	Miscellaneous durable goods	97.0	97.6	96.0	97.5	96.4	100.8	102.4	102.6	102.9	103.8	102.4	100.5
51	Nondurable goods, total	104.1	103.2	103.3	99.4	96.7	95.1	94.7	95.3	97.4	102.1	104.6	103.4
	Total (excluding farm-product raw materials)	100.0	100.0	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.6	100.5
511	Paper and paper products	97.8	98.3	99.1	101.1	100.4	102.6	100.0	100.2	100.7	100.0	99.6	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.1	99.8	100.6	97.9	100.6	99.0	100.0	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.0	100.2	101.9	101.5	99.8	99.0	98.6	99.3
514	Groceries and related products	98.7	100.2	102.1	100.5	99.2	98.7	98.5	98.0	99.9	102.0	100.9	101.0
515	Farm-product raw materials[1]	118.8	115.2	112.2	100.3	88.9	84.6	78.8	79.4	83.8	103.8	117.4	115.3
516	Chemicals and allied products	98.0	100.0	101.9	101.6	102.4	100.9	101.6	100.2	100.4	96.9	97.0	98.7
517	Petroleum and petroleum products	104.4	99.3	99.2	94.2	96.0	94.3	96.3	100.7	102.9	104.8	104.2	103.4
518	Beer, wine, and distilled alcoholic beverages	96.3	95.8	97.4	99.1	102.3	102.9	99.9	97.9	100.3	107.0	105.7	95.3
519	Miscellaneous nondurable goods	103.6	104.6	105.0	102.1	97.2	93.2	95.1	96.0	97.4	99.7	101.9	104.0

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979—Continued

1972 SIC code	Kind of business	1979											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	95.9	91.8	104.7	100.0	105.3	101.5	98.4	104.2	95.8	104.5	100.4	96.2
	Total (excluding farm-product raw materials)	94.0	91.6	103.9	99.8	106.1	102.9	98.6	105.7	97.6	104.9	99.2	94.5
50	Durable goods, total	91.9	89.1	103.2	101.1	107.3	104.3	99.4	107.0	99.3	106.8	98.4	91.2
501	Motor vehicles and automotive parts and supplies	94.0	89.9	106.2	108.4	110.5	104.7	102.9	104.4	94.7	99.1	93.7	89.3
502	Furniture and home furnishings	87.1	89.8	101.8	98.4	102.6	104.0	91.2	105.5	101.7	115.1	106.5	94.2
503	Lumber and other construction materials	83.0	80.2	97.3	98.0	110.4	107.7	107.0	117.2	102.4	113.5	100.3	83.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	84.3	88.7	102.1	101.4	107.8	98.7	95.0	103.6	103.6	113.3	102.3	97.8
505	Metals and minerals, except petroleum	100.7	91.4	102.7	101.4	107.6	101.3	95.4	108.3	101.3	102.6	96.1	89.0
506	Electrical goods	92.0	89.1	99.9	99.3	98.8	103.9	100.6	104.5	98.2	110.6	102.9	100.1
507	Hardware, plumbing, heating equipment, and supplies	91.0	87.4	97.8	100.1	108.1	104.5	103.4	108.6	100.5	109.2	100.3	88.6
508	Machinery, equipment, and supplies	90.9	88.7	106.1	102.1	108.9	105.2	97.1	104.4	100.1	106.7	96.3	92.9
509	Miscellaneous durable goods	86.8	89.8	105.0	99.4	101.6	105.4	92.6	109.0	98.1	109.1	106.2	95.5
51	Nondurable goods, total	93.8	93.7	106.2	99.2	104.4	99.5	97.2	101.8	93.9	102.7	101.5	99.8
	Total (excluding farm-product raw materials)	96.8	94.0	104.0	99.0	104.1	101.2	98.0	104.7	94.9	103.2	100.7	98.0
511	Paper and paper products	100.0	92.7	103.2	94.8	103.3	102.4	97.4	107.1	99.3	108.7	97.7	92.2
512	Drugs, drug proprietaries, and druggists' sundries	99.7	92.6	104.0	98.9	100.6	96.9	96.6	103.9	97.6	110.1	101.8	96.1
513	Apparel, piece goods, and notions	93.9	94.4	103.7	92.4	101.8	97.8	95.7	115.5	102.9	112.3	102.1	85.9
514	Groceries and related products	97.5	91.0	103.1	98.3	106.3	103.0	100.0	105.0	96.2	104.0	99.5	95.1
515	Farm-product raw materials[1]	106.7	94.5	111.9	100.2	102.7	97.1	94.1	91.8	87.9	104.3	108.3	100.5
516	Chemicals and allied products	92.5	89.2	101.9	100.8	107.7	105.0	100.2	108.2	94.8	107.6	98.9	91.7
517	Petroleum and petroleum products	99.2	102.1	106.6	99.2	95.9	96.9	100.0	100.7	90.7	100.1	103.6	103.5
518	Beer, wine, and distilled alcoholic beverages	81.1	81.5	98.0	93.8	107.9	109.4	101.0	108.2	94.0	104.8	106.4	112.3
519	Miscellaneous nondurable goods	97.5	100.5	114.0	106.1	108.2	101.4	90.4	96.3	92.4	98.3	96.6	96.6
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.7	101.2	101.7	100.8	99.5	99.3	98.6	98.1	98.7	100.1	100.8	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.1	100.4	100.6	100.7	100.2	99.4	99.6	99.9	99.6	99.0
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.4
501	Motor vehicles and automotive parts and supplies	101.3	103.1	101.6	100.6	102.0	100.5	99.3	97.0	97.4	98.2	99.0	99.8
502	Furniture and home furnishings	99.2	99.3	99.7	99.5	100.9	102.0	100.4	100.6	101.2	100.2	99.5	97.2
503	Lumber and other construction materials	98.5	99.1	103.7	102.7	103.4	101.5	101.3	99.8	99.2	96.8	96.2	97.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.7	99.8	100.7	102.3	106.4	105.3	100.9	101.6	100.9	93.8	90.0
505	Metals and minerals, except petroleum	99.3	98.3	100.2	100.8	100.2	100.2	102.8	102.9	100.0	96.6	98.8	99.6
506	Electrical goods	96.7	96.7	99.0	99.7	101.3	102.7	101.4	100.7	101.4	101.1	100.4	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.6	103.3	102.6	101.6	100.6	98.4	98.7	97.0	96.0
508	Machinery, equipment, and supplies	99.0	101.0	101.5	100.1	101.0	102.1	100.3	99.1	99.4	98.9	98.6	98.7
509	Miscellaneous durable goods	97.1	97.5	96.0	97.4	96.4	100.9	102.4	102.6	103.0	103.8	102.4	100.5
51	Nondurable goods, total	103.9	103.2	103.4	99.5	96.9	95.3	94.7	95.3	97.4	102.0	104.5	103.4
	Total (excluding farm-product raw materials)	100.0	99.9	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.5	100.5
511	Paper and paper products	97.7	98.3	99.1	101.1	100.5	102.7	99.9	100.1	100.7	100.0	99.5	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.0	99.8	100.5	97.8	100.6	99.0	100.1	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.1	100.2	101.8	101.6	99.8	99.1	98.5	99.2
514	Groceries and related products	98.7	100.2	102.1	100.5	99.3	98.7	98.5	98.0	99.9	102.0	100.8	101.0
515	Farm-product raw materials[1]	118.5	115.2	112.3	100.8	89.6	85.4	78.5	79.2	83.5	103.3	117.1	115.1
516	Chemicals and allied products	98.0	100.0	102.0	101.6	102.4	101.0	101.6	100.2	100.5	96.9	96.8	98.6
517	Petroleum and petroleum products	104.4	99.4	99.4	94.2	95.9	94.2	96.2	100.9	102.9	104.7	104.2	103.2
518	Beer, wine, and distilled alcoholic beverages	96.3	95.7	97.4	99.1	102.3	102.8	99.9	97.9	100.3	106.9	105.7	95.3
519	Miscellaneous nondurable goods	103.7	104.6	105.1	102.1	97.2	93.1	95.1	95.9	97.3	99.7	101.8	104.0

Note: The adjustment factors shown above for sales are a combination of the seasonal and trading-day factors. These are separately available, however, upon request. Adjustment factors are included in this table for some kinds of business for which adjusted data are not published separately.

Adjusted sales and inventory data shown in table 4 are obtained by dividing the unadjusted data shown in tables 1 and 2 by the adjustment factors shown above for the corresponding kinds of business. Adjusted data for the summary trade totals are obtained by summarizing the adjusted data for the individual kinds of business. Seasonal factors shown for the summary trade totals provide an approximation to these totals but may show small differences from the published data. The seasonally adjusted data for 1978 may vary slightly from the method shown above because of insignificant rounding differences.

[1]There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table B-2. Average Month-to-Month Percent Changes and Related Summary Measures for Sales and Inventories of Merchant Wholesalers

1972 SIC code	Kind of business	$\bar{O}$	$\bar{S}$	$\bar{CI}$	$\bar{I}$	$\bar{C}$	$\bar{I}/\bar{C}$	MCD	Average duration of run			
									CI	I	C	MCD
		Sales										
	Merchant wholesalers, total	4.74	3.10	1.31	.82	.96	.86	1	3.10	1.57	14.11	3.10
50	Durable goods, total	5.30	4.84	1.43	.89	1.08	.82	1	3.53	1.63	15.87	3.53
501	Motor vehicles and automotive parts and supplies	5.53	4.22	2.67	2.33	1.24	1.87	3	2.05	1.59	25.40	5.43
502	Furniture and home furnishings	6.00	7.29	2.06	1.68	1.07	1.57	2	2.27	1.55	9.07	3.00
503	Lumber and other construction materials	7.40	6.25	2.67	1.72	1.76	.98	1	2.76	1.51	14.11	2.76
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	9.79	9.32	4.02	3.74	1.20	3.12	4	1.81	1.67	7.06	3.44
505	Metals and minerals, except petroleum	6.79	3.78	3.10	2.38	1.63	1.46	2	2.19	1.41	9.07	3.71
506	Electrical goods	5.79	5.17	1.89	1.52	1.04	1.47	2	2.08	1.46	10.58	3.32
507	Hardware, plumbing, heating equipment, and supplies	5.42	4.86	1.78	1.33	1.09	1.22	2	1.98	1.41	12.70	3.94
508	Machinery, equipment, and supplies	6.10	5.41	1.87	1.51	.97	1.56	2	1.92	1.46	7.94	3.32
509	Miscellaneous durable goods	7.66	6.11	3.51	2.79	1.79	1.56	2	1.87	1.48	9.77	2.93
51	Nondurable goods, total	5.07	2.80	1.58	1.10	.95	1.16	2	2.59	1.43	9.07	3.60
511	Paper and paper products	5.41	3.16	1.99	1.44	1.10	1.30	2	1.98	1.48	7.94	3.60
512	Drugs, drug proprietaries, and druggists' sundries	5.97	3.89	1.90	1.64	.76	2.15	3	1.95	1.57	9.77	4.31
513	Apparel, piece goods, and notions	7.73	6.91	2.70	2.36	1.01	2.34	3	1.72	1.38	10.58	4.17
514	Groceries and related products	4.44	2.01	1.67	1.41	.82	1.72	2	1.92	1.51	12.70	3.15
515	Farm-product raw materials	9.27	5.04	4.87	4.29	1.59	2.70	4	1.90	1.53	6.68	3.54
516	Chemicals and allied products	6.21	4.53	2.47	1.93	1.46	1.32	2	2.19	1.49	8.47	3.32
517	Petroleum and petroleum products	7.38	4.71	4.81	4.47	1.35	3.30	4	1.67	1.55	9.07	2.70
518	Beer, wine, and distilled alcoholic beverages	10.94	8.71	1.86	1.64	.69	2.39	3	1.76	1.59	21.17	3.68
519	Miscellaneous nondurable goods	5.89	4.84	2.53	2.23	.96	2.32	3	1.92	1.63	8.47	3.47
		Inventories										
	Merchant wholesalers, total	1.10	.72	.94	.39	.83	.47	1	4.88	1.79	18.14	4.88
50	Durable goods, total	1.07	.57	.89	.35	.86	.41	1	7.94	1.46	31.75	7.94
501	Motor vehicles and automotive parts and supplies	2.20	1.22	1.69	1.13	1.21	.93	1	2.54	1.63	12.70	2.54
502	Furniture and home furnishings	2.13	1.28	1.60	1.19	1.00	1.19	2	2.40	1.57	21.17	5.25
503	Lumber and other construction materials	2.60	1.77	1.83	1.28	1.09	1.17	2	2.54	1.67	15.87	4.20
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	3.60	2.92	2.17	1.80	1.20	1.50	2	2.27	1.48	25.40	3.60
505	Metals and minerals, except petroleum	3.14	2.53	1.79	1.01	1.33	.76	1	3.26	1.72	8.47	3.26
506	Electrical goods	1.75	1.08	1.32	.90	.92	.98	1	2.49	1.31	42.33	2.49
507	Hardware, plumbing, heating equipment, and supplies	1.69	1.10	1.23	.87	.89	.98	1	2.70	1.53	18.14	2.70
508	Machinery, equipment, and supplies	1.36	.92	1.03	.66	.82	.82	1	2.65	1.65	31.75	2.65
509	Miscellaneous durable goods	2.29	1.47	1.85	1.28	1.18	1.08	2	1.95	1.53	25.40	4.34
51	Nondurable goods, total	2.49	2.19	1.44	.83	1.07	.78	1	3.74	1.74	7.06	3.74
511	Paper and paper products	1.82	.94	1.38	1.04	.75	.94	2	2.12	1.44	9.07	4.20
512	Drugs, drug proprietaries, and druggists' sundries	2.39	1.46	1.60	1.37	.67	2.04	3	1.81	1.51	31.75	3.38
513	Apparel, piece goods, and notions	2.28	1.43	1.86	1.43	1.05	1.35	2	2.40	1.74	9.07	3.15
514	Groceries and related products	1.87	1.29	1.43	.92	1.01	.91	1	2.54	1.38	11.55	2.54
515	Farm-product raw materials	8.88	8.22	4.86	3.99	2.03	1.96	3	2.49	1.90	8.47	3.91
516	Chemicals and allied products	3.14	1.58	1.36	1.89	1.39	1.36	2	2.35	1.49	12.70	3.71
517	Petroleum and petroleum products	6.09	3.19	5.01	4.34	2.00	2.17	3	1.87	1.59	15.87	3.68
518	Beer, wine, and distilled alcoholic beverages	4.28	3.68	1.76	1.46	.74	1.98	3	2.35	1.63	9.77	4.03
519	Miscellaneous nondurable goods	2.53	1.52	1.88	1.48	.84	1.75	2	2.19	1.59	7.06	3.15

Description of Measures Shown Above

The following are brief descriptions of the measures shown in this table. More complete explanations appear in "Electronic Computers and Business Indicators," Occasional Paper 57, National Bureau of Economic Research, Inc., New York, 1957.

$\bar{O}$ is the average month-to-month percentage change, without regard to sign, in the original series before seasonal or trading-day adjustment.

$\bar{S}$ is the average month-to-month percentage change, without regard to sign, in the seasonal component. It is a measure of the average monthly seasonal change in the unadjusted series.

$\bar{CI}$ is the average month-to-month percentage change, without regard to sign, in the seasonally adjusted series.

$\bar{I}$ is the average month-to-month percentage change without regard to sign, for the irregular component. The irregular component is obtained by dividing the seasonally adjusted series by the cyclical component.

$\bar{C}$ is the average month-to-month percentage change, without regard to sign, for the cyclical component, which is a smooth, flexible moving average.

$\bar{I}/\bar{C}$ is a measure of the relative smoothness (small values) or irregularity (large values) of the seasonally adjusted series.

MCD (months for cyclical dominance) gives an estimate of the appropriate time span over which to observe cyclical movements in a monthly series. In deriving MCD, the average (without regard to sign) percentage changes in the irregular and cyclical components are computed for 1-month spans (Jan.-Feb., Feb.-Mar., etc.) 2-months spans (Jan.-Mar., Feb.-Apr., etc.), and so on. MCD is the shortest span for which the average change (without regard to sign) in the cyclical component is larger than the average change (without regard to sign) in the irregular component; that is, it indicates the point at which fluctuations begin to be more attributable to cyclical than to irregular movements. MCD is small for smooth series and large for erratic series.

Average duration of run (ADR) is a measure of smoothness, and is equal to the average number of consecutive monthly changes in the same direction in any series of observations. When there is no change between 2 months, a change in the same direction as the preceding change is assumed. The ADR is shown for the seasonally adjusted series CI, irregular component I, cyclical component C, and the MCD moving average. The MCD moving average is an unweighted moving average (with the number of terms equal to MCD) of the seasonally adjusted series.

A comparison of these measures with the expected ADR of a random series gives an indication of whether the changes approximate those of a random series. (The expected value of ADR for a random series is 1.5 and it falls between 1.36 and 1.75 about 95 percent of the time. For a moving average of a random series the expected value is 2.0). For example, the ADR of CI is 2.08 for electrical goods sales. This indicates that 1-month changes in the seasonally adjusted series, on the average, reverse sign slightly less often than a random series. In the next two columns, 1.46 for I and 10.58 for C indicate the separation of the seasonally adjusted series into an essentially random component and the cyclical (nonrandom) component. Finally, 3.32 for MCD indicates that a 2-month moving average of the seasonally adjusted series (2 months being the MCD span) reverses direction on the average about every 3 months. The increase in the average duration of run from 2.08 for CI to 3.32 for the MCD moving average indicates that for this series the use of MCD spans reduces the effect of the irregular component upon the seasonally adjusted series.

These averages are based on a seasonally adjusted series which is adjusted historically; that is, the months used to compute the measures were the same months used to estimate the seasonal factors. Current data, however, are adjusted by use of factors projected 1 year ahead, and are thus subject to additional error. Therefore, current data are probably somewhat more irregular and subject to larger MCD than shown above.

APPENDIX C. Explanatory Material

I. SCOPE OF THE SURVEY

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the Standard Industrial Classification (SIC) Manual[1] and as covered in the 1972 census, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm or professional business users; or to other wholesalers; or acting as agents or brokers in buying merchandise for or selling merchandise to such persons or companies.

The principal types of establishments included are: (1) merchant wholesalers who take title to the goods they sell, such as wholesale merchants or jobbers, industrial distributors, voluntary group wholesalers, exporters, importers, cash-and-carry wholesalers, drop shippers, major distributors, retailer cooperative warehouses, terminal elevators, and cooperative buying associations; (2) sales branches and sales offices (but not retail stores) maintained by domestic manufacturing or mining enterprises apart from their plants or mines for the purpose of marketing their products; (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), which constitute the major portion of the broad field of wholesale trade, and excludes the other types of wholesale trade. All kinds of business in which merchant wholesalers operate are represented in this survey.

Kind-of-business classifications are not interchangeable with commodity classifications. Most businesses sell several kinds of commodities. The kind-of-business code assigned generally reflects either the individual commodity or the commodity group which is the primary source of the establishments receipts, or some mixture of commodities which characterizes the establishment's business. Thus, the classification of establishments by kind of business generally does not make it possible to determine either the number of establishments handling a particular commodity or the sales of that commodity. For example, the "grocery" classification excludes establishments selling groceries if the sale of groceries is not the primary source of receipts; moreover, even though establishments are classified as "grocery wholesalers" some of their sales may be derived from the sale of nonfood products.

A description of each kind of business included in the accompanying statistical data is shown in appendix D.

II. SAMPLE DESIGN AND ESTIMATION PROCEDURES

Framework of old series–The first publication in this series based on probability sampling, was the January 1954 report. Effective with the July 1956 publication an entirely new sample was selected from the 1954 Census of Business. Other changes in the sample have been made since 1956, representing, for the most part, revisions to reflect the findings of successive censuses of wholesale trade.

Selection of sample for new series–The new sample[2] like the old is a probability sample, and the estimating procedures used are similar in many respects to the old sample.

The new sample originally was drawn from the Standard Statistical Establishment List (SSEL) as updated to December 31, 1974. The initial SSEL consisted of two lists. One list was composed of all Employer Identification (EI) numbers issued by the Internal Revenue Service (IRS) with reported payroll in at least one quarter of 1973 or 1974, with payroll in the 1972 census, or with sales/receipts greater than $100,000 in the 1972 census. The second list consisted of all establishments of known multiestablishment companies as of December 31, 1974. These lists contained information on sales/receipts, payroll, employment, name and address, kind-of-business classification, etc.

Before the 1974 SSEL was available, a study was made, using files from the 1972 Census of Wholesale Trade. This study determined the stratification of the sampling units based on 1972 sales, inventories, and kind of business, and also determined the optimal allocation of the sample necessary to meet specified variance objectives for sales and inventory estimates for different kind-of-business groups. The primary stratum boundary determined in the study was the certainty cutoff to be used for each kind of business. The cutoff was particularly important since it also determined the type of sampling unit.

The sampling units for the new sample consisted of both companies and EI's. To be eligible for the initial sampling, an EI had to be active, i.e., had payroll in 1974 and was on the Internal Revenue Service mailing list for Federal Insurance Contribution Act (FICA) taxpayers. If a known multiestablishment company had total merchant wholesale sales (on a 1972 basis) above the cutoff for its major kind of business, the company was selected for the sample with certainty. Single establishment companies, whether or not selected with certainty, were considered as EI sampling units.

All merchant wholesale companies below the certainty cutoff were treated on an EI basis; that is, the EI was the sampling unit. The EI's were then stratified according to their major kind of business and their estimated sales (on a 1972

[1] Executive Office of the President, Office of Management and Budget, **Standard Industrial Classification Manual**, 1972.

[2] For a complete exposition of the new sample, see C. T. Isaki et al., "Sample Redesign Aspects of the Census Bureau's Monthly Business Surveys" and K. M. Wolter et al., "Sample Selection and Estimation Aspects of the Census Bureau's Monthly Business Surveys," **Proceedings of the Business and Economic Statistics Section: American Statistical Association**, 1976.

basis). Within each stratum, a simple random sample of EI's was selected. The sampling rates for these EI's varied between 1 in 3 and 1 in 600.

For those EI's in the inital sample that did not have kind-of-business classifications and for all EI "births" after the initial selection, a two-phase selection procedure was used. EI "births," as used here, are new EI's recently assigned by SSA and currently on the IRS mailing list for FICA taxpayers. In the first phase, "births" were stratified by kind of business and size (expected employment or quarterly payroll). A relatively large sample was drawn and canvassed in order to obtain a more reliable measure of size (sales in two recent months) and a more detailed kind-of-business code, if needed.

Using this more reliable information, the cases were re-stratified and the final sample drawn with overall probabilities equivalent to those used in drawing the initial sample from the 1974 SSEL. Because of the lag in reporting "births" to the IRS and Social Security Administration (SSA) and the time needed to accomplish the two-phase birth-selection procedure, "births" are actually added to the sample about eight or nine months after they begin operation. The ongoing birth-selection procedure is carried out quarterly.

Since "births" are not represented in the sample, until they go through the selection procedure described above, an interium procedure is required to account for "births" during the period between the onset of activity and the time of birth selection. This consists of imputing for all cases which go out of business, but which are still on the IRS mailing list. This imputation procedure was also used in the old series. However, because of recent delays in obtaining "births," this procedure now accounts for a larger percentage of the estimates.

To be eligible for the sample canvass and tabulation in a given month, a merchant wholesale business must meet both of the following requirements:

1. It must be on the IRS mailing list for FICA taxpayers from the previous quarter.

2. It must have been selected from either the SSEL or the file of employer "births." For this purpose, a universe file of all businesses ever given a chance of selection is maintained. This file shows, among other things, which EI numbers actually have been selected.

In the case of businesses that were selected into the sample with certainty, the first requirement is changed. These certainty sampling units are not dropped from canvass and tabulation if they are no longer on the IRS mailing list. If there are successor businesses, they are added to the survey. This is a tighter form of control used for these larger businesses.

Use of the rotating sample and composite estimating procedures–Rotating samples or panels are used except for very large businesses which are selected with certainty. For sampling units in the rotating panels, two months of data are obtained at each enumeration. For example, February rotating panel cases report data for February (the current month) and January (the previous month). In the following month, a different rotating panel (the March panel) reports figures for March and February. Three sample panels are used. This permits the use of a composite estimating procedure which provides estimates more reliable than those which would be obtained from a completely fixed sample of about twice the size. In addition, this procedure reduces the reporting burden of selected businesses.

The first estimate issued each month, based on the full sample, is called the preliminary estimate. The preliminary composite estimate for the current month is a weighted average of two estimates: (1) the current month unbiased estimate (weight .35), and (2) a ratio estimate (weight .65) obtained by multiplying the preliminary composite estimate for the previous month by the current-to-previous-month ratio obtained from the current month reports. Preliminary inventory estimates have been modified, prior to publication, based on past relationships between preliminary and final estimates.

A final estimate is developed one month later using information available from the following month's enumeration. The final composite estimate is also a weighted average of two estimates: (1) the preliminary composite estimate for a given month (weight .7), and (2) the unbiased estimate (weight .3) for the same month as obtained from the next month's reporting panel.

The preliminary composite estimates provide a measure of the dollar volume level that is considerably more reliable than the unbiased estimates, and the final composite estimates are generally more reliable than the preliminary composite estimates. The indication of the month-to-month trend considered to be most reliable is the ratio of the current month's preliminary composite estimate divided by the previous month's final composite estimate. This is true because the numerator and denominator of this ratio are more highly correlated than would be the case if the numerator and denominator were two preliminary estimates or two final estimates. The trend of the preliminary/final ratio, therefore, has less variability than one based on two preliminary figures or two final figures.

Another advantage of the use of the rotating panel system is that the frequency of canvass of very large noncertainty cases can be increased with a consequent reduction, in an unbiased manner, of their statistical weight. This increases the reliability of the estimates, particularly the measure of month-to-month change.

III. PREVIOUSLY PUBLISHED DATA

Data developed from the new sample are not comparable with data previously published in this series. Sales and inventory estimates prior to September 1977 have been revised to reflect: (1) a new sample design; (2) benchmarking of sales to the results of the 1967 and 1972 censuses of wholesale trade; (3) conversion of classifications based on the 1967 SIC manual to classifications based on the 1972 SIC manual (4) addition

of farm assemblers and bulk petroleum establishments; and (5) revision and updating of seasonal adjustment factors.

The revised historical sales series were derived in a manner designed to minimize the changes to the month-to-month trends in the old series. The inventory series were revised by applying the stock-sales ratios from the old series to the revised sales series to obtain the preliminary revised inventory series. These preliminary series were then revised slightly so that August 1977 estimates would equal the new sample estimates.

Although the month-to-month movements in the old and new series show very little change, the level of the revised series show substantial change from the old series for some kinds of business. The change in levels depends on the difference between the old series for census years and the benchmark levels and on the difference between the new series level and the old series level for the link month, August 1977.

Additional details concerning the sample design, and revised estimates of merchant wholesale sales and inventories from January 1967 through August 1977, have been provided in a special supplementary publication **Monthly Wholesale, Sales and Inventories: January 1967-August 1977, Revised BW-13-77S.** This report may be obtained from Subscriber Services (Publications), Bureau of the Census, Washington, D.C. 20233 at $.90 per copy.

IV. UNPUBLISHED DATA

Additional data, such as dollar volume estimates for some kinds of business not separately shown in this report, are produced as a byproduct of the regularly published statistics. These additional data have not been included in this publication because the sampling variability associated with these data does not meet the Census Bureau's publication criteria. The Census Bureau, on written request will release these data for individual use, though not for publication.

V. DEFINITION OF TERMS

Sales–Sales include the following: merchandise sold for cash or credit at wholesale and retail by establishments primarily engaged in merchant wholesale trade; receipts from customers for rental or leasing of equipment, instruments, tools, etc.; receipts for delivery, installation, alteration, maintenance, repair, storage, and other services; and gasoline, liquor, tobacco and other excise taxes which are paid by the manufacturer and passed along to the wholesaler. Sales are net after deductions for refunds and allowances for merchandise returned by customers. Sales which are made on an agency basis for others are included as gross sales. Direct shipments on orders from wholesalers are also included in sales. Total sales do not include nonoperating income from such sources as investments, rental or sale of real estate, etc.

In the new series, sales exclude sales and excise taxes collected directly from customers and paid directly to a local, State, or Federal tax agency. Also excluded are receipts from customers for carrying or other credit charges. In the old series respondents were requested to include these taxes and credit charges in the reported sales. The impact of this change is considered minimal.

Inventories–Inventories represent stocks, at cost, of merchandise on hand for sale at the end of the month regardless of location, except for goods outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included.

Stock-sales ratios–The stock-sales ratios are percentages derived by dividing the dollar value of inventories, at cost, by the dollar value of sales. No adjustment is made in these ratios for the markup in sales which may vary from trade to trade.

The sales and inventory figures represent total sales and inventories of all establishments primarily engaged in merchant wholesale trade. Also included are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments.

APPENDIX D. Kind-of-Business Classifications

DURABLE GOODS (SIC Major Group 50)

This major group includes establishments primarily engaged in the wholesale distribution of durable goods.

MOTOR VEHICLES AND AUTOMOTIVE PARTS AND SUPPLIES (SIC 501)

Automobiles and Other Motor Vehicles (SIC 5012)[1]—Establishments primarily engaged in the wholesale distribution of new and used passenger automobiles, trucks, and other motor vehicles. Automotive distributors primarily engaged in selling at retail to individual consumers for personal use, and also selling a limited amount of new and used passenger automobiles and trucks at wholesale to dealers, are classified in retail trade, industry 5511.

Automotive Parts and Supplies (SIC 5013)—Establishments primarily engaged in the wholesale distribution of automotive parts, supplies, accessories, tools and equipment.

Tires and Tubes (SIC 5014)[1]—Establishments primarily engaged in the wholesale distribution of rubber tires and tubes for passenger and commercial vehicles.

FURNITURE AND HOME FURNISHINGS (SIC 502)

Furniture (SIC 5021)—Establishments primarily engaged in the wholesale distribution of furniture, including bedsprings, mattresses, and other household furniture; office furniture; and furniture for public parks, buildings, etc.

SIC 5021 is subdivided into—

1. Household and lawn furniture.
2. Office and business furniture.

Home Furnishings (SIC 5023)—Establishments primarily engaged in the wholesale distribution of home furnishings and homewares, including antiques; china; glassware and earthenware; lamps; curtains and draperies; linens and towels; carpets, linoleum, and all other types of hard and soft surface floor coverings. Establishments primarily engaged in the wholesale distribution of electrical household goods are classified in industry 5064.

LUMBER AND OTHER CONSTRUCTION MATERIALS (SIC 503)

Lumber, Plywood, and Millwork (SIC 5031)—Establishments, with or without yards, primarily engaged in the wholesale distribution of rough, dressed, and finished lumber (but not timber); plywood; door and window frames (wood or metal); and other wood and metal millwork. Establishments selling lumber, plywood and millwork to the general public and known as "retail" in the trade are classified in industry 521.

Construction Materials, Not Elsewhere Classified (SIC 5039)—Establishments primarily engaged in the wholesale distribution of such building materials as brick, building stone, cement, granite, gravel, lime, marble, plaster, building glass, roofing materials, sand, and tile. Establishments selling construction materials to the general public and known as "retail" in the trade are classified in industry 521. Establishments primarily engaged in marketing heavy structural metal products are classified in industry 5051. Establishments primarily selling readymade concrete are classified in manufacturing.

SPORTING, RECREATIONAL, PHOTOGRAPHIC, AND HOBBY GOODS, TOYS, AND SUPPLIES (SIC 504)[1]

Establishments primarily engaged in the wholesale distribution of all types of amusement and sporting goods and accessories—billiard and pool supplies; cameras and photographic equipment; coin-operated game machines; games, toys; ammunition and fireworks; etc.

METALS AND MINERALS, EXCEPT PETROLEUM (SIC 505)

Ferrous Metals Service Centers and Offices (SIC 5051 pt.)—Establishments primarily engaged in marketing ferrous metal semifinished products such as nails, pig iron, steel and tin bars. Establishments in this industry may operate with warehouses (ferrous metals service centers) or without warehouses (ferrous metals sales offices).

Sales branches of domestic manufacturers are included in this category if the establishment is separate from the manufacturing plant and has warehouse space greater than 5,000 square feet.

[1] Data for this kind of business are not shown separately but are included in the group total.

Nonferrous Metals Service Centers and Offices and Other Minerals and Ores (SIC 5051 pt. and SIC 5052 pt.)[1]—Establishments primarily engaged in marketing nonferrous metal semifinished products such as aluminum bars and copper rods. Establishments in this industry may operate with warehouses (nonferrous metals service centers) or without warehouses (nonferrous metals sales offices). Also included are establishments primarily engaged in the wholesale distribution of copper, iron, lead, and other metallic ores except precious; and crude nonmetallic minerals (including concentrates) except crude petroleum. Establishments primarily engaged in the wholesale distribution of nonmetallic minerals used in construction, such as sand and gravel, are included in industry 5039.

Coal (SIC 5052 pt.)[1]—Establishments primarily engaged in the wholesale distribution of coal and coke. Included are establishments which have products shipped direct from mine to customer, and establishments operating yards and dock space and making deliveries therefrom at wholesale as well as other coal merchants.

ELECTRICAL GOODS (SIC 506)

Electrical Apparatus and Equipment, Wiring Supplies, and Construction Materials (SIC 5063)—Establishments primarily engaged in the wholesale distribution of electrical power equipment for the generation, transmission, or utilization of electric energy; and electrical construction materials for outside power transmission lines and for electrical systems. Construction contractors primarily engaged in installing electrical systems and equipment from their own stock are classified in industry 1731.

Electrical Appliances, TV and Radio Sets (SIC 5064)—Establishments primarily engaged in the wholesale distribution of radio and television sets and household electrical appliances.

Electronic Parts and Equipment (SIC 5065)[1]—Establishments primarily engaged in the wholesale distribution of electronic parts and equipment, such as industrial and radio and television receiving and transmitting electronic tubes; electronic intercommunication equipment; radio parts and accessories; and electronic sound equipment. Establishments primarily engaged in the wholesale distribution of radio and television receiving sets and phonographs are classified in industry 5064.

HARDWARE, PLUMBING, HEATING EQUIPMENT, AND SUPPLIES (SIC 507)

Hardware (SIC 5072)—Establishments primarily engaged in the wholesale distribution of hardware, such as builders; shelf or light hardware; handtools (except automotive and machinists' precision); handsaws and cutlery; brads, staples, and tacks; and bolts, nuts, rivets, and screws. Establishments primarily engaged in the wholesale distribution of nails, noninsulated wire, and screening are classified in industry 5051.

Plumbing and Heating Equipment and Supplies (Hydronics) (SIC 5074)—Establishments primarily engaged in the wholesale distribution of hydronic plumbing and heating equipment and supplies. Construction contractors primarily engaged in installing plumbing and heating equipment from their own stock are classified in industry 1711.

Warm Air Heating and Air-Conditioning Equipment and Supplies (SIC 5075)[1]—Establishments primarily engaged in the distribution of warm air heating and air-conditioning equipment and supplies. Construction contractors primarily engaged in installing warm air heating and air-conditioning equipment are classified in industry 1711.

Refrigeration Equipment and Supplies (SIC 5078)[1]—Establishments primarily engaged in the distribution of refrigeration equipment and supplies. Construction contractors primarily engaged in installing refrigeration equipment from their own stock are classified in industry 1711.

MACHINERY, EQUIPMENT, AND SUPPLIES (SIC 508)

Commercial Machines and Equipment (SIC 5081)[1]—Establishments primarily engaged in wholesaling commercial machines and equipment, such as office, store, and business machines and equipment; commercial food service equipment; and fountain and store fixtures.

Construction and Mining Machinery and Equipment (SIC 5082)—Establishments primarily engaged in marketing cranes, excavating machinery and equipment, power shovels, road construction and maintenance machinery, tractor-mounting equipment and other specialized machinery and equipment used in the construction, mining, and logging industries. Establishments engaged in marketing oil well machinery and equipment are classified in industry 5084.

Farm and Garden Machinery and Equipment (SIC 5083)[1]—Establishments primarily engaged in marketing agricultural machinery and equipment for use in the preparation and maintenance of the soil, the planting and harvesting of crops, and other operations and processes pertaining to work on the farm or the lawn or garden; and dairy and other livestock equipment.

Industrial Machinery and Equipment (SIC 5084)[1]—Establishments primarily engaged in marketing industrial machinery and equipment, such as metal working tools, food industries machinery, oil well and oil refining machinery, industrial

[1] Data for this kind of business are not shown separately but are included in the group total.

trucks and tractors (except over-the-road types), printing machinery, and machinery and equipment for other manufacturing industries.

Industrial Supplies (SIC 5085)[1]—Establishments primarily engaged in marketing industrial supplies, such as abrasives and materials, rope and cordage, and mechanical rubber goods; welding supplies; mechanical power transmission supplies, including bearings; industrial valves and fittings; metal containers; industrial leather; and reconditioned barrels and drums.

Professional Equipment and Supplies (SIC 5086)—Establishments primarily engaged in the wholesale distribution of mechanical devices and other equipment used by architects, dentists, engineers, physicians, surgeons, veterinarians, optometrists, osteopaths, and other professional groups.

Surgical, Medical, Hospital Supplies (SIC 5086 pt.)[1]—Establishments primarily engaged in selling surgical and medical instruments; doctors' apparatus and equipment; orthopedic appliances; artifical limbs; operating room and other hospital equipment, X-ray machines and accessories and other scientific instruments used by physicians and in hospitals.

Service Establishment Equipment and Supplies (SIC 5087)[1]—Establishments primarily engaged in the wholesale distribution of equipment and supplies for barber shops, beauty parlors power laundries, dry-cleaning plants, upholsterers, undertakers, and related personal service establishments.

Transportation Equipment and Supplies, Except Motor Vehicles (SIC 5088)[1]—Establishments primarily engaged in the wholesale distribution of transportation equipment and supplies. Establishments primarily engaged in the wholesale distribution of motor vehicles and motor vehicle parts are classified in group 501.

MISCELLANEOUS DURABLE GOODS (SIC 509)[1]

Scrap and Waste Materials (SIC 5093)—Establishments primarily engaged in assembling, breaking up, sorting and wholesale distribution of scrap and waste materials. This industry includes auto wreckers engaged in dismantling automobiles for scrap. However, those engaged in dismantling cars for the purpose of selling secondhand parts at retail are classified in industry 5931.

SIC 5093 is subdivided into—

1. *Iron and Steel scrap.*
2. *Waste and secondary materials dealers.*

[1] Data for this kind of business are not shown separately but are included in the group total.

Jewelry, Watches, Diamonds, and Other Precious Stones (SIC 5094)[1]—Establishments primarily engaged in the wholesale distribution of jewelry, precious stones and metals, costume jewelry, watches, clocks, silverware, and jewelers' findings.

Durable Goods, Not Elsewhere Classified (SIC 5099)[1]—Establishments primarily engaged in the wholesale distribution of durable goods, not elsewhere classified, such as musical instruments and forest products, except lumber.

NONDURABLE GOODS (SIC Major Group 51)

This major group includes establishments primarily engaged in the wholesale distribution of nondurable goods.

PAPER AND PAPER PRODUCTS (SIC 511)

Printing and Writing Paper (SIC 5111)[1]—Establishments primarily engaged in the wholesale distribution of writing paper, including envelope paper, fine paper, and ground wood, printing, and rotogravure paper.

Stationery Supplies (SIC 5112)[1]—Establishments primarily engaged in the wholesale distribution of stationery and office supplies, including envelopes, typewriter and mimeograph paper, file cards and folders, pens, social stationery, and greeting cards.

Industrial and Personal Service Paper (SIC 5113)[1]—Establishments primarily engaged in the wholesale distribution of wrapping and other coarse paper, paperboard, cellophane, and converted paper products, such as bags, boxes, dishes, napkins, and shipping supplies.

DRUGS, DRUG PROPRIETARIES, AND DRUGGISTS' SUNDRIES (SIC 512)

Drugs, Drug Proprietaries, and Druggists' Sundries (SIC 5122)—Establishments primarily engaged in the wholesale distribution of drugs, drug proprietaries, druggists' sundries, and toiletries. Establishments primarily engaged in the wholesale distribution of surgical, dental, and hospital equipment are classified in industry 5086.

SIC 5122 is subdivided into—

1. *General-line drugs*—These are distinguished from specialty-line drug and toiletries wholesalers on the basis of their commodity-line mix. Drug wholesalers were classified as general line if they reported a substantial portion of their sales in "pharmaceuticals, antibiotics, druggists' chemicals, biologicals, botanicals" and "proprietary products, toilet-

ries, druggists' sundries," and if annual sales volume was $1 million or more.

2. *Specialty-line pharmaceuticals, cosmetics, and toiletries.*

APPAREL, PIECE GOODS, AND NOTIONS (SIC 513)

Piece Goods (SIC 5133)[1]—Establishments primarily engaged in the wholesale distribution of woven piece goods or yard goods of natural or manmade fibers. "Converters" who buy goods in the grey, have them finished on contract, and sell at wholesale are included here. This industry does not include establishments primarily engaged in the wholesale distribution of home furnishings, which are classified in industry 5023.

Notions and Other Dry Goods (SIC 5134)[1]—Establishments primarily engaged in the wholesale distribution of notions (sewing and hair accessories, etc.), knit goods, and other dry goods, except piece goods.

Men's and Boys' Clothing and Furnishings (SIC 5136)[1]—Establishments primarily engaged in the wholesale distribution of men's and boys' apparel and furnishings, sportswear, hosiery, underwear, nightwear, and work clothing.

Women's Children's, and Infants' Clothing and Accessories (SIC 5137)[1]—Establishments primarily engaged in the wholesale distribution of women's, children's, and infants' clothing and accessories, including hosiery, lingerie, millinery and millinery supplies, and furs.

Footwear (SIC 5139)[1]—Establishments primarily engaged in the wholesale distribution of footwear of leather, rubber, and other materials.

GROCERIES AND RELATED PRODUCTS (SIC 514)

Groceries, General-Line (SIC 5141)—Establishments primarily engaged in the wholesale distribution of a general line of groceries. Establishments primarily engaged in roasting coffee and establishments primarily engaged in blending tea or grinding and packaging spices are classified in major group 20.

SIC 5141 is subdivided into—

1. *Voluntary group wholesalers.*
2. *Retailer cooperative wholesalers.*
3. *Other general-line wholesalers.*

Frozen Foods (SIC 5142)[1]—Establishments primarily engaged in the wholesale distribution of packaged quick-frozen vegetables, juices, meats, fish, poultry, pastries, and other "deep freeze" products. Establishments primarily engaged in the wholesale distribution of frozen dairy products are classified in industry 5143. Frozen poultry, fish, and meat which are not packaged are classified in industries 5144, 5146, and 5147, respectively.

Dairy Products (SIC 5143)[1]—Establishments primarily engaged in the wholesale distribution of dairy products, such as butter, cheese, ice cream and ices, and fluid milk and cream. This industry does not include establishments primarily engaged in pasteurizing and bottling milk, which are classified in group 202.

Poultry and Poultry Products (SIC 5144)—Establishments primarily engaged in the wholesale distribution of poultry and poultry products, except canned and packaged frozen products. This industry does not include establishments primarily engaged in the killing and dressing of poultry, which are classified in industry 2016. Establishments primarily engaged in the wholesale distribution of packaged frozen poultry are classified in industry 5142, and of canned poultry in industry 5149.

Confectionery (SIC 5145)—Establishments primarily engaged in the wholesale distribution of confectionery, such as candy, chewing gum, fountain fruits, salted or roasted nuts, popcorn, and fountain syrups; and potato, corn, and similar chips.

Fish and Seafoods (SIC 5146)[1]—Establishments primarily engaged in the wholesale distribution (not packaging) of fresh, cured, and frozen fish and seafoods, except canned (industry 5149) or packaged frozen (industry 5142). The preparation, packaging, and freezing of fresh fish and other seafood, and the shucking and packing of fresh oysters in nonsealed containers, are classified in industry 2092.

Meats and Meat Products (SIC 5147)—Establishments primarily engaged in the wholesale distribution of fresh, cured, and processed (but not canned) meats and lard. The wholesale distribution of frozen packaged meats is classified in industry 5142 and canned meats in industry 5149.

Fresh Fruits and Vegetables (SIC 5148)—Establishments primarily engaged in the wholesale distribution of fresh fruits and vegetables.

Groceries and Related Products, Not Elsewhere Classified (SIC 5149)[1]—Establishments primarily engaged in the wholesale distribution of groceries and related products, not elsewhere classified. Establishments primarily engaged in the wholesale distribution of soft drinks, and in bottling and distributing natural spring and mineral waters, are classified in this industry, but establishments primarily engaged in bottling soft drinks are classified in major group 20. This industry does not include farm-product raw materials (group 515), or beer, wine, and distilled alcholic beverages (group 518).

[1] Data for this kind of business are not shown separately but are included in the group total.

FARM-PRODUCT RAW MATERIALS (SIC 515)

Cotton (SIC 5152)[1]—Establishments primarily engaged in buying and/or marketing cotton and cotton linters.

Grain (SIC 5153)—Establishments primarily engaged in buying and/or marketing grain (such as corn, wheat, oats, barley, and unpolished rice); dry beans; soybeans, and other inedible beans. Country grain elevators primarily engaged in buying or receiving grain from farmers are included as are terminal elevators and other merchants marketing grain.

Livestock (SIC 5154)[1]—Establishments primarily engaged in buying and/or marketing cattle, hogs, sheep, and goats.

Farm-Product Raw Materials, Not Elsewhere Classified (SIC 5159)[1]—Establishments primarily engaged in buying and/or marketing farm products not elsewhere classified, such as horses and mules, leaf tobacco, hides, skins, furs, wool, mohair, raw silk, hops, and nuts, except roasted or salted (industry 5145). Establishments primarily engaged in the wholesale distribution of milk are classified in industry 5143 and live poultry in industry 5144.

CHEMICALS AND ALLIED PRODUCTS (SIC 516)[1]

Chemicals and Allied Products (SIC 5161)[1]—Establishments primarily engaged in the wholesale distribution of chemicals and allied products, not elsewhere classified, such as acids, industrial and heavy chemicals, dyestuffs, industrial salts, naval stores, plastics materials, rosin, and turpentine. Establishments primarily engaged in the wholesale distribution of ammunition are classified in industry 5041; agricultural chemicals and pesticides in industry 5191; drugs in industry 5122; and paints and varnishes in industry 5198.

PETROLEUM AND PETROLEUM PRODUCTS (SIC 517)

Petroleum Bulk Stations and Terminals (SIC 5171)—Establishments primarily engaged in wholesaling petroleum products, including liquefied petroleum gas, from bulk liquid storage facilities.

Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals (SIC 5172)[1]—Establishments primarily engaged in wholesaling petroleum and petroleum products, except those with bulk liquid storage facilities. Included are packaged and bottled petroleum products distributors, truck jobbers, and others marketing petroleum and products at wholesale but without bulk liquid storage facilities.

[1] Data for this kind of business are not shown separately but are included in the group total.

BEER, WINE, AND DISTILLED ALCOHOLIC BEVERAGES (SIC 518)

Beer and Ale (SIC 5181)—Establishments primarily engaged in the wholesale distribution of beer, ale, porter, and other fermented malt beverages.

Wines and Distilled Alcoholic Beverages (SIC 5182)—Establishments primarily engaged in the wholesale distribution of distilled spirits, including neutral spirits and ethyl alcohol used in blending wines and distilled liquors.

MISCELLANEOUS NONDURABLE GOODS (SIC 519)

Farm Supplies (SIC 5191)[1]—Establishments primarily engaged in the wholesale distribution of animal feeds, fertilizers, agricultural chemicals, pesticides, seeds, and other farm supplies, except grains.

Tobacco and Tobacco Products (SIC 5194)—Establishments primarily engaged in the wholesale distribution of tobacco and tobacco products. Leaf tobacco wholesalers are classified in industry 5159 and establishments primarily engaged in stemming and redrying tobacco in industry 2141.

Paints, Varnishes, and Supplies (SIC 5198)[1]—Establishments primarily engaged in the wholesale distribution of paints, varnishes, wallpaper, and supplies, and sometimes glass. Establishments selling to the general public and known as "retail" in the trade are classified in industry 5231.

Books, Periodicals, Newspapers (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of books, lithographed matter, magazines, newspapers, and all other forms of reading material.

Nondurable Goods, Not Elsewhere Classified (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of nondurable goods, not elswhere classified, such as art goods, flowers and florist supplies, industrial yarn, textile bags, bagging and burlap.

CHANGES IN WHOLESALE KIND-OF-BUSINESS CLASSIFICATIONS IN 1972 FROM 1967

The wholesale trade kind-of-business structure was expanded from one SIC major group (SIC 50) in 1967 to two major groups in 1972, "durable goods" (SIC 50) and "nondurable goods" (SIC 51). There were 61 four-digit industries in 1972 compared to 48 four-digit industries in 1967.

The definitions of some kinds of business also were changed in 1972. Establishments primarily selling farm supplies and equipment to farmers, and establishments primarily selling

plumbing, heating, and air-conditioning equipment and electrical supplies were classified in wholesale trade rather than retail trade. However, establishments primarily selling lumber and other building materials and paint, glass, and wallpaper were classified in retail trade if they sell to the public, even though sales to contractors account for a larger portion of the total. The change resulted in moving to wholesale trade those establishments primarily selling plumbing, heating, and air-conditioning equipment; electrical supplies; farm equipment; hay, grain, and feed; and other farm supplies. The change also theoretically could have shifted to wholesale trade some establishments primarily selling lumber and paint, glass and wallpaper to contractors, but not to the public.

In addition to the kind-of-business changes noted above the special nonmerchant classifications of farm assemblers and bulk petroleum were eliminated in the 1972 census. These establishments were classified in the appropriate merchant, or sales branch category.

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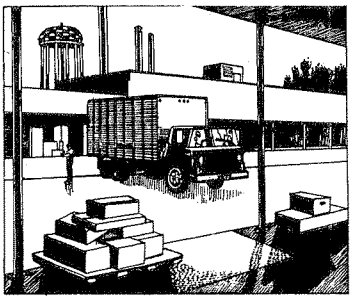
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued December 1979

October 1979

BW-79-10

Sales—October 1979 sales of merchant wholesalers, after adjustment for seasonal variations and trading day differences, but not for price changes, were $77.5 billion, up 2 percent from the previous month and 15 percent above October 1978. Adjusted August-through-October total sales were up 4 percent from the May-through-July period and were 17 percent above the total sales for the comparable months a year ago.

After adjustment, October sales in the durable goods trades were 5 percent above the previous month and were 14 percent above the same month a year ago. Nondurable goods sales were down 1 percent from September, but were 15 percent above October 1978. Total monthly sales in the durable goods group during the August-through-October period were 4 percent above the prior three months and were 14 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were 4 percent above the May-through-July period and were 18 percent above the total sales for the same period a year ago.

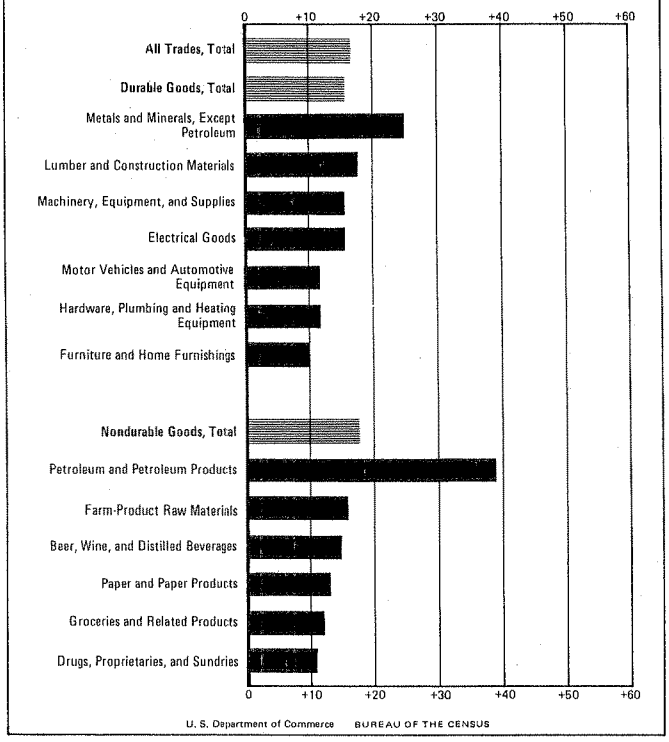
Based on adjusted data, most trade groups showed increases from their previous month sales levels with the most substantial increase shown in motor vehicles and automotive equipment (13%) and metals and minerals, except petroleum (9%). The largest decrease was reported in miscellaneous nondurable goods (-12%). Compared with sales of a year ago, all trade groups showed increases. The sharpest increase was reported in petroleum and petroleum products (60%).

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variations, but not for price changes, were valued at $89.1 billion at the end of October, up 1 percent from last month and 13 percent above the same month a year ago. Durable goods stocks were up 1 percent from September and were 13 percent above October 1978. Nondurable goods stocks were virtually unchanged from the previous month, but were 15 percent above the year-ago level.

Based on adjusted data, comparisons with previous month inventories showed mixed results with 9 trade groups showing gains, 4 indicating declines, and 2 with no change. The largest increase was shown in metals and minerals, except petroleum (7%). The most notable decrease was reported in farm-product raw materials (-5%). Compared with year-ago inventories, all trade groups showed increases with the sharper increases noted in petroleum and petroleum products (34%) and metals and minerals, except petroleum (24%).

Percent Change in Sales of Merchant Wholesalers in Selected Kinds of Business 10 Months 1979 Compared With 10 Months 1978

(Percent changes. Based on UNADJUSTED data)



Stock-Sales Ratios—The October stock-sales ratio for merchant wholesalers, based on seasonally adjusted data, was 115, down 1 point from the previous month and down 2 points from October 1978. The stock-sales ratio for durable goods was 162, down 5 points from the previous month and down 3 points from the year-ago ratio. The ratio for nondurable goods was 75, virtually unchanged from the previous month, but down 1 point from the year-ago ratio.

An advance release of October 1979 data was issued December 10, 1979.

U.S. Department of Commerce
BUREAU OF THE CENSUS

Inquiries concerning this report should be addressed to Ronald Piencykoski, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-5294/763-5295.

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Table 1. Estimated Monthly Sales of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979										1978			Total 10 months	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.[p]	Oct.	Nov.	Dec.	1979	1978
	Merchant wholesalers, total	63,739	61,721	74,319	70,768	76,814	74,361	73,537	78,567	73,213	81,359	69,086	67,699	64,527	728,400	621,880
	Total (excluding farm-product raw materials)	56,481	55,208	66,198	63,588	68,714	66,477	64,932	70,390	65,400	71,785	61,033	59,923	57,237	649,326	553,803
50	Durable goods, total	28,284	28,141	34,689	33,429	35,723	34,447	33,750	37,048	33,616	37,805	32,242	31,037	29,340	337,054	289,541
501	Motor vehicles and automotive parts and supplies	5,634	5,650	6,888	6,845	7,013	6,364	6,259	6,812	5,645	6,670	6,009	6,013	5,510	63,782	56,775
5013,4	Automotive parts and supplies, tires and tubes	3,120	3,081	3,459	3,349	3,385	3,318	3,091	3,552	3,081	3,472	3,344	3,298	2,927	33,060	30,651
5013	Automotive parts and supplies	2,594	2,603	2,902	2,807	2,966	2,759	2,600	3,014	2,617	2,908	2,761	2,752	2,413	27,769	25,808
502	Furniture and home furnishings	1,012	950	1,199	1,130	1,214	1,185	1,121	1,243	1,196	1,398	1,174	1,218	1,140	11,647	10,609
5021	Furniture--household and office	343	332	416	413	450	422	399	449	419	475	379	411	422	4,117	3,511
5023	Home furnishings[1]	669	618	783	717	764	763	722	794	778	923	795	807	718	7,531	7,097
503	Lumber and other construction materials	2,387	2,212	3,006	3,023	3,353	3,410	3,411	3,761	3,274	3,667	3,173	2,874	2,542	31,503	26,807
5031	Lumber, plywood, and millwork	1,672	1,544	2,047	2,067	2,269	2,250	2,250	2,515	2,102	2,341	2,083	1,915	1,682	21,057	17,802
5039	Construction materials, n.e.c.	715	668	959	957	1,084	1,160	1,161	1,246	1,172	1,326	1,089	959	860	10,447	9,005
505	Metals and minerals, except petroleum[2]	3,206	3,215	3,849	3,295	3,913	3,645	3,824	4,196	3,785	4,184	3,186	3,209	2,942	37,110	29,713
5051 pt.	Ferrous metals service centers and offices	2,455	2,437	2,925	2,469	2,951	2,759	2,865	3,062	2,806	3,055	2,446	2,448	2,260	27,784	22,625
5051 pt.	Ferrous metals service centers	1,652	1,744	2,129	1,798	2,160	2,056	2,046	2,211	1,974	2,315	1,801	1,768	1,678	20,085	16,640
506	Electrical goods	3,017	3,083	3,556	3,271	3,744	3,786	3,712	4,163	4,012	4,342	3,590	3,474	3,322	36,687	31,530
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,533	1,638	1,807	1,748	2,071	2,006	1,991	2,153	2,079	2,165	1,832	1,722	1,655	19,161	16,126
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,484	1,445	1,749	1,554	1,673	1,779	1,700	2,011	1,933	2,177	1,758	1,751	1,667	17,525	15,404
5064	Electrical appliances, TV and radio sets	834	849	1,024	881	939	1,064	986	1,116	1,083	1,267	1,040	1,090	1,006	10,044	9,302
507	Hardware, plumbing, heating equipment, and supplies	2,142	1,984	2,319	2,374	2,592	2,461	2,524	2,678	2,399	2,709	2,455	2,250	2,057	24,183	21,561
5072	Hardware	802	758	853	852	975	877	892	1,003	877	1,023	859	830	721	8,912	7,908
5074	Plumbing and heating equipment and supplies (hydronics)	854	800	960	994	1,001	966	1,015	1,038	1,011	1,113	1,047	918	854	9,752	8,721
508	Machinery, equipment, and supplies	7,691	7,841	9,664	9,443	10,062	9,745	9,222	10,113	9,394	10,340	8,909	8,421	8,485	93,426	80,971
5082	Construction and mining machinery and equipment	895	927	1,189	1,360	1,351	1,260	1,258	1,366	1,268	1,280	1,155	1,126	1,125	12,155	11,178
5084,5	Industrial machinery, equipment, and supplies	3,390	3,464	3,940	3,615	4,004	3,964	3,613	4,039	3,634	4,122	3,573	3,474	3,623	37,785	32,204
5086	Professional equipment, supplies	907	914	1,048	972	1,055	996	996	1,092	972	1,087	941	949	975	10,039	8,713
5093	Scrap and waste materials	1,132	1,184	1,501	1,492	1,518	1,468	1,395	1,534	1,328	1,486	1,007	1,103	1,079	14,039	9,622
51	Nondurable goods, total	35,455	33,580	39,630	37,339	41,091	39,914	39,787	41,519	39,597	43,554	36,844	36,662	35,187	391,467	332,340
	Total (excluding farm-product raw materials)	28,197	27,067	31,509	30,159	32,991	32,030	31,182	33,342	31,784	33,980	28,791	28,885	27,897	312,242	264,204
511	Paper and paper products	1,540	1,479	1,688	1,551	1,692	1,651	1,585	1,777	1,599	1,785	1,598	1,569	1,489	16,347	14,528
5111,3	Printing, writing, industrial, and personal services paper	1,133	1,100	1,272	1,184	1,272	1,252	1,192	1,327	1,202	1,340	1,191	1,177	1,140	12,274	10,761
512	Drugs, drug proprietaries, and druggists' sundries	950	917	1,073	1,038	1,102	1,039	1,066	1,099	1,030	1,190	1,082	1,017	963	10,503	9,493
5122	Drugs, drug proprietaries, and druggists' suntries	950	917	1,073	1,038	1,102	1,039	1,066	1,099	1,030	1,190	1,082	1,017	963	10,503	9,493
5122 pt.	General-line drugs	423	427	507	472	509	474	458	477	443	512	494	465	445	4,701	4,453
513	Apparel, piece goods, and notions[3]	2,094	1,996	2,326	2,107	2,127	2,102	2,389	2,629	2,563	2,625	2,443	2,369	1,976	22,957	20,731
514	Groceries and related products	11,122	10,381	11,954	11,281	11,988	11,721	11,500	11,835	11,122	12,166	11,150	11,155	10,830	115,070	103,105
5141	Groceries, general-line	3,965	3,658	4,173	3,989	4,241	4,247	4,245	4,429	4,137	4,590	3,999	4,120	3,914	41,673	36,941
5144	Poultry and poultry products	518	489	559	554	592	544	563	569	530	561	525	569	536	5,479	4,812
5145	Confectionery[4]	184	177	209	196	212	199	192	214	214	279	218	211	197	2,077	1,828
5147	Meats and meat products	1,979	1,971	2,198	2,029	2,076	1,908	1,872	1,959	1,770	1,924	1,928	1,911	1,885	19,686	17,501
5148	Fresh fruits and vegetables	1,020	961	1,203	1,086	1,202	1,242	1,063	1,030	917	981	980	974	973	10,705	9,965
515	Farm-product raw materials	7,258	6,513	8,121	7,180	8,100	7,884	8,605	8,177	7,813	9,574	8,053	7,777	7,290	79,225	68,151
5153	Grain	5,859	5,235	6,740	5,886	6,766	6,730	7,516	7,090	6,594	8,163	6,623	6,391	5,912	66,578	56,245
517	Petroleum and petroleum products	4,837	5,008	5,282	5,221	6,078	5,851	5,863	6,355	6,354	7,050	4,431	4,554	4,598	57,899	41,670
5171	Petroleum bulk stations and terminals	2,738	2,785	2,997	2,857	3,306	3,170	3,121	3,504	3,456	3,975	2,449	2,507	2,678	31,909	23,332
518	Beer, wine, and distilled alcoholic beverages	2,020	1,952	2,490	2,453	2,726	2,704	2,636	2,844	2,387	2,741	2,347	2,547	2,709	24,952	21,772
5181	Beer and ale	999	953	1,223	1,258	1,513	1,523	1,507	1,590	1,229	1,295	1,105	1,088	1,108	13,090	11,086
5182	Wine and distilled alcoholic beverages	1,021	999	1,267	1,195	1,214	1,181	1,129	1,254	1,158	1,446	1,242	1,459	1,601	11,863	10,686
519	Miscellaneous nondurable goods	4,529	4,383	5,528	5,406	6,001	5,801	5,105	5,468	5,570	5,215	4,510	4,486	4,425	53,006	43,215
5194	Tobacco and tobacco products	823	749	852	848	891	863	881	896	795	900	848	831	846	8,496	7,994

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. [p]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]The home furnishings group is subject to a sampling variability of 8 percent for October 1979.
[2]The metals and minerals, except petroleum group is subject to a sampling variability of 8 percent for October 1979.
[3]The apparel and piece goods and notions group is subject to a sampling variability of 16 percent for October 1979.
[4]The confectionery group is subject to a sampling variability of 13 percent for October 1979.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations)

1972 SIC code	Kind of business	1979										1978		
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.[p]	Oct.	Nov.	Dec.
	Merchant wholesalers, total	81,896	83,917	85,436	85,345	85,199	84,942	86,829	86,890	87,061	89,128	78,715	80,100	80,922
	Total (excluding farm-product raw materials)	75,593	77,627	79,311	79,626	80,246	79,964	81,487	81,570	81,563	82,663	73,327	73,947	74,898
50	Durable goods, total	51,860	53,807	54,381	54,731	55,566	55,523	56,602	56,803	56,361	56,757	50,462	50,971	51,646
501	Motor vehicles and automotive parts and supplies	9,512	10,189	9,797	9,663	9,631	9,207	9,760	9,530	9,322	9,600	8,701	9,326	9,227
5013,4	Automotive parts and supplies, tires and tubes	5,758	5,888	5,781	5,809	5,970	5,753	6,051	6,117	5,933	6,028	5,298	5,635	5,552
5013	Automotive parts and supplies	4,881	5,003	4,870	4,917	5,035	4,818	5,082	5,188	5,018	5,096	4,489	4,792	4,674
502	Furniture and home furnishings	1,764	1,753	1,872	1,837	1,815	1,903	1,847	1,839	1,861	1,907	1,780	1,774	1,752
5023	Home furnishings	1,292	1,282	1,355	1,332	1,309	1,361	1,347	1,339	1,328	1,353	1,315	1,305	1,251
503	Lumber and other construction materials	3,113	3,178	3,337	3,404	3,468	3,496	3,526	3,442	3,382	3,393	3,076	2,995	3,117
5031	Lumber, plywood, and millwork[1]	2,030	2,082	2,116	2,152	2,244	2,204	2,220	2,204	2,129	2,120	1,946	1,918	2,009
505	Metals and minerals, except petroleum	5,106	5,434	5,285	5,254	5,528	5,582	5,763	6,319	6,139	6,334	5,095	5,208	5,151
5051 pt.	Ferrous metals service centers and offices	4,191	4,425	4,365	4,239	4,455	4,586	4,655	4,947	4,953	5,053	3,976	4,150	4,191
5051 pt.	Ferrous metals service centers	3,241	3,459	3,433	3,269	3,506	3,643	3,665	3,956	4,010	4,102	3,098	3,236	3,336
506	Electrical goods	5,509	5,582	5,706	5,737	5,976	6,040	6,223	6,254	6,061	6,072	5,500	5,526	5,577
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2,542	2,684	2,676	2,730	2,946	2,838	2,840	2,841	2,771	2,787	2,399	2,534	2,558
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,966	2,898	3,030	3,007	3,030	3,202	3,383	3,274	3,290	3,285	3,101	3,016	3,023
507	Hardware, plumbing, heating equipment, and supplies	4,251	4,461	4,497	4,719	4,590	4,631	4,628	4,535	4,488	4,453	4,152	4,033	4,063
5072	Hardware	1,476	1,540	1,539	1,598	1,622	1,643	1,659	1,657	1,692	1,697	1,466	1,382	1,407
5074	Plumbing and heating equipment and supplies (hydronics)	1,819	1,900	1,899	1,985	1,848	1,896	1,902	1,828	1,783	1,747	1,738	1,737	1,760
508	Machinery, equipment, and supplies	17,748	18,254	18,807	18,924	19,370	19,465	19,576	19,778	19,974	19,784	17,352	17,428	18,012
5082	Construction and mining machinery and equipment	3,932	4,152	4,334	4,280	4,430	4,512	4,488	4,504	4,573	4,473	3,937	4,002	4,109
5084,5	Industrial machinery, equipment, and supplies	5,728	5,800	6,015	6,030	6,073	6,006	5,979	6,092	6,201	6,312	5,508	5,570	5,752
51	Nondurable goods, total	30,036	30,110	31,055	30,614	29,633	29,419	30,227	30,087	30,700	32,371	28,253	29,129	29,276
	Total (excluding farm-product raw materials)	23,733	23,820	24,930	24,895	24,680	24,441	24,885	24,767	25,202	25,906	22,865	22,976	23,252
511	Paper and paper products	1,424	1,468	1,547	1,501	1,542	1,616	1,608	1,604	1,663	1,640	1,419	1,441	1,482
5111,3	Printing, writing, industrial, and personal service paper	986	1,010	1,053	1,018	1,050	1,090	1,079	1,055	1,109	1,111	969	967	1,025
512	Drugs, drug proprietaries, and druggists' sundries	1,465	1,484	1,612	1,617	1,585	1,609	1,646	1,594	1,670	1,720	1,502	1,476	1,440
514	Groceries and related products	6,408	6,346	6,719	6,644	6,644	6,686	6,674	6,633	6,793	7,052	6,469	6,412	6,497
5141	Groceries, general-line	2,696	2,744	2,895	2,846	2,785	2,802	2,899	2,857	2,911	3,058	2,811	2,814	2,761
517	Petroleum and petroleum products	2,106	2,101	2,224	2,177	2,401	2,263	2,492	2,618	2,874	2,881	2,151	2,151	2,153
518	Beer, wine, and distilled alcoholic beverages	2,462	2,427	2,684	2,806	2,760	2,732	2,693	2,539	2,538	2,730	2,453	2,513	2,290
5181	Beer and ale[2]	800	845	1,040	1,085	1,089	1,072	1,030	923	903	925	769	777	729
5182	Wines and distilled alcoholic beverages	1,662	1,582	1,645	1,721	1,671	1,660	1,663	1,616	1,634	1,806	1,684	1,736	1,561

See footnotes at end of table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Percent. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979										1978		
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.[p]	Oct.	Nov.	Dec.
	Merchant wholesalers, total	128	136	115	121	111	114	118	111	119	110	114	118	125
	Total (excluding farm-product raw materials)	134	141	120	125	117	120	125	116	125	115	120	123	131
50	Durable goods, total	183	191	157	164	156	161	168	153	168	150	157	164	176
501	Motor vehicles and automotive parts and supplies	169	180	142	141	137	145	156	140	165	144	145	155	167
5013,4	Automotive parts and supplies, tires and tubes	185	191	167	173	169	173	196	172	193	174	158	171	190
5013	Automotive parts and supplies	188	192	168	175	170	175	195	172	192	175	163	174	194
502	Furniture and home furnishings	174	185	156	163	150	161	165	148	156	136	152	146	154
5023	Home furnishings	193	208	173	186	171	178	187	169	171	147	165	162	174
503	Lumber and other construction materials	130	144	111	113	103	102	103	92	103	92	97	104	123
5031	Lumber, plywood, and millwork	121	135	103	104	99	98	99	88	101	91	93	100	119
505	Metals and minerals, except petroleum	159	169	137	159	141	153	151	151	162	151	160	162	175
5051 pt.	Ferrous metals service centers and offices	171	182	149	172	151	166	162	162	177	165	163	170	185
5051 pt.	Ferrous metals service centers	196	198	161	182	162	177	179	179	203	177	172	183	199
506	Electrical goods	183	181	160	175	160	160	168	150	151	140	153	159	168
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	166	164	148	156	142	141	143	132	133	129	131	147	155
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	200	201	173	194	181	180	197	163	170	151	176	171	181
507	Hardware, plumbing, heating equipment, and supplies	198	225	194	199	177	188	183	169	187	164	169	179	198
5072	Hardware	184	203	180	188	166	187	186	165	193	166	171	167	195
5074	Plumbing and heating equipment and supplies (hydronics)	213	237	198	200	185	196	188	176	176	157	166	189	206
508	Machinery, equipment, and supplies	231	238	195	200	192	200	212	196	213	191	195	207	212
5082	Construction and mining machinery and equipment	439	448	364	315	328	358	357	330	361	349	341	356	365
5084,5	Industrial machinery, equipment, and supplies	168	167	153	167	152	152	165	151	171	153	154	160	159
51	Nondurable goods, total	85	90	78	82	72	74	76	72	78	74	77	79	83
	Total (excluding farm-product raw materials)	84	88	79	83	75	76	80	74	79	76	79	80	83
511	Paper and paper products	92	99	92	97	91	98	101	90	104	92	89	92	100
5111,3	Printing, writing, industrial, and personal service paper	87	92	83	86	83	87	90	79	92	83	81	82	90
512	Drugs, drug proprietaries, and druggists' sundries	154	162	150	156	144	155	154	145	162	145	139	145	150
514	Groceries and related products	58	61	56	59	55	57	58	56	61	58	58	57	60
5141	Groceries, general-line	68	75	69	71	66	66	68	64	70	67	70	68	71
517	Petroleum and petroleum products	44	42	42	42	40	39	43	41	45	41	49	47	47
518	Beer, wine, and distilled alcoholic beverages	122	124	108	114	101	101	102	89	106	100	105	99	85
5181	Beer and ale	80	89	85	86	72	70	68	58	74	71	70	71	66
5182	Wines and distilled alcoholic beverages	163	158	130	144	138	141	147	129	141	125	136	119	97

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. [p]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]The lumber, plywood, and millwork group is subject to a sampling variability of 8 percent for October 1979.
[2]The beer and ale group is subject to a sampling variability of 8 percent for October 1979.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1979 and 1978

(Sales and inventories in millions of dollars. Stock-sales ratios in percent)

1972 SIC code	Kind of businedd	1979										1978		
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.[p]	Oct.	Nov.	Dec.
	Sales ADJUSTED for seasonal variations and trading-day differences													
	Merchant wholesales, total	67,148	67,495	70,824	70,444	72,937	72,625	75,106	75,733	76,264	77,461	67,338	67,552	67,823
	Total (excluding farm-product raw materials)	60,346	60,603	63,567	63,278	65,050	64,506	65,961	66,826	67,375	68,282	59,349	60,373	60,526
50	Durable goods, total	31,012	31,769	33,570	32,770	33,354	32,956	34,078	34,711	33,862	35,438	30,953	31,498	31,939
501	Motor vehicles and automotive parts and supplies	5,994	6,285	6,486	6,315	6,347	6,078	6,083	6,525	5,961	6,731	6,113	6,442	6,088
502	Furniture and home furnishings	1,162	1,058	1,178	1,148	1,183	1,139	1,229	1,178	1,176	1,215	1,047	1,136	1,197
503	Lumber and other construction materials	2,876	2,758	3,089	3,085	3,037	3,166	3,188	3,209	3,197	3,231	2,887	2,874	3,026
505	Metals and minerals, except petroleum	3,184	3,518	3,748	3,250	3,637	3,598	4,008	3,874	3,736	4,078	3,188	3,305	3,259
506	Electrical goods	3,279	3,460	3,560	3,294	3,789	3,644	3,690	3,984	4,086	3,926	3,340	3,356	3,362
507	Hardware, plumbing, heating equipment, and supplies	2,354	2,270	2,371	2,372	2,398	2,355	2,441	2,466	2,387	2,481	2,290	2,237	2,330
508	Machinery, equipment, and supplies	8,461	8,840	9,108	9,249	9,240	9,263	9,497	9,680	9,385	9,691	8,607	8,730	9,193
51	Nondurable goods, total	36,136	35,726	37,254	37,674	39,583	39,669	41,028	41,022	42,402	42,023	36,385	36,054	35,884
	Total (excluding farm-product raw materials)	29,334	28,834	29,997	30,508	31,696	31,550	31,883	32,115	33,513	32,844	28,396	28,875	28,587
511	Paper and paper products	1,540	1,595	1,636	1,636	1,638	1,612	1,627	1,659	1,610	1,642	1,536	1,579	1,608
512	Drugs, drug proprietaries, and druggists' sundries	953	990	1,032	1,050	1,095	1,072	1,104	1,058	1,055	1,081	1,000	1,007	997
513	Apparel, piece goods, and notions	2,230	2,114	2,243	2,280	2,089	2,149	2,496	2,276	2,491	2,337	2,268	2,291	2,269
514	Groceries and related products	11,407	11,408	11,595	11,476	11,278	11,380	11,500	11,271	11,561	11,698	11,039	11,178	11,400
515	Farm-product raw materials[1]	6,802	6,892	7,257	7,166	7,887	8,119	9,145	8,907	8,889	9,179	7,989	7,179	7,297
517	Petroleum and petroleum products	4,876	4,905	4,955	5,263	6,338	6,038	5,863	6,311	7,006	7,043	4,390	4,542	4,387
518	Beer, wine, and distilled alcoholic beverages	2,491	2,395	2,541	2,615	2,526	2,472	2,610	2,628	2,539	2,615	2,333	2,383	2,387
519	Miscellaneous nondurable goods	4,645	4,361	4,849	5,095	5,546	5,721	5,647	5,678	6,028	5,305	4,657	4,693	4,567
	Inventories ADJUSTED for seasonal variations													
	Merchant wholesalers, total	81,543	83,005	84,078	84,973	85,257	85,245	88,144	88,727	88,393	89,073	78,625	79,526	80,771
	Total (excluding farm-product raw materials)	76,224	77,545	78,624	79,299	79,729	79,416	81,339	82,010	81,809	82,815	73,434	74,285	75,546
50	Durable goods, total	52,490	53,773	53,937	54,408	54,886	54,542	56,062	56,931	56,605	57,346	50,948	51,625	52,460
501	Motor vehicles and automotive parts and supplies	9,390	9,883	9,643	9,605	9,442	9,161	9,829	9,825	9,571	9,776	8,870	9,420	9,236
502	Furniture and home furnishings	1,778	1,765	1,878	1,846	1,799	1,866	1,840	1,828	1,839	1,903	1,776	1,782	1,801
503	Lumber and other construction materials	3,160	3,207	3,218	3,315	3,354	3,444	3,481	3,449	3,409	3,505	3,181	3,113	3,190
505	Metals and minerals, except petroleum	5,142	5,528	5,274	5,212	5,517	5,571	5,606	6,141	6,139	6,557	5,269	5,266	5,166
506	Electrical goods	5,697	5,772	5,764	5,754	5,899	5,881	6,137	6,211	5,977	6,006	5,435	5,499	5,650
507	Hardware, plumbing, heating equipment and supplies	4,382	4,543	4,422	4,511	4,443	4,514	4,555	4,508	4,561	4,512	4,207	4,153	4,228
508	Machinery, equipment, and supplies	17,927	18,073	18,529	18,905	19,178	19,065	19,517	19,958	20,095	20,004	17,527	17,658	18,249
51	Nondurable goods, total	29,053	29,232	30,141	30,565	30,371	30,703	32,082	31,796	31,788	31,727	27,677	27,901	28,311
	Total (excluding farm-product raw materials)	23,734	23,772	24,687	24,891	24,843	24,874	25,277	25,079	25,204	25,469	22,486	22,660	23,086
511	Paper and paper products	1,458	1,493	1,561	1,485	1,534	1,574	1,610	1,602	1,651	1,640	1,419	1,447	1,482
512	Drugs, drug proprietaries, and druggists' sundries	1,528	1,530	1,615	1,609	1,621	1,599	1,663	1,592	1,629	1,643	1,435	1,446	1,444
514	Groceries and related products	6,492	6,333	6,581	6,611	6,691	6,774	6,776	6,768	6,800	6,914	6,342	6,355	6,433
517	Petroleum and petroleum products	2,017	2,114	2,237	2,311	2,504	2,402	2,590	2,595	2,793	2,752	2,052	2,064	2,082
518	Beer, wine, and distilled alcoholic beverages	2,557	2,536	2,756	2,831	2,698	2,658	2,696	2,593	2,530	2,554	2,293	2,377	2,403
	Stock-sales ratios based on ADJUSTED data													
	Merchant wholesalers, total	121	123	119	121	117	117	117	117	116	115	117	118	119
	Total (excluding farm-product raw materials)	126	128	124	125	123	123	123	123	121	121	123	123	125
50	Durable goods, total	169	169	161	166	165	165	165	164	167	162	165	164	164
501	Motor vehicles and automotive parts and supplies	157	157	149	152	149	151	162	151	161	145	145	146	152
502	Furniture and home furnishings	153	167	159	161	152	164	150	155	156	157	170	157	150
503	Lumber and other construction materials	110	116	104	107	110	109	109	107	107	108	110	103	105
505	Metals and minerals, except petroleum	161	157	141	160	152	155	140	159	164	161	165	159	159
506	Electrical goods	174	167	162	175	156	161	166	156	146	153	163	164	168
507	Hardware, plumbing, heating equipment, and supplies	186	200	187	190	185	192	187	183	191	182	184	186	181
508	Machinery, equipment, and supplies	212	204	203	204	208	206	206	206	214	206	204	202	199
51	Nondurable goods, total	80	82	81	81	77	77	78	78	75	75	76	77	79
	Total (excluding farm-product raw materials)	81	82	82	82	78	79	79	78	75	78	79	78	81
511	Paper and paper products	95	94	95	91	94	98	99	97	103	100	92	92	92
512	Drugs, drug proprietaries, and druggists' sundries	160	155	156	153	148	149	151	150	154	152	144	144	145
514	Groceries and related products	57	56	57	58	59	60	59	60	59	59	57	57	56
517	Petroleum and petroleum products	41	43	45	44	40	40	44	41	40	39	47	45	47
518	Beer, wine, and distilled alcoholic beverages	103	106	108	108	107	108	103	99	100	98	98	100	101

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions. All data for 1978 have been revised to reflect recomputed factors for seasonal adjustment.

NA Not available. [p]Preliminary estimates. See p. 15, Sample Design and Estimation Procedures.

[1]There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table 4B. Percent Change Between Selected 3-Month Periods Sales of Merchant Wholesalers, United States

(Based on seasonally-adjusted data)

Item	3 month period, Aug. 1979-Oct. 1979 from--			
	May 1979-July 1979 (3 months ago)	Feb. 1979-April 1979 (6 months ago)	Nov. 1978-Jan. 1979 (9 months ago)	Aug. 1978-Oct. 1978 (12 months ago)
Merchant wholesalers, total.....	+4	+10	+13	+17
Durable goods, total.....	+4	+6	+10	+14
Nondurable goods, total...	+4	+13	+16	+18

Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers: 1973-1979

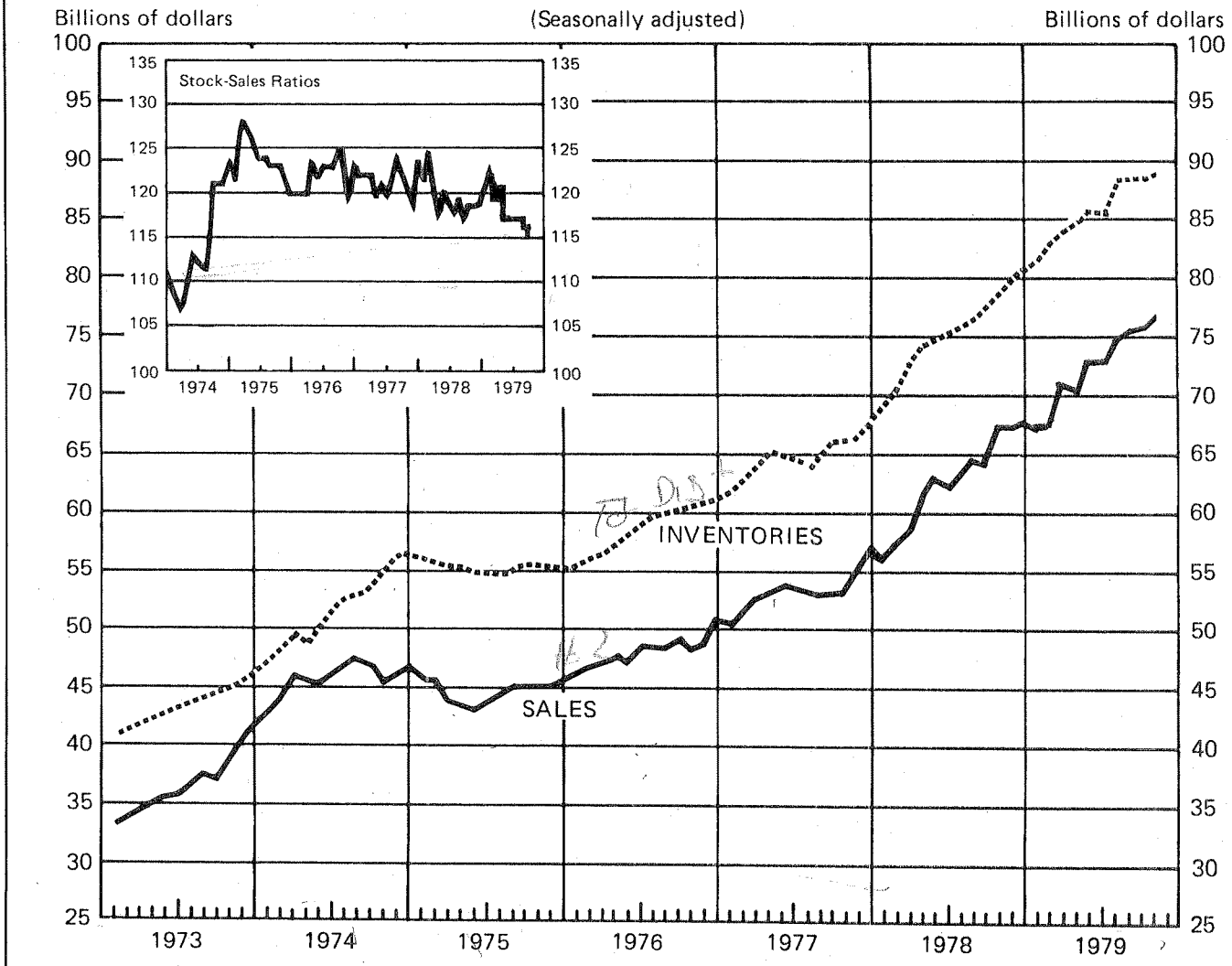


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: October 1979

1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		Oct. 1979 from Sept. 1979	Oct. 1979 from Oct. 1978	10 months 1979 from 10 months 1978	Oct. 1979 from Sept. 1979	Oct. 1979 from Oct. 1978	Oct. 1979 from Sept. 1979	Oct. 1979 from Oct. 1978	Oct. 1979 from Sept. 1979	Oct. 1979 from Oct. 1978
	Merchant wholesalers, total	+11	+18	+17	+2	+13	+2	+15	+1	+13
	Total (excluding farm-product raw materials)	+10	+18	+17	+1	+13	+1	+15	+1	+13
50	Durable goods, total	+12	+17	+16	+1	+12	+5	+14	+1	+13
501	Motor vehicles and automotive parts and supplies	+18	+11	+12	+3	+10	+13	+10	+2	+10
5012	Automobiles and other motor vehicles	+25	+20	+19	+5	+5	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	+13	+4	+8	+2	+14	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	+11	+5	+8	+2	+14	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	+17	+19	+10	+2	+7	+3	+16	+3	+6
5021	Furniture--household and office	+13	+25	+17	+4	+19	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	+8	+5	+5	+4	+15	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	+16	+36	+24	+4	+22	(*)	(*)	(*)	(*)
5023	Home furnishings	+19	+16	+6	+2	+3	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	+12	+16	+18	0	+10	+1	+12	+3	+10
5031	Lumber, plywood, and millwork	+11	+12	+18	0	+9	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c.	+13	+22	+16	+2	+13	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	+6	+20	+18	+1	+17	-3	+12	+2	+17
505	Metals and minerals, except petroleum	+11	+31	+25	+3	+24	+9	+28	+7	+24
5051 pt.	Ferrous metals service centers and offices	+9	+25	+23	+2	+27	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	+17	+29	+21	+2	+32	(*)	(*)	(*)	(*)
5051 pt.	Nonferrous metals service centers and offices	+15	(S)	(S)	+8	+19	(*)	(*)	(*)	(*)
506	Electrical goods	+8	+21	+16	0	+10	-4	+18	0	+11
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+4	+18	+19	+1	+16	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+13	+24	+14	0	+6	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	+17	+22	+8	0	+3	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	+13	+10	+12	-1	+7	+4	+8	-1	+7
5072	Hardware	+17	+19	+13	0	+16	(*)	(*)	(*)	(*)
5074	Plumbing and heating equipment and supplies (hydronics)	+10	+6	+12	-2	0	(*)	(*)	(*)	(*)
5075	Warm air heating and air conditioning equipment and supplies	+13	+3	+12	0	+2	(*)	(*)	(*)	(*)
508	Machinery, equipment, and supplies	+10	+16	+16	-1	+14	+3	+13	0	+14
5081	Commercial machines and equipment	+5	+26	+8	-3	+7	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	+1	+11	+9	-2	+14	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	+11	+18	+20	-4	+20	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	+13	+15	+17	+2	+15	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	+12	+16	+15	0	0	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	+12	+48	+46	0	0	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	+13	+45	+48	-1	-4	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	+11	+51	+42	+2	+9	(*)	(*)	(*)	(*)
51	Nondurable goods, total	+10	+18	+18	+5	+15	-1	+15	0	+15
	Total (excluding farm-product raw materials)	+7	+18	+18	+3	+13	-2	+16	+1	+13
511	Paper and paper products	+12	+12	+13	-1	+16	+2	+7	-1	+16
5111,3	Printing, writing, industrial, and personal service paper	+12	+13	+14	0	+15	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	+16	+10	+11	+3	+15	+2	+7	+1	+13
5122	Drugs, drug proprietaries, and druggists' sundries	+16	+10	+11	+3	+15	+2	+7	+1	+13
5122 pt.	General-line drugs	+15	+4	+6	+4	+8	(*)	(*)	(*)	(*)
514	Groceries and related products	+9	+9	+12	+4	+9	+1	+6	+2	+9
5141	Groceries, general-line	+11	+15	+13	+5	+9	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	+9	+11	+12	+6	+6	(*)	(*)	(*)	(*)
5141 pt.	Retailer cooperatives	+13	+17	+13	+6	+10	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	+11	+16	+14	+4	+10	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	+8	+9	+11	+2	+13	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	+6	+7	+14	+12	+16	(*)	(*)	(*)	(*)
5145	Confectionery	(S)	(S)	+14	-2	+7	(*)	(*)	(*)	(*)
5147	Meats and meat products	+9	0	+12	+6	-2	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	+7	0	+7	+3	+9	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	+23	+19	+16	+18	+20	+3	+15	-5	+21
5152	Cotton	+26	+18	+2	+25	-34	(*)	(*)	(*)	(*)
5153	Grain	+24	+23	+18	+16	+22	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	+11	+59	+39	0	+34	+1	+60	-1	+34
5171	Petroleum bulk stations and terminals	+15	+62	+37	-2	+32	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	+15	+17	+15	+8	+11	+3	+12	+1	+11
5181	Beer and ale	+5	+17	+18	+2	+20	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	+25	+16	+11	+10	+7	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	-6	+16	+23	+5	+10	-12	+14	+2	+10
5191	Farm supplies	+7	+15	+23	+10	+16	(*)	(*)	(*)	(*)
5194	Tobacco and tobacco products	+13	+6	+6	+3	+3	(*)	(*)	(*)	(*)
5198	Paints, varnishes, and supplies	+7	+6	+14	+3	+33	(*)	(*)	(*)	(*)
5199 pt.	Books, periodicals, newspapers	-5	-6	+10	-2	-19	(*)	(*)	(*)	(*)

*Adjusted data are available only for summary group totals.

[1]Adjusted for seasonal variations and, in the case of sales, also for trading-day differences. Adjusted data are only available for the summary kind-of-business groups shown.

[2]There are indications that the seasonal adjustment factors for this trade group may not reflect recent trends. The seasonally adjusted data for this trade group and also for the summary group totals should, therefore, be used with caution.

Sales of Merchant Wholesalers by Geographic Division
10 Months 1979 Compared With 10 Months 1978

(Percent changes based on UNADJUSTED data)

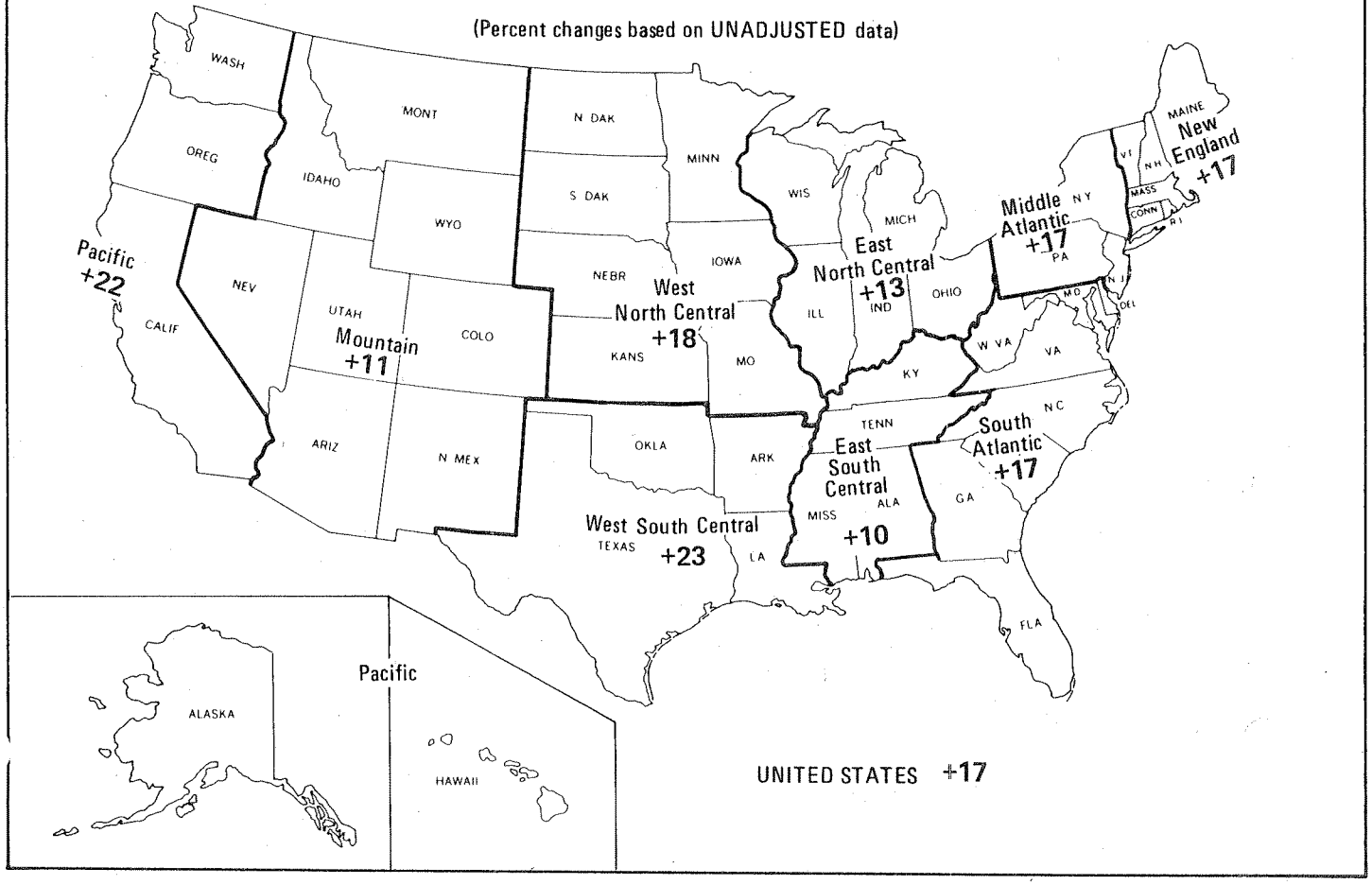


Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1979 and 1978

(Sales, in millions of dollars, are NOT ADJUSTED for seasonal variation or trading-day differences; sampling errors in percent)

1972 SIC code	Kind of business and geographic division[1]	1979										1978			Total 10 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.[P]	Oct.	Nov.	Dec.	1979	1978	Range[2]	Median
	Merchant wholesalers, total	63,739	61,721	74,319	70,768	76,814	74,361	73,537	78,567	73,213	81,359	69,086	67,699	64,527	728,400	621,880	0.8-0.9	0.9
	New England	3,393	3,289	3,835	3,652	3,915	3,782	3,572	3,981	3,741	4,308	3,638	3,678	3,652	37,467	32,105	5-6	6
	Middle Atlantic	14,513	13,785	16,692	15,218	16,416	16,288	16,256	17,786	17,136	18,333	15,123	15,304	14,529	162,423	138,278	2-2	2
	East North Central	10,573	10,454	12,314	11,906	13,356	12,661	12,182	12,979	11,735	13,358	12,195	11,757	10,882	121,517	107,995	2-3	3
	West North Central	6,695	6,589	7,834	7,506	8,614	8,005	8,385	8,510	7,921	8,919	7,790	7,471	6,894	78,978	66,990	2-3	2
	South Atlantic	7,023	6,620	8,329	7,929	8,401	8,074	7,720	8,067	7,558	8,298	7,449	7,106	6,979	78,019	66,568	2-3	2
	East South Central	2,961	2,801	3,505	3,461	3,557	3,372	3,292	3,534	3,261	3,657	3,213	3,075	2,922	33,400	30,301	4-5	4
	West South Central	6,703	6,648	7,785	7,673	8,443	8,314	8,248	8,755	8,434	9,294	7,036	6,885	6,680	80,296	65,362	3-4	4
	Mountain	2,337	2,253	2,904	2,659	2,786	2,851	2,704	2,830	2,760	3,022	2,583	2,477	2,540	27,108	24,448	5-5	5
	Pacific	9,540	9,281	11,121	10,765	11,325	11,077	11,178	12,125	10,668	12,173	10,058	9,946	9,448	109,192	89,833	2-3	3
50	Durable goods, total	28,284	28,141	34,689	33,429	35,723	34,447	33,750	37,048	33,616	37,805	32,242	31,037	29,340	337,054	289,541	0.8-1.0	0.9
	Middle Atlantic	5,936	5,892	7,165	6,601	7,191	6,961	6,769	7,538	6,989	8,061	6,618	6,516	6,094	69,104	60,498	4-5	4
	East North Central	4,818	4,975	6,057	5,863	6,467	6,023	5,801	6,440	5,833	6,331	5,801	5,674	5,177	58,610	51,301	3-4	4
	West North Central	2,157	2,208	2,718	2,746	3,009	2,778	2,873	3,209	2,900	3,136	2,740	2,652	2,379	27,736	23,503	5-6	5
	South Atlantic	3,515	3,211	4,246	4,111	4,269	4,172	4,074	4,173	3,796	4,280	3,869	3,608	3,513	39,845	34,577	4-5	4
	West South Central	3,020	3,067	3,649	3,637	3,863	3,900	3,702	3,970	3,662	4,166	3,438	3,160	3,144	36,636	31,184	4-4	4
	Mountain	1,076	1,043	1,408	1,309	1,355	1,358	1,322	1,356	1,280	1,411	1,283	1,172	1,207	12,918	12,173	6-7	7
	Pacific	5,259	5,268	6,330	6,173	6,433	6,265	6,388	7,143	6,069	6,987	5,597	5,524	5,250	62,254	50,355	2-3	3
51	Nondurable goods, total	35,455	33,580	39,630	37,339	41,091	39,914	39,787	41,519	39,597	43,554	36,844	36,662	35,187	391,467	332,340	1.0-1.2	1.0
	New England	2,166	2,066	2,335	2,200	2,377	2,343	2,225	2,453	2,252	2,606	2,245	2,316	2,349	23,021	20,043	5-7	6
	Middle Atlantic	8,577	7,893	9,527	8,616	9,226	9,327	9,487	10,247	10,147	10,272	8,505	8,788	8,435	93,319	77,779	3-3	3
	East North Central	5,755	5,479	6,256	6,042	6,888	6,638	6,380	6,539	5,902	7,027	6,394	6,083	5,704	62,907	56,694	3-4	3
	West North Central	4,538	4,381	5,115	4,760	5,606	5,227	5,512	5,301	5,021	5,783	5,050	4,820	4,515	51,243	43,487	3-4	3
	South Atlantic	3,508	3,409	4,084	3,818	4,132	3,902	3,646	3,894	3,762	4,018	3,580	3,498	3,466	38,174	31,991	3-5	3
	East South Central	1,685	1,549	1,889	1,925	1,959	1,820	1,817	1,844	1,664	1,922	1,710	1,706	1,650	18,075	16,414	3-4	4
	West South Central	3,683	3,581	4,136	4,036	4,580	4,414	4,546	4,785	4,771	5,128	3,598	3,725	3,536	43,659	34,179	5-5	5
	Pacific	4,281	4,013	4,790	4,591	4,893	4,812	4,790	4,982	4,599	5,187	4,461	4,422	4,199	46,938	39,478	4-5	4

Note: Detail may not add to totals due to rounding and minor revisions.

[P]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.

[1]See map on page 7.

[2]The range of sampling error of the estimate is based on data for August, September, and October 1977.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: October 1979

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in--					Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		Sales			Inventories			
		Oct. 1979 from Sept. 1979	Oct. 1979 from Oct. 1978	10 months 1979 from 10 months 1978	Oct. 1979 from Sept. 1979	Oct. 1979 from Oct. 1978		
		A	B	C[1]	D	E	A	D
	Merchant wholesalers, total	+11	+18	+17	+2	+13	0.4	0.2
	New England	+15	+18	+17	+5	+11	2.0	1.9
	Middle Atlantic	+7	+21	+17	+1	+13	1.1	0.6
	East North Central	+14	+10	+13	-2	+10	1.2	0.8
	West North Central	+13	+14	+18	+1	+17	1.3	1.1
	South Atlantic	+10	+11	+17	+4	+15	1.6	1.0
	East South Central	+12	+14	+10	+2	+7	1.7	1.4
	West South Central	+10	+32	+23	+1	+15	1.4	0.8
	Mountain	+10	+17	+11	+1	+14	2.4	1.3
	Pacific	+14	+21	+22	+2	+13	1.2	0.5
50	Durable goods, total	+12	+17	+16	+1	+12	0.6	0.3
	New England	+14	+22	+20	+5	+3	2.4	1.3
	Middle Atlantic	+15	+22	+14	+1	+14	1.7	1.0
	East North Central	+9	+9	+14	-1	+9	1.9	1.0
	West North Central	+8	+14	+18	-1	+17	3.3	1.7
	South Atlantic	+13	+11	+15	+2	+12	1.9	1.2
	East South Central	+9	+15	+10	-1	+10	3.9	2.5
	West South Central	+14	+21	+17	-2	+13	2.1	1.2
	Mountain	+10	+10	+6	+1	+11	2.9	1.7
	Pacific	+15	+25	+24	0	+13	1.9	0.7
51	Nondurable goods, total	+10	+18	+18	+5	+15	0.6	0.4
	New England	+16	+16	+15	+5	+20	1.9	2.7
	Middle Atlantic	+1	+21	+20	0	+9	1.9	0.9
	East North Central	+19	+10	+11	+9	+11	1.4	1.1
	West North Central	+15	+15	+18	+4	+18	1.6	1.4
	South Atlantic	+7	+12	+19	+8	+20	2.4	1.8
	East South Central	+16	+12	+10	+8	+3	1.7	2.4
	West South Central	+7	+43	+28	+5	+19	2.2	1.3
	Mountain	+9	+24	+16	+1	+20	3.2	1.2
	Pacific	+13	+16	+19	+7	+14	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	+13	+4	+8	+2	+14	2	1
	New England	+16	+35	+23	(S)	+31	7	4
	Middle Atlantic	+17	-1	-1	0	+31	4	2
	East North Central	+5	0	+13	0	+17	7	1
	West North Central	+6	+29	+14	-1	+26	5	2
	South Atlantic	+9	-6	+9	+1	+4	4	2
	East South Central	+19	+15	+8	+5	+25	4	3
	West South Central	+4	-6	+6	-1	+9	5	2
	Mountain	+6	(S)	(S)	+1	(S)	7	3
	Pacific	+24	+10	+11	-2	+2	3	2
502	Furniture and home furnishings	+17	+19	+10	+2	+7	2	1
	Middle Atlantic	+22	+4	+8	0	0	4	2
	East North Central	-1	+6	+18	+3	+14	7	2
	West North Central	+19	(S)	(S)	-2	+1	5	4
	West South Central	+20	+20	+11	+2	+5	5	7
	Pacific	+32	+56	+19	+5	+16	5	3
503	Lumber and other construction materials	+12	+16	+18	0	+10	2	1
	New England	+5	+13	+15	+5	+15	4	5
	Middle Atlantic	+14	+6	+9	-2	+1	4	2
	East North Central	+14	+20	+11	0	+13	3	2
	West North Central	+7	+15	+29	+1	+8	7	7
	South Atlantic	+18	+5	+14	-1	+6	4	2
	East South Central	+18	(S)	0	0	+6	4	3
	West South Central	+24	+28	+13	-3	-6	6	5
	Pacific	+7	+24	+29	0	+25	5	1
5051 pt.	Ferrous metals service centers	+17	+29	+21	+2	+32	2	1
	New England	+40	+56	+18	+10	+54	6	2
	Middle Atlantic	+19	+43	+24	+4	+44	5	2
	East North Central	+21	+17	+19	0	+30	5	2
	West North Central	+7	+32	+23	-1	+23	5	2
	South Atlantic	+21	+1	+7	+7	-2	3	2
	East South Central	+18	+26	+19	+4	+38	4	4
	West South Central	+9	+8	+13	0	+23	4	2
	Mountain	+38	(S)	+10	+4	+41	2	2
	Pacific	+8	+30	+38	-3	+42	2	3
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+4	+18	+19	+1	+16	2	1
	New England	+4	+2	+27	-1	-14	3	2
	Middle Atlantic	+13	+22	+15	-3	+3	5	2
	East North Central	+11	+28	+26	+2	+26	3	2
	West North Central	+5	(S)	+8	-4	+4	5	3
	South Atlantic	+10	+18	+14	0	+15	3	2
	East South Central	(S)	+3	+17	+5	+31	3	5
	West South Central	+9	+30	+28	-2	+27	4	2
	Mountain	+9	+8	+10	+1	+4	4	2
	Pacific	+7	+21	+21	+3	+24	4	2

See footnotes at end of table.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: October 1979—Continued

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in--					Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		Sales			Inventories			
		Oct. 1979 from Sept. 1979	Oct. 1979 from Oct. 1978	10 months 1979 from 10 months 1978	Oct. 1979 from Sept. 1979	Oct. 1979 from Oct. 1978		
		A	B	C[1]	D	E	A	D
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+13	+24	+14	0	+6	3	1
	Middle Atlantic	+10	+16	+11	+1	-4	3	2
	East North Central	+8	+20	+23	-3	+5	4	1
	West North Central	+5	+27	-1	+6	+37	4	4
	South Atlantic	+21	+13	+13	+6	+11	6	4
	West South Central	+7	+64	+34	-3	+14	4	4
	Mountain	+4	+5	+15	+8	+8	6	3
	Pacific	+25	+43	+13	-6	+4	3	2
5072	Hardware	+17	+19	+13	0	+16	1	1
	New England	+11	+2	+14	-6	-7	6	3
	Middle Atlantic	+13	+37	+14	-1	+30	6	2
	East North Central	+18	+14	+12	+1	+7	4	2
	West North Central	+21	+15	+16	-3	+6	3	3
	South Atlantic	+18	+26	+16	+1	+27	4	2
	East South Central	+20	+14	0	+1	-15	4	1
	Pacific	+16	+30	+21	+2	+32	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	+10	+6	+12	-2	0	2	1
	Middle Atlantic	+16	+18	+21	-2	+12	6	3
	East North Central	+4	-23	-6	-3	(S)	3	3
	South Atlantic	+10	+13	+19	-4	0	3	2
	Mountain	+13	-7	-11	+2	+31	7	4
	Pacific	+14	+26	+24	-2	+21	5	4
5084,5	Industrial machinery, equipment, and supplies	+13	+15	+17	+2	+15	2	1
	Middle Atlantic	+23	+43	+16	+2	+17	7	2
	East North Central	+8	+5	+17	+2	+16	3	2
	West South Central	+15	+11	+20	-1	+6	4	3
	Pacific	+16	+21	+24	+1	+20	5	2
512	Drugs, drug proprietaries, and druggists' sundries	+16	+10	+11	+3	+15	1	1
	New England	+7	+14	+16	+4	+46	5	3
	Middle Atlantic	+15	+5	+5	0	+21	3	2
	East North Central	+18	+5	+13	+1	+2	6	3
	West North Central	+17	+13	+12	+7	+25	2	2
	South Atlantic	+13	+9	+8	+5	+14	6	5
	East South Central	+17	(S)	+5	+3	+11	6	5
	West South Central	+10	+9	+8	+1	-1	3	2
	Mountain	+16	+18	+19	+5	+26	3	2
	Pacific	+22	+19	+20	+4	+11	3	3
5141	Groceries, general-line	+11	+15	+13	+5	+9	1	1
	New England	+10	+7	+11	+4	+12	2	1
	Middle Atlantic	+7	+13	+13	+2	+15	1	2
	East North Central	+10	+23	+14	+6	+12	3	1
	West North Central	+10	+10	+8	+6	-3	1	1
	South Atlantic	+12	+14	+15	+6	+6	2	1
	West South Central	+11	+13	+15	+7	+12	2	1
	Mountain	+20	+36	+17	-3	+29	2	2
	Pacific	+14	+8	+13	+5	+2	1	1
5142,3,6,9	Specialty-line groceries	+8	+9	+11	+2	+13	1	1
	Middle Atlantic	+9	+13	+9	-5	-4	4	2
	East North Central	+8	-3	+6	+1	+17	3	2
	West North Central	+8	+24	+14	+6	+33	3	1
	South Atlantic	-2	+19	+16	-1	+21	5	6
	East South Central	+5	(S)	+4	-1	(S)	2	2
5148	Fresh fruits and vegetables	+7	0	+7	+3	+9	2	4
	Middle Atantic	+10	-4	+5	+1	-9	7	5
	East North Central	+2	-3	0	+4	+5	6	6
	West North Central	+15	+15	+10	+16	(S)	6	3
	West South Central	+10	+9	+11	+4	+5	5	3
	Pacific	-1	-8	+8	+3	-3	4	4
5194	Tobacco and tobacco products	+13	+6	+6	+3	+3	1	1
	New England	+18	-10	-9	+6	-16	5	3
	Middle Atlantic	+12	+1	+5	+1	-4	4	3
	East North Central	+13	+15	+7	+2	+4	4	3
	West North Central	+20	+2	+7	-3	+8	4	2
	South Atlantic	+7	-9	+3	+7	+1	6	6
	East South Central	+11	+3	-2	+3	+12	7	4
	West South Central	+4	+20	+16	-4	+12	7	6
	Mountain	+22	+9	+11	0	(S)	6	2
	Pacific	+18	+21	+18	+13	+18	2	5

Note: Data at the United States level are generally more reliable than data by geographic division. In those kinds of business where the geographic division trends are subject to a high sampling error, it may be desirable to use the United States total trends for the kinds of business rather than the geogrpahic division trends.

(S) Does not meet publication standards because of extreme variability or high nonresponse rate.

[1]See map on page 7.

[2]The sampling errors (in percent) shown in columns A and D are based on medians or measurements on data for August, September, and October 1977. For SIC's 5051 pt., and 5063 the medians of measurements in columns A and D are based on data for June, July, and August 1978.

APPENDIX A. Reliability of Data

There are two types of errors possible in an estimate based on a sample survey—sampling and nonsampling. Sampling errors occur because observations are made only on a sample, not on the entire population. Nonsampling errors can be attributed to many sources in the collection and processing of data. The accuracy of a survey result is determined by the joint effects of sampling and nonsampling errors.

Measures of sampling variability—The particular sample used in this survey is one of a large number of all possible samples of the same size that could have been selected using the same design. Estimates derived from the different samples would differ from each other. The average of these estimates would be close to the estimate derived from a complete enumeration of the population (assuming that a complete enumeration has the same nonsampling errors as the sample survey). The average of the estimates differs from the estimate from a complete census because of the composite estimation technique. Disregarding this difference, the sampling error or standard error of the estimate is a measure of the variability among the estimates from all possible samples of the same size and design and, thus, is a measure of the precision with which an estimate from a particular sample approximates the results of a complete enumeration. The coefficient of variation (expressed as a percent) is the standard error of the estimate times 100 percent, divided by the value being estimated. Note that any measures of sampling variability, such as the standard error or coefficient of variation, are estimates derived from the sample and are also subject to sampling variability.

Estimates of sampling variability (the coefficients of variation in percent) for sales and inventories at the kind-of-business detail provided in this publication are shown in table A-1. These coefficients of variation permit certain confidence statements about the sample estimates. As noted above, the particular sample used in this survey is one of a large number of all possible samples of about the same size that could have been selected using the same design. In about two out of three (67 percent) of these samples, the estimate would differ from a complete enumeration by less than the corresponding percent for that estimate shown in the sampling variability table. In about 19 out of 20 (95 percent) of these samples, the estimate would differ from the results of a complete enumeration by less than twice the percentages shown.

To illustrate the computations involved in the above confidence statements for monthly dollar volume estimates, assume that an estimate for a kind of business published in table 1 for a particular month is $5,000 million and that the median coefficient of variation for this statistic, is 0.9 percent or .009. Multiplying $5,000 million by .009 yields $45 million. Therefore, a 67 percent confidence interval is $4,955 million to $5,045 million (i.e. $5,000 million plus or minus $45 million). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately two out of three (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Similarly a 95 percent confidence interval is $4,910 million to $5,090 million (i.e., $5,000 million plus or minus $90 million).

As an example of the use of the coefficients of variation with ratios, assume that an estimated month-to-month percent change published in table 5 is -1.0 percent for a particular kind of business. This is equivalent to a month-to-month ratio of .990. Assume the median coefficient of variation for this ratio as shown in table A-1 is 0.5 percent (or .005). Multiplying .990 by .005 yields .005. Therefore, a 67 percent confidence interval is .985 to .995 (i.e., .990 plus or minus .005) and a 95 percent confidence interval is .980 to 1.000 (i.e., .990 plus or minus .010).

Nonsampling errors—As calculated for this report, the coefficient of variation measures certain nonsampling errors but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples of the same size and design, between the estimate and the true value being estimated. The accuracy of the tabulated data is determined by the joint effects of the sampling and nonsampling errors.

Nonsampling errors can be attributed to many sources: (1) inability to obtain information about all cases in the sample, (2) response errors, (3) definitional difficulties, (4) differences in the interpretation of questions, (5) mistakes in recording or coding the data obtained, and (6) other errors of collection, response, coverage, and estimation for missing data. These nonsampling errors also occur in complete censuses.

Although no direct measurement of the biases due to nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is due to imputing data for nonrespondents, for late reporters, and for data which fail edit. For all kinds of business combined, imputed data amount to about 15 percent of the sales estimates and 25 percent for inventories.

Table A-1. Estimated Sampling Variability of Sales and Inventories by Kind of Business for the United States

1972 SIC code	Kind of business	Sales						Inventories					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total	0.8-1.1	0.9	0.8-0.9	0.9	0.4-0.5	0.5	0.8-1.0	0.9	0.7-1.0	0.9	0.2-0.5	0.4
	Total (excluding farm-product raw materials)	0.9-1.2	1.1	0.9-1.0	1.0	0.4-0.6	0.5	0.9-1.0	1.0	0.8-1.0	0.9	0.2-0.5	0.3
50	Durable goods, total	1.1-1.3	1.2	0.9-1.0	1.0	0.6-0.6	0.6	1.1-1.2	1.2	1.0-1.2	1.1	0.3-0.7	0.5
501	Motor vehicles and automotive parts and supplies	2.3-3.3	3.1	1.9-2.8	2.2	1.4-1.9	1.7	2.5-3.3	2.9	2.6-3.1	3.0	0.6-1.3	1.0
5012	Automobiles and other motor vehicles	(*)	(*)	(*)	(*)	1.7-3.9	3.1	(*)	(*)	(*)	(*)	1.7-3.0	2.8
5013,4	Automotive parts and supplies, tires and tubes	2.9-3.7	3.1	2.9-3.2	3.1	1.5-2.0	1.6	4.0-4.5	4.3	3.9-4.4	4.0	0.4-1.4	0.7
5013	Automotive parts and supplies	3.3-4.0	3.9	3.1-3.8	3.7	1.9-2.2	2.0	4.7-5.3	5.2	4.7-5.2	5.0	0.5-1.5	0.9
502	Furniture and home furnishings	4.2-5.8	4.6	4.2-4.4	4.3	1.7-2.9	2.0	3.2-4.9	3.7	3.4-4.2	3.7	0.8-2.3	2.0
5021	Furniture--household and office	6.6-7.6	6.9	5.6-7.1	6.9	4.0-5.7	4.3	(*)	(*)	(*)	(*)	1.4-3.4	2.2
5021 pt.	Household furniture	(*)	(*)	(*)	(*)	5.0-5.8	5.1	(*)	(*)	(*)	(*)	1.4-4.3	2.0
5021 pt.	Office furniture	(-)	(*)	(*)	(*)	5.7-8.0	5.9	(*)	(*)	(*)	(*)	0.7-3.7	2.1
5023	Home furnishings	5.1-7.5	6.1	5.1-6.1	5.5	1.6-3.6	2.2	4.8-6.9	5.6	4.9-6.0	5.0	1.0-3.1	2.6
503	Lumber and other construction materials	2.8-4.4	3.1	2.9-3.9	3.1	1.6-2.5	1.9	4.5-6.5	4.9	4.8-5.8	4.9	0.7-1.8	0.9
5031	Lumber, plywood, and millwork	4.1-4.6	4.3	3.3-4.6	4.0	2.1-2.5	2.4	5.9-8.2	6.5	6.0-6.9	6.5	1.0-2.6	1.8
5039	Construction materials, n.e.c.	4.2-7.2	4.9	4.5-5.9	4.9	2.0-3.4	2.2	(*)	(*)	(*)	(*)	1.1-2.0	1.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(*)	(*)	(*)	(*)	2.2-2.4	2.3	(*)	(*)	(*)	(*)	1.0-2.5	1.4
505	Metals and minerals, except petroleum	4.4-6.0	4.7	4.0-5.1	4.0	1.5-3.0	2.8	3.2-3.8	3.7	3.7-4.1	4.0	0.8-1.4	1.3
5051 pt.	Ferrous metals service centers and offices	5.0-5.8	5.7	4.1-5.2	4.7	1.2-3.8	3.1	3.8-4.2	4.1	4.1-4.3	4.2	0.5-1.6	1.4
5051 pt.	Ferrous metals service centers	6.7-8.0	6.8	5.0-6.8	5.8	1.1-5.3	3.5	2.9-4.4	3.4	3.4-4.0	3.5	0.6-2.2	2.1
5051 pt.	Nonferrous metals service centers and offices	(*)	(*)	(*)	(*)	4.5-7.0	6.1	(*)	(*)	(*)	(*)	2.8-5.4	4.7
506	Electrical goods	1.9-2.6	2.3	1.6-2.1	1.7	1.3-1.6	1.4	2.5-2.9	2.6	2.2-2.8	2.4	0.5-1.0	0.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2.2-3.1	2.6	2.3-2.7	2.4	1.4-1.7	1.6	2.9-3.5	3.2	3.0-3.2	3.1	0.6-1.2	0.7
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3.4-4.0	3.8	3.0-3.2	3.1	1.6-2.8	2.5	2.9-4.2	3.2	2.7-3.8	3.0	0.7-1.6	0.9
5064	Electrical appliances, TV and radio sets	3.0-3.8	3.6	2.6-3.7	3.1	1.7-2.7	2.5	(*)	(*)	(*)	(*)	0.9-1.7	1.4
507	Hardware, plumbing, heating equipment, and supplies	2.7-3.0	2.9	2.4-2.6	2.5	1.1-1.9	1.5	2.4-2.8	2.6	2.4-2.9	2.7	0.3-1.4	0.6
5072	Hardware	3.6-4.2	3.8	2.6-3.1	3.0	1.3-2.4	1.9	2.0-4.1	2.7	2.2-3.5	2.8	0.4-2.1	0.8
5074	Plumbing and heating equipment and supplies (hydronics)	4.1-5.3	4.2	3.9-5.1	4.2	1.6-3.8	2.1	5.0-7.0	6.0	4.5-7.1	5.3	0.5-3.1	0.9
5075	Warm air heating and air conditioning equipment and supplies	(*)	(*)	(*)	(*)	2.0-4.4	2.7	(*)	(*)	(*)	(*)	1.1-4.3	1.4
508	Machinery, equipment, and supplies	2.3-2.7	2.6	1.8-2.5	2.1	1.2-1.5	1.4	2.0-2.6	2.3	1.7-2.1	1.9	0.4-1.8	1.1
5081	Commercial machines and equipment	(*)	(*)	(*)	(*)	2.9-4.3	4.1	(*)	(*)	(*)	(*)	1.6-8.5	1.9
5082	Construction and mining machinery and equipment	5.0-7.3	5.8	3.3-5.8	4.9	3.9-4.6	4.4	2.9-7.0	4.0	3.2-4.1	3.3	0.7-5.3	1.0
5083	Farm and garden machinery and equipment	(*)	(*)	(*)	(*)	4.1-6.6	6.0	(*)	(*)	(*)	(*)	1.1-2.9	1.2
5084,5	Industrial machinery, equipment, and supplies	3.1-3.4	3.2	2.8-3.0	2.9	1.1-2.3	1.6	2.4-3.0	2.9	2.4-3.0	2.7	0.5-1.6	0.6
5086	Professional equipment and supplies	3.7-7.5	4.3	4.0-5.5	5.2	1.8-3.3	2.0	(*)	(*)	(*)	(*)	0.6-5.2	0.7
5086 pt.	Surgical, medical, hospital, and supplies	(*)	(*)	(*)	(*)	1.7-3.8	2.5	(*)	(*)	(*)	(*)	0.7-5.4	1.0
5087	Service establishment equipment and supplies	(*)	(*)	(*)	(*)	1.8-11.0	2.9	(*)	(*)	(*)	(*)	1.0-3.4	1.3
5093	Scrap and waste materials	4.6-13.3	9.0	4.6-8.8	5.0	2.2-4.9	2.7	(*)	(*)	(*)	(*)	0.7-3.8	0.9
5093 pt.	Iron and steel scrap	(*)	(*)	(*)	(*)	2.6-3.5	3.1	(*)	(*)	(*)	(*)	0.8-1.4	1.0
5093 pt.	Waste materials	(*)	(*)	(*)	(*)	2.6-8.8	4.8	(*)	(*)	(*)	(*)	1.2-9.1	1.6
51	Nondurable goods, total	1.0-1.3	1.1	1.0-1.1	1.1	0.4-0.7	0.6	1.5-1.7	1.6	1.4-1.6	1.5	0.3-0.7	0.4
	Total (excluding farm-product raw materials)	1.0-1.6	1.2	1.3-1.4	1.4	0.5-0.8	0.6	1.7-2.0	1.9	1.6-1.8	1.7	0.3-0.7	0.4
511	Paper and paper products	2.6-4.0	3.7	2.4-4.1	3.1	1.0-1.4	1.3	2.5-3.4	2.7	2.4-3.2	2.8	0.4-1.5	0.6
5111,3	Printing, writing, industrial, and personal service paper	2.4-3.1	2.7	2.3-2.8	2.4	1.3-1.5	1.4	2.9-3.4	3.1	2.7-3.2	2.8	0.4-1.3	0.9
5112	Stationery supplies	(*)	(*)	(*)	(*)	2.4-3.4	2.5	3.2-6.1	5.8	3.6-5.1	4.4	0.9-4.8	1.4
512	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	5.6-6.3	5.7	5.6-5.7	5.7	0.6-2.2	0.7
5122	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	(*)	(*)	(*)	(*)	0.6-2.2	0.7
5122 pt.	General-line drugs	7.2-9.8	7.9	7.5-8.5	7.6	0.7-3.0	1.0	(*)	(*)	(*)	(*)	0.5-3.1	1.0
513	Apparel, piece goods, and notions	8.3-12.4	8.8	8.6-9.3	9.1	2.6-4.0	3.3	(*)	(*)	(*)	(*)	(*)	(*)
	Groceries and related products	1.7-2.2	2.0	1.6-2.0	1.9	0.4-1.2	0.5	1.5-2.5	1.8	1.8-2.1	1.9	0.4-1.3	0.6
5141	Groceries, general-line	1.9-2.7	2.1	1.7-2.7	2.0	0.4-1.5	0.7	1.8-2.7	2.3	1.7-2.0	1.8	0.3-1.2	0.8
5141 pt.	Voluntary groups	(*)	(*)	(*)	(*)	0.5-1.7	0.6	(*)	(*)	(*)	(*)	0.4-1.7	0.5
5141 pt.	Retailer cooperatives	(*)	(*)	(*)	(*)	0.6-1.6	1.1	(*)	(*)	(*)	(*)	0.4-2.4	0.7
5141 pt.	Other general-lines	(*)	(*)	(*)	(*)	0.9-3.1	1.8	(*)	(*)	(*)	(*)	0.5-1.3	0.7
5142,3,6,9	Specialty-line groceries	(*)	(*)	(*)	(*)	0.7-3.4	1.3	(*)	(*)	(*)	(*)	0.9-2.4	1.0
5144	Poultry and poultry products	3.4-5.5	4.4	4.0-4.4	4.2	0.6-2.2	1.5	(*)	(*)	(*)	(*)	2.1-4.1	2.3
5145	Confectionery	4.7-6.3	4.7	3.6-5.4	4.3	2.0-3.2	2.2	(*)	(*)	(*)	(*)	0.8-2.4	2.3
5147	Meats and meat products	4.5-4.8	4.7	4.6-4.6	4.6	1.4-2.9	1.7	(*)	(*)	(*)	(*)	1.7-3.9	2.2
5148	Fresh fruits and vegetables	4.7-5.4	4.9	3.9-4.1	4.0	1.9-4.2	2.7	(*)	(*)	(*)	(*)	2.9-4.4	3.9
515	Farm-product raw materials	1.8-2.2	2.0	1.6-2.0	1.7	1.1-1.7	1.3	(*)	(*)	(*)	(*)	1.1-2.8	2.4
5152	Cotton	(*)	(*)	(*)	(*)	1.8-4.9	2.8	(*)	(*)	(*)	(*)	1.3-2.9	2.4
5153	Grain	2.4-2.7	2.6	2.2-2.4	2.3	1.0-1.7	1.3	(*)	(*)	(*)	(*)	1.6-3.3	1.9
517	Petroleum and petroleum products	4.0-5.0	4.7	4.2-4.6	4.5	1.1-1.9	1.5	4.1-5.2	5.0	4.4-5.4	4.7	1.6-3.0	2.3
5171	Petroleum bulk stations and terminals	2.8-3.3	2.9	2.8-3.0	2.9	0.9-1.4	1.2	(*)	(*)	(*)	(*)	1.7-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages	3.4-3.9	3.7	3.1-3.7	3.2	0.8-1.8	1.7	3.9-4.2	4.1	4.0-4.3	4.2	1.0-2.0	1.3
5181	Beer and ale	2.2-4.4	3.1	2.8-3.2	2.9	1.0-2.5	2.0	3.6-5.5	3.8	3.6-4.1	3.8	1.7-2.7	2.1
5182	Wines and distilled alcoholic beverages	5.2-6.3	5.4	4.6-5.6	4.7	1.2-3.4	1.7	4.6-5.4	4.8	5.0-5.6	5.3	1.4-2.3	1.6
519	Miscellaneous nondurable goods	2.4-3.2	2.9	2.4-2.7	2.5	1.4-2.3	1.6	(*)	(*)	(*)	(*)	0.8-1.7	1.4
5191	Farm supplies	(*)	(*)	(*)	(*)	3.2-3.6	3.3	(*)	(*)	(*)	(*)	1.7-3.9	2.0
5194	Tobacco and tobacco products	4.0-5.2	4.1	3.4-4.5	4.2	1.3-2.4	1.7	(*)	(*)	(*)	(*)	0.8-4.3	1.0
5198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.8-3.8	3.0	(*)	(*)	(*)	(*)	1.5-3.1	2.9
5199 pt.	Books, magazines, newspapers	(*)	(*)	(*)	(-)	3.2-8.0	5.6	(*)	(*)	(*)	(*)	2.0-6.5	5.1

Note: Measures of sampling variability are based on data unadjusted for seasonal variations or trading-day differences. The range of sampling error of the monthly dollar estimates and the ratio of current month to previous month for sales and inventories is based on data for July, August, and September 1977.

*Measures of sampling variability are not shown since sales and/or inventory estimates for these kinds of business are not published.

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

Seasonal factors for adjusting data in this historical publication have been developed by the method described in the **X-11 Variant of the Census Method II Seasonal Adjustment Program**, U.S. Bureau of the Census Technical Paper No. 15, Revised 1967. Trading-day factors for adjusting sales were also derived from the X-11 program.

Adjustment of estimates is an approximation based on past experiences, and therefore, will be less precise to the extent that current competitive pressures, changes in economic condition, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of trading-day adjustment factors may be found in **Estimating Trading-Day Variation in Monthly Economic Time Series**, Bureau of the Census Technical Paper No. 12, 1965. Additional details concerning the adjustment factors may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.7	91.8	107.1	97.7	104.3	104.7	95.6	104.7	98.3	102.2	100.6	96.3
	Total (excluding farm-product raw materials)	91.6	91.6	106.6	97.8	105.1	105.8	95.8	106.1	100.3	102.3	99.3	95.0
50	Durable goods, total	89.6	89.0	105.7	99.0	106.5	107.3	96.4	107.7	101.9	104.1	98.6	91.5
501	Motor vehicles and automotive parts and supplies	93.3	89.8	107.6	107.7	108.4	107.5	98.6	106.9	96.1	98.3	93.3	90.5
502	Furniture and home furnishings	84.8	89.8	105.2	96.8	101.6	106.6	89.2	105.2	103.9	112.1	107.2	95.2
503	Lumber and other construction materials	80.6	80.2	100.9	94.6	109.8	112.2	102.4	117.4	106.2	109.9	100.0	84.0
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	78.7	88.7	104.5	101.5	109.3	97.0	96.1	105.2	105.4	106.0	108.0	95.5
505	Metals and minerals, except petroleum	98.2	91.4	108.2	98.6	107.6	104.4	91.2	108.6	103.1	100.0	97.1	90.3
506	Electrical goods	89.3	89.1	102.0	96.0	99.4	106.5	99.0	104.8	100.8	107.5	103.5	98.8
507	Hardware, plumbing, heating equipment, and supplies	89.2	87.4	99.9	97.9	106.7	108.0	100.7	109.2	102.4	107.2	100.6	88.3
508	Machinery, equipment, and supplies	88.1	88.6	107.9	99.9	107.7	108.8	95.4	104.6	103.3	103.5	96.5	92.3
509	Miscellaneous durable goods	86.2	89.8	106.2	96.2	100.2	110.7	88.4	109.5	101.9	108.1	103.7	96.0
51	Nondurable goods, total	96.4	93.8	108.5	97.1	103.5	102.3	94.9	102.1	96.1	100.2	101.8	100.1
	Total (excluding farm-product raw materials)	94.3	94.0	106.8	96.6	103.2	104.5	95.5	104.5	97.6	100.6	100.6	98.4
511	Paper and paper products	95.5	92.6	106.3	93.4	103.3	103.6	95.6	107.3	102.6	104.0	99.4	92.6
512	Drugs, drug proprietaries, and druggists' sundries	97.8	92.6	106.0	96.3	100.3	99.8	92.9	104.7	100.8	108.1	101.0	96.6
513	Apparel, piece goods, and notions	90.1	94.4	107.1	91.8	101.2	98.8	93.7	115.6	106.3	107.7	103.4	87.1
514	Groceries and related products	94.7	91.1	104.2	97.2	105.4	105.0	99.0	105.3	98.9	101.0	99.8	95.0
515	Farm-product raw materials[1]	103.1	94.7	112.6	98.0	103.9	96.9	93.0	92.4	91.5	100.8	108.3	99.9
516	Chemicals and allied products	90.2	89.2	106.3	98.0	107.1	108.3	96.1	108.0	97.8	105.0	98.8	93.3
517	Petroleum and petroleum products	99.7	102.3	107.7	96.2	95.9	100.0	96.5	100.2	93.1	100.9	100.3	104.8
518	Beer, wine, and distilled alcoholic beverages	77.8	81.4	102.2	90.7	106.8	113.9	97.6	107.8	97.8	100.6	106.9	113.5
519	Miscellaneous nondurable goods	96.0	100.5	116.6	102.4	107.4	105.2	88.2	95.5	95.4	96.8	95.6	96.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.8	101.2	101.7	100.7	99.4	99.3	98.6	98.1	98.7	100.1	100.9	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.0	100.3	100.6	100.7	100.2	99.4	99.6	99.9	99.7	99.1
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.5
501	Motor vehicles and automotive parts and supplies	101.3	103.0	101.6	100.6	102.0	100.5	99.2	97.0	97.4	98.1	99.0	99.9
502	Furniture and home furnishings	99.1	99.3	99.7	99.5	100.8	101.9	100.5	100.6	101.2	100.2	99.5	97.3
503	Lumber and other construction materials	98.4	99.1	103.6	102.7	103.6	101.7	101.4	99.8	99.2	96.7	96.2	97.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.6	99.8	100.7	102.4	106.5	105.3	100.9	101.5	100.9	93.9	89.9
505	Metals and minerals, except petroleum	99.4	98.2	100.2	100.8	100.2	100.2	102.8	102.8	99.9	96.7	98.9	99.7
506	Electrical goods	96.7	96.8	99.0	99.6	101.2	102.6	101.4	100.7	101.3	101.2	100.5	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.4	103.2	102.6	101.6	100.6	98.4	98.7	97.1	96.1
508	Machinery, equipment, and supplies	99.0	101.0	101.6	100.1	101.0	102.1	100.3	99.0	99.4	99.0	98.7	98.7
509	Miscellaneous durable goods	97.0	97.6	96.0	97.5	96.4	100.8	102.4	102.6	102.9	103.8	102.4	100.5
51	Nondurable goods, total	104.1	103.2	103.3	99.4	96.7	95.1	94.7	95.3	97.4	102.1	104.6	103.4
	Total (excluding farm-product raw materials)	100.0	100.0	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.6	100.5
511	Paper and paper products	97.8	98.3	99.1	101.1	100.4	102.6	100.0	100.2	100.7	100.0	99.6	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.1	99.8	100.6	97.9	100.6	99.0	100.0	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.0	100.2	101.9	101.5	99.8	99.0	98.6	99.3
514	Groceries and related products	98.7	100.2	102.1	100.5	99.2	98.7	98.5	98.0	99.9	102.0	100.9	101.0
515	Farm-product raw materials[1]	118.8	115.2	112.2	100.3	88.9	84.6	78.8	79.4	83.8	103.8	117.4	115.3
516	Chemicals and allied products	98.0	100.0	101.9	101.6	102.4	100.9	101.6	100.2	100.4	96.9	97.0	98.7
517	Petroleum and petroleum products	104.4	99.3	99.2	94.2	96.0	94.3	96.3	100.7	102.9	104.8	104.2	103.4
518	Beer, wine, and distilled alcoholic beverages	96.3	95.8	97.4	99.1	102.3	102.9	99.9	97.9	100.3	107.0	105.7	95.3
519	Miscellaneous nondurable goods	103.6	104.6	105.0	102.1	97.2	93.2	95.1	96.0	97.4	99.7	101.9	104.0

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979—Continued

1972 SIC code	Kind of business	1979											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	95.9	91.8	104.7	100.0	105.3	101.5	98.4	104.2	95.8	104.5	100.4	96.2
	Total (excluding farm-product raw materials)	94.0	91.6	103.9	99.8	106.1	102.9	98.6	105.7	97.6	104.9	99.2	94.5
50	Durable goods, total	91.9	89.1	103.2	101.1	107.3	104.3	99.4	107.0	99.3	106.8	98.4	91.2
501	Motor vehicles and automotive parts and supplies	94.0	89.9	106.2	108.4	110.5	104.7	102.9	104.4	94.7	99.1	93.7	89.3
502	Furniture and home furnishings	87.1	89.8	101.8	98.4	102.6	104.0	91.2	105.5	101.7	115.1	106.5	94.2
503	Lumber and other construction materials	83.0	80.2	97.3	98.0	110.4	107.7	107.0	117.2	102.4	113.5	100.3	83.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	84.3	88.7	102.1	101.4	107.8	98.7	95.0	103.6	103.6	113.3	102.3	97.8
505	Metals and minerals, except petroleum	100.7	91.4	102.7	101.4	107.6	101.3	95.4	108.3	101.3	102.6	96.1	89.0
506	Electrical goods	92.0	89.1	99.9	99.3	98.8	103.9	100.6	104.5	98.2	110.6	102.9	100.1
507	Hardware, plumbing, heating equipment, and supplies	91.0	87.4	97.8	100.1	108.1	104.5	103.4	108.6	100.5	109.2	100.3	88.6
508	Machinery, equipment, and supplies	90.9	88.7	106.1	102.1	108.9	105.2	97.1	104.4	100.1	106.7	96.3	92.9
509	Miscellaneous durable goods	86.8	89.8	105.0	99.4	101.6	105.4	92.6	109.0	98.1	109.1	106.2	95.5
51	Nondurable goods, total	93.8	93.7	106.2	99.2	104.4	99.5	97.2	101.8	93.9	102.7	101.5	99.8
	Total (excluding farm-product raw materials)	96.8	94.0	104.0	99.0	104.1	101.2	98.0	104.7	94.9	103.2	100.7	98.0
511	Paper and paper products	100.0	92.7	103.2	94.8	103.3	102.4	97.4	107.1	99.3	108.7	97.7	92.2
512	Drugs, drug proprietaries, and druggists' sundries	99.7	92.6	104.0	98.9	100.6	96.9	96.6	103.9	97.6	110.1	101.8	96.1
513	Apparel, piece goods, and notions	93.9	94.4	103.7	92.4	101.8	97.8	95.7	115.5	102.9	112.3	102.1	85.9
514	Groceries and related products	97.5	91.0	103.1	98.3	106.3	103.0	100.0	105.0	96.2	104.0	99.5	95.1
515	Farm-product raw materials[1]	106.7	94.5	111.9	100.2	102.7	97.1	94.1	91.8	87.9	104.3	108.3	100.5
516	Chemicals and allied products	92.5	89.2	101.9	100.8	107.7	105.0	100.2	108.2	94.8	107.6	98.9	91.7
517	Petroleum and petroleum products	99.2	102.1	106.6	99.2	95.9	96.9	100.0	100.7	90.7	100.1	103.6	103.5
518	Beer, wine, and distilled alcoholic beverages	81.1	81.5	98.0	93.8	107.9	109.4	101.0	108.2	94.0	104.8	106.4	112.3
519	Miscellaneous nondurable goods	97.5	100.5	114.0	106.1	108.2	101.4	90.4	96.3	92.4	98.3	96.6	96.6
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.7	101.2	101.7	100.8	99.5	99.3	98.6	98.1	98.7	100.1	100.8	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.1	100.4	100.6	100.7	100.2	99.4	99.6	99.9	99.6	99.0
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.4
501	Motor vehicles and automotive parts and supplies	101.3	103.1	101.6	100.6	102.0	100.5	99.3	97.0	97.4	98.2	99.0	99.8
502	Furniture and home furnishings	99.2	99.3	99.7	99.5	100.9	102.0	100.4	100.6	101.2	100.2	99.5	97.2
503	Lumber and other construction materials	98.5	99.1	103.7	102.7	103.4	101.5	101.3	99.8	99.2	96.8	96.2	97.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.7	99.8	100.7	102.3	106.4	105.3	100.9	101.6	100.9	93.8	90.0
505	Metals and minerals, except petroleum	99.3	98.3	100.2	100.8	100.2	100.2	102.8	102.9	100.0	96.6	98.8	99.6
506	Electrical goods	96.7	96.7	99.0	99.7	101.3	102.7	101.4	100.7	101.4	101.1	100.4	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.6	103.3	102.6	101.6	100.6	98.4	98.7	97.0	96.0
508	Machinery, equipment, and supplies	99.0	101.0	101.5	100.1	101.0	102.1	100.3	99.1	99.4	98.9	98.6	98.7
509	Miscellaneous durable goods	97.1	97.5	96.0	97.4	96.4	100.9	102.4	102.6	103.0	103.8	102.4	100.5
51	Nondurable goods, total	103.9	103.2	103.4	99.5	96.9	95.3	94.7	95.3	97.4	102.0	104.5	103.4
	Total (excluding farm-product raw materials)	100.0	99.9	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.5	100.5
511	Paper and paper products	97.7	98.3	99.1	101.1	100.5	102.7	99.9	100.1	100.7	100.0	99.5	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.0	99.8	100.5	97.8	100.6	99.0	100.1	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.1	100.2	101.8	101.6	99.8	99.1	98.5	99.2
514	Groceries and related products	98.7	100.2	102.1	100.5	99.3	98.7	98.5	98.0	99.9	102.0	100.8	101.0
515	Farm-product raw materials[1]	118.5	115.2	112.3	100.8	89.6	85.4	78.5	79.2	83.5	103.3	117.1	115.1
516	Chemicals and allied products	98.0	100.0	102.0	101.6	102.4	101.0	101.6	100.2	100.5	96.9	96.8	98.6
517	Petroleum and petroleum products	104.4	99.4	99.4	94.2	95.9	94.2	96.2	100.9	102.9	104.7	104.2	103.2
518	Beer, wine, and distilled alcoholic beverages	96.3	95.7	97.4	99.1	102.3	102.8	99.9	97.9	100.3	106.9	105.7	95.3
519	Miscellaneous nondurable goods	103.7	104.6	105.1	102.1	97.2	93.1	95.1	95.9	97.3	99.7	101.8	104.0

Note: The adjustment factors shown above for sales are a combination of the seasonal and trading-day factors. These are separately available, however, upon request. Adjustment factors are included in this table for some kinds of business for which adjusted data are not published separately.

Adjusted sales and inventory data shown in table 4 are obtained by dividing the unadjusted data shown in tables 1 and 2 by the adjustment factors shown above for the corresponding kinds of business. Adjusted data for the summary trade totals are obtained by summarizing the adjusted data for the individual kinds of business. Seasonal factors shown for the summary trade totals provide an approximation to these totals but may show small differences from the published data. The seasonally adjusted data for 1978 may vary slightly from the method shown above because of insignificant rounding differences.

[1]There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table B-2. Average Month-to-Month Percent Changes and Related Summary Measures for Sales and Inventories of Merchant Wholesalers

1972 SIC code	Kind of business	$\bar{O}$	$\bar{S}$	$\bar{CI}$	$\bar{I}$	$\bar{C}$	$\bar{I}/\bar{C}$	MCD	Average duration of run			
									CI	I	C	MCD
		Sales										
	Merchant wholesalers, total	4.74	3.10	1.31	.82	.96	.86	1	3.10	1.57	14.11	3.10
50	Durable goods, total	5.30	4.84	1.43	.89	1.08	.82	1	3.53	1.63	15.87	3.53
501	Motor vehicles and automotive parts and supplies	5.53	4.22	2.67	2.33	1.24	1.87	3	2.05	1.59	25.40	5.43
502	Furniture and home furnishings	6.00	7.29	2.06	1.68	1.07	1.57	2	2.27	1.55	9.07	3.00
503	Lumber and other construction materials	7.40	6.25	2.67	1.72	1.76	.98	1	2.76	1.51	14.11	2.76
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	9.79	9.32	4.02	3.74	1.20	3.12	4	1.81	1.67	7.06	3.44
505	Metals and minerals, except petroleum	6.79	3.78	3.10	2.38	1.63	1.46	2	2.19	1.41	9.07	3.71
506	Electrical goods	5.79	5.17	1.89	1.52	1.04	1.47	2	2.08	1.46	10.58	3.32
507	Hardware, plumbing, heating equipment, and supplies	5.42	4.86	1.78	1.33	1.09	1.22	2	1.98	1.41	12.70	3.94
508	Machinery, equipment, and supplies	6.10	5.41	1.87	1.51	.97	1.56	2	1.92	1.46	7.94	3.32
509	Miscellaneous durable goods	7.66	6.11	3.51	2.79	1.79	1.56	2	1.87	1.48	9.77	2.93
51	Nondurable goods, total	5.07	2.80	1.58	1.10	.95	1.16	2	2.59	1.43	9.07	3.60
511	Paper and paper products	5.41	3.16	1.99	1.44	1.10	1.30	2	1.98	1.48	7.94	3.60
512	Drugs, drug proprietaries, and druggists' sundries	5.97	3.89	1.90	1.64	.76	2.15	3	1.95	1.57	9.77	4.31
513	Apparel, piece goods, and notions	7.73	6.91	2.70	2.36	1.01	2.34	3	1.72	1.38	10.58	4.17
514	Groceries and related products	4.44	2.01	1.67	1.41	.82	1.72	2	1.92	1.51	12.70	3.15
515	Farm-product raw materials	9.27	5.04	4.87	4.29	1.59	2.70	4	1.90	1.53	6.68	3.54
516	Chemicals and allied products	6.21	4.53	2.47	1.93	1.46	1.32	2	2.19	1.49	8.47	3.32
517	Petroleum and petroleum products	7.38	4.71	4.81	4.47	1.35	3.30	4	1.67	1.55	9.07	2.70
518	Beer, wine, and distilled alcoholic beverages	10.94	8.71	1.86	1.64	.69	2.39	3	1.76	1.59	21.17	3.68
519	Miscellaneous nondurable goods	5.89	4.84	2.53	2.23	.96	2.32	3	1.92	1.63	8.47	3.47
		Inventories										
	Merchant wholesalers, total	1.10	.72	.94	.39	.83	.47	1	4.88	1.79	18.14	4.88
50	Durable goods, total	1.07	.57	.89	.35	.86	.41	1	7.94	1.46	31.75	7.94
501	Motor vehicles and automotive parts and supplies	2.20	1.22	1.69	1.13	1.21	.93	1	2.54	1.63	12.70	2.54
502	Furniture and home furnishings	2.13	1.28	1.60	1.19	1.00	1.19	2	2.40	1.57	21.17	5.25
503	Lumber and other construction materials	2.60	1.77	1.83	1.28	1.09	1.17	2	2.54	1.67	15.87	4.20
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	3.60	2.92	2.17	1.80	1.20	1.50	2	2.27	1.48	25.40	3.60
505	Metals and minerals, except petroleum	3.14	2.53	1.79	1.01	1.33	.76	1	3.26	1.72	8.47	3.26
506	Electrical goods	1.75	1.08	1.32	.90	.92	.98	1	2.49	1.31	42.33	2.49
507	Hardware, plumbing, heating equipment, and supplies	1.69	1.10	1.23	.87	.89	.98	1	2.70	1.53	18.14	2.70
508	Machinery, equipment, and supplies	1.36	.92	1.03	.66	.82	.82	1	2.65	1.65	31.75	2.65
509	Miscellaneous durable goods	2.29	1.47	1.85	1.28	1.18	1.08	2	1.95	1.53	25.40	4.34
51	Nondurable goods, total	2.49	2.19	1.44	.83	1.07	.78	1	3.74	1.74	7.06	3.74
511	Paper and paper products	1.82	.94	1.38	1.04	.75	.94	2	2.12	1.44	9.07	4.20
512	Drugs, drug proprietaries, and druggists' sundries	2.39	1.46	1.60	1.37	.67	2.04	3	1.81	1.51	31.75	3.38
513	Apparel, piece goods, and notions	2.28	1.43	1.86	1.43	1.05	1.35	2	2.40	1.74	9.07	3.15
514	Groceries and related products	1.87	1.29	1.43	.92	1.01	.91	1	2.54	1.38	11.55	2.54
515	Farm-product raw materials	8.88	8.22	4.86	3.99	2.03	1.96	3	2.49	1.90	8.47	3.91
516	Chemicals and allied products	3.14	1.58	1.36	1.89	1.39	1.36	2	2.35	1.49	12.70	3.71
517	Petroleum and petroleum products	6.09	3.19	5.01	4.34	2.00	2.17	3	1.87	1.59	15.87	3.68
518	Beer, wine, and distilled alcoholic beverages	4.28	3.68	1.76	1.46	.74	1.98	3	2.35	1.63	9.77	4.03
519	Miscellaneous nondurable goods	2.53	1.52	1.88	1.48	.84	1.75	2	2.19	1.59	7.06	3.15

Description of Measures Shown Above

The following are brief descriptions of the measures shown in this table. More complete explanations appear in "Electronic Computers and Business Indicators," Occasional Paper 57, National Bureau of Economic Research, Inc., New York, 1957.

$\bar{O}$ is the average month-to-month percentage change, without regard to sign, in the original series before seasonal or trading-day adjustment.

$\bar{S}$ is the average month-to-month percentage change, without regard to sign, in the seasonal component. It is a measure of the average monthly seasonal change in the unadjusted series.

$\bar{CI}$ is the average month-to-month percentage change, without regard to sign, in the seasonally adjusted series.

$\bar{I}$ is the average month-to-month percentage change without regard to sign, for the irregular component. The irregular component is obtained by dividing the seasonally adjusted series by the cyclical component.

$\bar{C}$ is the average month-to-month percentage change, without regard to sign, for the cyclical component, which is a smooth, flexible moving average.

$\bar{I}/\bar{C}$ is a measure of the relative smoothness (small values) or irregularity (large values) of the seasonally adjusted series.

MCD (months for cyclical dominance) gives an estimate of the appropriate time span over which to observe cyclical movements in a monthly series. In deriving MCD, the average (without regard to sign) percentage changes in the irregular and cyclical components are computed for 1-month spans (Jan.-Feb., Feb.-Mar., etc.) 2-months spans (Jan.-Mar., Feb.-Apr., etc.), and so on. MCD is the shortest span for which the average change (without regard to sign) in the cyclical component is larger than the average change (without regard to sign) in the irregular component; that is, it indicates the point at which fluctuations begin to be more attributable to cyclical than to irregular movements. MCD is small for smooth series and large for erratic series.

Average duration of run (ADR) is a measure of smoothness, and is equal to the average number of consecutive monthly changes in the same direction in any series of observations. When there is no change between 2 months, a change in the same direction as the preceding change is assumed. The ADR is shown for the seasonally adjusted series CI, irregular component I, cyclical component C, and the MCD moving average. The MCD moving average is an unweighted moving average (with the number of terms equal to MCD) of the seasonally adjusted series.

A comparison of these measures with the expected ADR of a random series gives an indication of whether the changes approximate those of a random series. (The expected value of ADR for a random series is 1.5 and it falls between 1.36 and 1.75 about 95 percent of the time. For a moving average of a random series the expected value is 2.0). For example, the ADR of CI is 2.08 for electrical goods sales. This indicates that 1-month changes in the seasonally adjusted series, on the average, reverse sign slightly less often than a random series. In the next two columns, 1.46 for I and 10.58 for C indicate the separation of the seasonally adjusted series into an essentially random component and the cyclical (nonrandom) component. Finally, 3.32 for MCD indicates that a 2-month moving average of the seasonally adjusted series (2 months being the MCD span) reverses direction on the average about every 3 months. The increase in the average duration of run from 2.08 for CI to 3.32 for the MCD moving average indicates that for this series the use of MCD spans reduces the effect of the irregular component upon the seasonally adjusted series.

These averages are based on a seasonally adjusted series which is adjusted historically; that is, the months used to compute the measures were the same months used to estimate the seasonal factors. Current data, however, are adjusted by use of factors projected 1 year ahead, and are thus subject to additional error. Therefore, current data are probably somewhat more irregular and subject to larger MCD than shown above.

APPENDIX C. Explanatory Material

I. SCOPE OF THE SURVEY

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the Standard Industrial Classification (SIC) Manual[1] and as covered in the 1972 census, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm or professional business users; or to other wholesalers; or acting as agents or brokers in buying merchandise for or selling merchandise to such persons or companies.

The principal types of establishments included are: (1) merchant wholesalers who take title to the goods they sell, such as wholesale merchants or jobbers, industrial distributors, voluntary group wholesalers, exporters, importers, cash-and-carry wholesalers, drop shippers, major distributors, retailer cooperative warehouses, terminal elevators, and cooperative buying associations; (2) sales branches and sales offices (but not retail stores) maintained by domestic manufacturing or mining enterprises apart from their plants or mines for the purpose of marketing their products; (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), which constitute the major portion of the broad field of wholesale trade, and excludes the other types of wholesale trade. All kinds of business in which merchant wholesalers operate are represented in this survey.

Kind-of-business classifications are not interchangeable with commodity classifications. Most businesses sell several kinds of commodities. The kind-of-business code assigned generally reflects either the individual commodity or the commodity group which is the primary source of the establishments receipts, or some mixture of commodities which characterizes the establishment's business. Thus, the classification of establishments by kind of business generally does not make it possible to determine either the number of establishments handling a particular commodity or the sales of that commodity. For example, the "grocery" classification excludes establishments selling groceries if the sale of groceries is not the primary source of receipts; moreover, even though establishments are classified as "grocery wholesalers" some of their sales may be derived from the sale of nonfood products.

A description of each kind of business included in the accompanying statistical data is shown in appendix D.

II. SAMPLE DESIGN AND ESTIMATION PROCEDURES

Framework of old series—The first publication in this series based on probability sampling, was the January 1954 report. Effective with the July 1956 publication an entirely new sample was selected from the 1954 Census of Business. Other changes in the sample have been made since 1956, representing, for the most part, revisions to reflect the findings of successive censuses of wholesale trade.

Selection of sample for new series—The new sample[2] like the old is a probability sample, and the estimating procedures used are similar in many respects to the old sample.

The new sample originally was drawn from the Standard Statistical Establishment List (SSEL) as updated to December 31, 1974. The initial SSEL consisted of two lists. One list was composed of all Employer Identification (EI) numbers issued by the Internal Revenue Service (IRS) with reported payroll in at least one quarter of 1973 or 1974, with payroll in the 1972 census, or with sales/receipts greater than $100,000 in the 1972 census. The second list consisted of all establishments of known multiestablishment companies as of December 31, 1974. These lists contained information on sales/receipts, payroll, employment, name and address, kind-of-business classification, etc.

Before the 1974 SSEL was available, a study was made, using files from the 1972 Census of Wholesale Trade. This study determined the stratification of the sampling units based on 1972 sales, inventories, and kind of business, and also determined the optimal allocation of the sample necessary to meet specified variance objectives for sales and inventory estimates for different kind-of-business groups. The primary stratum boundary determined in the study was the certainty cutoff to be used for each kind of business. The cutoff was particularly important since it also determined the type of sampling unit.

The sampling units for the new sample consisted of both companies and EI's. To be eligible for the initial sampling, an EI had to be active, i.e., had payroll in 1974 and was on the Internal Revenue Service mailing list for Federal Insurance Contribution Act (FICA) taxpayers. If a known multiestablishment company had total merchant wholesale sales (on a 1972 basis) above the cutoff for its major kind of business, the company was selected for the sample with certainty. Single establishment companies, whether or not selected with certainty, were considered as EI sampling units.

All merchant wholesale companies below the certainty cutoff were treated on an EI basis; that is, the EI was the sampling unit. The EI's were then stratified according to their major kind of business and their estimated sales (on a 1972

[1] Executive Office of the President, Office of Management and Budget, **Standard Industrial Classification Manual**, 1972.

[2] For a complete exposition of the new sample, see C. T. Isaki et al., "Sample Redesign Aspects of the Census Bureau's Monthly Business Surveys" and K. M. Wolter et al., "Sample Selection and Estimation Aspects of the Census Bureau's Monthly Business Surveys," **Proceedings of the Business and Economic Statistics Section: American Statistical Association**, 1976.

basis). Within each stratum, a simple random sample of EI's was selected. The sampling rates for these EI's varied between 1 in 3 and 1 in 600.

For those EI's in the inital sample that did not have kind-of-business classifications and for all EI "births" after the initial selection, a two-phase selection procedure was used. EI "births," as used here, are new EI's recently assigned by SSA and currently on the IRS mailing list for FICA taxpayers. In the first phase, "births" were stratified by kind of business and size (expected employment or quarterly payroll). A relatively large sample was drawn and canvassed in order to obtain a more reliable measure of size (sales in two recent months) and a more detailed kind-of-business code, if needed.

Using this more reliable information, the cases were re-stratified and the final sample drawn with overall probabilities equivalent to those used in drawing the initial sample from the 1974 SSEL. Because of the lag in reporting "births" to the IRS and Social Security Administration (SSA) and the time needed to accomplish the two-phase birth-selection procedure, "births" are actually added to the sample about eight or nine months after they begin operation. The ongoing birth-selection procedure is carried out quarterly.

Since "births" are not represented in the sample, until they go through the selection procedure described above, an interium procedure is required to account for "births" during the period between the onset of activity and the time of birth selection. This consists of imputing for all cases which go out of business, but which are still on the IRS mailing list. This imputation procedure was also used in the old series. However, because of recent delays in obtaining "births," this procedure now accounts for a larger percentage of the estimates.

To be eligible for the sample canvass and tabulation in a given month, a merchant wholesale business must meet both of the following requirements:

1. It must be on the IRS mailing list for FICA taxpayers from the previous quarter.

2. It must have been selected from either the SSEL or the file of employer "births." For this purpose, a universe file of all businesses ever given a chance of selection is maintained. This file shows, among other things, which EI numbers actually have been selected.

In the case of businesses that were selected into the sample with certainty, the first requirement is changed. These certainty sampling units are not dropped from canvass and tabulation if they are no longer on the IRS mailing list. If there are successor businesses, they are added to the survey. This is a tighter form of control used for these larger businesses.

Use of the rotating sample and composite estimating procedures–Rotating samples or panels are used except for very large businesses which are selected with certainty. For sampling units in the rotating panels, two months of data are obtained at each enumeration. For example, February rotating panel cases report data for February (the current month) and January (the previous month). In the following month, a different rotating panel (the March panel) reports figures for March and February. Three sample panels are used. This permits the use of a composite estimating procedure which provides estimates more reliable than those which would be obtained from a completely fixed sample of about twice the size. In addition, this procedure reduces the reporting burden of selected businesses.

The first estimate issued each month, based on the full sample, is called the preliminary estimate. The preliminary composite estimate for the current month is a weighted average of two estimates: (1) the current month unbiased estimate (weight .35), and (2) a ratio estimate (weight .65) obtained by multiplying the preliminary composite estimate for the previous month by the current-to-previous-month ratio obtained from the current month reports. Preliminary inventory estimates have been modified, prior to publication, based on past relationships between preliminary and final estimates.

A final estimate is developed one month later using information available from the following month's enumeration. The final composite estimate is also a weighted average of two estimates: (1) the preliminary composite estimate for a given month (weight .7), and (2) the unbiased estimate (weight .3) for the same month as obtained from the next month's reporting panel.

The preliminary composite estimates provide a measure of the dollar volume level that is considerably more reliable than the unbiased estimates, and the final composite estimates are generally more reliable than the preliminary composite estimates. The indication of the month-to-month trend considered to be most reliable is the ratio of the current month's preliminary composite estimate divided by the previous month's final composite estimate. This is true because the numerator and denominator of this ratio are more highly correlated than would be the case if the numerator and denominator were two preliminary estimates or two final estimates. The trend of the preliminary/final ratio, therefore, has less variability than one based on two preliminary figures or two final figures.

Another advantage of the use of the rotating panel system is that the frequency of canvass of very large noncertainty cases can be increased with a consequent reduction, in an unbiased manner, of their statistical weight. This increases the reliability of the estimates, particularly the measure of month-to-month change.

III. PREVIOUSLY PUBLISHED DATA

Data developed from the new sample are not comparable with data previously published in this series. Sales and inventory estimates prior to September 1977 have been revised to reflect: (1) a new sample design; (2) benchmarking of sales to the results of the 1967 and 1972 censuses of wholesale trade; (3) conversion of classifications based on the 1967 SIC manual to classifications based on the 1972 SIC manual (4) addition

of farm assemblers and bulk petroleum establishments; and (5) revision and updating of seasonal adjustment factors.

The revised historical sales series were derived in a manner designed to minimize the changes to the month-to-month trends in the old series. The inventory series were revised by applying the stock-sales ratios from the old series to the revised sales series to obtain the preliminary revised inventory series. These preliminary series were then revised slightly so that August 1977 estimates would equal the new sample estimates.

Although the month-to-month movements in the old and new series show very little change, the level of the revised series show substantial change from the old series for some kinds of business. The change in levels depends on the difference between the old series for census years and the benchmark levels and on the difference between the new series level and the old series level for the link month, August 1977.

Additional details concerning the sample design, and revised estimates of merchant wholesale sales and inventories from January 1967 through August 1977, have been provided in a special supplementary publication **Monthly Wholesale, Sales and Inventories: January 1967-August 1977, Revised BW-13-77S.** This report may be obtained from Subscriber Services (Publications), Bureau of the Census, Washington, D.C. 20233 at $.90 per copy.

IV. UNPUBLISHED DATA

Additional data, such as dollar volume estimates for some kinds of business not separately shown in this report, are produced as a byproduct of the regularly published statistics. These additional data have not been included in this publication because the sampling variability associated with these data does not meet the Census Bureau's publication criteria. The Census Bureau, on written request will release these data for individual use, though not for publication.

V. DEFINITION OF TERMS

Sales–Sales include the following: merchandise sold for cash or credit at wholesale and retail by establishments primarily engaged in merchant wholesale trade; receipts from customers for rental or leasing of equipment, instruments, tools, etc.; receipts for delivery, installation, alteration, maintenance, repair, storage, and other services; and gasoline, liquor, tobacco and other excise taxes which are paid by the manufacturer and passed along to the wholesaler. Sales are net after deductions for refunds and allowances for merchandise returned by customers. Sales which are made on an agency basis for others are included as gross sales. Direct shipments on orders from wholesalers are also included in sales. Total sales do not include nonoperating income from such sources as investments, rental or sale of real estate, etc.

In the new series, sales exclude sales and excise taxes collected directly from customers and paid directly to a local, State, or Federal tax agency. Also excluded are receipts from customers for carrying or other credit charges. In the old series respondents were requested to include these taxes and credit charges in the reported sales. The impact of this change is considered minimal.

Inventories–Inventories represent stocks, at cost, of merchandise on hand for sale at the end of the month regardless of location, except for goods outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included.

Stock-sales ratios–The stock-sales ratios are percentages derived by dividing the dollar value of inventories, at cost, by the dollar value of sales. No adjustment is made in these ratios for the markup in sales which may vary from trade to trade.

The sales and inventory figures represent total sales and inventories of all establishments primarily engaged in merchant wholesale trade. Also included are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments.

APPENDIX D. Kind-of-Business Classifications

DURABLE GOODS (SIC Major Group 50)

This major group includes establishments primarily engaged in the wholesale distribution of durable goods.

MOTOR VEHICLES AND AUTOMOTIVE PARTS AND SUPPLIES (SIC 501)

Automobiles and Other Motor Vehicles (SIC 5012)[1]—Establishments primarily engaged in the wholesale distribution of new and used passenger automobiles, trucks, and other motor vehicles. Automotive distributors primarily engaged in selling at retail to individual consumers for personal use, and also selling a limited amount of new and used passenger automobiles and trucks at wholesale to dealers, are classified in retail trade, industry 5511.

Automotive Parts and Supplies (SIC 5013)—Establishments primarily engaged in the wholesale distribution of automotive parts, supplies, accessories, tools and equipment.

Tires and Tubes (SIC 5014)[1]—Establishments primarily engaged in the wholesale distribution of rubber tires and tubes for passenger and commercial vehicles.

FURNITURE AND HOME FURNISHINGS (SIC 502)

Furniture (SIC 5021)—Establishments primarily engaged in the wholesale distribution of furniture, including bedsprings, mattresses, and other household furniture; office furniture; and furniture for public parks, buildings, etc.

SIC 5021 is subdivided into—

1. Household and lawn furniture.
2. Office and business furniture.

Home Furnishings (SIC 5023)—Establishments primarily engaged in the wholesale distribution of home furnishings and homewares, including antiques; china; glassware and earthenware; lamps; curtains and draperies; linens and towels; carpets, linoleum, and all other types of hard and soft surface floor coverings. Establishments primarily engaged in the wholesale distribution of electrical household goods are classified in industry 5064.

[1] Data for this kind of business are not shown separately but are included in the group total.

LUMBER AND OTHER CONSTRUCTION MATERIALS (SIC 503)

Lumber, Plywood, and Millwork (SIC 5031)—Establishments, with or without yards, primarily engaged in the wholesale distribution of rough, dressed, and finished lumber (but not timber); plywood; door and window frames (wood or metal); and other wood and metal millwork. Establishments selling lumber, plywood and millwork to the general public and known as "retail" in the trade are classified in industry 521.

Construction Materials, Not Elsewhere Classified (SIC 5039)—Establishments primarily engaged in the wholesale distribution of such building materials as brick, building stone, cement, granite, gravel, lime, marble, plaster, building glass, roofing materials, sand, and tile. Establishments selling construction materials to the general public and known as "retail" in the trade are classified in industry 521. Establishments primarily engaged in marketing heavy structural metal products are classified in industry 5051. Establishments primarily selling readymade concrete are classified in manufacturing.

SPORTING, RECREATIONAL, PHOTOGRAPHIC, AND HOBBY GOODS, TOYS, AND SUPPLIES (SIC 504)[1]

Establishments primarily engaged in the wholesale distribution of all types of amusement and sporting goods and accessories—billiard and pool supplies; cameras and photographic equipment; coin-operated game machines; games, toys; ammunition and fireworks; etc.

METALS AND MINERALS, EXCEPT PETROLEUM (SIC 505)

Ferrous Metals Service Centers and Offices (SIC 5051 pt.)—Establishments primarily engaged in marketing ferrous metal semifinished products such as nails, pig iron, steel and tin bars. Establishments in this industry may operate with warehouses (ferrous metals service centers) or without warehouses (ferrous metals sales offices).

Sales branches of domestic manufacturers are included in this category if the establishment is separate from the manufacturing plant and has warehouse space greater than 5,000 square feet.

Nonferrous Metals Service Centers and Offices and Other Minerals and Ores (SIC 5051 pt. and SIC 5052 pt.)[1]—Establishments primarily engaged in marketing nonferrous metal semifinished products such as aluminum bars and copper rods. Establishments in this industry may operate with warehouses (nonferrous metals service centers) or without warehouses (nonferrous metals sales offices). Also included are establishments primarily engaged in the wholesale distribution of copper, iron, lead, and other metallic ores except precious; and crude nonmetallic minerals (including concentrates) except crude petroleum. Establishments primarily engaged in the wholesale distribution of nonmetallic minerals used in construction, such as sand and gravel, are included in industry 5039.

Coal (SIC 5052 pt.)[1]—Establishments primarily engaged in the wholesale distribution of coal and coke. Included are establishments which have products shipped direct from mine to customer, and establishments operating yards and dock space and making deliveries therefrom at wholesale as well as other coal merchants.

ELECTRICAL GOODS (SIC 506)

Electrical Apparatus and Equipment, Wiring Supplies, and Construction Materials (SIC 5063)—Establishments primarily engaged in the wholesale distribution of electrical power equipment for the generation, transmission, or utilization of electric energy; and electrical construction materials for outside power transmission lines and for electrical systems. Construction contractors primarily engaged in installing electrical systems and equipment from their own stock are classified in industry 1731.

Electrical Appliances, TV and Radio Sets (SIC 5064)—Establishments primarily engaged in the wholesale distribution of radio and television sets and household electrical appliances.

Electronic Parts and Equipment (SIC 5065)[1]—Establishments primarily engaged in the wholesale distribution of electronic parts and equipment, such as industrial and radio and television receiving and transmitting electronic tubes; electronic intercommunication equipment; radio parts and accessories; and electronic sound equipment. Establishments primarily engaged in the wholesale distribution of radio and television receiving sets and phonographs are classified in industry 5064.

HARDWARE, PLUMBING, HEATING EQUIPMENT, AND SUPPLIES (SIC 507)

Hardware (SIC 5072)—Establishments primarily engaged in the wholesale distribution of hardware, such as builders; shelf or light hardware; handtools (except automotive and machinists' precision); handsaws and cutlery; brads, staples, and tacks; and bolts, nuts, rivets, and screws. Establishments primarily engaged in the wholesale distribution of nails, noninsulated wire, and screening are classified in industry 5051.

Plumbing and Heating Equipment and Supplies (Hydronics) (SIC 5074)—Establishments primarily engaged in the wholesale distribution of hydronic plumbing and heating equipment and supplies. Construction contractors primarily engaged in installing plumbing and heating equipment from their own stock are classified in industry 1711.

Warm Air Heating and Air-Conditioning Equipment and Supplies (SIC 5075)[1]—Establishments primarily engaged in the distribution of warm air heating and air-conditioning equipment and supplies. Construction contractors primarily engaged in installing warm air heating and air-conditioning equipment are classified in industry 1711.

Refrigeration Equipment and Supplies (SIC 5078)[1]—Establishments primarily engaged in the distribution of refrigeration equipment and supplies. Construction contractors primarily engaged in installing refrigeration equipment from their own stock are classified in industry 1711.

MACHINERY, EQUIPMENT, AND SUPPLIES (SIC 508)

Commercial Machines and Equipment (SIC 5081)[1]—Establishments primarily engaged in wholesaling commercial machines and equipment, such as office, store, and business machines and equipment; commercial food service equipment; and fountain and store fixtures.

Construction and Mining Machinery and Equipment (SIC 5082)—Establishments primarily engaged in marketing cranes, excavating machinery and equipment, power shovels, road construction and maintenance machinery, tractor-mounting equipment and other specialized machinery and equipment used in the construction, mining, and logging industries. Establishments engaged in marketing oil well machinery and equipment are classified in industry 5084.

Farm and Garden Machinery and Equipment (SIC 5083)[1]—Establishments primarily engaged in marketing agricultural machinery and equipment for use in the preparation and maintenance of the soil, the planting and harvesting of crops, and other operations and processes pertaining to work on the farm or the lawn or garden; and dairy and other livestock equipment.

Industrial Machinery and Equipment (SIC 5084)[1]—Establishments primarily engaged in marketing industrial machinery and equipment, such as metal working tools, food industries machinery, oil well and oil refining machinery, industrial

[1] Data for this kind of business are not shown separately but are included in the group total.

trucks and tractors (except over-the-road types), printing machinery, and machinery and equipment for other manufacturing industries.

Industrial Supplies (SIC 5085)[1]—Establishments primarily engaged in marketing industrial supplies, such as abrasives and materials, rope and cordage, and mechanical rubber goods; welding supplies; mechanical power transmission supplies, including bearings; industrial valves and fittings; metal containers; industrial leather; and reconditioned barrels and drums.

Professional Equipment and Supplies (SIC 5086)—Establishments primarily engaged in the wholesale distribution of mechanical devices and other equipment used by architects, dentists, engineers, physicians, surgeons, veterinarians, optometrists, osteopaths, and other professional groups.

Surgical, Medical, Hospital Supplies (SIC 5086 pt.)[1]—Establishments primarily engaged in selling surgical and medical instruments; doctors' apparatus and equipment; orthopedic appliances; artifical limbs; operating room and other hospital equipment, X-ray machines and accessories and other scientific instruments used by physicians and in hospitals.

Service Establishment Equipment and Supplies (SIC 5087)[1]—Establishments primarily engaged in the wholesale distribution of equipment and supplies for barber shops, beauty parlors power laundries, dry-cleaning plants, upholsterers, undertakers, and related personal service establishments.

Transportation Equipment and Supplies, Except Motor Vehicles (SIC 5088)[1]—Establishments primarily engaged in the wholesale distribution of transportation equipment and supplies. Establishments primarily engaged in the wholesale distribution of motor vehicles and motor vehicle parts are classified in group 501.

MISCELLANEOUS DURABLE GOODS (SIC 509)[1]

Scrap and Waste Materials (SIC 5093)—Establishments primarily engaged in assembling, breaking up, sorting and wholesale distribution of scrap and waste materials. This industry includes auto wreckers engaged in dismantling automobiles for scrap. However, those engaged in dismantling cars for the purpose of selling secondhand parts at retail are classified in industry 5931.

SIC 5093 is subdivided into—

1. *Iron and Steel scrap.*
2. *Waste and secondary materials dealers.*

[1] Data for this kind of business are not shown separately but are included in the group total.

Jewelry, Watches, Diamonds, and Other Precious Stones (SIC 5094)[1]—Establishments primarily engaged in the wholesale distribution of jewelry, precious stones and metals, costume jewelry, watches, clocks, silverware, and jewelers' findings.

Durable Goods, Not Elsewhere Classified (SIC 5099)[1]—Establishments primarily engaged in the wholesale distribution of durable goods, not elsewhere classified, such as musical instruments and forest products, except lumber.

NONDURABLE GOODS (SIC Major Group 51)

This major group includes establishments primarily engaged in the wholesale distribution of nondurable goods.

PAPER AND PAPER PRODUCTS (SIC 511)

Printing and Writing Paper (SIC 5111)[1]—Establishments primarily engaged in the wholesale distribution of writing paper, including envelope paper, fine paper, and ground wood, printing, and rotogravure paper.

Stationery Supplies (SIC 5112)[1]—Establishments primarily engaged in the wholesale distribution of stationery and office supplies, including envelopes, typewriter and mimeograph paper, file cards and folders, pens, social stationery, and greeting cards.

Industrial and Personal Service Paper (SIC 5113)[1]—Establishments primarily engaged in the wholesale distribution of wrapping and other coarse paper, paperboard, cellophane, and converted paper products, such as bags, boxes, dishes, napkins, and shipping supplies.

DRUGS, DRUG PROPRIETARIES, AND DRUGGISTS' SUNDRIES (SIC 512)

Drugs, Drug Proprietaries, and Druggists' Sundries (SIC 5122)—Establishments primarily engaged in the wholesale distribution of drugs, drug proprietaries, druggists' sundries, and toiletries. Establishments primarily engaged in the wholesale distribution of surgical, dental, and hospital equipment are classified in industry 5086.

SIC 5122 is subdivided into—

1. *General-line drugs*—These are distinguished from specialty-line drug and toiletries wholesalers on the basis of their commodity-line mix. Drug wholesalers were classified as general line if they reported a substantial portion of their sales in "pharmaceuticals, antibiotics, druggists' chemicals, biologicals, botanicals" and "proprietary products, toilet-

ries, druggists' sundries," and if annual sales volume was $1 million or more.

2. *Specialty-line pharmaceuticals, cosmetics, and toiletries.*

APPAREL, PIECE GOODS, AND NOTIONS (SIC 513)

Piece Goods (SIC 5133)[1]—Establishments primarily engaged in the wholesale distribution of woven piece goods or yard goods of natural or manmade fibers. "Converters" who buy goods in the grey, have them finished on contract, and sell at wholesale are included here. This industry does not include establishments primarily engaged in the wholesale distribution of home furnishings, which are classified in industry 5023.

Notions and Other Dry Goods (SIC 5134)[1]—Establishments primarily engaged in the wholesale distribution of notions (sewing and hair accessories, etc.), knit goods, and other dry goods, except piece goods.

Men's and Boys' Clothing and Furnishings (SIC 5136)[1]—Establishments primarily engaged in the wholesale distribution of men's and boys' apparel and furnishings, sportswear, hosiery, underwear, nightwear, and work clothing.

Women's Children's, and Infants' Clothing and Accessories (SIC 5137)[1]—Establishments primarily engaged in the wholesale distribution of women's, children's, and infants' clothing and accessories, including hosiery, lingerie, millinery and millinery supplies, and furs.

Footwear (SIC 5139)[1]—Establishments primarily engaged in the wholesale distribution of footwear of leather, rubber, and other materials.

GROCERIES AND RELATED PRODUCTS (SIC 514)

Groceries, General-Line (SIC 5141)—Establishments primarily engaged in the wholesale distribution of a general line of groceries. Establishments primarily engaged in roasting coffee and establishments primarily engaged in blending tea or grinding and packaging spices are classified in major group 20.

SIC 5141 is subdivided into—

1. *Voluntary group wholesalers.*
2. *Retailer cooperative wholesalers.*
3. *Other general-line wholesalers.*

Frozen Foods (SIC 5142)[1]—Establishments primarily engaged in the wholesale distribution of packaged quick-frozen vegetables, juices, meats, fish, poultry, pastries, and other "deep freeze" products. Establishments primarily engaged in the wholesale distribution of frozen dairy products are classified in industry 5143. Frozen poultry, fish, and meat which are not packaged are classified in industries 5144, 5146, and 5147, respectively.

Dairy Products (SIC 5143)[1]—Establishments primarily engaged in the wholesale distribution of dairy products, such as butter, cheese, ice cream and ices, and fluid milk and cream. This industry does not include establishments primarily engaged in pasteurizing and bottling milk, which are classified in group 202.

Poultry and Poultry Products (SIC 5144)—Establishments primarily engaged in the wholesale distribution of poultry and poultry products, except canned and packaged frozen products. This industry does not include establishments primarily engaged in the killing and dressing of poultry, which are classified in industry 2016. Establishments primarily engaged in the wholesale distribution of packaged frozen poultry are classified in industry 5142, and of canned poultry in industry 5149.

Confectionery (SIC 5145)—Establishments primarily engaged in the wholesale distribution of confectionery, such as candy, chewing gum, fountain fruits, salted or roasted nuts, popcorn, and fountain syrups; and potato, corn, and similar chips.

Fish and Seafoods (SIC 5146)[1]—Establishments primarily engaged in the wholesale distribution (not packaging) of fresh, cured, and frozen fish and seafoods, except canned (industry 5149) or packaged frozen (industry 5142). The preparation, packaging, and freezing of fresh fish and other seafood, and the shucking and packing of fresh oysters in nonsealed containers, are classified in industry 2092.

Meats and Meat Products (SIC 5147)—Establishments primarily engaged in the wholesale distribution of fresh, cured, and processed (but not canned) meats and lard. The wholesale distribution of frozen packaged meats is classified in industry 5142 and canned meats in industry 5149.

Fresh Fruits and Vegetables (SIC 5148)—Establishments primarily engaged in the wholesale distribution of fresh fruits and vegetables.

Groceries and Related Products, Not Elsewhere Classified (SIC 5149)[1]—Establishments primarily engaged in the wholesale distribution of groceries and related products, not elsewhere classified. Establishments primarily engaged in the wholesale distribution of soft drinks, and in bottling and distributing natural spring and mineral waters, are classified in this industry, but establishments primarily engaged in bottling soft drinks are classified in major group 20. This industry does not include farm-product raw materials (group 515), or beer, wine, and distilled alcholic beverages (group 518).

[1] Data for this kind of business are not shown separately but are included in the group total.

FARM-PRODUCT RAW MATERIALS (SIC 515)

Cotton (SIC 5152)[1]—Establishments primarily engaged in buying and/or marketing cotton and cotton linters.

Grain (SIC 5153)—Establishments primarily engaged in buying and/or marketing grain (such as corn, wheat, oats, barley, and unpolished rice); dry beans; soybeans, and other inedible beans. Country grain elevators primarily engaged in buying or receiving grain from farmers are included as are terminal elevators and other merchants marketing grain.

Livestock (SIC 5154)[1]—Establishments primarily engaged in buying and/or marketing cattle, hogs, sheep, and goats.

Farm-Product Raw Materials, Not Elsewhere Classified (SIC 5159)[1]—Establishments primarily engaged in buying and/or marketing farm products not elsewhere classified, such as horses and mules, leaf tobacco, hides, skins, furs, wool, mohair, raw silk, hops, and nuts, except roasted or salted (industry 5145). Establishments primarily engaged in the wholesale distribution of milk are classified in industry 5143 and live poultry in industry 5144.

CHEMICALS AND ALLIED PRODUCTS (SIC 516)[1]

Chemicals and Allied Products (SIC 5161)[1]—Establishments primarily engaged in the wholesale distribution of chemicals and allied products, not elsewhere classified, such as acids, industrial and heavy chemicals, dyestuffs, industrial salts, naval stores, plastics materials, rosin, and turpentine. Establishments primarily engaged in the wholesale distribution of ammunition are classified in industry 5041; agricultural chemicals and pesticides in industry 5191; drugs in industry 5122; and paints and varnishes in industry 5198.

PETROLEUM AND PETROLEUM PRODUCTS (SIC 517)

Petroleum Bulk Stations and Terminals (SIC 5171)—Establishments primarily engaged in wholesaling petroleum products, including liquefied petroleum gas, from bulk liquid storage facilities.

Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals (SIC 5172)[1]—Establishments primarily engaged in wholesaling petroleum and petroleum products, except those with bulk liquid storage facilities. Included are packaged and bottled petroleum products distributors, truck jobbers, and others marketing petroleum and products at wholesale but without bulk liquid storage facilities.

[1] Data for this kind of business are not shown separately but are included in the group total.

BEER, WINE, AND DISTILLED ALCOHOLIC BEVERAGES (SIC 518)

Beer and Ale (SIC 5181)—Establishments primarily engaged in the wholesale distribution of beer, ale, porter, and other fermented malt beverages.

Wines and Distilled Alcoholic Beverages (SIC 5182)—Establishments primarily engaged in the wholesale distribution of distilled spirits, including neutral spirits and ethyl alcohol used in blending wines and distilled liquors.

MISCELLANEOUS NONDURABLE GOODS (SIC 519)

Farm Supplies (SIC 5191)[1]—Establishments primarily engaged in the wholesale distribution of animal feeds, fertilizers, agricultural chemicals, pesticides, seeds, and other farm supplies, except grains.

Tobacco and Tobacco Products (SIC 5194)—Establishments primarily engaged in the wholesale distribution of tobacco and tobacco products. Leaf tobacco wholesalers are classified in industry 5159 and establishments primarily engaged in stemming and redrying tobacco in industry 2141.

Paints, Varnishes, and Supplies (SIC 5198)[1]—Establishments primarily engaged in the wholesale distribution of paints, varnishes, wallpaper, and supplies, and sometimes glass. Establishments selling to the general public and known as "retail" in the trade are classified in industry 5231.

Books, Periodicals, Newspapers (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of books, lithographed matter, magazines, newspapers, and all other forms of reading material.

Nondurable Goods, Not Elsewhere Classified (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of nondurable goods, not elswhere classified, such as art goods, flowers and florist supplies, industrial yarn, textile bags, bagging and burlap.

CHANGES IN WHOLESALE KIND-OF-BUSINESS CLASSIFICATIONS IN 1972 FROM 1967

The wholesale trade kind-of-business structure was expanded from one SIC major group (SIC 50) in 1967 to two major groups in 1972, "durable goods" (SIC 50) and "nondurable goods" (SIC 51). There were 61 four-digit industries in 1972 compared to 48 four-digit industries in 1967.

The definitions of some kinds of business also were changed in 1972. Establishments primarily selling farm supplies and equipment to farmers, and establishments primarily selling

plumbing, heating, and air-conditioning equipment and electrical supplies were classified in wholesale trade rather than retail trade. However, establishments primarily selling lumber and other building materials and paint, glass, and wallpaper were classified in retail trade if they sell to the public, even though sales to contractors account for a larger portion of the total. The change resulted in moving to wholesale trade those establishments primarily selling plumbing, heating, and air-conditioning equipment; electrical supplies; farm equipment; hay, grain, and feed; and other farm supplies. The change also theoretically could have shifted to wholesale trade some establishments primarily selling lumber and paint, glass and wallpaper to contractors, but not to the public.

In addition to the kind-of-business changes noted above the special nonmerchant classifications of farm assemblers and bulk petroleum were eliminated in the 1972 census. These establishments were classified in the appropriate merchant, or sales branch category.

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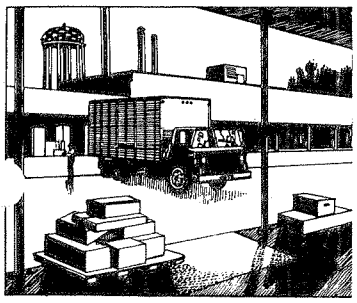
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued January 1980

November 1979

BW-79-11

Sales—November 1979 sales of merchant wholesalers, after adjustment for seasonal variations and trading day differences, but not for price changes, were $78.1 billion, virtually unchanged from the previous month, but 16 percent above November 1978. Adjusted September-through-November total sales were up 4 percent from the June-through-August period and were 16 percent above the total sales for the comparable months a year ago.

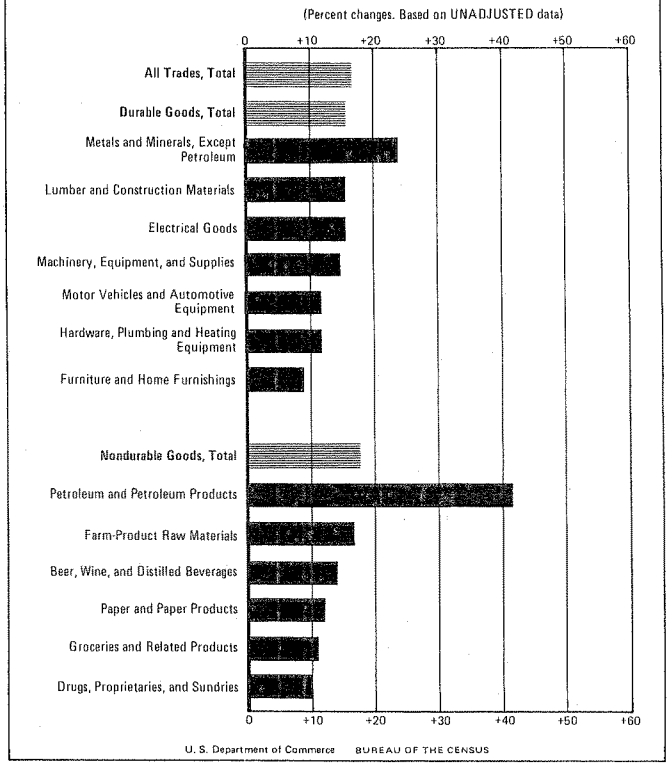
After adjustment, November sales in the durable goods trades were 2 percent below the previous month, but were 11 percent above the same month a year ago. Nondurable goods sales were up 2 percent from October and were 20 percent above November 1978. Total monthly sales in the durable goods group during the September-through-November period were 2 percent above the prior three months and were 13 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were 5 percent above the June-through-August period and were 20 percent above the total sales for the same period a year ago.

Based on adjusted data, comparisons with previous month sales levels showed mixed results with 7 trade groups showing gains, 7 indicating declines, and 1 with no change. The largest increase was reported in sporting goods, toys, and hobby goods (21%). The rgest decrease was shown in lumber and construction materials, and hardware, plumbing, and heating equipment, both down 5 percent. Compared with sales of a year ago, all trade groups showed increases with the sharper gains reported in petroleum and petroleum products (62%) and sporting goods, toys, and hobby goods (34%).

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variations, but not for price changes, were valued at $88.6 billion at the end of November, virtually unchanged from last month, but 11 percent above the same month a year ago. Durable goods stocks were down 1 percent from October, but were 10 percent above November 1978. Nondurable goods stocks were up 1 percent from the previous month, and were 14 percent above the year-ago level.

Based on adjusted data, comparisons with previous month inventories showed mixed results with 9 trade groups showing gains, 5 indicating declines, and 1 with no change. The largest increase was shown in paper and paper products, and petroleum and petroleum products, both up 5 percent. The most notable decrease was reported in metals and minerals, except petroleum (-9%). Compared with year-ago inventories, all trade groups showed increases with the sharper increases noted in petroleum and petroleum products (41%) and farm-product raw materials (21%).

Percent Change in Sales of Merchant Wholesalers in Selected Kinds of Business
11 Months 1979 Compared With 11 Months 1978



Stock-Sales Ratios—The November stock sales ratio for merchant wholesalers, based on seasonally adjusted data, was 113, down 1 point from the previous month and down 5 points from November 1978. The stock-sales ratio for durable goods was 163, up 2 points from the previous month, but down 1 point from the year-ago ratio. The ratio for nondurable goods was 74, down 1 point from the previous month and down 3 points from the year-ago ratio.

An advance release of November 1979 data was issued January 16, 1980.

U.S. Department of Commerce
BUREAU OF THE CENSUS

Inquiries concerning this report should be addressed to Ronald Piencykoski, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-5294/763-5295.

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Table 1. Estimated Monthly Sales of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979											1978		Total 11 months	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.[p]	Nov.	Dec.	1979	1978
	Merchant wholesalers, total	63,739	61,721	74,319	70,768	76,814	74,361	73,537	78,567	73,213	81,820	78,531	67,699	64,527	807,392	689,579
	Total (excluding farm-product raw materials)	56,481	55,208	66,198	63,588	68,714	66,477	64,932	70,390	65,400	72,156	68,935	59,923	57,237	718,630	613,725
50	Durable goods, total	28,284	28,141	34,689	33,429	35,723	34,447	33,750	37,048	33,616	37,935	34,313	31,037	29,340	371,375	320,578
501	Motor vehicles and automotive parts and supplies	5,634	5,650	6,888	6,845	7,013	6,364	6,259	6,812	5,645	6,784	6,277	6,013	5,510	70,173	62,788
5013,4	Automotive parts and supplies, tires and tubes	3,120	3,081	3,459	3,349	3,385	3,318	3,091	3,552	3,081	3,538	3,184	3,298	2,927	36,310	33,949
5013	Automotive parts and supplies	2,594	2,603	2,902	2,807	2,966	2,759	2,600	3,014	2,617	2,978	2,712	2,752	2,413	30,551	28,560
502	Furniture and home furnishings	1,012	950	1,199	1,130	1,214	1,185	1,121	1,243	1,196	1,390	1,291	1,218	1,140	12,930	11,827
5021	Furniture--household and office	343	332	416	413	450	422	399	449	419	458	437	411	422	4,538	3,922
5023	Home furnishings[1]	669	618	783	717	764	763	722	794	778	931	853	807	718	8,392	7,904
503	Lumber and other construction materials	2,387	2,212	3,006	3,023	3,353	3,410	3,411	3,761	3,274	3,622	3,042	2,874	2,542	34,500	29,681
5031	Lumber, plywood, and millwork	1,672	1,544	2,047	2,067	2,269	2,250	2,250	2,515	2,102	2,346	1,924	1,915	1,682	22,985	19,717
5039	Construction materials, n.e.c.	715	668	959	957	1,084	1,160	1,161	1,246	1,172	1,276	1,118	959	860	11,515	9,965
505	Metals and minerals, except petroleum[2]	3,206	3,215	3,849	3,295	3,913	3,645	3,824	4,196	[r]3,687	4,197	3,866	3,209	2,942	40,891	32,922
5051 pt.	Ferrous metals service centers and offices	2,455	2,437	2,925	2,469	2,951	2,759	2,865	3,062	2,806	2,974	2,736	2,448	2,260	30,440	25,073
5051 pt.	Ferrous metals service centers	1,652	1,744	2,129	1,798	2,160	2,056	2,046	2,211	1,974	2,208	2,014	1,768	1,678	21,991	18,408
506	Electrical goods	3,017	3,083	3,556	3,271	3,744	3,786	3,712	4,163	4,012	4,395	3,961	3,474	3,322	40,701	35,003
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,533	1,638	1,807	1,748	2,071	2,006	1,991	2,153	2,079	2,165	1,868	1,722	1,655	21,030	17,848
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,484	1,445	1,749	1,554	1,673	1,779	1,700	2,011	1,933	2,230	2,093	1,751	1,667	19,671	17,156
5064	Electrical appliances, TV and radio sets	834	849	1,024	881	939	1,064	986	1,116	1,083	1,250	1,171	1,090	1,006	11,198	10,392
507	Hardware, plumbing, heating equipment, and supplies	2,142	1,984	2,319	2,374	2,592	2,461	2,524	2,678	2,399	2,794	2,444	2,250	2,057	26,711	23,811
5072	Hardware	802	758	853	852	975	877	892	1,003	877	1,024	914	830	721	9,828	8,738
5074	Plumbing and heating equipment and supplies (hydronics)	854	800	960	994	1,001	966	1,015	1,038	1,011	1,167	1,037	918	854	10,843	9,640
508	Machinery, equipment, and supplies	7,691	7,841	9,664	9,443	10,062	9,745	9,222	10,113	9,394	10,317	9,133	8,421	8,485	102,626	89,392
5082	Construction and mining machinery and equipment	895	927	1,189	1,360	1,351	1,260	1,258	1,366	1,268	1,323	1,094	1,126	1,125	13,293	12,304
5084,5	Industrial machinery, equipment, and supplies	3,390	3,464	3,940	3,615	4,004	3,964	3,613	4,039	3,634	4,078	3,880	3,474	3,623	41,622	35,678
5086	Professional equipment, supplies	907	914	1,048	972	1,055	996	996	1,092	972	1,121	944	949	975	11,016	9,662
5093	Scrap and waste materials	1,132	1,184	1,501	1,492	1,518	1,468	1,395	1,534	1,328	1,456	1,409	1,103	1,079	15,417	10,725
51	Nondurable goods, total	35,455	33,580	39,630	37,339	41,091	39,914	39,787	41,519	39,597	43,885	44,218	36,662	35,187	436,017	369,002
	Total (excluding farm-product raw materials)	28,197	27,067	31,509	30,159	32,991	32,030	31,182	33,342	31,784	34,221	34,622	28,885	27,897	347,105	293,088
511	Paper and paper products	1,540	1,479	1,688	1,551	1,692	1,651	1,585	1,777	1,599	1,821	1,693	1,569	1,489	18,076	16,096
5111,3	Printing, writing, industrial, and personal service paper	1,133	1,100	1,272	1,184	1,272	1,252	1,192	1,327	1,202	1,368	1,271	1,177	1,140	13,573	11,938
512	Drugs, drug proprietaries, and druggists' sundries	950	917	1,073	1,038	1,102	1,039	1,066	1,099	1,030	1,178	1,115	1,017	963	11,606	10,512
5122	Drugs, drug proprietaries, and druggists' sundries	950	[r]917	[r]1,073	1,038	1,102	[r]1,039	[r]1,066	1,099	1,030	1,178	1,115	[r]1,017	[r]963	11,606	[r]10,512
5122 pt.	General-line drugs	[r]403	[r]403	[r]477	472	509	[r]455	[r]443	477	443	487	454	[r]449	[r]425	5,023	[r]4,829
513	Apparel, piece goods, and notions[3]	2,094	1,996	2,326	2,107	2,127	2,102	2,389	2,629	2,563	2,704	2,412	2,369	1,976	25,449	23,100
514	Groceries and related products	11,122	10,381	11,954	11,281	11,988	11,721	11,500	11,835	11,122	12,140	12,017	11,155	10,830	127,061	114,260
5141	Groceries, general-line	3,965	3,658	4,173	3,989	4,241	4,247	4,245	4,429	4,137	4,597	4,547	4,120	3,914	46,227	41,061
5144	Poultry and poultry products	518	489	559	554	592	544	563	569	530	561	605	569	536	6,084	5,380
5145	Confectionery[4]	184	177	209	196	212	199	192	214	214	275	253	211	197	2,325	2,039
5147	Meats and meat products	1,979	1,971	2,198	2,029	2,076	1,908	1,872	1,959	1,770	1,925	1,794	1,911	1,885	21,481	19,412
5148	Fresh fruits and vegetables	1,020	961	1,203	1,086	1,202	1,242	1,063	1,030	917	997	997	974	973	11,718	10,937
515	Farm-product raw materials	7,258	6,513	8,121	7,180	8,100	7,884	8,605	8,177	7,813	9,664	9,596	7,777	7,290	88,911	75,928
5153	Grain	5,859	5,235	6,740	5,886	6,766	6,730	7,516	7,090	6,594	8,328	8,281	6,391	5,912	75,023	62,636
517	Petroleum and petroleum products	4,837	5,008	5,282	5,221	6,078	5,851	5,863	6,355	6,354	7,171	7,601	4,554	4,598	65,621	46,223
5171	Petroleum bulk stations and terminals	2,738	2,785	2,997	2,857	3,306	3,170	3,121	3,504	3,456	3,960	4,046	2,507	2,678	35,939	25,839
518	Beer, wine, and distilled alcoholic beverages	2,020	1,952	2,490	2,453	2,726	2,704	2,636	2,844	2,387	2,733	2,815	2,547	2,709	27,760	24,319
5181	Beer and ale	999	953	1,223	1,258	1,513	1,523	1,507	1,590	1,229	1,299	1,252	1,088	1,108	14,346	12,174
5182	Wine and distilled alcoholic beverages	1,021	999	1,267	1,195	1,214	1,181	1,129	1,254	1,158	1,435	1,563	1,459	1,601	13,415	12,145
519	Miscellaneous nondurable goods	4,529	4,383	5,528	5,406	6,001	5,801	5,105	5,468	5,570	5,296	5,537	4,486	4,425	58,625	47,701
5194	Tobacco and tobacco products	823	749	852	848	891	863	881	896	795	902	907	831	846	9,405	8,825

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. [p]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures. [r]Revised.

[1]The home furnishings group is subject to a sampling variability of 9 percent for November 1979.
[2]The metals and minerals, except petroleum group is subject to a sampling variability of 9 percent for November 1979.
[3]The apparel and piece goods and notions group is subject to a sampling variability of 13 percent for November 1979.
[4]The confectionery group is subject to a sampling variability of 9 percent for November 1979.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations)

1972 SIC code	Kind of business	1979											1978	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.[p]	Nov.	Dec.
	Merchant wholesalers, total	81,896	83,917	85,436	85,345	85,199	84,942	86,829	86,890	87,061	88,839	89,312	80,100	80,922
	Total (excluding farm-product raw materials)	75,593	77,627	79,311	79,626	80,246	79,964	81,487	81,570	81,563	82,485	81,909	73,947	74,898
50	Durable goods, total	51,860	53,807	54,381	54,731	55,566	55,523	56,602	56,803	56,361	56,620	55,945	50,971	51,646
501	Motor vehicles and automotive parts and supplies	9,512	10,189	9,797	9,663	9,631	9,207	r9,672	r9,446	r9,240	9,546	9,647	9,326	9,227
5013,4	Automotive parts and supplies, tires and tubes	5,758	5,888	5,781	5,809	5,970	5,753	6,051	6,117	5,933	6,025	6,004	5,635	5,552
5013	Automotive parts and supplies	4,881	5,003	4,870	4,917	5,035	4,818	5,082	5,188	5,018	5,121	5,156	4,792	4,674
502	Furniture and home furnishings	1,764	1,753	1,872	1,837	1,815	1,903	1,847	1,839	1,861	1,909	1,873	1,774	1,752
5023	Home furnishings	1,292	1,282	1,355	1,332	1,309	1,361	1,347	1,333	1,328	1,381	1,345	1,305	1,251
503	Lumber and other construction materials	3,113	3,178	3,337	3,404	3,468	3,496	3,526	3,442	3,382	3,383	3,406	2,995	3,117
5031	Lumber, plywood, and millwork[1]	2,030	2,082	2,116	2,152	2,244	2,204	2,220	2,204	2,129	2,149	2,136	1,918	2,009
505	Metals and minerals, except petroleum	5,106	5,434	5,285	5,254	5,528	5,582	5,763	6,319	6,139	6,376	5,904	5,208	5,151
5051 pt.	Ferrous metals service centers and offices	4,191	4,425	4,365	4,239	4,455	4,586	4,655	4,947	4,953	4,794	4,633	4,150	4,191
5051 pt.	Ferrous metals service centers	3,241	3,459	3,433	3,269	3,506	3,643	3,665	3,956	4,010	3,843	3,754	3,236	3,336
506	Electrical goods	5,509	5,582	5,706	5,737	5,976	6,040	6,223	6,254	6,061	6,082	6,102	5,526	5,577
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2,542	2,684	2,676	2,730	2,946	2,838	2,840	2,841	2,771	2,785	2,855	2,534	2,558
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,966	2,898	3,030	3,007	3,030	3,202	3,383	3,274	3,290	3,296	3,247	3,016	3,023
507	Hardware, plumbing, heating equipment, and supplies	4,251	4,461	4,497	4,719	4,590	4,631	4,628	4,535	4,488	4,537	4,546	4,033	4,063
5072	Hardware	1,476	1,540	1,539	1,598	1,622	1,643	1,659	1,657	1,692	1,698	1,704	1,382	1,407
5074	Plumbing and heating equipment and supplies (hydronics)	1,819	1,900	1,899	1,985	1,848	1,896	1,902	1,828	1,783	1,823	1,849	1,737	1,760
508	Machinery, equipment, and supplies	17,748	18,254	18,807	18,924	19,370	19,465	19,576	19,778	19,974	19,555	19,294	17,428	18,012
5082	Construction and mining machinery and equipment	3,932	4,152	4,334	4,280	4,430	4,512	4,488	4,504	4,573	4,339	4,127	4,002	4,109
5084,5	Industrial machinery, equipment, and supplies	5,728	5,800	6,015	6,030	6,073	6,006	5,979	6,092	6,201	6,251	6,215	5,570	5,752
51	Nondurable goods, total	30,036	30,110	31,055	30,614	29,633	29,419	30,227	30,087	30,700	32,219	33,367	29,129	29,276
	Total (excluding farm-product raw materials)	23,733	23,820	24,930	24,895	24,680	24,441	24,885	24,767	25,202	25,865	25,964	22,976	23,252
511	Paper and paper products	1,424	1,468	1,547	1,501	1,542	1,616	1,608	1,604	1,663	1,597	1,663	1,441	1,482
5111,3	Printing, writing, industrial, and personal service paper	986	1,010	1,053	1,018	1,050	1,090	1,079	1,055	1,109	1,082	1,110	967	1,025
512	Drugs, drug proprietaries, and druggists' sundries	r1,396	r1,412	r1,535	1,617	r1,563	r1,567	r1,609	r1,570	1,670	1,678	1,612	r1,434	r1,385
514	Groceries and related products	6,408	6,346	6,719	6,644	6,644	6,686	6,674	6,633	6,793	6,982	7,006	6,412	6,497
5141	Groceries, general-line	2,696	2,744	2,895	2,846	2,785	2,802	2,899	2,857	2,911	3,046	3,084	2,814	2,761
517	Petroleum and petroleum products	2,106	2,101	2,224	2,177	2,401	2,263	2,492	2,618	2,874	2,918	3,041	2,151	2,153
518	Beer, wine, and distilled alcoholic beverages	2,462	2,427	2,684	2,806	2,760	2,732	2,693	2,539	2,538	2,781	2,823	2,513	2,290
5181	Beer and ale[2]	800	845	1,040	1,085	1,089	1,072	1,030	923	903	934	917	777	729
5182	Wines and distilled alcoholic beverages	1,662	1,582	1,645	1,721	1,671	1,660	1,663	1,616	1,634	1,847	1,907	1,736	1,561

See footnotes at end of table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Percent. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979											1978	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.[p]	Nov.	Dec.
	Merchant wholesalers, total	128	136	115	121	111	114	118	111	119	109	114	118	125
	Total (excluding farm-product raw materials)	134	141	120	125	117	120	125	116	125	114	119	123	131
50	Durable goods, total	183	191	157	164	156	161	168	153	168	149	163	164	176
501	Motor vehicles and automotive parts and supplies	169	180	142	141	137	145	r155	r139	r164	141	154	155	167
5013,4	Automotive parts and supplies, tires and tubes	185	191	167	173	169	173	196	172	193	170	189	171	190
5013	Automotive parts and supplies	188	192	168	175	170	175	195	172	192	172	190	174	194
502	Furniture and home furnishings	174	185	156	163	150	161	165	148	156	137	145	146	154
5023	Home furnishings	193	208	173	186	171	178	187	169	171	148	156	162	174
503	Lumber and other construction materials	130	144	111	113	103	102	103	92	103	93	112	104	123
5031	Lumber, plywood, and millwork	121	135	103	104	99	98	99	88	101	92	111	100	119
505	Metals and minerals, except petroleum	159	169	137	159	141	153	151	151	r166	152	153	162	175
5051 pt.	Ferrous metals service centers and offices	171	182	149	172	151	166	162	162	177	161	169	170	185
5051 pt.	Ferrous metals service centers	196	198	161	182	162	177	179	179	203	174	186	183	199
506	Electrical goods	183	181	160	175	160	160	168	150	151	138	154	159	168
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	166	164	148	156	142	141	143	132	133	129	153	147	155
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	200	201	173	194	181	180	197	163	170	148	155	171	181
507	Hardware, plumbing, heating equipment, and supplies	198	225	194	199	177	188	183	169	187	162	186	179	198
5072	Hardware	184	203	180	188	166	187	186	165	193	166	186	167	195
5074	Plumbing and heating equipment and supplies (hydronics)	213	237	198	200	185	196	188	176	176	156	178	189	206
508	Machinery, equipment, and supplies	231	238	195	200	192	200	212	196	213	190	211	207	212
5082	Construction and mining machinery and equipment	439	448	364	315	328	358	357	330	361	328	377	356	365
5084,5	Industrial machinery, equipment, and supplies	168	167	153	167	152	152	165	151	171	153	160	160	159
51	Nondurable goods, total	85	90	78	82	72	74	76	72	78	73	75	79	83
	Total (excluding farm-product raw materials)	84	88	79	83	75	76	80	74	79	76	75	80	83
511	Paper and paper products	92	99	92	97	91	98	101	90	104	88	98	92	100
5111,3	Printing, writing, industrial, and personal service paper	87	92	83	86	83	87	90	79	92	79	87	82	90
512	Drugs, drug proprietaries, and druggists' sundries	r147	r154	r143	156	r142	r151	r151	r143	162	142	145	r141	r144
514	Groceries and related products	58	61	56	59	55	57	58	56	61	58	58	57	60
5141	Groceries, general-line	68	75	69	71	66	66	68	64	70	66	68	68	71
517	Petroleum and petroleum products	44	42	42	42	40	39	43	41	45	41	40	47	47
518	Beer, wine, and distilled alcoholic beverages	122	124	108	114	101	101	102	89	106	102	100	99	85
5181	Beer and ale	80	89	85	86	72	70	68	58	74	72	73	71	66
5182	Wines and distilled alcoholic beverages	163	158	130	144	138	141	147	129	141	129	122	119	97

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. [p]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures. [r]Revised.

[1]The lumber, plywood, and millwork group is subject to a sampling variability of 8 percent for November 1979.
[2]The beer and ale group is subject to a sampling variability of 8 percent for November 1979.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1979 and 1978

(Sales and inventories in millions of dollars. Stock-sales ratios in percent)

1972 SIC code	Kind of business	1979											1978	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.[p]	Nov.	Dec.
	Sales ADJUSTED for seasonal variations and trading-day differences													
	Merchant wholesalers, total	67,148	67,495	70,824	70,444	72,937	72,625	75,106	75,733	76,264	77,915	78,117	67,552	67,823
	Total (excluding farm-product raw materials)	60,346	60,603	63,567	63,278	65,050	64,506	65,961	66,826	67,375	68,649	69,256	60,373	60,526
50	Durable goods, total	31,012	31,769	33,570	32,770	33,354	32,956	34,078	34,711	33,862	35,568	34,826	31,498	31,939
501	Motor vehicles and automotive parts and supplies	5,994	6,285	6,486	6,315	6,347	6,078	6,083	6,525	5,961	6,846	6,699	6,442	6,088
502	Furniture and home furnishings	1,162	1,058	1,178	1,148	1,183	1,139	1,229	1,178	1,176	1,208	1,212	1,136	1,197
503	Lumber and other construction materials	2,876	2,758	3,089	3,085	3,037	3,166	3,188	3,209	r3,197	3,191	3,033	2,874	3,026
505	Metals and minerals, except petroleum	3,184	3,518	3,748	3,250	3,637	3,598	4,008	3,874	r3,638	4,091	4,023	3,305	3,259
506	Electrical goods	3,279	3,460	3,560	3,294	3,789	3,644	3,690	3,984	4,086	3,974	3,849	3,356	3,362
507	Hardware, plumbing, heating equipment, and supplies	2,354	2,270	2,371	2,372	2,398	2,355	2,441	2,466	2,387	2,559	2,437	2,237	2,330
508	Machinery, equipment, and supplies	8,461	8,840	9,108	9,249	9,240	9,263	9,497	9,680	9,385	9,669	9,484	8,730	9,193
51	Nondurable goods, total	36,136	35,726	37,254	37,674	39,583	39,669	41,028	41,022	42,402	42,347	43,291	36,054	35,894
	Total (excluding farm-product raw materials)	29,334	28,834	29,997	30,508	31,696	31,550	31,883	32,115	33,513	33,081	34,430	28,875	28,587
511	Paper and paper products	1,540	1,595	1,636	1,636	1,638	1,612	1,627	1,659	1,610	1,675	1,733	1,579	1,608
512	Drugs, drug proprietaries, and druggists' sundries	953	990	1,032	1,050	1,095	1,072	1,104	1,058	1,055	1,070	1,095	1,007	997
513	Apparel, piece goods, and notions	2,230	2,114	2,243	2,280	2,089	2,149	2,496	2,276	2,491	2,408	2,362	2,291	2,269
514	Groceries and related products	11,407	11,408	11,595	11,476	11,278	11,380	11,500	11,271	11,561	11,673	12,077	11,178	11,400
515	Farm-product raw materials[1]	6,802	6,892	7,257	7,166	7,887	8,119	9,145	8,907	8,889	9,266	8,861	7,179	7,297
517	Petroleum and petroleum products	4,876	4,905	4,955	5,263	6,338	6,038	5,863	6,311	7,006	7,164	7,337	4,542	4,387
518	Beer, wine, and distilled alcoholic beverages	2,491	2,395	2,541	2,615	2,526	2,472	2,610	2,628	2,539	2,608	2,646	2,383	2,387
519	Miscellaneous nondurable goods	4,645	4,361	4,849	5,095	5,546	5,721	5,647	5,678	6,028	5,388	5,732	4,693	4,567
	Inventories ADJUSTED for seasonal variations													
	Merchant wholesalers, total	81,543	83,005	84,078	84,973	85,257	85,245	88,144	88,727	88,393	88,784	88,648	79,526	80,771
	Total (excluding farm-product raw materials)	76,224	77,545	78,624	79,299	79,729	79,416	81,339	82,010	81,809	82,633	82,326	74,285	75,546
50	Durable goods, total	52,490	53,773	53,937	54,408	54,886	54,542	56,062	56,931	56,605	57,207	56,715	51,625	52,460
501	Motor vehicles and automotive parts and supplies	9,390	9,883	9,643	9,605	9,442	9,161	r9,741	r9,742	r9,489	9,721	9,744	9,420	9,236
502	Furniture and home furnishings	1,778	1,765	1,878	1,846	1,799	1,866	1,840	1,828	1,839	1,905	1,882	1,782	1,801
503	Lumber and other construction materials	3,160	3,207	3,218	3,315	3,354	3,444	3,481	3,449	3,409	3,495	3,541	3,113	3,190
505	Metals and minerals, except petroleum	5,142	5,528	5,274	5,212	5,517	5,571	5,606	6,141	6,139	6,600	5,976	5,266	5,166
506	Electrical goods	5,697	5,772	5,764	5,754	5,899	5,881	6,137	6,211	5,977	6,016	6,078	5,499	5,650
507	Hardware, plumbing, heating equipment and supplies	4,382	4,543	4,422	4,511	4,443	4,514	4,555	4,508	4,561	4,597	4,687	4,153	4,228
508	Machinery, equipment, and supplies	17,927	18,073	18,529	18,905	19,178	19,065	19,517	19,958	20,095	19,772	19,568	17,658	18,249
51	Nondurable goods, total	29,053	29,232	30,141	30,565	30,371	30,703	32,082	31,796	31,788	31,577	31,933	27,901	28,311
	Total (excluding farm-product raw materials)	23,734	23,772	24,687	24,891	24,843	24,874	25,277	25,079	25,204	25,426	25,611	22,660	23,086
511	Paper and paper products	1,458	1,493	1,561	1,485	1,534	1,574	1,610	1,602	1,651	1,597	1,671	1,447	1,482
512	Drugs, drug proprietaries, and druggists' sundries	r1,459	r1,458	r1,538	1,609	r1,599	r1,557	r1,626	r1,568	1,629	1,603	1,579	r1,405	r1,389
514	Groceries and related products	6,492	6,333	6,581	6,611	6,691	6,774	6,776	6,768	6,800	6,845	6,950	6,355	6,433
517	Petroleum and petroleum products	2,017	2,114	2,237	2,311	2,504	2,402	2,590	2,595	2,793	2,787	2,918	2,064	2,082
518	Beer, wine, and distilled alcoholic beverages	2,557	2,536	2,756	2,831	2,698	2,658	2,696	2,593	2,530	2,601	2,671	2,377	2,403
	Stock-sales ratios based on ADJUSTED data													
	Merchant wholesalers, total	121	123	119	121	117	117	117	117	116	114	113	118	119
	Total (excluding farm-product raw materials)	126	128	124	125	123	123	123	123	121	120	119	123	125
50	Durable goods, total	169	169	161	166	165	165	165	164	167	161	163	164	164
501	Motor vehicles and automotive parts and supplies	157	157	149	152	149	151	r160	r149	r159	142	145	146	152
502	Furniture and home furnishings	153	167	159	161	152	164	150	155	156	158	155	157	150
503	Lumber and other construction materials	110	116	104	107	110	109	109	107	107	110	117	109	105
505	Metals and minerals, except petroleum	161	157	141	160	152	155	140	159	r169	161	149	159	159
506	Electrical goods	174	167	162	175	156	161	166	156	146	151	158	164	168
507	Hardware, plumbing, heating equipment, and supplies	186	200	187	190	185	192	187	183	191	180	192	186	181
508	Machinery, equipment, and supplies	212	204	203	204	208	206	206	206	214	204	206	202	199
51	Nondurable goods, total	80	82	81	81	77	77	78	78	75	75	74	77	79
	Total (excluding farm-product raw materials)	81	82	82	82	78	79	79	78	75	77	74	78	81
511	Paper and paper products	95	94	95	91	94	98	99	97	103	95	96	92	92
512	Drugs, drug proprietaries, and druggists' sundries	r153	r147	r149	153	r146	r145	r147	r148	154	150	144	r140	r139
514	Groceries and related products	57	56	57	58	59	60	59	60	59	59	58	57	56
517	Petroleum and petroleum products	41	43	45	44	40	40	44	41	40	39	40	45	47
518	Beer, wine, and distilled alcoholic beverages	103	106	108	108	107	108	103	99	100	100	101	100	101

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions. All data for 1978 have been revised to reflect recomputed factors for seasonal adjustment.

NA Not available. [p]Preliminary estimates. See p. 15, Sample Design and Estimation Procedures. [r]Revised.

[1]There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table 4B. Percent Change Between Selected 3-Month Periods Sales of Merchant Wholesalers, United States

(Based on seasonally-adjusted data)

Item	3 month period, Sept. 1979-Nov. 1979 from--			
	June 1979-Aug. 1979 (3 months ago)	Mar. 1979-May 1979 (6 months ago)	Dec. 1978-Feb. 1979 (9 months ago)	Sept. 1978-Nov. 1978 (12 months ago)
Merchant wholesalers, total.....	+4	+8	+15	+16
Durable goods, total.....	+2	+5	+10	+13
Nondurable goods, total...	+5	+12	+19	+20

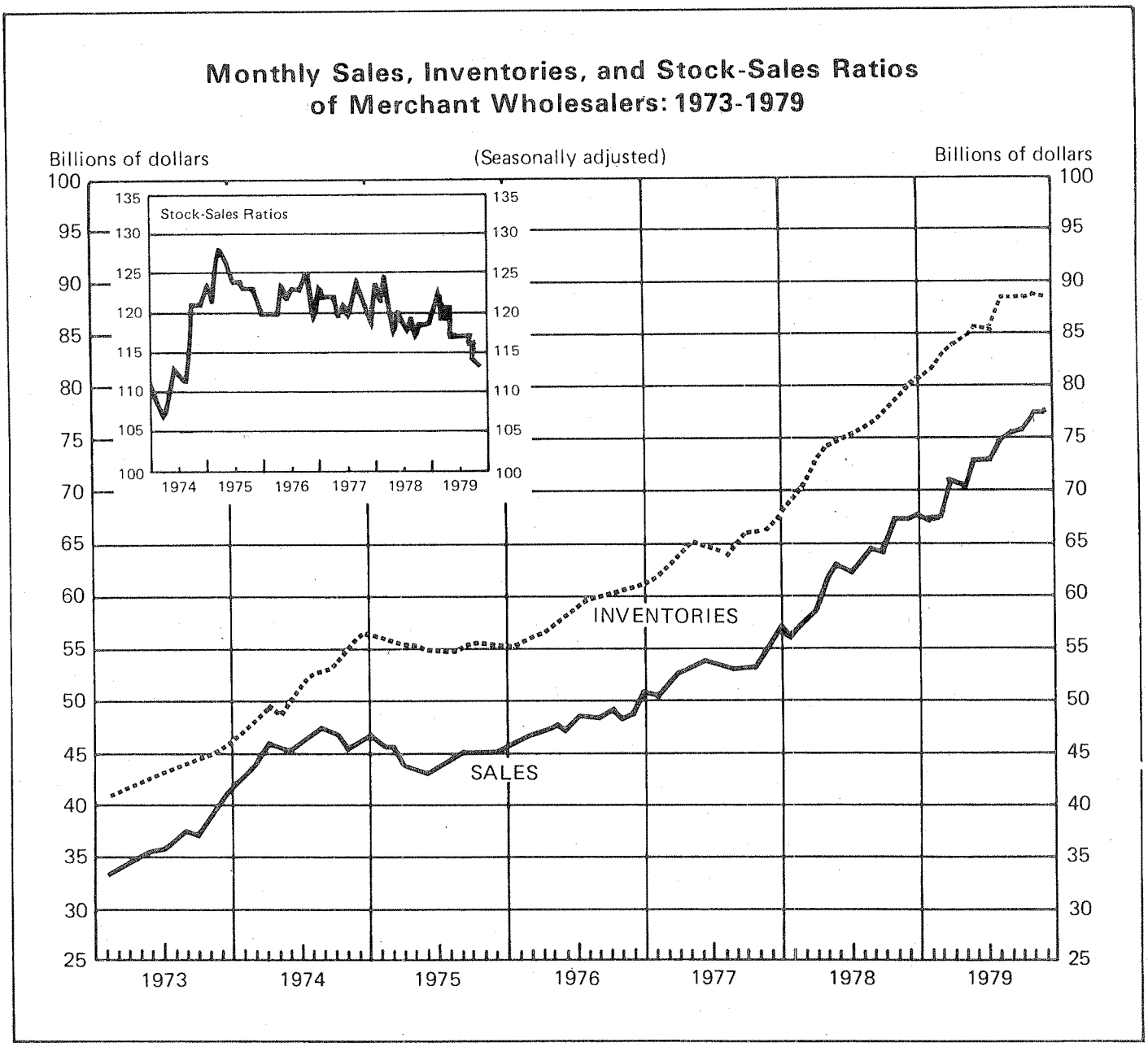


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: November 1979

1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		Nov. 1979 from Oct. 1979	Nov. 1979 from Nov. 1978	11 months 1979 from 11 months 1978	Nov. 1979 from Oct. 1979	Nov. 1979 from Nov. 1978	Nov. 1979 from Oct. 1979	Nov. 1979 from Nov. 1978	Nov. 1979 from Oct. 1979	Nov. 1979 from Nov. 1978
	Merchant wholesalers, total	-4	+16	+17	+1	+12	0	+16	0	+11
	Total (excluding farm-product raw materials)	-4	+15	+17	-1	+11	+1	+15	0	+11
50	Durable goods, total	-10	+11	+16	-1	+10	-2	+11	-1	+10
501	Motor vehicles and automotive parts and supplies	-7	+4	+12	+1	+3	-2	+4	0	+3
5012	Automobiles and other motor vehicles	-5	+14	+18	+3	-1	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	-10	-3	+7	0	+7	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	-9	-1	+7	+1	+8	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	-7	+6	+9	-2	+6	0	+7	-1	+4
5021	Furniture--household and office	-5	+6	+16	0	+13	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	2	-6	+4	-1	+10	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	-8	+14	+22	+1	+15	(*)	(*)	(*)	(*)
5023	Home furnishings	-8	+6	+6	-3	+3	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	-16	+6	+16	+1	+14	-5	+6	+1	+14
5031	Lumber, plywood, and millwork	-18	0	+17	-1	+11	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c.	-12	+17	+16	+3	+18	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	+9	+27	+19	-4	+15	+21	+34	+3	+16
505	Metals and minerals, except petroleum	-8	+20	+24	-7	+13	-2	+22	-9	+13
5051 pt.	Ferrous metals service centers and offices	-8	+12	+21	-3	+12	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	-9	+14	+19	-2	+16	(*)	(*)	(*)	(*)
5051 pt.	Nonferrous metals service centers and offices	-9	(S)	(S)	(S)	(S)	(*)	(*)	(*)	(*)
506	Electrical goods	-10	+14	+16	0	+10	-3	+15	+1	+11
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-14	+8	+18	+3	+13	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-6	+20	+15	-1	+8	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	-6	+7	+8	+1	+7	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	-13	+9	+12	0	+13	-5	+9	+2	+13
5072	Hardware	-11	+10	+12	0	+23	(*)	(*)	(*)	(*)
5074	Plumbing and heating equipment and supplies (hydronics)	-12	+13	+12	+1	+6	(*)	(*)	(*)	(*)
5075	Warm air heating and air conditioning equipment and supplies	-18	+1	+12	-3	+5	(*)	(*)	(*)	(*)
508	Machinery, equipment, and supplies	-11	+8	+15	-1	+11	-2	+9	-1	+11
5081	Commercial machines and equipment	-4	+9	+7	-3	-4	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	-17	-3	+8	-5	+3	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	-22	+15	+19	-1	+23	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	-5	+12	+17	-1	+12	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	-16	-1	+14	+1	0	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	-3	+28	+44	-1	+3	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	+4	+21	+45	0	-2	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	-2	+38	+42	-2	+19	(*)	(*)	(*)	(*)
51	Nondurable goods, total	+1	+21	+18	+4	+15	+2	+20	+1	+14
	Total (excluding farm-product raw materials)	+1	+20	+18	0	+13	+4	+19	+1	+13
511	Paper and paper products	-7	+8	+12	+4	+15	+3	+10	+5	+15
5111,3	Printing, writing, industrial, and personal service paper	-7	+8	+14	+3	+15	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	-5	+9	+10	-4	r+12	+2	+7	-1	r+12
5122	Drugs, drug proprietaries, and druggists' sundries	-5	+9	+10	-4	r+12	(*)	(*)	(*)	(*)
5122 pt.	General-line drugs	-7	+1	+4	-5	0	(*)	(*)	(*)	(*)
514	Groceries and related products	-1	+8	+11	0	+9	+3	+8	+2	+9
5141	Groceries, general-line	-1	+10	+13	+1	+10	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	-1	+5	+11	0	+5	(*)	(*)	(*)	(*)
5141 pt.	Retailer cooperatives	+1	+14	+13	+3	+15	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	-3	+12	+13	+1	+10	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	+1	+13	+11	+2	+16	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	+8	+6	+13	-10	+3	(*)	(*)	(*)	(*)
5145	Confectionery	-8	+20	+14	-10	0	(*)	(*)	(*)	(*)
5147	Meats and meat products	-7	-6	+11	-2	-5	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	0	+2	+7	-7	0	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	-1	+23	+17	+17	+20	-4	+23	+3	+21
5152	Cotton	+27	+11	+3	+84	-11	(*)	(*)	(*)	(*)
5153	Grain	-1	+30	+20	+11	+26	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	+6	+67	+42	+4	+41	+2	+62	+5	+41
5171	Petroleum bulk stations and terminals	+2	+61	+39	+5	+36	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	+3	+11	+14	+2	+12	+1	+11	+3	+12
5181	Beer and ale	-4	+15	+18	-2	+18	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	+9	+7	+10	+3	+10	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	+5	+23	+23	-2	+7	+6	+22	-4	+7
5191	Farm supplies	-9	+8	+22	-1	+7	(*)	(*)	(*)	(*)
5194	Tobacco and tobacco products	0	+9	+7	+2	+6	(*)	(*)	(*)	(*)
5198	Paints, varnishes, and supplies	-10	+8	+13	-1	+29	(*)	(*)	(*)	(*)
5199 pt.	Books, periodicals, newspapers	+8	+8	+10	+2	+1	(*)	(*)	(*)	(*)

*Adjusted data are available only for summary group totals. rRevised.

[1]Adjusted for seasonal variations and, in the case of sales, also for trading-day differences. Adjusted data are only available for the summary kind-of-business groups shown.

[2]There are indications that the seasonal adjustment factors for this trade group may not reflect recent trends. The seasonally adjusted data for this trade group and also for the summary group totals should, therefore, be used with caution.

Sales of Merchant Wholesalers by Geographic Division
11 Months 1979 Compared With 11 Months 1978

(Percent changes based on UNADJUSTED data)

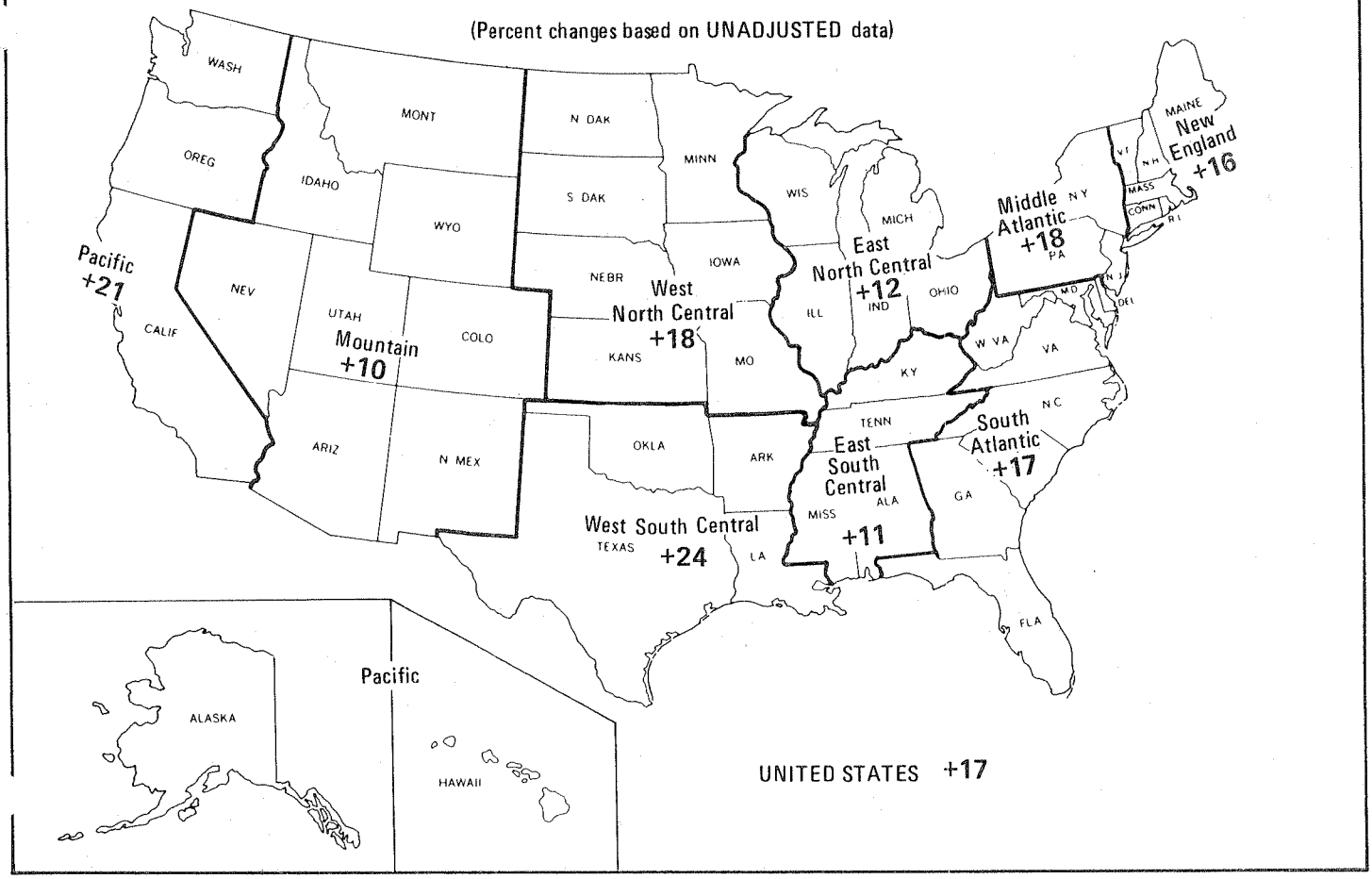


Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1979 and 1978

(Sales, in millions of dollars, are NOT ADJUSTED for seasonal variation or trading-day differences; sampling errors in percent)

1972 SIC code	Kind of business and geographic division[1]	1979											1978		Total 11 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.[p]	Nov.	Dec.	1979	1978	Range[2]	Median
	Merchant wholesalers, total	63,739	61,721	74,319	70,768	76,814	74,361	73,537	78,567	73,213	81,820	78,531	67,699	64,527	807,392	689,579	0.8-0.9	0.9
	New England	3,393	3,289	3,835	3,652	3,915	3,782	3,572	3,981	3,741	4,167	4,040	3,678	3,652	41,366	35,783	5-6	6
	Middle Atlantic	14,513	13,785	16,692	15,218	16,416	16,288	16,256	17,786	17,136	18,350	18,310	15,304	14,529	180,750	153,582	2-2	2
	East North Central	10,573	10,454	12,314	11,906	13,356	12,661	12,182	12,979	11,735	13,552	12,675	11,757	10,882	134,387	119,752	2-3	3
	West North Central	6,695	6,589	7,834	7,506	8,614	[r]8,005	8,385	8,510	7,921	9,106	8,433	7,471	6,894	87,599	74,462	2-3	2
	South Atlantic	7,023	6,620	8,329	7,929	8,401	[r]8,014	7,720	8,067	7,558	8,391	8,001	7,106	6,979	86,054	73,673	2-3	2
	East South Central	2,961	2,801	3,505	3,461	3,557	3,372	3,292	3,534	3,261	3,791	3,514	3,075	2,922	37,048	33,375	4-5	4
	West South Central	6,703	6,648	7,785	7,673	8,443	8,314	8,248	8,755	8,434	9,347	9,202	6,885	6,680	89,551	72,248	3-4	4
	Mountain	2,337	2,253	2,904	2,659	2,786	2,851	2,704	2,830	2,760	2,851	2,684	2,477	2,540	29,621	26,925	5-5	5
	Pacific	9,540	9,281	11,121	10,765	11,325	11,077	11,178	12,125	10,668	12,264	11,674	9,946	9,448	121,017	99,779	2-3	3
50	Durable goods, total	28,284	28,141	34,689	33,429	35,723	34,447	33,750	37,048	33,616	37,935	34,313	31,037	29,340	371,375	320,578	0.8-1.0	0.9
	Middle Atlantic	5,936	5,892	7,165	6,601	7,191	6,961	6,769	7,538	6,989	8,083	7,423	6,516	6,094	76,548	67,015	4-5	4
	East North Central	4,818	4,975	6,057	5,863	6,467	6,023	5,801	6,440	5,833	6,439	5,726	5,674	5,177	64,444	56,975	3-4	4
	West North Central	2,157	2,208	2,718	2,746	3,009	2,778	2,873	3,209	2,900	3,171	2,781	2,652	2,379	30,551	26,155	5-6	5
	South Atlantic	3,515	3,211	4,246	4,111	4,269	4,172	4,074	4,173	3,796	4,374	4,045	3,608	3,513	43,984	38,185	4-5	4
	West South Central	3,020	3,067	3,649	3,637	3,863	3,900	3,702	3,970	3,662	4,174	3,810	3,160	3,144	40,455	34,344	4-4	4
	Mountain	1,076	1,043	1,408	1,309	1,355	1,358	1,322	1,356	1,280	1,384	1,216	1,172	1,207	14,108	13,346	6-7	7
	Pacific	5,259	5,268	6,330	6,173	6,433	6,265	6,388	7,143	6,069	6,993	6,445	5,524	5,250	68,766	55,879	2-3	3
51	Nondurable goods, total	35,455	33,580	39,630	37,339	41,091	39,914	39,787	41,519	39,597	43,885	44,218	36,662	35,187	436,017	369,002	1.0-1.2	1.0
	New England	2,166	2,066	2,335	2,200	2,377	2,343	2,225	2,453	2,252	2,542	2,569	2,316	2,349	25,526	22,359	5-7	6
	Middle Atlantic	8,577	7,893	9,527	8,616	9,226	9,327	9,487	10,247	10,147	10,267	10,887	8,788	8,435	104,201	86,567	3-3	3
	East North Central	5,755	5,479	6,256	6,042	6,888	6,638	6,380	6,539	5,902	7,113	6,949	6,083	5,704	69,942	62,777	3-4	3
	West North Central	4,538	4,381	5,115	4,760	5,606	5,227	5,512	5,301	5,021	5,935	5,652	4,820	4,515	57,048	48,307	3-4	3
	South Atlantic	3,508	3,409	4,084	3,818	4,132	[r]3,842	3,646	3,894	3,762	4,017	3,957	3,498	3,466	42,070	35,489	3-5	3
	East South Central	1,685	1,549	1,889	1,925	1,959	1,820	1,817	1,844	1,664	2,100	2,116	1,706	1,650	20,369	18,120	3-4	4
	West South Central	3,683	3,581	4,136	4,036	4,580	4,414	4,546	4,785	4,771	5,173	5,392	3,725	3,536	49,096	37,904	5-5	5
	Pacific	4,281	4,013	4,790	4,591	4,893	4,812	4,790	4,982	4,599	5,270	5,229	4,422	4,199	52,251	43,900	4-5	4

Note: Detail may not add to totals due to rounding and minor revisions.

[p]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures. [r]Revised.

[1]See map on page 7.

[2]The range of sampling error of the estimate is based on data for August, September, and October 1977.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: November 1979

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in-- Sales: Nov. 1979 from Oct. 1979	Sales: Nov. 1979 from Nov. 1978	Sales: 11 months 1979 from 11 months 1978	Inventories: Nov. 1979 from Oct. 1979	Inventories: Nov. 1979 from Nov. 1978	Sampling errors of the ratio corresponding to the percent change in columns[2]-- A	D
		A	B	C[1]	D	E		
	Merchant wholesalers, total	-4	+16	+17	+1	+12	0.4	0.2
	New England	-3	+10	+16	-2	+7	2.0	1.9
	Middle Atlantic	0	+20	+18	-2	+12	1.1	0.6
	East North Central	-6	+8	+12	0	+9	1.2	0.8
	West North Central	-7	+13	+18	0	+16	1.3	1.1
	South Atlantic	-5	+13	+17	0	+11	1.6	1.0
	East South Central	-7	+14	+11	+3	+6	1.7	1.4
	West South Central	-2	+34	+24	+2	+14	1.4	0.8
	Mountain	-6	+8	+10	-1	+6	2.4	1.3
	Pacific	-5	+17	+21	+1	+10	1.2	0.5
50	Durable goods, total	-10	+11	+16	-1	+10	0.6	0.3
	New England	-10	+8	+18	-2	+1	2.4	1.3
	Middle Atlantic	-8	+14	+14	-4	+11	1.7	1.0
	East North Central	-11	+1	+13	-1	+8	1.9	1.0
	West North Central	-12	+5	+17	-3	+11	3.3	1.7
	South Atlantic	-8	+12	+15	-1	+11	1.9	1.2
	East South Central	-17	+2	+9	-5	+2	3.9	2.5
	West South Central	-9	+21	+18	-1	+12	2.1	1.2
	Mountain	-12	+4	+6	-3	+2	2.9	1.7
	Pacific	-8	+17	+23	-1	+7	1.9	0.7
51	Nondurable goods, total	+1	+21	+18	+4	+15	0.6	0.4
	New England	+1	+11	+14	-3	+14	1.9	2.7
	Middle Atlantic	+6	+24	+20	+2	+13	1.9	0.9
	East North Central	-2	+14	+11	+3	+11	1.4	1.1
	West North Central	-5	+17	+18	+4	+23	1.6	1.4
	South Atlantic	-2	+13	+19	+1	+11	2.4	1.8
	East South Central	+1	+24	+12	+15	+13	1.7	2.4
	West South Central	+4	+45	+30	+6	+17	2.2	1.3
	Mountain	0	+12	+14	+4	+14	3.2	1.2
	Pacific	-1	+18	+19	+3	+15	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	-10	-3	+7	0	+7	2	1
	New England	-7	+31	+25	+1	+45	7	4
	Middle Atlantic	-11	-7	-1	-8	+7	4	2
	East North Central	-9	-13	+10	-2	+2	7	1
	West North Central	-13	-12	+10	-4	-6	5	2
	South Atlantic	0	+5	+9	+3	+1	4	2
	East South Central	-16	+6	+8	-5	+9	4	3
	West South Central	-8	-3	+6	+1	+15	5	2
	Mountain	+1	-6	(S)	-4	-4	7	3
	Pacific	-16	-4	+10	+3	+4	3	2
502	Furniture and home furnishings	-7	+6	+9	-2	+6	2	1
	Middle Atlantic	-14	-9	+6	-2	-4	4	2
	East North Central	-2	+1	+16	-3	+4	7	2
	West North Central	-13	(S)	(S)	-8	+10	5	4
	West South Central	-3	+17	+12	0	+14	5	7
	Pacific	-4	+37	+20	+1	+29	5	3
503	Lumber and other construction materials	-16	+6	+16	+1	+14	2	1
	New England	-10	+9	+14	+7	+18	4	5
	Middle Atlantic	-19	-3	+8	+1	+8	4	2
	East North Central	-15	+5	+9	-2	0	3	2
	West North Central	-17	+11	+27	+1	+27	7	7
	South Atlantic	-9	+7	+14	0	+15	4	2
	East South Central	-16	(S)	-1	-2	+13	4	3
	West South Central	-7	+34	+15	+4	+19	6	5
	Pacific	-22	+4	+26	-3	+17	5	1
5051 pt.	Ferrous metals service centers	-9	+14	+19	-2	+16	2	1
	New England	-5	+42	+18	-7	+24	6	2
	Middle Atlantic	-5	+24	+23	-3	+24	5	2
	East North Central	-11	-3	+17	-4	+12	5	2
	West North Central	-17	+22	+22	-3	+13	5	2
	South Atlantic	-15	+3	+6	-3	+6	3	2
	East South Central	-10	+10	+17	-5	+22	4	4
	West South Central	-6	+14	+14	0	+12	4	2
	Mountain	-12	(S)	(S)	-7	-5	2	2
	Pacific	-8	+14	+35	-1	+15	2	3
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-14	+8	+18	+3	+13	2	1
	New England	-4	+19	+27	+5	+9	3	2
	Middle Atlantic	-13	+12	+15	+4	+6	5	2
	East North Central	-10	+21	+25	+1	+27	3	2
	West North Central	-17	-5	+13	+7	+16	5	3
	South Atlantic	-13	+1	+12	+1	+1	3	2
	East South Central	-33	(S)	+12	-2	0	3	5
	West South Central	-21	+24	+27	0	+33	4	2
	Mountain	-14	+9	+9	+5	+3	4	2
	Pacific	-9	+11	+20	0	+4	4	2

See footnotes at end of table.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: November 1979—Continued

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in-- Sales: Nov. 1979 from Oct. 1979	Sales: Nov. 1979 from Nov. 1978	Sales: 11 months 1979 from 11 months 1978	Inventories: Nov. 1979 from Oct. 1979	Inventories: Nov. 1979 from Nov. 1978	Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		A	B	C[1]	D	E	A	D
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-6	+20	+15	-1	+8	3	1
	Middle Atlantic	-1	+16	+13	-1	+2	3	2
	East North Central	-13	+29	+26	-2	+21	4	1
	West North Central	+1	+16	+1	-4	+8	4	4
	South Atlantic	-6	+20	+13	-6	+1	6	4
	West South Central	-3	+59	+36	-3	+18	4	4
	Mountain	-13	+3	+13	-7	+14	6	3
	Pacific	-9	+24	+14	+1	+13	3	2
5072	Hardware	-11	+10	+12	0	+23	1	1
	New England	-13	-3	+14	+3	+6	6	3
	Middle Atlantic	-6	+23	+14	0	+23	6	2
	East North Central	-12	+11	+12	+5	+39	4	2
	West North Central	-7	+9	+16	-6	+17	3	3
	South Atlantic	-14	+6	+14	-2	+27	4	2
	East South Central	-21	+23	+3	-5	+18	4	1
	Pacific	-11	+15	+20	-2	+20	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	-12	+13	+12	+1	+6	2	1
	Middle Atlantic	-12	+24	+21	+1	0	6	3
	East North Central	-15	-17	-5	-3	(S)	3	3
	South Atlantic	-12	+12	+19	-	+9	3	2
	Mountain	-3	+14	-9	+2	+65	7	4
	Pacific	-8	+36	+25	+2	+27	5	4
5084,5	Industrial machinery, equipment, and supplies	-5	+12	+17	-1	+12	2	1
	Middle Atlantic	-11	+17	+15	0	+17	7	2
	East North Central	-3	+5	+17	+2	+24	3	2
	West South Central	-6	+14	+20	-2	+5	4	3
	Pacific	-6	+15	+23	-2	+5	5	2
512	Drugs, drug proprietaries, and druggists' sundries	-5	+9	+10	-4	+9	1	1
	New England	-2	+19	+16	-5	+41	5	3
	Middle Atlantic	-7	+7	+6	-2	+18	2	2
	East North Central	-9	+14	+13	-6	+11	6	3
	West North Central	-3	+17	+12	-7	+4	2	2
	South Atlantic	-1	+4	+7	-3	-2	6	5
	East South Central	-2	+3	+5	-9	+7	6	5
	West South Central	-3	+1	+7	+6	+3	3	2
	Mountain	-5	+12	+18	-5	+15	3	2
	Pacific	-9	+12	+18	-5	+2	3	3
5141	Groceries, general-line	-1	+10	+13	+1	+10	1	1
	New England	+2	+14	+12	+4	+25	2	1
	Middle Atlantic	+2	+7	+12	+2	+11	1	2
	East North Central	-3	+15	+13	+2	+8	3	1
	West North Central	-3	+8	+8	-1	+6	1	1
	South Atlantic	+2	+12	+15	0	+4	2	1
	West South Central	-1	+11	+15	-2	+15	2	1
	Mountain	+1	+10	+15	0	+5	2	2
	Pacific	-5	+2	+12	+4	+11	1	1
5142,3,6,9	Specialty-line groceries	+1	+13	+11	+2	+16	1	1
	Middle Atlantic	+9	+28	+10	+4	-2	4	2
	East North Central	-5	-6	+5	-2	+25	3	2
	West North Central	-3	+17	+14	0	+45	3	1
	South Atlantic	0	+15	+16	+1	+8	5	6
	East South Central	+2	+5	+5	0	+10	2	2
5148	Fresh fruits and vegetables	0	+2	+7	-7	0	2	4
	Middle Atantic	-6	-4	+3	-9	(S)	7	5
	East North Central	-1	+4	+1	-4	+5	6	6
	West North Central	-4	0	+7	-8	+4	6	3
	West South Central	+2	+15	+11	+3	+14	5	3
	Pacific	+4	+6	+8	-7	-1	4	4
5194	Tobacco and tobacco products	0	+9	+7	+2	+6	1	1
	New England	-3	+19	-5	+7	+20	5	3
	Middle Atlantic	-6	-3	+4	+2	+12	4	3
	East North Central	-5	+7	+7	0	-1	4	3
	West North Central	+5	+52	+13	+3	+12	4	2
	South Atlantic	(S)	(S)	(S)	+9	(S)	6	6
	East South Central	+8	+16	-1	+3	-1	7	4
	West South Central	+8	+34	+18	+2	+9	7	6
	Mountain	-4	+53	+16	-20	-4	6	2
	Pacific	-2	+7	+17	-1	+31	2	5

Note: Data at the United States level are generally more reliable than data by geographic division. In those kinds of business where the geographic division trends are subject to a high sampling error, it may be desirable to use the United States total trends for the kinds of business rather than the geogrpahic division trends.

(S) Does not meet publication standards because of extreme variability or high nonresponse rate.

[1]See map on page 7.

[2]The sampling errors (in percent) shown in columns A and D are based on medians or measurements on data for August, September, and October 1977. For SIC's 5051 pt., and 5063 the medians of measurements in columns A and D are based on data for June, July, and August 1978.

APPENDIX A. Reliability of Data

There are two types of errors possible in an estimate based on a sample survey—sampling and nonsampling. Sampling errors occur because observations are made only on a sample, not on the entire population. Nonsampling errors can be attributed to many sources in the collection and processing of data. The accuracy of a survey result is determined by the joint effects of sampling and nonsampling errors.

Measures of sampling variability—The particular sample used in this survey is one of a large number of all possible samples of the same size that could have been selected using the same design. Estimates derived from the different samples would differ from each other. The average of these estimates would be close to the estimate derived from a complete enumeration of the population (assuming that a complete enumeration has the same nonsampling errors as the sample survey). The average of the estimates differs from the estimate from a complete census because of the composite estimation technique. Disregarding this difference, the sampling error or standard error of the estimate is a measure of the variability among the estimates from all possible samples of the same size and design and, thus, is a measure of the precision with which an estimate from a particular sample approximates the results of a complete enumeration. The coefficient of variation (expressed as a percent) is the standard error of the estimate times 100 percent, divided by the value being estimated. Note that any measures of sampling variability, such as the standard error or coefficient of variation, are estimates derived from the sample and are also subject to sampling variability.

Estimates of sampling variability (the coefficients of variation in percent) for sales and inventories at the kind-of-business detail provided in this publication are shown in table A-1. These coefficients of variation permit certain confidence statements about the sample estimates. As noted above, the particular sample used in this survey is one of a large number of all possible samples of about the same size that could have been selected using the same design. In about two out of three (67 percent) of these samples, the estimate would differ from a complete enumeration by less than the corresponding percent for that estimate shown in the sampling variability table. In about 19 out of 20 (95 percent) of these samples, the estimate would differ from the results of a complete enumeration by less than twice the percentages shown.

To illustrate the computations involved in the above confidence statements for monthly dollar volume estimates, assume that an estimate for a kind of business published in table 1 for a particular month is $5,000 million and that the median coefficient of variation for this statistic, is 0.9 percent or .009. Multiplying $5,000 million by .009 yields $45 million. Therefore, a 67 percent confidence interval is $4,955 million to $5,045 million (i.e. $5,000 million plus or minus $45 million). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately two out of three (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Similarly a 95 percent confidence interval is $4,910 million to $5,090 million (i.e., $5,000 million plus or minus $90 million).

As an example of the use of the coefficients of variation with ratios, assume that an estimated month-to-month percent change published in table 5 is -1.0 percent for a particular kind of business. This is equivalent to a month-to-month ratio of .990. Assume the median coefficient of variation for this ratio as shown in table A-1 is 0.5 percent (or .005). Multiplying .990 by .005 yields .005. Therefore, a 67 percent confidence interval is .985 to .995 (i.e., .990 plus or minus .005) and a 95 percent confidence interval is .980 to 1.000 (i.e., .990 plus or minus .010).

Nonsampling errors—As calculated for this report, the coefficient of variation measures certain nonsampling errors but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples of the same size and design, between the estimate and the true value being estimated. The accuracy of the tabulated data is determined by the joint effects of the sampling and nonsampling errors.

Nonsampling errors can be attributed to many sources: (1) inability to obtain information about all cases in the sample, (2) response errors, (3) definitional difficulties, (4) differences in the interpretation of questions, (5) mistakes in recording or coding the data obtained, and (6) other errors of collection, response, coverage, and estimation for missing data. These nonsampling errors also occur in complete censuses.

Although no direct measurement of the biases due to nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is due to imputing data for nonrespondents, for late reporters, and for data which fail edit. For all kinds of business combined, imputed data amount to about 15 percent of the sales estimates and 25 percent for inventories.

Table A-1. Estimated Sampling Variability of Sales and Inventories by Kind of Business for the United States

1972 SIC code	Kind of business	Sales						Inventories					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total	0.8-1.1	0.9	0.8-0.9	0.9	0.4-0.5	0.5	0.8-1.0	0.9	0.7-1.0	0.9	0.2-0.5	0.4
	Total (excluding farm-product raw materials)	0.9-1.2	1.1	0.9-1.0	1.0	0.4-0.6	0.5	0.9-1.0	1.0	0.8-1.0	0.9	0.2-0.5	0.3
50	Durable goods, total	1.1-1.3	1.2	0.9-1.0	1.0	0.6-0.6	0.6	1.1-1.2	1.2	1.0-1.2	1.1	0.3-0.7	0.5
501	Motor vehicles and automotive parts and supplies	2.3-3.3	3.1	1.9-2.8	2.2	1.4-1.9	1.7	2.5-3.3	2.9	2.6-3.1	3.0	0.6-1.3	1.0
5012	Automobiles and other motor vehicles	(*)	(*)	(*)	(*)	1.7-3.9	3.1	(*)	(*)	(*)	(*)	1.7-3.0	2.8
5013,4	Automotive parts and supplies, tires and tubes	2.9-3.7	3.1	2.9-3.2	3.1	1.5-2.0	1.6	4.0-4.5	4.3	3.9-4.4	4.0	0.4-1.4	0.7
5013	Automotive parts and supplies	3.3-4.0	3.9	3.1-3.8	3.7	1.9-2.2	2.0	4.7-5.3	5.2	4.7-5.2	5.0	0.5-1.5	0.9
502	Furniture and home furnishings	4.2-5.8	4.6	4.2-4.4	4.3	1.7-2.9	2.0	3.2-4.9	3.7	3.4-4.2	3.7	0.8-2.3	2.0
5021	Furniture--household and office	6.6-7.6	6.9	5.6-7.1	6.9	4.0-5.7	4.3	(*)	(*)	(*)	(*)	1.4-3.4	2.2
5021 pt.	Household furniture	(*)	(*)	(*)	(*)	5.0-5.8	5.1	(*)	(*)	(*)	(*)	1.4-4.3	2.0
5021 pt.	Office furniture	(*)	(*)	(*)	(*)	5.7-8.0	5.9	(*)	(*)	(*)	(*)	0.7-3.7	2.1
5023	Home furnishings	5.1-7.5	6.1	5.1-6.1	5.5	1.6-3.6	2.2	4.8-6.9	5.6	4.9-6.0	5.0	1.0-3.1	2.6
503	Lumber and other construction materials	2.8-4.4	3.1	2.9-3.9	3.1	1.6-2.5	1.9	4.5-6.5	4.9	4.8-5.8	4.9	0.7-1.8	0.9
5031	Lumber, plywood, and millwork	4.1-4.6	4.3	3.3-4.6	4.0	2.1-2.5	2.4	5.9-8.2	6.5	6.0-6.9	6.5	1.0-2.6	1.8
5039	Construction materials, n.e.c.	4.2-7.2	4.9	4.5-5.9	4.9	2.0-3.4	2.2	(*)	(*)	(*)	(*)	1.1-2.0	1.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(*)	(*)	(*)	(*)	2.2-2.4	2.3	(*)	(*)	(*)	(*)	1.0-2.5	1.4
505	Metals and minerals, except petroleum	4.4-6.0	4.7	4.0-5.1	4.0	1.5-3.0	2.8	3.2-3.8	3.7	3.7-4.1	4.0	0.8-1.4	1.3
5051 pt.	Ferrous metals service centers and offices	5.0-5.8	5.7	4.1-5.2	4.7	1.2-3.8	3.1	3.8-4.2	4.1	4.1-4.3	4.2	0.5-1.6	1.4
5051 pt.	Ferrous metals service centers	6.7-8.0	6.8	5.0-6.8	5.8	1.1-5.3	3.5	2.9-4.4	3.4	3.4-4.0	3.5	0.6-2.2	2.1
5051 pt.	Nonferrous metals service centers and offices	(*)	(*)	(*)	(*)	4.5-7.0	6.1	(*)	(*)	(*)	(*)	2.8-5.4	4.7
506	Electrical goods	1.9-2.6	2.3	1.6-2.1	1.7	1.3-1.6	1.4	2.5-2.9	2.6	2.2-2.8	2.4	0.5-1.0	0.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2.2-3.1	2.6	2.3-2.7	2.4	1.4-1.7	1.6	2.9-3.5	3.2	3.0-3.2	3.1	0.6-1.2	0.7
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3.4-4.0	3.8	3.0-3.2	3.1	1.6-2.8	2.5	2.9-4.2	3.2	2.7-3.8	3.0	0.7-1.6	0.9
5064	Electrical appliances, TV and radio sets	3.0-3.8	3.6	2.6-3.7	3.1	1.7-2.7	2.5	(*)	(*)	(*)	(*)	0.9-1.7	1.4
507	Hardware, plumbing, heating equipment, and supplies	2.7-3.0	2.9	2.4-2.6	2.5	1.1-1.9	1.5	2.4-2.8	2.6	2.4-2.9	2.7	0.3-1.4	0.6
5072	Hardware	3.6-4.2	3.8	2.6-3.1	3.0	1.3-2.4	1.9	2.0-4.1	2.7	2.2-3.5	2.8	0.4-2.1	0.8
5074	Plumbing and heating equipment and supplies (hydronics)	4.1-5.3	4.2	3.9-5.1	4.2	1.6-3.8	2.1	5.0-7.0	6.0	4.5-7.1	5.3	0.5-3.1	0.9
5075	Warm air heating and air conditioning equipment and supplies	(*)	(*)	(*)	(*)	2.0-4.4	2.7	(*)	(*)	(*)	(*)	1.1-4.3	1.4
508	Machinery, equipment, and supplies	2.3-2.7	2.6	1.8-2.5	2.1	1.2-1.5	1.4	2.0-2.6	2.3	1.7-2.1	1.9	0.4-1.8	1.1
5081	Commercial machines and equipment	(*)	(*)	(*)	(*)	2.9-4.3	4.1	(*)	(*)	(*)	(*)	1.6-8.5	1.9
5082	Construction and mining machinery and equipment	5.0-7.3	5.8	3.3-5.8	4.9	3.9-4.6	4.4	2.9-7.0	4.0	3.2-4.1	3.3	0.7-5.3	1.0
5083	Farm and garden machinery and equipment	(*)	(*)	(*)	(*)	4.1-6.6	6.0	(*)	(*)	(*)	(*)	1.1-2.9	1.2
5084,5	Industrial machinery, equipment, and supplies	3.1-3.4	3.2	2.8-3.0	2.9	1.1-2.3	1.6	2.4-3.0	2.9	2.4-3.0	2.7	0.5-1.6	0.6
5086	Professional equipment and supplies	3.7-7.5	4.3	4.0-5.5	5.2	1.8-3.3	2.0	(*)	(*)	(*)	(*)	0.6-5.2	0.7
5086 pt.	Surgical, medical, hospital, and supplies	(*)	(*)	(*)	(*)	1.7-3.8	2.5	(*)	(*)	(*)	(*)	0.7-5.4	1.0
5087	Service establishment equipment and supplies	(*)	(*)	(*)	(*)	1.8-11.0	2.9	(*)	(*)	(*)	(*)	1.0-3.4	1.3
5093	Scrap and waste materials	4.6-13.3	9.0	4.6-8.8	5.0	2.2-4.9	2.7	(*)	(*)	(*)	(*)	0.7-3.8	0.9
5093 pt.	Iron and steel scrap	(*)	(*)	(*)	(*)	2.6-3.5	3.1	(*)	(*)	(*)	(*)	0.8-1.4	1.0
5093 pt.	Waste materials	(*)	(*)	(*)	(*)	2.6-8.8	4.8	(*)	(*)	(*)	(*)	1.2-9.1	1.6
51	Nondurable goods, total	1.0-1.3	1.1	1.0-1.1	1.1	0.4-0.7	0.6	1.5-1.7	1.6	1.4-1.6	1.5	0.3-0.7	0.4
	Total (excluding farm-product raw materials)	1.0-1.6	1.2	1.3-1.4	1.4	0.5-0.8	0.6	1.7-2.0	1.9	1.6-1.8	1.7	0.3-0.7	0.4
511	Paper and paper products	2.6-4.0	3.7	2.4-4.1	3.1	1.0-1.4	1.3	2.5-3.4	2.7	2.4-3.2	2.8	0.4-1.5	0.6
5111,3	Printing, writing, industrial, and personal service paper	2.4-3.1	2.7	2.3-2.8	2.4	1.3-1.5	1.4	2.9-3.4	3.1	2.7-3.2	2.8	0.4-1.3	0.9
5112	Stationery supplies	(*)	(*)	(*)	(*)	2.4-3.4	2.5	3.2-6.1	5.8	3.6-5.1	4.4	0.9-4.8	1.4
512	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	5.6-6.3	5.7	5.6-5.7	5.7	0.6-2.2	0.7
5122	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	(*)	(*)	(*)	(*)	0.6-2.2	0.7
5122 pt.	General-line drugs	7.2-9.8	7.9	7.5-8.5	7.6	0.7-3.0	1.0	(*)	(*)	(*)	(*)	0.5-3.1	1.0
513	Apparel, piece goods, and notions	8.3-12.4	8.8	8.6-9.3	9.1	2.6-4.0	3.3	(*)	(*)	(*)	(*)	(*)	(*)
	Groceries and related products	1.7-2.2	2.0	1.6-2.0	1.9	0.4-1.2	0.5	1.5-2.5	1.8	1.8-2.1	1.9	0.4-1.3	0.6
5141	Groceries, general-line	1.9-2.7	2.1	1.7-2.7	2.0	0.4-1.5	0.7	1.8-2.7	2.3	1.7-2.0	1.8		0.8
5141 pt.	Voluntary groups	(*)	(*)	(*)	(*)	0.5-1.7	0.6	(*)	(*)	(*)	(*)	0.4-1.7	0.5
5141 pt.	Retailer cooperatives	(*)	(*)	(*)	(*)	0.6-1.6	1.1	(*)	(*)	(*)	(*)	0.4-2.4	0.7
5141 pt.	Other general-lines	(*)	(*)	(*)	(*)	0.9-3.1	1.8	(*)	(*)	(*)	(*)	0.5-1.3	0.7
5142,3,6,9	Specialty-line groceries	(*)	(*)	(*)	(*)	0.7-3.4	1.3	(*)	(*)	(*)	(*)	0.9-2.4	1.0
5144	Poultry and poultry products	3.4-5.5	4.4	4.0-4.4	4.2	0.6-2.2	1.5	(*)	(*)	(*)	(*)	2.1-4.1	2.3
5145	Confectionery	4.7-6.3	4.7	3.6-5.4	4.3	2.0-3.2	2.2	(*)	(*)	(*)	(*)	0.8-2.4	2.3
5147	Meats and meat products	4.5-4.8	4.7	4.6-4.6	4.6	1.4-2.9	1.7	(*)	(*)	(*)	(*)	1.7-3.9	2.2
5148	Fresh fruits and vegetables	4.7-5.4	4.9	3.9-4.1	4.0	1.9-4.2	2.7	(*)	(*)	(*)	(*)	2.9-4.4	3.9
515	Farm-product raw materials	1.8-2.2	2.0	1.6-2.0	1.7	1.1-1.7	1.3	(*)	(*)	(*)	(*)	1.1-2.8	2.4
5152	Cotton	(*)	(*)	(*)	(*)	1.8-4.9	2.8	(*)	(*)	(*)	(*)	1.3-2.9	2.4
5153	Grain	2.4-2.7	2.6	2.2-2.4	2.3	1.0-1.7	1.3	(*)	(*)	(*)	(*)	1.6-3.3	1.9
517	Petroleum and petroleum products	4.0-5.0	4.7	4.2-4.6	4.5	1.1-1.9	1.5	4.1-5.2	5.0	4.4-5.4	4.7	1.6-3.0	2.3
5171	Petroleum bulk stations and terminals	2.8-3.3	2.9	2.8-3.0	2.9	0.9-1.4	1.2	(*)	(*)	(*)	(*)	1.7-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages	3.4-3.9	3.7	3.1-3.7	3.2	0.8-1.8	1.7	3.9-4.2	4.1	4.0-4.3	4.2	1.0-2.0	1.3
5181	Beer and ale	2.2-4.4	3.1	2.8-3.2	2.9	1.0-2.5	2.0	3.6-5.5	3.8	3.6-4.1	3.8	1.7-2.7	2.1
5182	Wines and distilled alcoholic beverages	5.2-6.3	5.4	4.6-5.6	4.7	1.2-3.4	1.7	4.6-5.4	4.8	5.0-5.6	5.3	1.4-2.3	1.6
519	Miscellaneous nondurable goods	2.4-3.2	2.9	2.4-2.7	2.5	1.4-2.3	1.6	(*)	(*)	(*)	(*)	0.8-1.7	1.4
5191	Farm supplies	(*)	(*)	(*)	(*)	3.2-3.6	3.3	(*)	(*)	(*)	(*)	1.7-3.9	2.0
5194	Tobacco and tobacco products	4.0-5.2	4.1	3.4-4.5	4.2	1.3-2.4	1.7	(*)	(*)	(*)	(*)	0.8-4.3	1.0
5198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.8-3.8	3.0	(*)	(*)	(*)	(*)	1.5-3.1	2.9
5199 pt.	Books, magazines, newspapers	(*)	(*)	(*)	(*)	3.2-8.0	5.6	(*)	(*)	(*)	(*)	2.0-6.5	5.1

Note: Measures of sampling variability are based on data unadjusted for seasonal variations or trading-day differences. The range of sampling error of the monthly dollar estimates and the ratio of current month to previous month for sales and inventories is based on data for July, August, and September 1977.

*Measures of sampling variability are not shown since sales and/or inventory estimates for these kinds of business are not published.

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

Seasonal factors for adjusting data in this historical publication have been developed by the method described in the **X-11 Variant of the Census Method II Seasonal Adjustment Program**, U.S. Bureau of the Census Technical Paper No. 15, Revised 1967. Trading-day factors for adjusting sales were also derived from the X-11 program.

Adjustment of estimates is an approximation based on past experiences, and therefore, will be less precise to the extent that current competitive pressures, changes in economic condition, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of trading-day adjustment factors may be found in **Estimating Trading-Day Variation in Monthly Economic Time Series**, Bureau of the Census Technical Paper No. 1[illegible] 1965. Additional details concerning the adjustment factors may be obtained from the Ch[illegible] Business Division, Bureau of the Census, Washington, D.C. 20233.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.7	91.8	107.1	97.7	104.3	104.7	95.6	104.7	98.3	102.2	100.6	96.3
	Total (excluding farm-product raw materials)	91.6	91.6	106.6	97.8	105.1	105.8	95.8	106.1	100.3	102.3	99.3	95.0
50	Durable goods, total	89.6	89.0	105.7	99.0	106.5	107.3	96.4	107.7	101.9	104.1	98.6	91.5
501	Motor vehicles and automotive parts and supplies	93.3	89.8	107.6	107.7	108.4	107.5	98.6	106.9	96.1	98.3	93.3	90.5
502	Furniture and home furnishings	84.8	89.8	105.2	96.8	101.6	106.6	89.2	105.2	103.9	112.1	107.2	95.2
503	Lumber and other construction materials	80.6	80.2	100.9	94.6	109.8	112.2	102.4	117.4	106.2	109.9	100.0	84.0
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	78.7	88.7	104.5	101.5	109.3	97.0	96.1	105.2	105.4	106.0	108.0	95.5
505	Metals and minerals, except petroleum	98.2	91.4	108.2	98.6	107.6	104.4	91.2	108.6	103.1	100.0	97.1	90.3
506	Electrical goods	89.3	89.1	102.0	96.0	99.4	106.5	99.0	104.8	100.8	107.5	103.5	98.8
507	Hardware, plumbing, heating equipment, and supplies	89.2	87.4	99.9	97.9	106.7	108.0	100.7	109.2	102.4	107.2	100.6	88.3
508	Machinery, equipment, and supplies	88.1	88.6	107.9	99.9	107.7	108.8	95.4	104.6	103.3	103.5	96.5	92.3
509	Miscellaneous durable goods	86.2	89.8	106.2	96.2	100.2	110.7	88.4	109.5	101.9	108.1	103.7	96.0
51	Nondurable goods, total	96.4	93.8	108.5	97.1	103.5	102.3	94.9	102.1	96.1	100.2	101.8	100.1
	Total (excluding farm-product raw materials)	94.3	94.0	106.8	96.6	103.2	104.5	95.5	104.5	97.6	100.6	100.6	98.4
511	Paper and paper products	95.5	92.6	106.3	93.4	103.3	103.6	95.6	107.3	102.6	104.0	99.4	92
512	Drugs, drug proprietaries, and druggists' sundries	97.8	92.6	106.0	96.3	100.3	99.8	92.9	104.7	100.8	108.1	101.0	96
513	Apparel, piece goods, and notions	90.1	94.4	107.1	91.8	101.2	98.8	93.7	115.6	106.3	107.7	103.4	87.1
514	Groceries and related products	94.7	91.1	104.2	97.2	105.4	105.0	99.0	105.3	98.9	101.0	99.8	95.0
515	Farm-product raw materials[1]	103.1	94.7	112.6	98.0	103.9	96.9	93.0	92.4	91.5	100.8	108.3	99.9
516	Chemicals and allied products	90.2	89.2	106.3	98.0	107.1	108.3	96.1	108.0	97.8	105.0	98.8	93.3
517	Petroleum and petroleum products	99.7	102.3	107.7	96.2	95.9	100.0	96.5	100.2	93.1	100.9	100.3	104.8
518	Beer, wine, and distilled alcoholic beverages	77.8	81.4	102.2	90.7	106.8	113.9	97.6	107.8	97.8	100.6	106.9	113.5
519	Miscellaneous nondurable goods	96.0	100.5	116.6	102.4	107.4	105.2	88.2	95.5	95.4	96.8	95.6	96.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.8	101.2	101.7	100.7	99.4	99.3	98.6	98.1	98.7	100.1	100.9	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.0	100.3	100.6	100.7	100.2	99.4	99.6	99.9	99.7	99.1
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.5
501	Motor vehicles and automotive parts and supplies	101.3	103.0	101.6	100.6	102.0	100.5	99.2	97.0	97.4	98.1	99.0	99.9
502	Furniture and home furnishings	99.1	99.3	99.7	99.5	100.8	101.9	100.5	100.6	101.2	100.2	99.5	97.3
503	Lumber and other construction materials	98.4	99.1	103.6	102.7	103.6	101.7	101.4	99.8	99.2	96.7	96.2	97.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.6	99.8	100.7	102.4	106.5	105.3	100.9	101.5	100.9	93.9	89.9
505	Metals and minerals, except petroleum	99.4	98.2	100.2	100.8	100.2	100.2	102.8	102.8	99.9	96.7	98.9	99.7
506	Electrical goods	96.7	96.8	99.0	99.6	101.2	102.6	101.4	100.7	101.3	101.2	100.5	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.4	103.2	102.6	101.6	100.6	98.4	98.7	97.1	96.1
508	Machinery, equipment, and supplies	99.0	101.0	101.6	100.1	101.0	102.1	100.3	99.0	99.4	99.0	98.7	98.7
509	Miscellaneous durable goods	97.0	97.6	96.0	97.5	96.4	100.8	102.4	102.6	102.9	103.8	102.4	100.5
51	Nondurable goods, total	104.1	103.2	103.3	99.4	96.7	95.1	94.7	95.3	97.4	102.1	104.6	103.4
	Total (excluding farm-product raw materials)	100.0	100.0	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.6	100.5
511	Paper and paper products	97.8	98.3	99.1	101.1	100.4	102.6	100.0	100.2	100.7	100.0	99.6	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.1	99.8	100.6	97.9	100.6	99.0	100.0	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.0	100.2	101.9	101.5	99.8	99.0	98.6	99.3
514	Groceries and related products	98.7	100.2	102.1	100.5	99.2	98.7	98.5	98.0	99.9	102.0	100.9	101.0
515	Farm-product raw materials[1]	118.8	115.2	112.2	100.3	88.9	84.6	78.8	79.4	83.8	103.8	117.4	115.3
516	Chemicals and allied products	98.0	100.0	101.9	101.6	102.4	100.9	101.6	100.2	100.4	96.9	97.0	98.7
517	Petroleum and petroleum products	104.4	99.3	99.2	94.2	96.0	94.3	96.3	100.7	102.9	104.8	104.2	103
518	Beer, wine, and distilled alcoholic beverages	96.3	95.8	97.4	99.1	102.3	102.9	99.9	97.9	100.3	107.0	105.7	95.
519	Miscellaneous nondurable goods	103.6	104.6	105.0	102.1	97.2	93.2	95.1	96.0	97.4	99.7	101.9	104.

See footnotes at end of table.

Table B-2. Average Month-to-Month Percent Changes and Related Summary Measures for Sales and Inventories of Merchant Wholesalers

1972 SIC code	Kind of business	$\bar{O}$	$\bar{S}$	$\overline{CI}$	$\bar{I}$	$\bar{C}$	$\bar{I}/\bar{C}$	MCD	Average duration of run			
									CI	I	C	MCD
		Sales										
	Merchant wholesalers, total	4.74	3.10	1.31	.82	.96	.86	1	3.10	1.57	14.11	3.10
50	Durable goods, total	5.30	4.84	1.43	.89	1.08	.82	1	3.53	1.63	15.87	3.53
501	Motor vehicles and automotive parts and supplies	5.53	4.22	2.67	2.33	1.24	1.87	3	2.05	1.59	25.40	5.43
502	Furniture and home furnishings	6.00	7.29	2.06	1.68	1.07	1.57	2	2.27	1.55	9.07	3.00
503	Lumber and other construction materials	7.40	6.25	2.67	1.72	1.76	.98	1	2.76	1.51	14.11	2.76
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	9.79	9.32	4.02	3.74	1.20	3.12	4	1.81	1.67	7.06	3.44
505	Metals and minerals, except petroleum	6.79	3.78	3.10	2.38	1.63	1.46	2	2.19	1.41	9.07	3.71
506	Electrical goods	5.79	5.17	1.89	1.52	1.04	1.47	2	2.08	1.46	10.58	3.32
507	Hardware, plumbing, heating equipment, and supplies	5.42	4.86	1.78	1.33	1.09	1.22	2	1.98	1.41	12.70	3.94
508	Machinery, equipment, and supplies	6.10	5.41	1.87	1.51	.97	1.56	2	1.92	1.46	7.94	3.32
509	Miscellaneous durable goods	7.66	6.11	3.51	2.79	1.79	1.56	2	1.87	1.48	9.77	2.93
51	Nondurable goods, total	5.07	2.80	1.58	1.10	.95	1.16	2	2.59	1.43	9.07	3.60
511	Paper and paper products	5.41	3.16	1.99	1.44	1.10	1.30	2	1.98	1.48	7.94	3.60
512	Drugs, drug proprietaries, and druggists' sundries	5.97	3.89	1.90	1.64	.76	2.15	3	1.95	1.57	9.77	4.31
513	Apparel, piece goods, and notions	7.73	6.91	2.70	2.36	1.01	2.34	3	1.72	1.38	10.58	4.17
514	Groceries and related products	4.44	2.01	1.67	1.41	.82	1.72	2	1.92	1.51	12.70	3.15
515	Farm-product raw materials	9.27	5.04	4.87	4.29	1.59	2.70	4	1.90	1.53	6.68	3.54
516	Chemicals and allied products	6.21	4.53	2.47	1.93	1.46	1.32	2	2.19	1.49	8.47	3.32
517	Petroleum and petroleum products	7.38	4.71	4.81	4.47	1.35	3.30	4	1.67	1.55	9.07	2.70
518	Beer, wine, and distilled alcoholic beverages	10.94	8.71	1.86	1.64	.69	2.39	3	1.76	1.59	21.17	3.68
519	Miscellaneous nondurable goods	5.89	4.84	2.53	2.23	.96	2.32	3	1.92	1.63	8.47	3.47
		Inventories										
	Merchant wholesalers, total	1.10	.72	.94	.39	.83	.47	1	4.88	1.79	18.14	4.88
50	Durable goods, total	1.07	.57	.89	.35	.86	.41	1	7.94	1.46	31.75	7.94
501	Motor vehicles and automotive parts and supplies	2.20	1.22	1.69	1.13	1.21	.93	1	2.54	1.63	12.70	2.54
502	Furniture and home furnishings	2.13	1.28	1.60	1.19	1.00	1.19	2	2.40	1.57	21.17	5.25
503	Lumber and other construction materials	2.60	1.77	1.83	1.28	1.09	1.17	2	2.54	1.67	15.87	4.20
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	3.60	2.92	2.17	1.80	1.20	1.50	2	2.27	1.48	25.40	3.60
505	Metals and minerals, except petroleum	3.14	2.53	1.79	1.01	1.33	.76	1	3.26	1.72	8.47	3.26
506	Electrical goods	1.75	1.08	1.32	.90	.92	.98	1	2.49	1.31	42.33	2.49
507	Hardware, plumbing, heating equipment, and supplies	1.69	1.10	1.23	.87	.89	.98	1	2.70	1.53	18.14	2.70
508	Machinery, equipment, and supplies	1.36	.92	1.03	.66	.82	.82	1	2.65	1.65	31.75	2.65
509	Miscellaneous durable goods	2.29	1.47	1.85	1.28	1.18	1.08	2	1.95	1.53	25.40	4.34
51	Nondurable goods, total	2.49	2.19	1.44	.83	1.07	.78	1	3.74	1.74	7.06	3.74
511	Paper and paper products	1.82	.94	1.38	1.04	.75	.94	2	2.12	1.44	9.07	4.20
512	Drugs, drug proprietaries, and druggists' sundries	2.39	1.46	1.60	1.37	.67	2.04	3	1.81	1.51	31.75	3.38
513	Apparel, piece goods, and notions	2.28	1.43	1.86	1.43	1.05	1.35	2	2.40	1.74	9.07	3.15
514	Groceries and related products	1.87	1.29	1.43	.92	1.01	.91	1	2.54	1.38	11.55	2.54
515	Farm-product raw materials	8.88	8.22	4.86	3.99	2.03	1.96	3	2.49	1.90	8.47	3.91
516	Chemicals and allied products	3.14	1.58	1.36	1.89	1.39	1.36	2	2.35	1.49	12.70	3.71
517	Petroleum and petroleum products	6.09	3.19	5.01	4.34	2.00	2.17	3	1.87	1.59	15.87	3.68
518	Beer, wine, and distilled alcoholic beverages	4.28	3.68	1.76	1.46	.74	1.98	3	2.35	1.63	9.77	4.03
519	Miscellaneous nondurable goods	2.53	1.52	1.88	1.48	.84	1.75	2	2.19	1.59	7.06	3.15

Description of Measures Shown Above

The following are brief descriptions of the measures shown in this table. More complete explanations appear in "Electronic Computers and Business Indicators," Occasional Paper 57, National Bureau of Economic Research, Inc., New York, 1957.

$\bar{O}$ is the average month-to-month percentage change, without regard to sign, in the original series before seasonal or trading-day adjustment.

$\bar{S}$ is the average month-to-month percentage change, without regard to sign, in the seasonal component. It is a measure of the average monthly seasonal change in the unadjusted series.

$\overline{CI}$ is the average month-to-month percentage change, without regard to sign, in the seasonally adjusted series.

$\bar{I}$ is the average month-to-month percentage change without regard to sign, for the irregular component. The irregular component is obtained by dividing the seasonally adjusted series by the cyclical component.

$\bar{C}$ is the average month-to-month percentage change, without regard to sign, for the cyclical component, which is a smooth, flexible moving average.

$\bar{I}/\bar{C}$ is a measure of the relative smoothness (small values) or irregularity (large values) of the seasonally adjusted series.

MCD (months for cyclical dominance) gives an estimate of the appropriate time span over which to observe cyclical movements in a monthly series. In deriving MCD, the average (without regard to sign) percentage changes in the irregular and cyclical components are computed for 1-month spans (Jan.-Feb., Feb.-Mar., etc.) 2-months spans (Jan.-Mar., Feb.-Apr., etc.), and so on. MCD is the shortest span for which the average change (without regard to sign) in the cyclical component is larger than the average change (without regard to sign) in the irregular component; that is, it indicates the point at which fluctuations begin to be more attributable to cyclical than to irregular movements. MCD is small for smooth series and large for erratic series.

Average duration of run (ADR) is a measure of smoothness, and is equal to the average number of consecutive monthly changes in the same direction in any series of observations. When there is no change between 2 months, a change in the same direction as the preceding change is assumed. The ADR is shown for the seasonally adjusted series CI, irregular component I, cyclical component C, and the MCD moving average. The MCD moving average is an unweighted moving average (with the number of terms equal to MCD) of the seasonally adjusted series.

A comparison of these measures with the expected ADR of a random series gives an indication of whether the changes approximate those of a random series. (The expected value of ADR for a random series is 1.5 and it falls between 1.36 and 1.75 about 95 percent of the time. For a moving average of a random series the expected value is 2.0). For example, the ADR of CI is 2.08 for electrical goods sales. This indicates that 1-month changes in the seasonally adjusted series, on the average, reverse sign slightly less often than a random series. In the next two columns, 1.46 for I and 10.58 for C indicate the separation of the seasonally adjusted series into an essentially random component and the cyclical (nonrandom) component. Finally, 3.32 for MCD indicates that a 2-month moving average of the seasonally adjusted series (2 months being the MCD span) reverses direction on the average about every 3 months. The increase in the average duration of run from 2.08 for CI to 3.32 for the MCD moving average indicates that for this series the use of MCD spans reduces the effect of the irregular component upon the seasonally adjusted series.

These averages are based on a seasonally adjusted series which is adjusted historically; that is, the months used to compute the measures were the same months used to estimate the seasonal factors. Current data, however, are adjusted by use of factors projected 1 year ahead, and are thus subject to additional error. Therefore, current data are probably somewhat more irregular and subject to larger MCD than shown above.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979—Continued

1972 SIC code	Kind of business	1979											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	95.9	91.8	104.7	100.0	105.3	101.5	98.4	104.2	95.8	104.5	100.4	96.2
	Total (excluding farm-product raw materials)	94.0	91.6	103.9	99.8	106.1	102.9	98.6	105.7	97.6	104.9	99.2	94.5
50	Durable goods, total	91.9	89.1	103.2	101.1	107.3	104.3	99.4	107.0	99.3	106.8	98.4	91.2
501	Motor vehicles and automotive parts and supplies	94.0	89.9	106.2	108.4	110.5	104.7	102.9	104.4	94.7	99.1	93.7	89.3
502	Furniture and home furnishings	87.1	89.8	101.8	98.4	102.6	104.0	91.2	105.5	101.7	115.1	106.5	94.2
503	Lumber and other construction materials	83.0	80.2	97.3	98.0	110.4	107.7	107.0	117.2	102.4	113.5	100.3	83.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	84.3	88.7	102.1	101.4	107.8	98.7	95.0	103.6	103.6	113.3	102.3	97.8
505	Metals and minerals, except petroleum	100.7	91.4	102.7	101.4	107.6	101.3	95.4	108.3	101.3	102.6	96.1	89.0
506	Electrical goods	92.0	89.1	99.9	99.3	98.8	103.9	100.6	104.5	98.2	110.6	102.9	100.1
507	Hardware, plumbing, heating equipment, and supplies	91.0	87.4	97.8	100.1	108.1	104.5	103.4	108.6	100.5	109.2	100.3	88.6
508	Machinery, equipment, and supplies	90.9	88.7	106.1	102.1	108.9	105.2	97.1	104.4	100.1	106.7	96.3	92.9
509	Miscellaneous durable goods	86.8	89.8	105.0	99.4	101.6	105.4	92.6	109.0	98.1	109.1	106.2	95.5
51	Nondurable goods, total	93.8	93.7	106.2	99.2	104.4	99.5	97.2	101.8	93.9	102.7	101.5	99.8
	Total (excluding farm-product raw materials)	96.8	94.0	104.0	99.0	104.1	101.2	98.0	104.7	94.9	103.2	100.7	98.0
511	Paper and paper products	100.0	92.7	103.2	94.8	103.3	102.4	97.4	107.1	99.3	108.7	97.7	92.2
512	Drugs, drug proprietaries, and druggists' sundries	99.7	92.6	104.0	98.9	100.6	96.9	96.6	103.9	97.6	110.1	101.8	96.1
513	Apparel, piece goods, and notions	93.9	94.4	103.7	92.4	101.8	97.8	95.7	115.5	102.9	112.3	102.1	85.9
514	Groceries and related products	97.5	91.0	103.1	98.3	106.3	103.0	100.0	105.0	96.2	104.0	99.5	95.1
515	Farm-product raw materials[1]	106.7	94.5	111.9	100.2	102.7	97.1	94.1	91.8	87.9	104.3	108.3	100.5
516	Chemicals and allied products	92.5	89.2	101.9	100.8	107.7	105.0	100.2	108.2	94.8	107.6	98.9	91.7
517	Petroleum and petroleum products	99.2	102.1	106.6	99.2	95.9	96.9	100.0	100.7	90.7	100.1	103.6	103.5
518	Beer, wine, and distilled alcoholic beverages	81.1	81.5	98.0	93.8	107.9	109.4	101.0	108.2	94.0	104.8	106.4	112.3
519	Miscellaneous nondurable goods	97.5	100.5	114.0	106.1	108.2	101.4	90.4	96.3	92.4	98.3	96.6	96.6
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.7	101.2	101.7	100.8	99.5	99.3	98.6	98.1	98.7	100.1	100.8	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.1	100.4	100.6	100.7	100.2	99.4	99.6	99.9	99.6	99.0
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.4
501	Motor vehicles and automotive parts and supplies	101.3	103.1	101.6	100.6	102.0	100.5	99.3	97.0	97.4	98.2	99.0	99.8
502	Furniture and home furnishings	99.2	99.3	99.7	99.5	100.9	102.0	100.4	100.6	101.2	100.2	99.5	97.2
503	Lumber and other construction materials	98.5	99.1	103.7	102.7	103.4	101.5	101.3	99.8	99.2	96.8	96.2	97.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.7	99.8	100.7	102.3	106.4	105.3	100.9	101.6	100.9	93.8	90.0
505	Metals and minerals, except petroleum	99.3	98.3	100.2	100.8	100.2	100.2	102.8	102.9	100.0	96.6	98.8	99.6
506	Electrical goods	96.7	96.7	99.0	99.7	101.3	102.7	101.4	100.7	101.4	101.1	100.4	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.6	103.3	102.6	101.6	100.6	98.4	98.7	97.0	96.0
508	Machinery, equipment, and supplies	99.0	101.0	101.5	100.1	101.0	102.1	100.3	99.1	99.4	98.9	98.6	98.7
509	Miscellaneous durable goods	97.1	97.5	96.0	97.4	96.4	100.9	102.4	102.6	103.0	103.8	102.4	100.5
51	Nondurable goods, total	103.9	103.2	103.4	99.5	96.9	95.3	94.7	95.3	97.4	102.0	104.5	103.4
	Total (excluding farm-product raw materials)	100.0	99.9	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.5	100.5
511	Paper and paper products	97.7	98.3	99.1	101.1	100.5	102.7	99.9	100.1	100.7	100.0	99.5	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.0	99.8	100.5	97.8	100.6	99.0	100.1	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.1	100.2	101.8	101.6	99.8	99.1	98.5	99.2
514	Groceries and related products	98.7	100.2	102.1	100.5	99.3	98.7	98.5	98.0	99.9	102.0	100.8	101.0
515	Farm-product raw materials[1]	118.5	115.2	112.3	100.8	89.6	85.4	78.5	79.2	83.5	103.3	117.1	115.1
516	Chemicals and allied products	98.0	100.0	102.0	101.6	102.4	101.0	101.6	100.2	100.5	96.9	96.8	98.6
517	Petroleum and petroleum products	104.4	99.4	99.4	94.2	95.9	94.2	96.2	100.9	102.9	104.7	104.2	103.2
518	Beer, wine, and distilled alcoholic beverages	96.3	95.7	97.4	99.1	102.3	102.8	99.9	97.9	100.3	106.9	105.7	95.3
519	Miscellaneous nondurable goods	103.7	104.6	105.1	102.1	97.2	93.1	95.1	95.9	97.3	99.7	101.8	104.0

Note: The adjustment factors shown above for sales are a combination of the seasonal and trading-day factors. These are separately available, however, upon request. Adjustment factors are included in this table for some kinds of business for which adjusted data are not published separately.

Adjusted sales and inventory data shown in table 4 are obtained by dividing the unadjusted data shown in tables 1 and 2 by the adjustment factors shown above for the corresponding kinds of business. Adjusted data for the summary trade totals are obtained by summarizing the adjusted data for the individual kinds of business. Seasonal factors shown for the summary trade totals provide an approximation to these totals but may show small differences from the published data. The seasonally adjusted data for 1978 may vary slightly from the method shown above because of insignificant rounding differences.

[1]There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

APPENDIX C. Explanatory Material

I. SCOPE OF THE SURVEY

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the Standard Industrial Classification (SIC) Manual[1] and as covered in the 1972 census, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm or professional business users; or to other wholesalers; or acting as agents or brokers in buying merchandise for or selling merchandise to such persons or companies.

The principal types of establishments included are: (1) merchant wholesalers who take title to the goods they sell, such as wholesale merchants or jobbers, industrial distributors, voluntary group wholesalers, exporters, importers, cash-and-carry wholesalers, drop shippers, major distributors, retailer cooperative warehouses, terminal elevators, and cooperative buying associations; (2) sales branches and sales offices (but not retail stores) maintained by domestic manufacturing or mining enterprises apart from their plants or mines for the purpose of marketing their products; (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), which constitute the major portion of the broad field of wholesale trade, and excludes the other types of wholesale trade. All kinds of business in which merchant wholesalers operate are represented in this survey.

Kind-of-business classifications are not interchangeable with commodity classifications. Most businesses sell several kinds of commodities. The kind-of-business code assigned generally reflects either the individual commodity or the commodity group which is the primary source of the establishments receipts, or some mixture of commodities which characterizes the establishment's business. Thus, the classification of establishments by kind of business generally does not make it possible to determine either the number of establishments handling a particular commodity or the sales of that commodity. For example, the "grocery" classification excludes establishments selling groceries if the sale of groceries is not the primary source of receipts; moreover, even though establishments are classified as "grocery wholesalers" some of their sales may be derived from the sale of nonfood products.

A description of each kind of business included in the accompanying statistical data is shown in appendix D.

II. SAMPLE DESIGN AND ESTIMATION PROCEDURES

Framework of old series–The first publication in this series based on probability sampling, was the January 1954 report. Effective with the July 1956 publication an entirely new sample was selected from the 1954 Census of Business. Other changes in the sample have been made since 1956, representing, for the most part, revisions to reflect the findings of successive censuses of wholesale trade.

Selection of sample for new series–The new sample[2] like the old is a probability sample, and the estimating procedures used are similar in many respects to the old sample.

The new sample originally was drawn from the Standard Statistical Establishment List (SSEL) as updated to December 31, 1974. The initial SSEL consisted of two lists. One list was composed of all Employer Identification (EI) numbers issued by the Internal Revenue Service (IRS) with reported payroll in at least one quarter of 1973 or 1974, with payroll in the 1972 census, or with sales/receipts greater than $100,000 in the 1972 census. The second list consisted of all establishments of known multiestablishment companies as of December 31, 1974. These lists contained information on sales/receipts, payroll, employment, name and address, kind-of-business classification, etc.

Before the 1974 SSEL was available, a study was made, using files from the 1972 Census of Wholesale Trade. This study determined the stratification of the sampling units based on 1972 sales, inventories, and kind of business, and also determined the optimal allocation of the sample necessary to meet specified variance objectives for sales and inventory estimates for different kind-of-business groups. The primary stratum boundary determined in the study was the certainty cutoff to be used for each kind of business. The cutoff was particularly important since it also determined the type of sampling unit.

The sampling units for the new sample consisted of both companies and EI's. To be eligible for the initial sampling, an EI had to be active, i.e., had payroll in 1974 and was on the Internal Revenue Service mailing list for Federal Insurance Contribution Act (FICA) taxpayers. If a known multiestablishment company had total merchant wholesale sales (on a 1972 basis) above the cutoff for its major kind of business, the company was selected for the sample with certainty. Single establishment companies, whether or not selected with certainty, were considered as EI sampling units.

All merchant wholesale companies below the certainty cutoff were treated on an EI basis; that is, the EI was the sampling unit. The EI's were then stratified according to their major kind of business and their estimated sales (on a 1972

[1] Executive Office of the President, Office of Management and Budget, **Standard Industrial Classification Manual,** 1972.

[2] For a complete exposition of the new sample, see C. T. Isaki et al., "Sample Redesign Aspects of the Census Bureau's Monthly Business Surveys" and K. M. Wolter et al., "Sample Selection and Estimation Aspects of the Census Bureau's Monthly Business Surveys," **Proceedings of the Business and Economic Statistics Section: American Statistical Association,** 1976.

basis). Within each stratum, a simple random sample of EI's was selected. The sampling rates for these EI's varied between 1 in 3 and 1 in 600.

For those EI's in the inital sample that did not have kind-of-business classifications and for all EI "births" after the initial selection, a two-phase selection procedure was used. EI "births," as used here, are new EI's recently assigned by SSA and currently on the IRS mailing list for FICA taxpayers. In the first phase, "births" were stratified by kind of business and size (expected employment or quarterly payroll). A relatively large sample was drawn and canvassed in order to obtain a more reliable measure of size (sales in two recent months) and a more detailed kind-of-business code, if needed.

Using this more reliable information, the cases were re-stratified and the final sample drawn with overall probabilities equivalent to those used in drawing the initial sample from the 1974 SSEL. Because of the lag in reporting "births" to the IRS and Social Security Administration (SSA) and the time needed to accomplish the two-phase birth-selection procedure, "births" are actually added to the sample about eight or nine months after they begin operation. The ongoing birth-selection procedure is carried out quarterly.

Since "births" are not represented in the sample, until they go through the selection procedure described above, an interium procedure is required to account for "births" during the period between the onset of activity and the time of birth selection. This consists of imputing for all cases which go out of business, but which are still on the IRS mailing list. This imputation procedure was also used in the old series. However, because of recent delays in obtaining "births," this procedure now accounts for a larger percentage of the estimates.

To be eligible for the sample canvass and tabulation in a given month, a merchant wholesale business must meet both of the following requirements:

1. It must be on the IRS mailing list for FICA taxpayers from the previous quarter.

2. It must have been selected from either the SSEL or the file of employer "births." For this purpose, a universe file of all businesses ever given a chance of selection is maintained. This file shows, among other things, which EI numbers actually have been selected.

In the case of businesses that were selected into the sample with certainty, the first requirement is changed. These certainty sampling units are not dropped from canvass and tabulation if they are no longer on the IRS mailing list. If there are successor businesses, they are added to the survey. This is a tighter form of control used for these larger businesses.

Use of the rotating sample and composite estimating procedures–Rotating samples or panels are used except for very large businesses which are selected with certainty. For sampling units in the rotating panels, two months of data are obtained at each enumeration. For example, February rotating panel cases report data for February (the current month) and January (the previous month). In the following month, a different rotating panel (the March panel) reports figures for March and February. Three sample panels are used. This permits the use of a composite estimating procedure which provides estimates more reliable than those which would be obtained from a completely fixed sample of about twice the size. In addition, this procedure reduces the reporting burden of selected businesses.

The first estimate issued each month, based on the full sample, is called the preliminary estimate. The preliminary composite estimate for the current month is a weighted average of two estimates: (1) the current month unbiased estimate (weight .35), and (2) a ratio estimate (weight .65) obtained by multiplying the preliminary composite estimate for the previous month by the current-to-previous-month ratio obtained from the current month reports. Preliminary inventory estimates have been modified, prior to publication, based on past relationships between preliminary and final estimates.

A final estimate is developed one month later using information available from the following month's enumeration. The final composite estimate is also a weighted average of two estimates: (1) the preliminary composite estimate for a given month (weight .7), and (2) the unbiased estimate (weight .3) for the same month as obtained from the next month's reporting panel.

The preliminary composite estimates provide a measure of the dollar volume level that is considerably more reliable than the unbiased estimates, and the final composite estimates are generally more reliable than the preliminary composite estimates. The indication of the month-to-month trend considered to be most reliable is the ratio of the current month's preliminary composite estimate divided by the previous month's final composite estimate. This is true because the numerator and denominator of this ratio are more highly correlated than would be the case if the numerator and denominator were two preliminary estimates or two final estimates. The trend of the preliminary/final ratio, therefore, has less variability than one based on two preliminary figures or two final figures.

Another advantage of the use of the rotating panel system is that the frequency of canvass of very large noncertainty cases can be increased with a consequent reduction, in an unbiased manner, of their statistical weight. This increases the reliability of the estimates, particularly the measure of month-to-month change.

III. PREVIOUSLY PUBLISHED DATA

Data developed from the new sample are not comparable with data previously published in this series. Sales and inventory estimates prior to September 1977 have been revised to reflect: (1) a new sample design; (2) benchmarking of sales to the results of the 1967 and 1972 censuses of wholesale trade; (3) conversion of classifications based on the 1967 SIC manual to classifications based on the 1972 SIC manual (4) addition

of farm assemblers and bulk petroleum establishments; and (5) revision and updating of seasonal adjustment factors.

The revised historical sales series were derived in a manner designed to minimize the changes to the month-to-month trends in the old series. The inventory series were revised by applying the stock-sales ratios from the old series to the revised sales series to obtain the preliminary revised inventory series. These preliminary series were then revised slightly so that August 1977 estimates would equal the new sample estimates.

Although the month-to-month movements in the old and new series show very little change, the level of the revised series show substantial change from the old series for some kinds of business. The change in levels depends on the difference between the old series for census years and the benchmark levels and on the difference between the new series level and the old series level for the link month, August 1977.

Additional details concerning the sample design, and revised estimates of merchant wholesale sales and inventories from January 1967 through August 1977, have been provided in a special supplementary publication **Monthly Wholesale, Sales and Inventories: January 1967-August 1977, Revised BW-13-77S.** This report may be obtained from Subscriber Services (Publications), Bureau of the Census, Washington, D.C. 20233 at $.90 per copy.

IV. UNPUBLISHED DATA

Additional data, such as dollar volume estimates for some kinds of business not separately shown in this report, are produced as a byproduct of the regularly published statistics. These additional data have not been included in this publication because the sampling variability associated with these data does not meet the Census Bureau's publication criteria. The Census Bureau, on written request will release these data for individual use, though not for publication.

V. DEFINITION OF TERMS

Sales—Sales include the following: merchandise sold for cash or credit at wholesale and retail by establishments primarily engaged in merchant wholesale trade; receipts from customers for rental or leasing of equipment, instruments, tools, etc.; receipts for delivery, installation, alteration, maintenance, repair, storage, and other services; and gasoline, liquor, tobacco and other excise taxes which are paid by the manufacturer and passed along to the wholesaler. Sales are net after deductions for refunds and allowances for merchandise returned by customers. Sales which are made on an agency basis for others are included as gross sales. Direct shipments on orders from wholesalers are also included in sales. Total sales do not include nonoperating income from such sources as investments, rental or sale of real estate, etc.

In the new series, sales exclude sales and excise taxes collected directly from customers and paid directly to a local, State, or Federal tax agency. Also excluded are receipts from customers for carrying or other credit charges. In the old series respondents were requested to include these taxes and credit charges in the reported sales. The impact of this change is considered minimal.

Inventories—Inventories represent stocks, at cost, of merchandise on hand for sale at the end of the month regardless of location, except for goods outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included.

Stock-sales ratios—The stock-sales ratios are percentages derived by dividing the dollar value of inventories, at cost, by the dollar value of sales. No adjustment is made in these ratios for the markup in sales which may vary from trade to trade.

The sales and inventory figures represent total sales and inventories of all establishments primarily engaged in merchant wholesale trade. Also included are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments.

APPENDIX D. Kind-of-Business Classifications

DURABLE GOODS
(SIC Major Group 50)

This major group includes establishments primarily engaged in the wholesale distribution of durable goods.

MOTOR VEHICLES AND AUTOMOTIVE PARTS AND SUPPLIES (SIC 501)

Automobiles and Other Motor Vehicles (SIC 5012)[1]—Establishments primarily engaged in the wholesale distribution of new and used passenger automobiles, trucks, and other motor vehicles. Automotive distributors primarily engaged in selling at retail to individual consumers for personal use, and also selling a limited amount of new and used passenger automobiles and trucks at wholesale to dealers, are classified in retail trade, industry 5511.

Automotive Parts and Supplies (SIC 5013)—Establishments primarily engaged in the wholesale distribution of automotive parts, supplies, accessories, tools and equipment.

Tires and Tubes (SIC 5014)[1]—Establishments primarily engaged in the wholesale distribution of rubber tires and tubes for passenger and commercial vehicles.

FURNITURE AND HOME FURNISHINGS (SIC 502)

Furniture (SIC 5021)—Establishments primarily engaged in the wholesale distribution of furniture, including bedsprings, mattresses, and other household furniture; office furniture; and furniture for public parks, buildings, etc.

SIC 5021 is subdivided into—

1. Household and lawn furniture.
2. Office and business furniture.

Home Furnishings (SIC 5023)—Establishments primarily engaged in the wholesale distribution of home furnishings and homewares, including antiques; china; glassware and earthenware; lamps; curtains and draperies; linens and towels; carpets, linoleum, and all other types of hard and soft surface floor coverings. Establishments primarily engaged in the wholesale distribution of electrical household goods are classified in industry 5064.

LUMBER AND OTHER CONSTRUCTION MATERIALS (SIC 503)

Lumber, Plywood, and Millwork (SIC 5031)—Establishments, with or without yards, primarily engaged in the wholesale distribution of rough, dressed, and finished lumber (but not timber); plywood; door and window frames (wood or metal); and other wood and metal millwork. Establishments selling lumber, plywood and millwork to the general public and known as "retail" in the trade are classified in industry 521.

Construction Materials, Not Elsewhere Classified (SIC 5039)—Establishments primarily engaged in the wholesale distribution of such building materials as brick, building stone, cement, granite, gravel, lime, marble, plaster, building glass, roofing materials, sand, and tile. Establishments selling construction materials to the general public and known as "retail" in the trade are classified in industry 521. Establishments primarily engaged in marketing heavy structural metal products are classified in industry 5051. Establishments primarily selling readymade concrete are classified in manufacturing.

SPORTING, RECREATIONAL, PHOTOGRAPHIC, AND HOBBY GOODS, TOYS, AND SUPPLIES (SIC 504)[1]

Establishments primarily engaged in the wholesale distribution of all types of amusement and sporting goods and accessories—billiard and pool supplies; cameras and photographic equipment; coin-operated game machines; games, toys; ammunition and fireworks; etc.

METALS AND MINERALS, EXCEPT PETROLEUM (SIC 505)

Ferrous Metals Service Centers and Offices (SIC 5051 pt.)—Establishments primarily engaged in marketing ferrous metal semifinished products such as nails, pig iron, steel and tin bars. Establishments in this industry may operate with warehouses (ferrous metals service centers) or without warehouses (ferrous metals sales offices).

Sales branches of domestic manufacturers are included in this category if the establishment is separate from the manufacturing plant and has warehouse space greater than 5,000 square feet.

[1] Data for this kind of business are not shown separately but are included in the group total.

Nonferrous Metals Service Centers and Offices and Other Minerals and Ores (SIC 5051 pt. and SIC 5052 pt.)[1]—Establishments primarily engaged in marketing nonferrous metal semifinished products such as aluminum bars and copper rods. Establishments in this industry may operate with warehouses (nonferrous metals service centers) or without warehouses (nonferrous metals sales offices). Also included are establishments primarily engaged in the wholesale distribution of copper, iron, lead, and other metallic ores except precious; and crude nonmetallic minerals (including concentrates) except crude petroleum. Establishments primarily engaged in the wholesale distribution of nonmetallic minerals used in construction, such as sand and gravel, are included in industry 5039.

Coal (SIC 5052 pt.)[1]—Establishments primarily engaged in the wholesale distribution of coal and coke. Included are establishments which have products shipped direct from mine to customer, and establishments operating yards and dock space and making deliveries therefrom at wholesale as well as other coal merchants.

ELECTRICAL GOODS (SIC 506)

Electrical Apparatus and Equipment, Wiring Supplies, and Construction Materials (SIC 5063)—Establishments primarily engaged in the wholesale distribution of electrical power equipment for the generation, transmission, or utilization of electric energy; and electrical construction materials for outside power transmission lines and for electrical systems. Construction contractors primarily engaged in installing electrical systems and equipment from their own stock are classified in industry 1731.

Electrical Appliances, TV and Radio Sets (SIC 5064)—Establishments primarily engaged in the wholesale distribution of radio and television sets and household electrical appliances.

Electronic Parts and Equipment (SIC 5065)[1]—Establishments primarily engaged in the wholesale distribution of electronic parts and equipment, such as industrial and radio and television receiving and transmitting electronic tubes; electronic intercommunication equipment; radio parts and accessories; and electronic sound equipment. Establishments primarily engaged in the wholesale distribution of radio and television receiving sets and phonographs are classified in industry 5064.

HARDWARE, PLUMBING, HEATING EQUIPMENT, AND SUPPLIES (SIC 507)

Hardware (SIC 5072)—Establishments primarily engaged in the wholesale distribution of hardware, such as builders; shelf or light hardware; handtools (except automotive and machinists' precision); handsaws and cutlery; brads, staples, and tacks; and bolts, nuts, rivets, and screws. Establishments primarily engaged in the wholesale distribution of nails, noninsulated wire, and screening are classified in industry 5051.

Plumbing and Heating Equipment and Supplies (Hydronics) (SIC 5074)—Establishments primarily engaged in the wholesale distribution of hydronic plumbing and heating equipment and supplies. Construction contractors primarily engaged in installing plumbing and heating equipment from their own stock are classified in industry 1711.

Warm Air Heating and Air-Conditioning Equipment and Supplies (SIC 5075)[1]—Establishments primarily engaged in the distribution of warm air heating and air-conditioning equipment and supplies. Construction contractors primarily engaged in installing warm air heating and air-conditioning equipment are classified in industry 1711.

Refrigeration Equipment and Supplies (SIC 5078)[1]—Establishments primarily engaged in the distribution of refrigeration equipment and supplies. Construction contractors primarily engaged in installing refrigeration equipment from their own stock are classified in industry 1711.

MACHINERY, EQUIPMENT, AND SUPPLIES (SIC 508)

Commercial Machines and Equipment (SIC 5081)[1]—Establishments primarily engaged in wholesaling commercial machines and equipment, such as office, store, and business machines and equipment; commercial food service equipment; and fountain and store fixtures.

Construction and Mining Machinery and Equipment (SIC 5082)—Establishments primarily engaged in marketing cranes, excavating machinery and equipment, power shovels, road construction and maintenance machinery, tractor-mounting equipment and other specialized machinery and equipment used in the construction, mining, and logging industries. Establishments engaged in marketing oil well machinery and equipment are classified in industry 5084.

Farm and Garden Machinery and Equipment (SIC 5083)[1]—Establishments primarily engaged in marketing agricultural machinery and equipment for use in the preparation and maintenance of the soil, the planting and harvesting of crops, and other operations and processes pertaining to work on the farm or the lawn or garden; and dairy and other livestock equipment.

Industrial Machinery and Equipment (SIC 5084)[1]—Establishments primarily engaged in marketing industrial machinery and equipment, such as metal working tools, food industries machinery, oil well and oil refining machinery, industrial

[1] Data for this kind of business are not shown separately but are included in the group total.

trucks and tractors (except over-the-road types), printing machinery, and machinery and equipment for other manufacturing industries.

Industrial Supplies (SIC 5085)[1]—Establishments primarily engaged in marketing industrial supplies, such as abrasives and materials, rope and cordage, and mechanical rubber goods; welding supplies; mechanical power transmission supplies, including bearings; industrial valves and fittings; metal containers; industrial leather; and reconditioned barrels and drums.

Professional Equipment and Supplies (SIC 5086)—Establishments primarily engaged in the wholesale distribution of mechanical devices and other equipment used by architects, dentists, engineers, physicians, surgeons, veterinarians, optometrists, osteopaths, and other professional groups.

Surgical, Medical, Hospital Supplies (SIC 5086 pt.)[1]—Establishments primarily engaged in selling surgical and medical instruments; doctors' apparatus and equipment; orthopedic appliances; artifical limbs; operating room and other hospital equipment, X-ray machines and accessories and other scientific instruments used by physicians and in hospitals.

Service Establishment Equipment and Supplies (SIC 5087)[1]—Establishments primarily engaged in the wholesale distribution of equipment and supplies for barber shops, beauty parlors power laundries, dry-cleaning plants, upholsterers, undertakers, and related personal service establishments.

Transportation Equipment and Supplies, Except Motor Vehicles (SIC 5088)[1]—Establishments primarily engaged in the wholesale distribution of transportation equipment and supplies. Establishments primarily engaged in the wholesale distribution of motor vehicles and motor vehicle parts are classified in group 501.

MISCELLANEOUS DURABLE GOODS (SIC 509)[1]

Scrap and Waste Materials (SIC 5093)—Establishments primarily engaged in assembling, breaking up, sorting and wholesale distribution of scrap and waste materials. This industry includes auto wreckers engaged in dismantling automobiles for scrap. However, those engaged in dismantling cars for the purpose of selling secondhand parts at retail are classified in industry 5931.

SIC 5093 is subdivided into—

1. *Iron and Steel scrap.*
2. *Waste and secondary materials dealers.*

[1] Data for this kind of business are not shown separately but are included in the group total.

Jewelry, Watches, Diamonds, and Other Precious Stones (SIC 5094)[1]—Establishments primarily engaged in the wholesale distribution of jewelry, precious stones and metals, costume jewelry, watches, clocks, silverware, and jewelers' findings.

Durable Goods, Not Elsewhere Classified (SIC 5099)[1]—Establishments primarily engaged in the wholesale distribution of durable goods, not elsewhere classified, such as musical instruments and forest products, except lumber.

NONDURABLE GOODS (SIC Major Group 51)

This major group includes establishments primarily engaged in the wholesale distribution of nondurable goods.

PAPER AND PAPER PRODUCTS (SIC 511)

Printing and Writing Paper (SIC 5111)[1]—Establishments primarily engaged in the wholesale distribution of writing paper, including envelope paper, fine paper, and ground wood, printing, and rotogravure paper.

Stationery Supplies (SIC 5112)[1]—Establishments primarily engaged in the wholesale distribution of stationery and office supplies, including envelopes, typewriter and mimeograph paper, file cards and folders, pens, social stationery, and greeting cards.

Industrial and Personal Service Paper (SIC 5113)[1]—Establishments primarily engaged in the wholesale distribution of wrapping and other coarse paper, paperboard, cellophane, and converted paper products, such as bags, boxes, dishes, napkins, and shipping supplies.

DRUGS, DRUG PROPRIETARIES, AND DRUGGISTS' SUNDRIES (SIC 512)

Drugs, Drug Proprietaries, and Druggists' Sundries (SIC 5122)—Establishments primarily engaged in the wholesale distribution of drugs, drug proprietaries, druggists' sundries, and toiletries. Establishments primarily engaged in the wholesale distribution of surgical, dental, and hospital equipment are classified in industry 5086.

SIC 5122 is subdivided into—

1. *General-line drugs*—These are distinguished from specialty-line drug and toiletries wholesalers on the basis of their commodity-line mix. Drug wholesalers were classified as general line if they reported a substantial portion of their sales in "pharmaceuticals, antibiotics, druggists' chemicals, biologicals, botanicals" and "proprietary products, toilet-

ries, druggists' sundries," and if annual sales volume was $1 million or more.

2. *Specialty-line pharmaceuticals, cosmetics, and toiletries.*

APPAREL, PIECE GOODS, AND NOTIONS (SIC 513)

Piece Goods (SIC 5133)[1]—Establishments primarily engaged in the wholesale distribution of woven piece goods or yard goods of natural or manmade fibers. "Converters" who buy goods in the grey, have them finished on contract, and sell at wholesale are included here. This industry does not include establishments primarily engaged in the wholesale distribution of home furnishings, which are classified in industry 5023.

Notions and Other Dry Goods (SIC 5134)[1]—Establishments primarily engaged in the wholesale distribution of notions (sewing and hair accessories, etc.), knit goods, and other dry goods, except piece goods.

Men's and Boys' Clothing and Furnishings (SIC 5136)[1]—Establishments primarily engaged in the wholesale distribution of men's and boys' apparel and furnishings, sportswear, hosiery, underwear, nightwear, and work clothing.

Women's Children's, and Infants' Clothing and Accessories (SIC 5137)[1]—Establishments primarily engaged in the wholesale distribution of women's, children's, and infants' clothing and accessories, including hosiery, lingerie, millinery and millinery supplies, and furs.

Footwear (SIC 5139)[1]—Establishments primarily engaged in the wholesale distribution of footwear of leather, rubber, and other materials.

GROCERIES AND RELATED PRODUCTS (SIC 514)

Groceries, General-Line (SIC 5141)—Establishments primarily engaged in the wholesale distribution of a general line of groceries. Establishments primarily engaged in roasting coffee and establishments primarily engaged in blending tea or grinding and packaging spices are classified in major group 20.

SIC 5141 is subdivided into—

1. *Voluntary group wholesalers.*
2. *Retailer cooperative wholesalers.*
3. *Other general-line wholesalers.*

Frozen Foods (SIC 5142)[1]—Establishments primarily engaged in the wholesale distribution of packaged quick-frozen vegetables, juices, meats, fish, poultry, pastries, and other "deep freeze" products. Establishments primarily engaged in the wholesale distribution of frozen dairy products are classified in industry 5143. Frozen poultry, fish, and meat which are not packaged are classified in industries 5144, 5146, and 5147, respectively.

Dairy Products (SIC 5143)[1]—Establishments primarily engaged in the wholesale distribution of dairy products, such as butter, cheese, ice cream and ices, and fluid milk and cream. This industry does not include establishments primarily engaged in pasteurizing and bottling milk, which are classified in group 202.

Poultry and Poultry Products (SIC 5144)—Establishments primarily engaged in the wholesale distribution of poultry and poultry products, except canned and packaged frozen products. This industry does not include establishments primarily engaged in the killing and dressing of poultry, which are classified in industry 2016. Establishments primarily engaged in the wholesale distribution of packaged frozen poultry are classified in industry 5142, and of canned poultry in industry 5149.

Confectionery (SIC 5145)—Establishments primarily engaged in the wholesale distribution of confectionery, such as candy, chewing gum, fountain fruits, salted or roasted nuts, popcorn, and fountain syrups; and potato, corn, and similar chips.

Fish and Seafoods (SIC 5146)[1]—Establishments primarily engaged in the wholesale distribution (not packaging) of fresh, cured, and frozen fish and seafoods, except canned (industry 5149) or packaged frozen (industry 5142). The preparation, packaging, and freezing of fresh fish and other seafood, and the shucking and packing of fresh oysters in nonsealed containers, are classified in industry 2092.

Meats and Meat Products (SIC 5147)—Establishments primarily engaged in the wholesale distribution of fresh, cured, and processed (but not canned) meats and lard. The wholesale distribution of frozen packaged meats is classified in industry 5142 and canned meats in industry 5149.

Fresh Fruits and Vegetables (SIC 5148)—Establishments primarily engaged in the wholesale distribution of fresh fruits and vegetables.

Groceries and Related Products, Not Elsewhere Classified (SIC 5149)[1]—Establishments primarily engaged in the wholesale distribution of groceries and related products, not elsewhere classified. Establishments primarily engaged in the wholesale distribution of soft drinks, and in bottling and distributing natural spring and mineral waters, are classified in this industry, but establishments primarily engaged in bottling soft drinks are classified in major group 20. This industry does not include farm-product raw materials (group 515), or beer, wine, and distilled alcholic beverages (group 518).

[1] Data for this kind of business are not shown separately but are included in the group total.

FARM-PRODUCT RAW MATERIALS (SIC 515)

Cotton (SIC 5152)[1]—Establishments primarily engaged in buying and/or marketing cotton and cotton linters.

Grain (SIC 5153)—Establishments primarily engaged in buying and/or marketing grain (such as corn, wheat, oats, barley, and unpolished rice); dry beans; soybeans, and other inedible beans. Country grain elevators primarily engaged in buying or receiving grain from farmers are included as are terminal elevators and other merchants marketing grain.

Livestock (SIC 5154)[1]—Establishments primarily engaged in buying and/or marketing cattle, hogs, sheep, and goats.

Farm-Product Raw Materials, Not Elsewhere Classified (SIC 5159)[1]—Establishments primarily engaged in buying and/or marketing farm products not elsewhere classified, such as horses and mules, leaf tobacco, hides, skins, furs, wool, mohair, raw silk, hops, and nuts, except roasted or salted (industry 5145). Establishments primarily engaged in the wholesale distribution of milk are classified in industry 5143 and live poultry in industry 5144.

CHEMICALS AND ALLIED PRODUCTS (SIC 516)[1]

Chemicals and Allied Products (SIC 5161)[1]—Establishments primarily engaged in the wholesale distribution of chemicals and allied products, not elsewhere classified, such as acids, industrial and heavy chemicals, dyestuffs, industrial salts, naval stores, plastics materials, rosin, and turpentine. Establishments primarily engaged in the wholesale distribution of ammunition are classified in industry 5041; agricultural chemicals and pesticides in industry 5191; drugs in industry 5122; and paints and varnishes in industry 5198.

PETROLEUM AND PETROLEUM PRODUCTS (SIC 517)

Petroleum Bulk Stations and Terminals (SIC 5171)—Establishments primarily engaged in wholesaling petroleum products, including liquefied petroleum gas, from bulk liquid storage facilities.

Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals (SIC 5172)[1]—Establishments primarily engaged in wholesaling petroleum and petroleum products, except those with bulk liquid storage facilities. Included are packaged and bottled petroleum products distributors, truck jobbers, and others marketing petroleum and products at wholesale but without bulk liquid storage facilities.

[1] Data for this kind of business are not shown separately but are included in the group total.

BEER, WINE, AND DISTILLED ALCOHOLIC BEVERAGES (SIC 518)

Beer and Ale (SIC 5181)—Establishments primarily engaged in the wholesale distribution of beer, ale, porter, and other fermented malt beverages.

Wines and Distilled Alcoholic Beverages (SIC 5182)—Establishments primarily engaged in the wholesale distribution of distilled spirits, including neutral spirits and ethyl alcohol used in blending wines and distilled liquors.

MISCELLANEOUS NONDURABLE GOODS (SIC 519)

Farm Supplies (SIC 5191)[1]—Establishments primarily engaged in the wholesale distribution of animal feeds, fertilizers, agricultural chemicals, pesticides, seeds, and other farm supplies, except grains.

Tobacco and Tobacco Products (SIC 5194)—Establishments primarily engaged in the wholesale distribution of tobacco and tobacco products. Leaf tobacco wholesalers are classified in industry 5159 and establishments primarily engaged in stemming and redrying tobacco in industry 2141.

Paints, Varnishes, and Supplies (SIC 5198)[1]—Establishments primarily engaged in the wholesale distribution of paints, varnishes, wallpaper, and supplies, and sometimes glass. Establishments selling to the general public and known as "retail" in the trade are classified in industry 5231.

Books, Periodicals, Newspapers (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of books, lithographed matter, magazines, newspapers, and all other forms of reading material.

Nondurable Goods, Not Elsewhere Classified (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of nondurable goods, not elswhere classified, such as art goods, flowers and florist supplies, industrial yarn, textile bags, bagging and burlap.

CHANGES IN WHOLESALE KIND-OF-BUSINESS CLASSIFICATIONS IN 1972 FROM 1967

The wholesale trade kind-of-business structure was expanded from one SIC major group (SIC 50) in 1967 to two major groups in 1972, "durable goods" (SIC 50) and "nondurable goods" (SIC 51). There were 61 four-digit industries in 1972 compared to 48 four-digit industries in 1967.

The definitions of some kinds of business also were changed in 1972. Establishments primarily selling farm supplies and equipment to farmers, and establishments primarily selling

plumbing, heating, and air-conditioning equipment and electrical supplies were classified in wholesale trade rather than retail trade. However, establishments primarily selling lumber and other building materials and paint, glass, and wallpaper were classified in retail trade if they sell to the public, even though sales to contractors account for a larger portion of the total. The change resulted in moving to wholesale trade those establishments primarily selling plumbing, heating, and air-conditioning equipment; electrical supplies; farm equipment; hay, grain, and feed; and other farm supplies. The change also theoretically could have shifted to wholesale trade some establishments primarily selling lumber and paint, glass and wallpaper to contractors, but not to the public.

In addition to the kind-of-business changes noted above the special nonmerchant classifications of farm assemblers and bulk petroleum were eliminated in the 1972 census. These establishments were classified in the appropriate merchant, or sales branch category.

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UNITED STATES DEPARTMENT OF
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CB-80-28

MONTHLY WHOLESALE TRADE REPORT: DECEMBER 1979

SALES The Bureau of the Census, U. S. Department of Commerce, announced today that December sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were $79.3 billion. December sales were up 1 percent from November and were 17 percent above the same month a year ago.

Seasonally adjusted December sales in the durable goods trades were up 2 percent from the previous month and 13 percent above December 1978. Nondurable goods sales were virtually unchanged from November, but were 21 percent above the year-ago level.

INVENTORIES Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were valued at $90.1 billion at the end of December, up 1 percent from the previous month and 12 percent above the year-ago level. Durable and nondurable goods stocks were both up 1 percent from the previous month and were up 10 and 14 percent, respectively, from the year-ago level.

STOCK-SALES RATIO The December stock-sales ratio for merchant wholesalers, based on adjusted data, was 114, 1 point above November, but 5 points below the previous year ratio.

Table 1. SALES, INVENTORIES, AND STOCK-SALES RATIOS OF MERCHANT WHOLESALERS: DECEMBER 1979

(Sales and inventories in millions of dollars. Stock-sales ratios in percent)

Kind of business	Unadjusted			Adjusted[1]		
	Dec. 1979[2]	Nov. 1979	Dec. 1978	Dec. 1979[2]	Nov. 1979	Dec. 1978
SALES						
Merchant wholesalers, total	75,558	79,079	64,527	79,341	78,688	67,823
Durable goods, total	32,982	34,711	29,340	35,945	35,254	31,939
Nondurable goods, total	42,576	44,368	35,187	43,396	43,434	35,884
INVENTORIES						
Merchant wholesalers, total	90,396	89,632	80,922	90,120	88,961	80,771
Durable goods, total	56,841	56,241	51,646	57,749	57,007	52,460
Nondurable goods, total	33,555	33,391	29,276	32,371	31,954	28,311
STOCK-SALES RATIO						
Merchant wholesalers, total	120	113	125	114	113	119
Durable goods, total	172	162	176	161	162	164
Nondurable goods, total	79	75	83	75	74	79

[1]Adjusted for seasonal variations and, in the case of sales, also for trading-day differences. [2]Preliminary estimates. NOTE: Preliminary inventory estimates have been modified prior to publication based on past relationships ween preliminary and final estimates. Detail may not add to totals due to rounding and minor revisions.

Data shown in this release are preliminary and subject to revision. They are presented here in advance of their publication in the Bureau's Monthly Wholesale Trade Report, which shows greater detail by kind of business and area.

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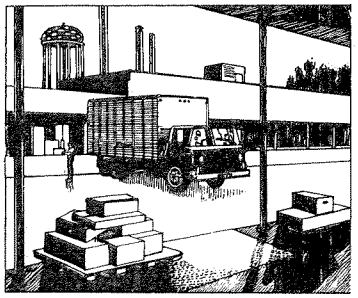
Table 2. SALES, INVENTORIES, PERCENT CHANGES AND STOCK-SALES RATIOS OF MERCHANT WHOLESALERS BY KIND OF BUSINESS, FOR THE UNITED STATES: DECEMBER 1979

1972 SIC code	Kind of business	Sales					Inventories (end-of-month)				Stock-sales ratios (percent)	
		Dollars (millions)		Percent change			Dollars (millions)		Percent change			
		Dec.[1] 1979	Nov. 1979	Dec. 1979 from Nov. 1979	Dec. 1979 from Dec. 1978	12 months 1979 from 12 months 1978	Dec.[1] 1979	Nov. 1979	Dec. 1979 from Nov. 1979	Dec. 1979 from Dec. 1978	Dec.[1] 1979	Nov. 1979
		Data are NOT ADJUSTED for seasonal variation or trading-day differences										
	Merchant wholesalers, total	75,558	79,079	−4	+17	+17	90,396	89,632	+1	+12	120	113
	Total (excluding farm-product raw materials)	66,546	69,354	−4	+16	+17	82,791	82,184	+1	+11	124	118
50	Durable goods, total	32,982	34,711	−5	+12	+16	56,841	56,241	+1	+10	172	162
501	Motor vehicles and automotive parts and supplies	6,362	6,452	−1	+15	+12	9,912	9,652	+3	+7	156	150
5013	Automotive parts and supplies	2,641	2,817	−6	+9	+8	5,279	5,208	+1	+13	200	185
502	Furniture and home furnishings	1,130	1,263	−10	−1	+8	1,746	1,796	−3	0	155	142
503	Lumber and other construction materials	2,464	2,997	−18	−3	+15	3,329	3,335	0	+7	135	111
505	Metals and minerals, except petroleum[2]	4,219	4,064	+4	+43	+27	6,561	6,363	+3	+27	156	157
5051 pt.	Ferrous metals service centers and offices	2,769	2,836	−2	+23	+22	4,950	4,891	+1	+18	179	172
5051 pt.	Ferrous metals service centers	1,975	2,122	−7	+18	+20	4,092	3,999	+2	+23	207	188
506	Electrical goods	3,809	3,962	−4	+15	+16	5,962	6,098	−2	+7	157	154
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,921	1,962	−2	+16	+18	2,926	2,945	−1	+14	152	150
507	Hardware, plumbing, heating equipment, and supplies	2,215	2,415	−8	+8	+12	4,591	4,456	+3	+13	207	185
5074	Plumbing and heating equipment and supplies (hydronics)	927	992	−7	+8	+12	1,834	1,777	+3	+4	198	179
508	Machinery, equipment, and supplies	9,050	9,324	−3	+7	+14	19,483	19,461	0	+8	215	209
51	Nondurable goods, total	42,576	44,368	−4	+21	+18	33,555	33,391	0	+15	79	75
	Total (excluding farm-product raw materials)	33,564	34,643	−3	+20	+19	25,950	25,943	0	+12	77	75
511	Paper and paper products	1,643	1,699	−3	+10	+12	1,684	1,657	+2	+14	103	98
5111, 3	Printing, writing, industrial, and personal service paper	1,208	1,269	−5	+6	+13	1,119	1,090	+3	+9	93	86
512	Drugs, drug proprietaries, and druggists' sundries	1,045	1,092	−4	+7	+10	1,556	1,580	−2	+12	149	145
514	Groceries and related products	11,538	11,919	−3	+7	+11	6,862	6,933	−1	+6	59	58
5141	Groceries, general-line	4,267	4,511	−5	+9	+12	2,921	3,044	−4	+6	68	67
517	Petroleum and petroleum products	7,643	7,602	+1	+66	+44	3,168	3,062	+3	+47	41	40
518	Beer, wine, and distilled alcoholic beverages	2,891	2,821	+2	+7	+13	2,577	2,770	−7	+13	89	98
		Data are ADJUSTED for seasonal variation and, in the case of sales, for trading-day differences										
	Merchant wholesalers, total	79,341	78,688	+1	+17		90,120	88,961	+1	+12	114	113
	Total (excluding farm-product raw materials)	70,374	69,708	+1	+16		83,513	82,601	+1	+11	119	118
50	Durable goods, total	35,945	35,254	+2	+13		57,749	57,007	+1	+10	161	162
501	Motor vehicles and automotive parts and supplies	7,124	6,886	+3	+17		9,932	9,749	+2	+8	139	142
502	Furniture and home furnishings	1,200	1,186	+1	0		1,796	1,805	0	−2	150	152
503	Lumber and other construction materials	2,947	2,988	−1	−3		3,411	3,467	−2	+7	116	116
505	Metals and minerals, except petroleum	4,740	4,229	+12	+45		6,587	6,440	+2	+28	139	152
506	Electrical goods	3,805	3,850	−1	+13		6,041	6,074	−1	+7	159	158
507	Hardware, plumbing, heating equipment and supplies	2,500	2,408	+4	+7		4,782	4,594	+4	+13	191	191
508	Machinery, equipment, and supplies	9,742	9,682	+1	+6		19,740	19,737	0	+8	203	204
51	Nondurable goods, total	43,396	43,434	0	+21		32,371	31,954	+1	+14	75	74
	Total (excluding farm-product raw materials)	34,429	34,454	0	+20		25,764	25,594	+1	+12	75	74
511	Paper and paper products	1,782	1,739	+2	+11		1,684	1,665	+1	+14	94	96
512	Drugs, drug proprietaries, and druggists' sundries	1,087	1,073	+1	+7		1,561	1,548	+1	+12	144	144
514	Groceries and related products	12,132	11,979	+1	+6		6,794	6,878	−1	+6	56	57
517	Petroleum and petroleum products	7,385	7,338	+1	+68		3,070	2,939	+4	+47	42	40
518	Beer, wine, and distilled alcoholic beverages	2,574	2,651	−3	+8		2,704	2,621	+3	+13	105	99

Note: Totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

[1]Preliminary estimates.

[2]The metals and minerals, except petroleum group is subject to a samply variability of 17 percent for sales for December 1979.



CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued February 1980

December 1979

BW-79-12

Annual Sales—Annual 1979 sales of merchant wholesalers were estimated at $883.5 billion, up $129.4 billion (17%) from 1978 sales. The durable goods trades with sales of $404.8 billion in 1979, were up $54.8 billion (16%) from the 1978 level. Nondurable goods trades, with sales of $478.7 billion, were up $74.6 billion (18%) for the same period. Compared with year-ago annualized sales all trade groups showed increases. The larger increases were reported in petroleum and petroleum products (44%) and metals and minerals except petroleum (27%).

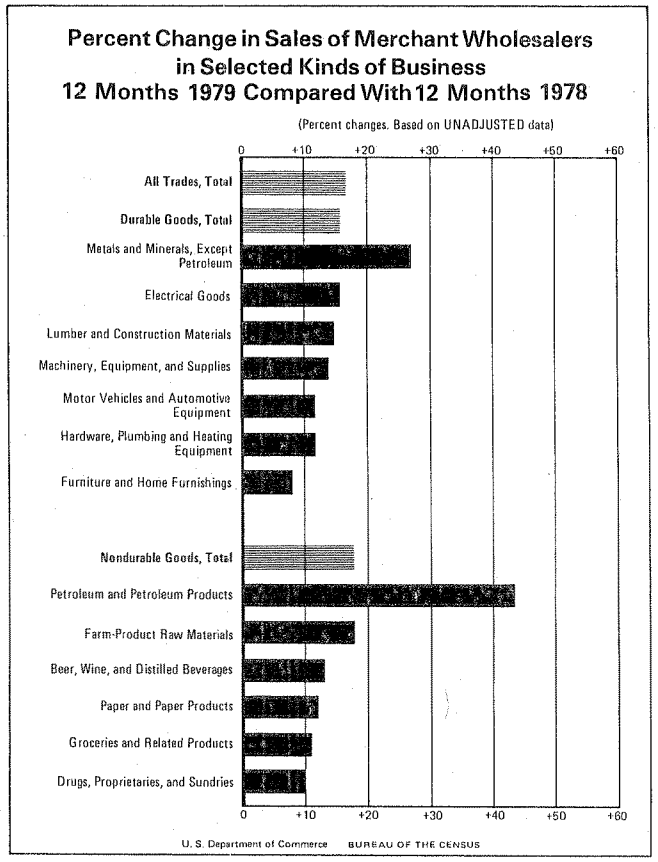
Annual sales and year-end inventories by major kind-of-business groups from 1969 to 1979 are included on page 2. Sales for all merchant wholesalers increased 226 percent between 1969 and 1979. Durable goods trades showed an increase of 231 percent in the same period, while nondurable goods trades were up 221 percent. The principal gain between 1969 and 1979 was registered by farm-product raw materials (328%). The smallest increase was in drugs, proprietaries, and sundries (132%). These data have not been adjusted for price changes.

December Sales—December 1979 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences, but not for price changes, were $79.3 billion, up 1 percent from the previous month and 17 percent above December 1978. Adjusted October-through-December total sales were up 4 percent from the July-through-September period and were 16 percent above the total sales for the comparable months a year ago.

After adjustment, December sales in the durable goods trades were up 2 percent from the previous month and were 13 percent above December 1978. Nondurable goods sales were virtually unchanged from November, but were 21 percent above December 1978.

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variations, but not for price changes, were valued at $90.1 billion at the end of December, up 1 percent from last month and 12 percent above the same month a year ago. Both durable and nondurable goods stocks were up 1 percent from November and were 10 and 14 percent, respectively, above the December 1978 level.

Based on adjusted data, comparisons with previous month inventories showed mixed results with 9 trade groups showing gains, 4 indicating declines, and 2 with no change. The larger increases were reported in hardware, plumbing and heating equipment; farm-product raw materials; and petroleum and petroleum products, all up 4 percent. The largest decrease was shown in lumber and construction materials (-2%). Compared with year-ago inventories, all trade groups reported increases with the exception of furniture and home furnishings down 2 percent. The sharper increases were shown in petroleum and petroleum products (47%) and metals and minerals, except petroleum (28%).



Stock-Sales Ratios—The December stock-sales ratio for merchant wholesalers, based on seasonally adjusted data, was 114, up 1 point from November, but 5 points below the year-ago ratio. The stock sales ratio for durable goods was 161, down 1 point from last month and down 3 points from December 1978. The ratio for nondurable goods was 75, up 1 point from the previous month, but down 4 points from the year-ago ratio.

An advance release of December 1979 data was issued February 7, 1980.

U.S. Department of Commerce
BUREAU OF THE CENSUS

Inquiries concerning this report should be addressed to Ronald Piencykoski, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-5294/763-5295.

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Table 1A. Estimated Annual Sales, Year-End Inventories, and Stock-Sales Ratios of Merchant Wholesalers for Selected Kinds of Business for the United States: 1969-1979

(Millions of dollars)

1972 SIC code	Kind of business	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979[p]
		Annual sales[1]										
	Merchant wholesalers, total.....	271,304	287,310	315,086	355,013	441,861	550,036	535,596	580,894	642,104	754,105	883,496
	Total (excluding farm-product raw materials).....	248,417	262,468	287,436	321,057	382,809	470,863	461,422	508,201	572,052	670,902	785,594
50	Durable goods, total.....	122,240	127,214	140,941	161,088	195,869	237,044	220,094	246,732	285,605	349,916	404,754
501	Motor vehicles and automotive parts and supplies.....	19,133	21,401	26,632	29,909	34,341	38,266	38,951	44,889	54,046	68,298	76,710
502	Furniture and home furnishings.....	5,472	5,524	6,427	6,788	7,625	8,288	8,136	9,594	11,026	12,966	14,032
503	Lumber and other construction materials.....	12,515	11,550	13,876	16,914	20,064	18,789	16,576	20,920	26,181	32,223	36,919
505	Metals and minerals, except petroleum..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	29,000	35,864	45,406
506	Electrical goods.....	14,469	14,963	16,257	18,848	22,574	25,405	23,546	27,868	31,745	38,325	44,511
507	Hardware, plumbing, heating equipment, and supplies.....	10,586	10,489	11,658	13,328	15,602	18,106	16,814	19,174	22,404	25,868	28,897
508	Machinery, equipment, and supplies.....	32,771	33,836	37,038	42,497	51,371	63,047	65,911	71,378	82,003	97,877	111,867
51	Nondurable goods, total.....	149,064	160,096	174,145	193,925	245,992	312,992	315,502	334,162	356,498	404,189	478,742
	Total (excluding farm-product raw materials).....	126,177	135,254	146,495	159,969	186,940	233,819	241,328	261,469	286,448	320,986	380,690
511	Paper and paper products.....	7,463	7,416	7,655	8,216	9,686	12,338	11,498	13,444	15,482	17,586	19,724
512	Drugs, drug proprietaries, and druggists' sundries.....	5,434	5,633	5,888	6,536	7,261	8,600	9,284	10,144	10,868	11,526	12,628
513	Apparel, piece goods, and notions.....	9,705	10,206	11,923	13,433	14,515	15,315	15,715	17,567	19,595	25,076	27,600
514	Groceries and related products.....	50,893	54,405	58,687	64,083	76,221	88,786	95,022	99,791	110,700	125,091	138,501
515	Farm-product raw materials.....	22,887	24,842	27,650	33,956	59,052	79,173	74,174	72,693	70,051	83,204	98,052
517	Petroleum and petroleum products.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	47,421	50,822	73,265
518	Beer, wine, and distilled alcoholic beverages.....	12,068	13,103	14,412	15,424	16,256	18,133	20,055	21,587	23,371	27,028	30,657
519	Miscellaneous nondurable goods.....	23,811	25,880	26,787	29,495	36,606	47,252	44,203	45,492	48,762	52,125	63,899
		Year-end inventories										
	Merchant wholesalers, total.....	29,439	33,317	36,198	40,457	47,273	57,526	55,727	62,056	68,555	80,922	90,396
	Total (excluding farm-product raw materials).....	26,320	29,013	32,544	35,228	40,089	50,734	50,699	56,334	63,245	74,898	82,791
50	Durable goods, total.....	17,699	19,464	21,746	23,975	26,597	33,651	34,123	37,628	43,676	51,646	56,841
501	Motor vehicles and automotive parts and supplies.....	2,686	2,893	3,994	4,270	4,541	6,649	6,160	6,664	7,424	9,227	9,912
502	Furniture and home furnishings.....	641	692	720	839	964	1,149	1,127	1,305	1,512	1,777	1,746
503	Lumber and other construction materials.....	1,160	1,178	1,310	1,586	1,830	1,778	1,824	2,061	2,602	3,117	3,329
505	Metals and minerals, except petroleum..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	4,459	5,151	6,561
506	Electrical goods.....	2,088	2,277	2,464	2,721	3,247	3,710	3,443	3,901	4,653	5,577	5,962
507	Hardware, plumbing, heating equipment, and supplies.....	1,577	1,686	1,825	2,129	2,440	2,891	2,799	3,139	3,620	4,063	4,591
508	Machinery, equipment, and supplies.....	6,056	6,714	7,139	7,614	8,311	10,258	11,765	12,738	15,307	18,012	19,483
51	Nondurable goods, total.....	11,740	13,854	14,453	16,482	20,676	23,875	21,604	24,429	24,879	29,276	33,555
	Total (excluding farm-product raw materials).....	8,621	9,550	10,798	11,254	13,492	17,083	16,576	18,707	19,569	23,252	25,950
511	Paper and paper products.....	653	679	673	743	873	1,097	1,072	1,192	1,261	1,482	1,684
512	Drugs, drug proprietaries, and druggists' sundries.....	642	647	710	752	859	1,054	1,079	1,224	1,303	[r]1,441	1,556
514	Groceries and related products.....	2,305	2,445	2,625	2,999	3,924	4,517	4,326	5,109	5,540	6,497	6,862
517	Petroleum and petroleum products.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	2,042	2,153	3,168
518	Beer, wine, and distilled alcoholic beverages.....	988	1,110	1,213	1,276	1,380	1,609	1,755	1,889	1,809	2,290	2,577
		Stock-sales ratios based on monthly average sales[2]										
	Merchant wholesalers, total.....	130	139	138	137	128	126	125	128	128	129	123
	Total (excluding farm-product raw materials).....	127	133	136	132	126	129	132	133	133	134	126
50	Durable goods, total.....	174	184	185	179	163	170	186	183	184	177	169
501	Motor vehicles and automotive parts and supplies.....	169	162	180	171	159	208	190	178	165	162	155
502	Furniture and home furnishings.....	141	150	134	148	152	166	166	163	165	165	149
503	Lumber and other construction materials	111	122	113	113	109	114	132	118	119	116	108
505	Metals and minerals, except petroleum..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	184	172	173
506	Electrical goods.....	173	183	182	173	173	175	175	168	176	175	161
507	Hardware, plumbing, heating equipment, and supplies.....	179	193	188	192	188	192	200	196	194	188	191
508	Machinery, equipment, and supplies.....	222	238	231	215	194	195	214	214	224	221	209
51	Nondurable goods, total.....	95	104	100	102	101	92	82	88	84	87	84
	Total (excluding farm-product raw materials).....	82	85	88	84	87	88	82	86	82	87	82
511	Paper and paper products.....	105	110	105	108	108	107	112	106	98	101	102
512	Drugs, drug proprietaries, and druggists' sundries.....	142	138	145	138	142	147	139	145	144	[r]150	148
514	Groceries and related products.....	54	54	54	54	62	61	55	61	60	62	59
517	Petroleum and petroleum products.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	52	51	52
518	Beer, wine, and distilled alcoholic beverages.....	98	102	101	99	102	106	105	105	93	102	101

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions. These data have not been adjusted for seasonal variation nor for price change.

(NA) Not available. [p]Preliminary estimate. [r]Revised.

[1]Annual total includes preliminary estimate for December 1979 sales.

[2]Stock-sales ratios computed on a basis of average sales and year-end inventories.

Table 1B. Estimated Monthly Sales of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1979												Total 12 months 1979
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.[p]	
	Merchant wholesalers, total	63,739	61,721	74,319	70,768	76,814	74,361	73,537	78,567	73,213	81,820	79,079	75,558	883,496
	Total (excluding farm-product raw materials)	56,481	55,208	66,198	63,588	68,714	66,477	64,932	70,390	65,400	72,156	69,354	66,546	785,594
50	Durable goods, total	28,284	28,141	34,689	33,429	35,723	34,447	33,750	37,048	33,616	37,935	34,711	32,982	404,754
501	Motor vehicles and automotive parts and supplies	5,634	5,650	6,888	6,845	7,013	6,364	6,259	6,812	5,645	6,784	6,452	6,362	76,710
5013,4	Automotive parts and supplies, tires and tubes	3,120	3,081	3,459	3,349	[r]3,535	3,318	3,091	3,552	3,081	3,538	3,298	3,098	39,522
5013	Automotive parts and supplies	2,594	2,603	2,902	2,807	2,966	2,759	2,600	3,014	2,617	2,978	2,817	2,641	33,297
502	Furniture and home furnishings	1,012	950	1,199	1,130	1,214	1,185	1,121	1,243	1,196	1,390	1,263	1,130	14,032
5021	Furniture--household and office	343	332	416	413	450	422	399	449	419	458	430	408	4,938
5023	Home furnishings	669	618	783	717	764	763	722	794	778	931	832	723	9,094
503	Lumber and other construction materials	2,387	2,212	3,006	3,023	3,353	3,410	3,411	3,761	3,274	3,622	2,997	2,464	36,919
5031	Lumber, plywood, and millwork	1,672	1,544	2,047	2,067	2,269	2,250	2,250	2,515	2,102	2,346	1,899	1,542	24,502
5039	Construction materials, n.e.c.	715	668	959	957	1,084	1,160	1,161	1,246	1,172	1,276	1,098	922	12,417
505	Metals and minerals, except petroleum[1]	3,206	3,215	3,849	3,295	3,913	3,645	3,824	4,196	3,687	4,197	4,064	4,219	45,406
5051 pt.	Ferrous metals service centers and offices	2,455	2,437	2,925	2,469	2,951	2,759	2,865	3,062	2,806	2,974	2,836	2,769	33,308
5051 pt.	Ferrous metals service centers	1,652	1,744	2,129	1,798	2,160	2,056	2,046	2,211	1,974	2,208	2,122	1,975	24,074
506	Electrical goods	3,017	3,083	3,556	3,271	3,744	3,786	3,712	4,163	4,012	4,395	3,962	3,809	44,511
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,533	1,638	1,807	1,748	2,071	2,006	1,991	2,153	2,079	2,165	1,962	1,921	23,044
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,484	1,445	1,749	1,554	1,673	1,779	1,700	2,011	1,933	2,230	2,000	1,888	21,466
5064	Electrical appliances, TV and radio sets[2]	834	849	1,024	881	939	1,064	986	1,116	1,083	1,250	1,154	1,050	12,232
507	Hardware, plumbing, heating equipment, and supplies	2,142	1,984	2,319	2,374	2,592	2,461	2,524	2,678	2,399	2,794	2,415	2,215	28,897
5072	Hardware	802	758	853	852	975	877	892	1,003	877	1,024	916	853	10,683
5074	Plumbing and heating equipment and supplies (hydronics)	854	800	960	994	1,001	966	1,015	1,038	1,011	1,167	992	927	11,725
508	Machinery, equipment, and supplies	7,691	7,841	9,664	9,443	10,062	9,745	9,222	10,113	9,394	10,317	9,324	9,050	111,867
5082	Construction and mining machinery and equipment	895	927	1,189	1,360	1,351	1,260	1,258	1,366	1,268	1,323	1,144	1,017	14,359
5084,5	Industrial machinery, equipment, and supplies	3,390	3,464	3,940	3,615	4,004	3,964	3,613	4,039	3,634	4,078	4,020	3,959	45,720
5086	Professional equipment, supplies[3]	907	914	1,048	972	1,055	996	996	1,092	972	1,121	948	922	11,943
5093	Scrap and waste materials	1,132	1,184	1,501	1,492	1,518	1,468	1,395	1,534	1,328	1,456	1,428	1,405	16,842
51	Nondurable goods, total	35,455	33,580	39,630	37,339	41,091	39,914	39,787	41,519	39,597	43,885	44,368	42,576	478,742
	Total (excluding farm-product raw materials)	28,197	27,067	31,509	30,159	32,991	32,030	31,182	33,342	31,784	34,221	34,643	33,564	380,690
511	Paper and paper products[4]	1,540	1,479	1,688	1,551	1,692	1,651	1,585	1,777	1,599	1,821	1,699	1,643	19,724
5111,3	Printing, writing, industrial, and personal service paper	1,133	1,100	1,272	1,184	1,272	1,252	1,192	1,327	1,202	1,368	1,269	1,208	14,779
512	Drugs, drug proprietaries, and druggists' sundries	950	917	1,073	1,038	1,102	1,039	1,066	1,099	1,030	1,178	1,092	1,045	12,628
5122	Drugs, drug proprietaries, and druggists' sundries	950	917	1,073	1,038	1,102	1,039	1,066	1,099	1,030	1,178	1,092	1,045	12,628
5122 pt.	General-line drugs	403	403	477	472	509	455	443	477	443	487	448	440	5,566
513	Apparel, piece goods, and notions[5]	2,094	1,996	2,326	2,107	2,127	2,102	2,389	2,629	2,563	2,704	2,468	2,095	27,600
514	Groceries and related products	11,122	10,381	11,954	11,281	11,988	11,721	11,500	11,835	11,122	12,140	11,919	11,538	138,501
5141	Groceries, general-line	3,965	3,658	4,173	3,989	4,241	4,247	4,245	4,429	4,137	4,597	4,511	4,267	50,458
5144	Poultry and poultry products	518	489	559	554	592	544	563	569	530	561	603	584	6,666
5145	Confectionery	184	177	209	196	212	199	192	214	214	275	243	210	2,525
5147	Meats and meat products	1,979	1,971	2,198	2,029	2,076	1,908	1,872	1,959	1,770	1,925	1,768	1,823	23,279
5148	Fresh fruits and vegetables	1,020	961	1,203	1,086	1,202	1,242	1,063	1,030	917	997	1,024	1,007	12,752
515	Farm-product raw materials	7,258	6,513	8,121	7,180	8,100	7,884	8,605	8,177	7,813	9,664	9,725	9,012	98,052
5153	Grain	5,859	5,235	6,740	5,886	6,766	6,730	7,516	7,090	6,594	8,328	8,347	7,510	82,599
517	Petroleum and petroleum products[6]	4,837	5,008	5,282	5,221	6,078	5,851	5,863	6,355	6,354	7,171	7,602	7,643	73,265
5171	Petroleum bulk stations and terminals	2,738	2,785	2,997	2,857	3,306	3,170	3,121	3,504	3,456	3,960	4,050	4,172	40,115
518	Beer, wine, and distilled alcoholic beverages	2,020	1,952	2,490	2,453	2,726	2,704	2,636	2,844	2,387	2,733	2,821	2,891	30,657
5181	Beer and ale	999	953	1,223	1,258	1,513	1,523	1,507	1,590	1,229	1,299	1,267	1,242	15,603
5182	Wine and distilled alcoholic beverages	1,021	999	1,267	1,195	1,214	1,181	1,129	1,254	1,158	1,435	1,554	1,649	15,054
519	Miscellaneous nondurable goods	4,529	4,383	5,528	5,406	6,001	5,801	5,105	5,468	5,570	5,296	5,643	5,168	63,899
5194	Tobacco and tobacco products	823	749	852	848	891	863	881	896	795	902	861	843	10,202

See footnotes at end of table.

Sales of Merchant Wholesalers by Kind of Business: 1969 and 1979

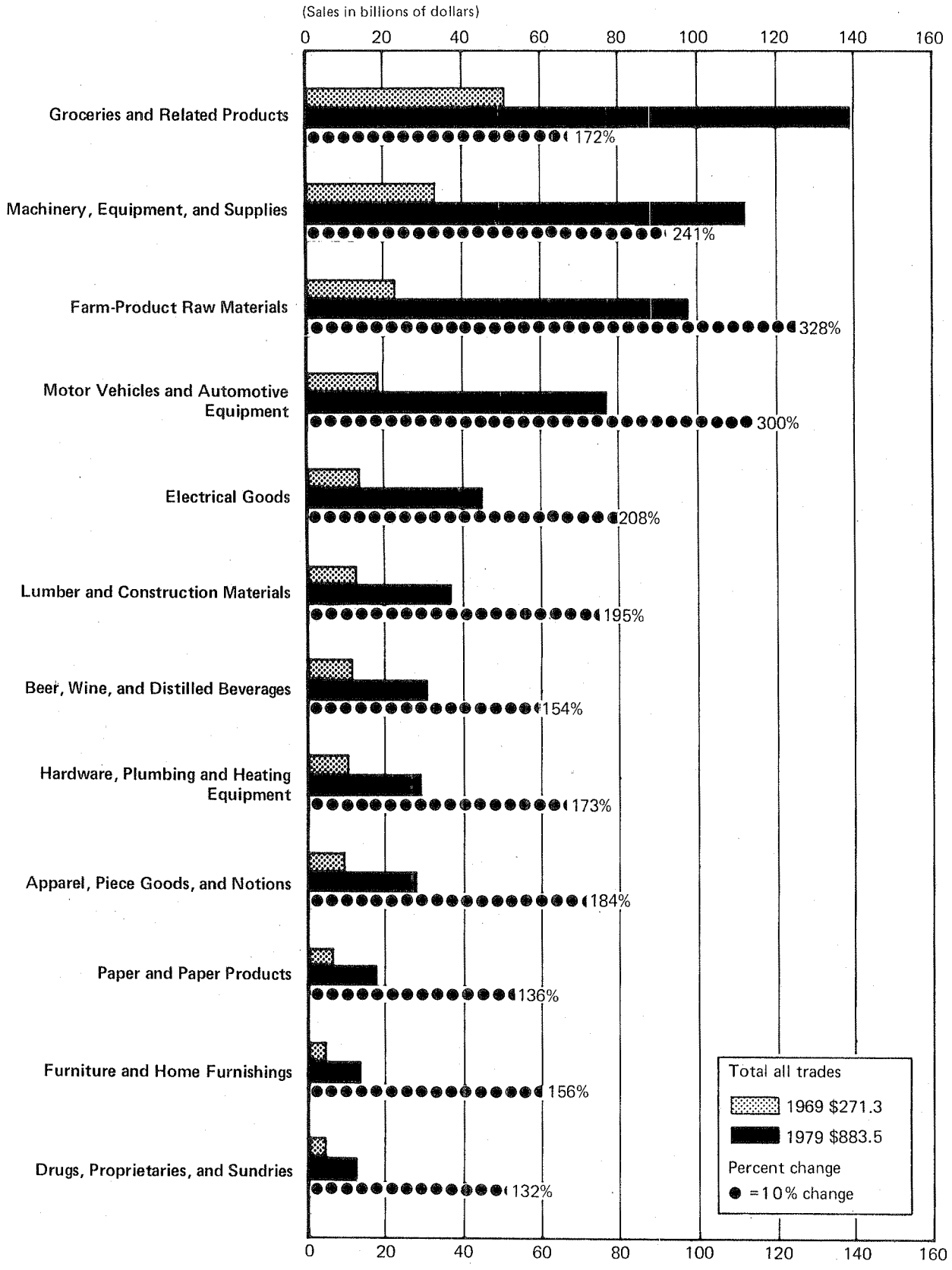


Table 1B. Estimated Monthly Sales of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978—Continued

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	1978												Total 12 months 1978
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
	Merchant wholesalers, total	52,143	52,766	62,900	60,613	66,249	65,834	60,651	67,702	63,933	69,086	67,699	64,527	754,105
	Total (excluding farm-product raw materials)	46,343	47,112	55,848	54,095	58,061	58,658	54,411	60,838	57,342	61,033	59,923	57,237	670,902
50	Durable goods, total	22,869	23,880	28,985	28,784	30,405	30,991	28,701	32,279	30,404	32,242	31,037	29,340	349,916
501	Motor vehicles and automotive parts and supplies	4,797	5,065	5,870	5,956	6,083	5,929	5,552	6,134	5,381	6,009	6,013	5,510	68,298
5013,4	Automotive parts and supplies, tires and tubes	2,517	2,666	3,128	3,217	3,403	3,227	2,935	3,440	2,998	3,344	3,298	2,927	37,101
5013	Automotive parts and supplies	2,166	2,286	2,602	2,706	2,828	2,660	2,432	2,872	2,496	2,761	2,752	2,413	30,973
502	Furniture and home furnishings	867	921	1,111	1,046	1,077	1,104	1,013	1,133	1,162	1,174	1,218	1,140	12,966
5021	Furniture--household and office	304	311	356	352	368	370	328	366	379	379	411	422	4,344
5023	Home furnishings	564	610	755	695	710	735	685	767	783	795	807	718	8,622
503	Lumber and other construction materials	1,867	1,891	2,368	2,517	2,889	3,067	2,771	3,208	3,056	3,173	2,874	2,542	32,223
5031	Lumber, plywood, and millwork	1,290	1,288	1,582	1,676	1,947	2,037	1,845	2,105	1,949	2,083	1,915	1,682	21,399
5039	Construction materials, n.e.c.	576	603	786	841	942	1,031	927	1,103	1,107	1,089	959	860	10,825
505	Metals and minerals, except petroleum	2,505	2,557	3,040	2,942	3,153	3,169	2,817	3,306	3,037	3,186	3,209	2,942	35,864
5051 pt.	Ferrous metals service centers and offices	1,922	1,970	2,344	2,190	2,360	2,380	2,158	2,515	2,339	2,446	2,448	2,260	27,333
5051 pt.	Ferrous metals service centers	1,386	1,443	1,713	1,629	1,755	1,778	1,580	1,833	1,721	1,801	1,768	1,678	20,085
506	Electrical goods	2,541	2,627	3,096	2,980	3,239	3,385	3,193	3,540	3,338	3,590	3,474	3,322	38,325
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,262	1,354	1,561	1,556	1,698	1,725	1,663	1,812	1,663	1,832	1,722	1,655	19,502
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,279	1,273	1,535	1,424	1,541	1,660	1,530	1,728	1,675	1,758	1,751	1,667	18,823
5064	Electrical appliances, TV and radio sets	763	762	939	841	931	994	912	1,064	1,057	1,040	1,090	1,006	11,398
507	Hardware, plumbing, heating equipment, and supplies	1,790	1,708	2,021	2,102	2,306	2,360	2,247	2,412	2,159	2,455	2,250	2,057	25,868
5072	Hardware	693	679	793	797	856	836	760	864	771	859	830	721	9,458
5074	Plumbing and heating equipment and supplies (hydronics)	726	675	801	834	904	902	916	988	928	1,047	918	854	10,494
508	Machinery, equipment, and supplies	6,190	6,632	8,301	8,296	8,616	8,790	7,827	8,757	8,655	8,909	8,421	8,485	97,877
5082	Construction and mining machinery and equipment	825	875	1,130	1,254	1,276	1,229	1,122	1,196	1,115	1,155	1,126	1,125	13,429
5084,5	Industrial machinery, equipment, and supplies	2,545	2,790	3,294	3,077	3,388	3,505	3,049	3,532	3,450	3,573	3,474	3,623	39,301
5086	Professional equipment, supplies	710	732	863	816	873	952	888	990	949	941	949	975	10,637
5093	Scrap and waste materials	757	815	979	958	1,058	1,057	940	1,073	978	1,007	1,103	1,079	11,804
51	Nondurable goods, total	29,274	28,886	33,915	31,829	35,844	34,843	31,950	35,423	33,529	36,844	36,662	35,187	404,189
	Total (excluding farm-product raw materials)	23,474	23,232	26,863	25,311	27,656	27,667	25,710	28,559	26,937	28,791	28,885	27,897	320,986
511	Paper and paper products	1,316	1,284	1,506	1,395	1,508	1,498	1,384	1,581	1,456	1,598	1,569	1,489	17,586
5111,3	Printing, writing, industrial, and personal service paper	950	926	1,100	1,032	1,126	1,125	1,046	1,177	1,088	1,191	1,177	1,140	13,078
512	Drugs, drug proprietaries, and druggists' sundries	887	824	994	912	943	950	902	1,026	973	1,082	1,017	963	11,526
5122	Drugs, drug proprietaries, and druggists' sundries	887	r824	994	912	943	950	902	1,026	973	1,082	1,017	963	11,526
5122 pt.	General-line drugs	r408	r363	r455	423	447	448	409	482	464	r481	449	425	r5,254
513	Apparel, piece goods, and notions	1,620	1,615	2,063	1,818	2,099	2,066	2,036	2,658	2,313	2,443	2,369	1,976	25,076
514	Groceries and related products	9,261	9,093	10,398	9,916	10,873	10,685	10,237	11,002	10,489	11,150	11,155	10,830	125,091
5141	Groceries, general-line	3,426	3,333	3,740	3,547	3,791	3,724	3,649	3,965	3,767	3,999	4,120	3,914	44,975
5144	Poultry and poultry products	402	397	486	468	507	503	482	539	505	525	569	536	5,916
5145	Confectionery	154	163	191	173	191	189	171	187	190	218	211	197	2,236
5147	Meats and meat products	1,460	1,462	1,651	1,688	1,871	1,826	1,800	1,974	1,840	1,928	1,911	1,885	21,297
5148	Fresh fruits and vegetables	839	824	986	1,035	1,184	1,198	1,044	1,005	909	980	974	973	11,951
515	Farm-product raw materials	5,800	5,654	7,052	6,518	8,188	7,176	6,240	6,864	6,591	8,053	7,777	7,290	83,204
5153	Grain	4,549	4,503	5,718	5,358	6,890	6,078	5,317	5,760	5,448	6,623	6,391	5,912	68,489
517	Petroleum and petroleum products	4,209	4,085	4,249	3,830	4,178	4,111	4,000	4,441	4,136	4,431	4,554	4,598	50,822
5171	Petroleum bulk stations and terminals	2,387	2,293	2,384	2,188	2,425	2,358	2,190	2,378	2,280	2,449	2,507	2,678	28,517
518	Beer, wine, and distilled alcoholic beverages	1,654	1,770	2,299	1,993	2,295	2,506	2,191	2,463	2,254	2,347	2,547	2,709	27,028
5181	Beer and ale	795	839	1,094	998	1,219	1,372	1,217	1,328	1,119	1,105	1,088	1,108	13,282
5182	Wine and distilled alcoholic beverages	859	931	1,204	996	1,076	1,134	974	1,134	1,135	1,242	1,459	1,601	13,746
519	Miscellaneous nondurable goods	3,723	3,782	4,434	4,568	4,730	4,819	4,040	4,297	4,311	4,510	4,486	4,425	52,125
5194	Tobacco and tobacco products	721	692	782	765	812	849	838	871	814	848	831	846	9,671

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. ^{p}Preliminary estimate. See p. 21, sample design and estimation procedures. ^{r}Revised.

[1]The metals and minerals, except petroleum group is subject to a sampling variability of 17 percent for December 1979.
[2]The electrical appliances, TV and radio sets group is subject to a sampling variability of 8 percent for December 1979.
[3]The professional equipment, supplies group is subject to a sampling variability of 8 percent for December 1979.
[4]The paper and paper products group is subject to a sampling variability of 8 percent for December 1979.
[5]The apparel, piece goods, and notions group is subject to a sampling variability of 13 percent for December 1979.
[6]The petroleum and petroleum products group is subject to a sampling variability of 8 percent for December 1979.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Millions of dollars. Data are NOT ADJUSTED for seasonal variations)

1972 SIC code	Kind of business	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.[P]
		1979											
	Merchant wholesalers, total	81,896	83,917	85,436	85,345	85,199	84,942	86,829	86,890	87,061	88,839	89,632	90,396
	Total (excluding farm-product raw materials)	75,593	77,627	79,311	79,626	80,246	79,964	81,487	81,570	81,563	82,485	82,184	82,791
50	Durable goods, total	51,860	53,807	54,381	54,731	55,566	55,523	56,602	56,803	56,361	56,620	56,241	56,841
501	Motor vehicles and automotive parts and supplies	9,512	10,189	9,797	9,663	9,631	9,207	9,672	9,446	9,240	9,546	9,652	9,912
5013,4	Automotive parts and supplies, tires and tubes	5,758	5,888	5,781	5,809	5,970	5,753	6,051	6,117	5,933	6,025	6,084	6,220
5013	Automotive parts and supplies	4,881	5,003	4,870	4,917	5,035	4,818	5,082	5,188	5,018	5,121	5,208	5,279
502	Furniture and home furnishings	1,764	1,753	1,872	1,837	1,815	1,903	1,847	1,839	1,861	1,909	1,796	1,746
5023	Home furnishings	1,292	1,282	1,355	1,332	1,309	1,361	1,347	1,339	1,328	1,381	1,291	1,241
503	Lumber and other construction materials	3,113	3,178	3,337	3,404	3,468	3,496	3,526	3,442	3,382	3,383	3,335	3,329
5031	Lumber, plywood, and millwork[1]	2,030	2,082	2,116	2,152	2,244	2,204	2,220	2,204	2,129	2,149	2,112	2,120
505	Metals and minerals, except petroleum[2]	5,106	5,434	5,285	5,254	5,528	5,582	5,763	6,319	6,139	6,376	6,363	6,561
5051pt.	Ferrous metals service centers and offices	4,191	4,425	4,365	4,239	4,455	4,586	4,655	4,947	4,953	4,794	4,891	4,950
5051pt.	Ferrous metals service centers	3,241	3,459	3,433	3,269	3,506	3,643	3,665	3,956	4,010	3,843	3,999	4,092
506	Electrical goods	5,509	5,582	5,706	5,737	5,976	6,040	6,223	6,254	6,061	6,082	6,098	5,962
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,542	2,684	2,676	2,730	2,946	2,838	2,840	2,841	2,771	2,785	2,945	2,926
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,966	2,898	3,030	3,007	3,030	3,202	3,383	3,274	3,290	3,296	3,153	3,037
507	Hardware, plumbing, heating equipment, and supplies	4,251	4,461	4,497	4,719	4,590	4,631	4,628	4,535	4,488	4,537	4,456	4,591
5072	Hardware	1,476	1,540	1,539	1,598	1,622	1,643	1,659	1,657	1,692	1,698	1,692	1,736
5074	Plumbing and heating equipment and supplies (hydronics)	1,819	1,900	1,899	1,985	1,848	1,896	1,902	1,828	1,783	1,823	1,777	1,834
508	Machinery, equipment, and supplies	17,748	18,254	18,807	18,924	19,370	19,465	19,576	19,778	19,974	19,555	19,461	19,483
5082	Construction and mining machinery and equipment	3,932	4,152	4,334	4,280	4,430	4,512	4,488	4,504	4,573	4,339	4,288	4,254
5084,5	Industrial machinery, equipment, and supplies	5,728	5,800	6,015	6,030	6,073	6,006	5,979	6,092	6,201	6,251	6,163	6,241
51	Nondurable goods, total	30,036	30,110	31,055	30,614	29,633	29,419	30,227	30,087	30,700	32,219	33,391	33,555
	Total (excluding farm-product raw materials)	23,733	23,820	24,930	24,895	24,680	24,441	24,885	24,767	25,202	25,865	25,943	25,950
511	Paper and paper products	1,424	1,468	1,547	1,501	1,542	1,616	1,608	1,604	1,663	1,597	1,657	1,684
5111,3	Printing, writing, industrial, and personal service paper	986	1,010	1,053	1,018	1,050	1,090	1,079	1,055	1,109	1,082	1,090	1,119
512	Drugs, drug proprietaries, and druggists' sundries	1,396	1,412	1,535	1,617	1,563	1,567	1,609	1,570	1,670	1,678	1,580	1,556
514	Groceries and related products	6,408	6,346	6,719	6,644	6,644	6,686	6,674	6,633	6,793	6,982	6,933	6,862
5141	Groceries, general-line	2,696	2,744	2,895	2,846	2,785	2,802	2,899	2,857	2,911	3,046	3,044	2,921
517	Petroleum and petroleum products	2,106	2,101	2,224	2,177	2,401	2,263	2,492	2,618	2,874	2,918	3,062	3,168
518	Beer, wine, and distilled alcoholic beverages	2,462	2,427	2,684	2,806	2,760	2,732	2,693	2,539	2,538	2,781	2,770	2,577
5181	Beer and ale[3]	800	845	1,040	1,085	1,089	1,072	1,030	923	903	934	922	877
5182	Wines and distilled alcoholic beverages	1,662	1,582	1,645	1,721	1,671	1,660	1,663	1,616	1,634	1,847	1,848	1,700
		1978											
	Merchant wholesalers, total	69,596	71,156	73,931	74,635	74,634	74,882	74,874	74,943	76,074	78,715	80,100	80,922
	Total (excluding farm-product raw materials)	64,090	65,682	67,973	69,060	69,883	70,513	71,073	71,138	71,889	73,327	73,947	74,898
50	Durable goods, total	44,287	45,757	47,275	47,957	49,918	49,627	49,900	49,841	49,944	50,462	50,971	51,646
501	Motor vehicles and automotive parts and supplies	7,709	8,189	7,995	7,973	8,246	8,218	8,367	8,378	8,099	8,701	9,326	9,227
5013,4	Automotive parts and supplies, tires and tubes	4,743	4,962	4,856	4,901	5,149	5,035	5,034	5,206	5,172	5,298	5,635	5,552
5013	Automotive parts and supplies	3,953	4,163	4,041	4,171	4,382	4,241	4,288	4,415	4,345	4,489	4,792	4,674
502	Furniture and home furnishings	1,560	1,606	1,633	1,669	1,730	1,781	1,764	1,760	1,810	1,780	1,774	1,752
5023	Home furnishings	1,137	1,184	1,182	1,233	1,279	1,305	1,305	1,306	1,326	1,315	1,305	1,251
503	Lumber and other construction materials	2,676	2,761	2,919	2,966	3,030	3,071	3,095	3,007	3,076	3,076	2,995	3,117
5031	Lumber, plywood, and millwork	1,715	1,775	1,870	1,882	1,963	1,949	1,967	1,929	1,932	1,946	1,918	2,009
505	Metals and minerals, except petroleum	4,449	4,660	4,953	4,976	5,356	5,307	5,305	5,437	5,285	5,095	5,208	5,151
5051pt.	Ferrous metals service centers and offices	3,471	3,591	3,820	3,823	4,116	4,108	4,104	4,232	4,148	3,976	4,150	4,191
5051pt.	Ferrous metals service centers	2,633	2,760	3,039	2,971	3,220	3,268	3,191	3,308	3,299	3,098	3,236	3,336
506	Electrical goods	4,563	4,594	4,867	4,951	5,129	5,312	5,266	5,264	5,416	5,500	5,526	5,577
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,114	2,214	2,226	2,286	2,417	2,358	2,283	2,367	2,356	2,399	2,534	2,558
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,449	2,380	2,640	2,665	2,712	2,954	2,983	2,899	3,059	3,101	3,016	3,023
507	Hardware, plumbing, heating equipment, and supplies	3,712	3,876	4,058	4,231	4,222	4,201	4,215	4,117	4,032	4,152	4,033	4,063
5072	Hardware	1,366	1,384	1,421	1,428	1,445	1,423	1,410	1,369	1,417	1,466	1,382	1,407
5074	Plumbing and heating equipment and supplies (hydronics)[1]	1,590	1,678	1,784	1,861	1,815	1,818	1,839	1,800	1,805	1,738	1,737	1,760
508	Machinery, equipment, and supplies	15,508	16,005	16,511	16,762	16,796	17,061	17,057	17,183	17,405	17,352	17,428	18,012
5082	Construction and mining machinery and equipment	3,281	3,396	3,505	3,516	3,589	3,636	3,637	3,793	3,899	3,937	4,002	4,109
5084,5	Industrial machinery, equipment, and supplies	4,816	4,912	4,996	5,055	5,160	5,328	5,301	5,317	5,519	5,508	5,570	5,752
51	Nondurable goods, total	25,309	25,399	26,656	26,678	25,716	25,255	24,974	25,102	26,130	28,253	29,129	29,276
	Total (excluding farm-product raw materials)	19,803	19,925	20,699	21,103	20,966	20,887	21,173	21,297	21,946	22,865	22,976	23,252
511	Paper and paper products	1,225	1,259	1,310	1,349	1,343	1,376	1,341	1,361	1,414	1,419	1,441	1,482
5111,3	Printing, writing, industrial, and personal service paper	868	877	910	911	929	955	938	921	976	969	967	1,025
512	Drugs, drug proprietaries, and druggists' sundries	1,266	1,292	1,330	1,345	1,350	1,401	1,368	1,410	1,489	[r]1,426	1,434	1,385
514	Groceries and related products	5,401	5,376	5,710	5,740	5,752	5,871	5,833	5,803	6,186	6,469	6,412	6,497
5141	Groceries, general-line	2,350	2,366	2,562	2,500	2,495	2,512	2,480	2,505	2,641	2,811	2,814	2,761
517	Petroleum and petroleum products	2,045	1,936	1,953	1,872	1,938	1,837	1,974	2,093	2,098	2,151	2,151	2,153
518	Beer, wine, and distilled alcoholic beverages	1,917	1,889	2,017	2,133	2,135	2,148	2,178	2,158	2,221	2,453	2,513	2,290
5181	Beer and ale[2]	611	641	707	758	730	717	709	679	720	769	777	729
5182	Wine and distilled alcoholic beverages	1,305	1,248	1,311	1,375	1,405	1,431	1,469	1,480	1,501	1,684	1,736	1,561

Note: Merchant wholesalers total and group totals include data for some kind of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. [P]Preliminary estimate. See p. 21, Sample Design and Estimation Procedures. [r]Revised.

[1]The lumber, plywood, and millwork group is subject to a sampling variability of 8 percent for December 1979.
[2]The metals and minerals, except petroleum group is subject to a sampling variability of 9 percent for December 1979.
[3]The beer and ale group is subject to a sampling variability of 8 percent for December 1979.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1979 and 1978

(Percent. Data are NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.P
		1979											
	Merchant wholesalers, total	128	136	115	121	111	114	118	111	119	109	113	120
	Total (excluding farm-product raw materials)	134	141	120	125	117	120	125	116	125	114	118	124
50	Durable goods, total	183	191	157	164	156	161	168	153	168	149	162	172
501	Motor vehicles and automotive parts and supplies	169	180	142	141	137	145	155	139	166	141	150	156
5013,4	Automotive parts and supplies, tires and tubes	185	191	167	173	169	173	196	172	193	170	184	201
5013	Automotive parst and supplies	188	192	168	175	170	175	195	172	192	172	185	200
502	Furniture and home furnishings	174	185	156	163	150	161	165	148	156	137	142	155
5023	Home furnishings	193	208	173	186	171	178	187	169	171	148	155	172
503	Lumber and other construction materials	130	144	111	113	103	102	103	92	103	93	111	135
5031	Lumber, plywood, and millwork	121	135	103	104	99	98	99	88	101	92	111	138
505	Metals and minerals, except petroleum	159	169	137	159	141	153	151	151	162	152	157	156
5051 pt.	Ferrous metals service centers and offices	171	182	149	172	151	166	162	162	177	161	172	179
5051 pt.	Ferrous metals service centers	196	198	161	182	162	177	179	179	203	174	188	207
506	Electrical goods	183	181	160	175	160	160	168	150	151	138	154	157
5063	Electrical apparatus and equipment, wiring supplies and construction materials	166	164	148	156	142	141	143	132	133	129	150	152
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	200	201	173	194	181	180	197	163	170	148	158	161
507	Hardware, plumbing, heating equipment, and supplies	198	225	194	199	177	188	183	169	187	162	185	207
5072	Hardware	184	203	180	188	166	187	186	165	193	166	185	203
5074	Plumbing and heating equipment and supplies (hydronics)	213	237	198	200	185	196	188	176	176	156	179	198
508	Machinery, equipment, and supplies	231	238	195	200	192	200	212	196	213	190	209	215
5082	Construction and mining machinery and equipment	439	448	364	315	328	358	357	330	361	328	375	418
5084,5	Industrial machinery, equipment, and supplies	168	167	153	167	152	152	165	151	171	153	153	158
51	Nondurable goods, total	85	90	78	82	72	74	76	72	78	73	75	79
	Total (excluding farm-product raw materials)	84	88	79	83	75	76	80	74	79	76	75	77
511	Paper and paper products	92	99	92	97	91	98	101	90	104	88	98	103
5111,3	Printing, writing, industrial, and personal service paper	87	92	83	86	83	87	90	79	92	79	86	93
512	Drugs, drug proprietaries, and druggists' sundries	147	154	143	156	142	151	151	143	162	142	145	149
514	Groceries and related products	58	61	56	59	55	57	58	56	61	58	58	59
5141	Groceries, general-line	68	75	69	71	66	66	68	64	70	66	67	68
517	Petroleum and petroleum products	44	42	42	42	40	39	43	41	45	41	40	41
518	Beer, wine, and distilled alcoholic beverages	122	124	108	114	101	101	102	89	106	102	98	89
5181	Beer and ale	80	89	85	86	72	70	68	58	74	72	73	71
5182	Wines and distilled alcoholic beverages	163	158	130	144	138	141	147	129	141	129	119	103
		1978											
	Merchant wholesalers, total	133	135	118	123	113	114	123	111	119	114	118	125
	Total (excluding farm-product raw materials)	138	139	122	128	120	120	131	117	125	120	123	131
50	Durable goods, total	194	192	163	167	161	160	174	154	164	157	164	176
501	Motor vehicles and automotive parts and supplies	161	162	136	134	136	139	151	137	151	145	155	167
5013,4	Automotive parts and supplies, tires and tubes	188	186	155	152	151	156	172	151	173	158	171	190
5013	Automotive parts and supplies	183	182	155	154	155	159	176	154	174	163	174	194
502	Furniture and home furnishings	180	174	147	159	161	161	174	155	156	152	146	154
5023	Home furnishings	202	194	157	178	180	178	190	170	169	165	162	174
503	Lumber and other construction materials	143	146	123	118	105	100	112	94	101	97	104	123
5031	Lumber, plywood, and millwork	133	138	118	112	101	96	107	92	99	93	100	119
505	Metals and minerals, except petroleum	178	182	163	169	170	167	188	164	174	160	162	175
5051 pt.	Ferrous metals service centers and offices	181	182	163	175	174	173	190	168	177	163	170	185
5051 pt.	Ferrous metals service centers	190	191	177	182	184	184	202	181	192	172	183	199
506	Electrical goods	180	175	157	166	158	157	165	149	162	153	159	168
5063	Electrical apparatus and equipment, wiring supplies and construction materials	168	163	143	147	142	137	137	131	142	131	147	155
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	191	187	172	187	176	178	195	168	183	176	171	181
507	Hardware, plumbing, heating equipment, and supplies	207	227	201	201	183	178	188	171	187	169	179	198
5072	Hardware	197	204	179	179	169	170	185	158	179	171	167	195
5074	Plumbing and heating equipment and supplies (hydronics)	219	249	223	223	201	202	201	182	188	166	189	206
508	Machinery, equipment, and supplies	251	241	199	202	195	194	218	196	201	195	207	212
5082	Construction and mining machinery and equipment	398	388	310	280	281	296	324	317	350	341	356	365
5084,5	Industrial machinery, equipment, and supplies	189	176	152	164	152	152	174	151	160	154	160	159
51	Nondurable goods, total	86	88	79	84	72	72	78	71	78	77	79	83
	Total (excluding farm-product raw materials)	84	86	77	83	76	75	82	75	81	79	80	83
511	Paper and paper products	95	98	87	97	89	92	97	86	97	89	92	100
5111,3	Printing, writing, industrial, and personal service paper	91	95	83	88	82	85	90	78	90	81	82	90
512	Drugs, drug proprietaries, and druggists' sundries	143	157	134	147	143	147	152	137	153	r132	141	144
514	Groceries and related products	58	59	55	58	53	55	57	53	59	58	57	60
5141	Groceries, general-line	69	71	68	70	66	67	68	63	70	70	68	71
517	Petroleum and petroleum products	49	47	46	49	46	45	49	47	51	49	47	47
518	Beer, wine, and distilled alcoholic beverages	116	107	88	107	93	86	99	88	99	105	99	85
5181	Beer and ale	77	76	65	76	60	52	58	51	64	70	71	66
5182	Wines and distilled alcoholic beverages	152	134	109	138	131	126	151	130	132	136	119	97

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. ^{P}Preliminary estimate. See p. 21, Sample Design and Estimation Procedures. ^{r}Revised.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1979 and 1978

(Sales and inventories in millions of dollars. Stock-sales ratios in percent)

1972 SIC code	Kind of business	1979											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.[p]
		Sales ADJUSTED for seasonal variations and trading-day differences											
	Merchant wholesalers, total	67,148	67,495	70,824	70,444	72,937	72,625	75,106	75,733	76,264	77,915	78,688	79,341
	Total (excluding farm-product raw materials)	60,346	60,603	63,567	63,278	65,050	64,506	65,961	66,826	67,375	68,649	69,708	70,374
50	Durable goods, total	31,012	31,769	33,570	32,770	33,354	32,956	34,078	34,711	33,862	35,568	35,254	35,945
501	Motor vehicles and automotive parts and supplies	5,994	6,285	6,486	6,315	6,347	6,078	6,083	6,525	5,961	6,846	6,886	7,124
502	Furniture and home furnishings	1,162	1,058	1,178	1,148	1,183	1,139	1,229	1,178	1,176	1,208	1,186	1,200
503	Lumber and other construction materials	2,876	2,758	3,089	3,085	3,037	3,166	3,188	3,209	3,197	3,191	2,988	2,947
505	Metals and minerals, except petroleum	3,184	3,518	3,748	3,250	3,637	3,598	4,008	3,874	3,638	4,091	4,229	4,740
506	Electrical goods	3,279	3,460	3,560	3,294	3,789	3,644	3,690	3,984	4,086	3,974	3,850	3,805
507	Hardware, plumbing, heating equipment, and supplies	2,354	2,270	2,371	2,372	2,398	2,355	2,441	2,466	2,387	2,559	2,408	2,500
508	Machinery, equipment, and supplies	8,461	8,840	9,108	9,249	9,240	9,263	9,497	9,680	9,385	9,669	9,682	9,742
51	Nondurable goods, total	36,136	35,726	37,254	37,674	39,583	39,669	41,028	41,022	42,402	42,347	43,434	43,396
	Total (excluding farm-product raw materials)	29,334	28,834	29,997	30,508	31,696	31,550	31,883	32,115	33,513	33,081	34,454	34,429
511	Paper and paper products	1,540	1,595	1,636	1,636	1,638	1,612	1,627	1,659	1,610	1,675	1,739	1,782
512	Drugs, drug proprietaries, and druggists' sundries	953	990	1,032	1,050	1,095	1,072	1,104	1,058	1,055	1,070	1,073	1,087
513	Apparel, piece goods, and notions	2,230	2,114	2,243	2,280	2,089	2,149	2,496	2,276	2,491	2,408	2,417	2,439
514	Groceries and related products	11,407	11,408	11,595	11,476	11,278	11,380	11,500	11,271	11,561	11,673	11,979	12,132
515	Farm-product raw materials[1]	6,802	6,892	7,257	7,166	7,887	8,119	9,145	8,907	8,889	9,266	8,980	8,967
517	Petroleum and petroleum products	4,876	4,905	4,955	5,263	6,338	6,038	5,863	6,311	7,006	7,164	7,338	7,385
518	Beer, wine, and distilled alcoholic beverages	2,491	2,395	2,541	2,615	2,526	2,472	2,610	2,628	2,539	2,608	2,651	2,574
519	Miscellaneous nondurable goods	4,645	4,361	4,849	5,095	5,546	5,721	5,647	5,678	6,028	5,388	5,842	5,350
		Inventories ADJUSTED for seasonal variations											
	Merchant wholesalers, total	81,543	83,005	84,078	84,973	85,257	85,245	88,144	88,727	88,393	88,784	88,961	90,120
	Total (excluding farm-product raw materials)	76,224	77,545	78,624	79,299	79,729	79,416	81,339	82,010	81,809	82,633	82,601	83,513
50	Durable goods, total	52,490	53,773	53,937	54,408	54,886	54,542	56,062	56,931	56,605	57,207	57,007	57,749
501	Motor vehicles and automotive parts and supplies	9,390	9,883	9,643	9,605	9,442	9,161	9,741	9,742	9,489	9,721	9,749	9,932
502	Furniture and home furnishings	1,778	1,765	1,878	1,846	1,799	1,866	1,840	1,828	1,839	1,905	1,805	1,796
503	Lumber and other construction materials	3,160	3,207	3,218	3,315	3,354	3,444	3,481	3,449	3,409	3,495	3,467	3,411
505	Metals and minerals, except petroleum	5,142	5,528	5,274	5,212	5,517	5,571	5,606	6,141	6,139	6,600	6,440	6,587
506	Electrical goods	5,697	5,772	5,764	5,754	5,899	5,881	6,137	6,211	5,977	6,016	6,074	6,041
507	Hardware, plumbing, heating equipment, and supplies	4,382	4,543	4,422	4,511	4,443	4,514	4,555	4,508	4,561	4,597	4,594	4,782
508	Machinery, equipment, and supplies	17,927	18,073	18,529	18,905	19,178	19,065	19,517	19,958	20,095	19,772	19,737	19,740
51	Nondurable goods, total	29,053	29,232	30,141	30,565	30,371	30,703	32,082	31,796	31,788	31,577	31,954	32,371
	Total (excluding farm-product raw materials)	23,734	23,772	24,687	24,891	24,843	24,874	25,277	25,079	25,204	25,426	25,594	25,764
511	Paper and paper products	1,458	1,493	1,561	1,485	1,534	1,574	1,610	1,602	1,651	1,597	1,665	1,684
512	Drugs, drug proprietaries, and druggists' sundries	1,459	1,458	1,538	1,609	1,599	1,557	1,626	1,568	1,629	1,603	1,548	1,561
514	Groceries and related products	6,492	6,333	6,581	6,611	6,691	6,774	6,776	6,768	6,800	6,845	6,878	6,794
517	Petroleum and petroleum products	2,017	2,114	2,237	2,311	2,504	2,402	2,590	2,595	2,793	2,787	2,939	3,070
518	Beer, wine, and distilled alcoholic beverages	2,557	2,536	2,756	2,831	2,698	2,658	2,696	2,593	2,530	2,601	2,621	2,704
		Stock-sales ratios based on ADJUSTED data											
	Merchant wholesalers, total	121	123	119	121	117	117	117	117	116	114	113	114
	Total (excluding farm-product raw materials)	126	128	124	125	123	123	123	123	121	120	118	119
50	Durable goods, total	169	169	161	166	165	165	165	164	167	161	162	161
501	Motor vehicles and automotive parts and supplies	157	157	149	152	149	151	160	149	159	142	142	139
502	Furniture and home furnishings	153	167	159	161	152	164	150	155	156	158	152	150
503	Lumber and other construction materials	110	116	104	107	110	109	109	107	107	110	116	116
505	Metals and minerals, except petroleum	161	157	141	160	152	155	140	159	169	161	152	139
506	Electrical goods	174	167	162	175	156	161	166	156	146	151	158	159
507	Hardware, plumbing, heating equipment, and supplies	186	200	187	190	185	192	187	183	191	180	191	191
508	Machinery, equipment, and supplies	212	204	203	204	208	206	206	206	214	204	204	203
51	Nondurable goods, total	80	82	81	81	77	77	78	78	75	75	74	75
	Total (excluding farm-product raw materials)	81	82	82	82	78	79	79	78	75	77	74	75
511	Paper and paper products	95	94	95	91	94	98	99	97	103	95	96	94
512	Drugs, drug proprietaries, and druggists' sundries	153	147	149	153	146	145	147	148	154	150	144	144
514	Groceries and related products	57	56	57	58	59	60	59	60	59	59	57	56
517	Petroleum and petroleum products	41	43	45	44	40	40	44	41	40	39	40	42
518	Beer, wine, and distilled alcoholic beverages	103	106	108	108	107	108	103	99	100	100	99	105

See footnotes at end of table.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1979 and 1978 —Continued

(Sales and inventories in millions of dollars. Stock-sales ratios in percent)

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Sales ADJUSTED for seasonal variations and trading-day differences											
	Merchant wholesalers, total	56,260	57,729	58,803	61,640	63,171	62,656	63,425	64,894	64,531	67,338	67,552	67,823
	Total (excluding farm-product raw materials)	50,635	51,757	52,539	54,992	55,288	55,252	56,716	57,461	57,326	59,349	60,373	60,526
50	Durable goods, total	25,655	26,981	27,419	28,831	28,627	28,741	29,859	30,043	29,863	30,953	31,498	31,939
501	Motor vehicles and automotive parts and supplies	5,143	5,641	5,454	5,530	5,614	5,516	5,631	5,739	5,598	6,113	6,442	6,088
502	Furniture and home furnishings	1,023	1,026	1,056	1,080	1,060	1,036	1,136	1,077	1,118	1,047	1,136	1,197
503	Lumber and other construction materials	2,317	2,357	2,347	2,661	2,630	2,733	2,705	2,732	2,878	2,887	2,874	3,026
505	Metals and minerals, except petroleum	2,551	2,799	2,811	2,984	2,930	3,036	3,090	3,045	2,947	3,188	3,305	3,258
506	Electrical goods	2,844	2,950	3,034	3,103	3,259	3,179	3,225	3,377	3,311	3,340	3,356	3,362
507	Hardware, plumbing, heating equipment, and supplies	2,006	1,954	2,022	2,148	2,161	2,185	2,232	2,209	2,108	2,290	2,237	2,330
508	Machinery, equipment, and supplies	7,030	7,486	7,690	8,305	7,997	8,082	8,201	8,372	8,382	8,607	8,730	9,193
51	Nondurable goods, total	30,605	30,748	31,384	32,809	34,544	33,915	33,566	34,851	34,668	36,385	36,054	35,884
	Total (excluding farm-product raw materials)	24,980	24,776	25,120	26,161	26,661	26,511	26,857	27,418	27,463	28,396	28,875	28,587
511	Paper and paper products	1,378	1,386	1,416	1,494	1,459	1,446	1,447	1,473	1,419	1,536	1,579	1,608
512	Drugs, drug proprietaries, and druggists' sundries	907	890	938	947	940	952	971	980	965	1,000	1,007	997
513	Apparel, piece goods, and notions	1,798	1,711	1,926	1,981	2,075	2,091	2,173	2,299	2,177	2,268	2,291	2,269
514	Groceries and related products	9,781	9,984	9,978	10,199	10,319	10,176	10,340	10,443	10,607	11,039	11,178	11,400
515	Farm-product raw materials[1]	5,625	5,972	6,264	6,648	7,883	7,404	6,709	7,433	7,205	7,989	7,179	7,297
517	Petroleum and petroleum products	4,222	3,993	3,944	3,982	4,354	4,111	4,144	4,430	4,442	4,390	4,542	4,387
518	Beer, wine, and distilled alcoholic beverages	2,125	2,174	2,250	2,198	2,149	2,199	2,245	2,284	2,305	2,333	2,383	2,387
519	Miscellaneous nondurable goods	3,877	3,765	3,802	4,463	4,403	4,583	4,580	4,499	4,521	4,657	4,693	4,567
		Inventories ADJUSTED for seasonal variations											
	Merchant wholesalers, total	69,191	70,325	72,629	74,327	74,779	75,191	75,744	76,338	77,113	78,625	79,526	80,771
	Total (excluding farm-product raw materials)	64,556	65,573	67,319	68,769	69,436	70,028	70,920	71,546	72,119	73,434	74,285	75,546
50	Durable goods, total	44,837	45,738	46,871	47,677	48,319	48,756	49,414	49,972	50,160	50,948	51,625	52,460
501	Motor vehicles and automotive parts and supplies	7,610	7,950	7,869	7,925	8,084	8,177	8,434	8,637	8,315	8,870	9,420	9,236
502	Furniture and home furnishings	1,574	1,617	1,638	1,677	1,716	1,748	1,755	1,750	1,789	1,776	1,782	1,801
503	Lumber and other construction materials	2,720	2,786	2,818	2,888	2,925	3,020	3,052	3,013	3,101	3,181	3,113	3,190
505	Metals and minerals, except petroleum	4,476	4,745	4,943	4,937	5,345	5,296	5,161	5,289	5,290	5,269	5,266	5,166
506	Electrical goods	4,719	4,746	4,916	4,971	5,068	5,177	5,193	5,227	5,346	5,435	5,499	5,650
507	Hardware, plumbing, heating equipment, and supplies	3,827	3,947	3,990	4,053	4,091	4,095	4,149	4,092	4,098	4,207	4,153	4,228
508	Machinery, equipment, and supplies	15,665	15,847	16,251	16,745	16,630	16,710	17,006	17,357	17,510	17,527	17,658	18,249
51	Nondurable goods, total	24,354	24,587	25,758	26,650	26,460	26,435	26,330	26,366	26,953	27,677	27,901	28,311
	Total (excluding farm-product raw materials)	19,719	19,835	20,448	21,092	21,117	21,272	21,506	21,574	21,959	22,486	22,660	23,086
511	Paper and paper products	1,253	1,280	1,323	1,334	1,338	1,341	1,341	1,358	1,404	1,419	1,447	1,482
512	Drugs, drug proprietaries, and druggists' sundries	1,320	1,331	1,333	1,337	1,379	1,393	1,382	1,410	1,453	r1,412	1,405	1,389
514	Groceries and related products	5,472	5,365	5,593	5,711	5,798	5,948	5,922	5,921	6,192	6,342	6,355	6,433
517	Petroleum and petroleum products	1,959	1,950	1,969	1,987	2,019	1,948	2,050	2,078	2,039	2,052	2,064	2,082
518	Beer, wine, and distilled alcoholic beverages	1,991	1,972	2,071	2,152	2,087	2,087	2,180	2,204	2,214	2,293	2,377	2,403
		Stock-sales ratios based on ADJUSTED data											
	Merchant wholesalers, total	123	122	124	121	118	120	119	118	119	117	118	119
	Total (excluding farm-product raw materials)	127	127	128	125	126	127	125	125	126	123	123	125
50	Durable goods, total	175	170	171	165	169	170	165	166	168	165	164	164
501	Motor vehicles and automotive parts and supplies	148	141	144	143	144	148	150	150	149	145	146	152
502	Furniture and home furnishings	154	158	155	155	162	169	154	162	160	170	157	150
503	Lumber and other construction materials	117	118	120	109	111	111	113	110	108	110	108	105
505	Metals and minerals, except petroleum	175	177	176	165	182	174	167	174	179	165	159	159
506	Electrical goods	166	161	162	160	156	163	161	155	161	163	164	168
507	Hardware, plumbing, heating equipment, and supplies	191	202	197	189	189	187	186	185	194	184	186	181
508	Machinery, equipment, and supplies	223	212	211	202	208	207	207	207	209	204	202	199
51	Nondurable goods, total	80	80	82	81	77	78	78	76	78	76	77	79
	Total (excluding farm-product raw materials)	79	80	81	81	79	80	80	79	80	79	78	81
511	Paper and paper products	91	92	93	89	92	93	92	92	99	92	92	92
512	Drugs, drug proprietaries, and druggists' sundries	146	150	142	141	147	146	142	144	151	r141	140	139
514	Groceries and related products	56	54	56	56	56	58	57	57	58	57	57	56
517	Petroleum and petroleum products	46	49	50	50	46	47	49	47	46	47	45	47
518	Beer, wine, and distilled alcoholic beverages	94	91	92	98	97	95	97	97	96	98	100	101

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions.

NA Not available. p Preliminary estimates. See p. 21, Sample Design and Estimation Procedures. r Revised.

[1] There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table 4B. Percent Change Between Selected 3-Month Periods Sales of Merchant Wholesalers, United States

(Based on seasonally-adjusted data)

Item	3 month period, Oct. 1979-Dec. 1979 from--			
	July 1979-Sept. 1979 (3 months ago)	Apr. 1979-June 1979 (6 months ago)	Jan. 1979-Mar. 1979 (9 months ago)	Oct. 1978-Dec. 1978 (12 months ago)
Merchant wholesalers, total.....	+4	+9	+15	+16
Durable goods, total.....	+4	+8	+11	+13
Nondurable goods, total...	+4	+10	+18	+19

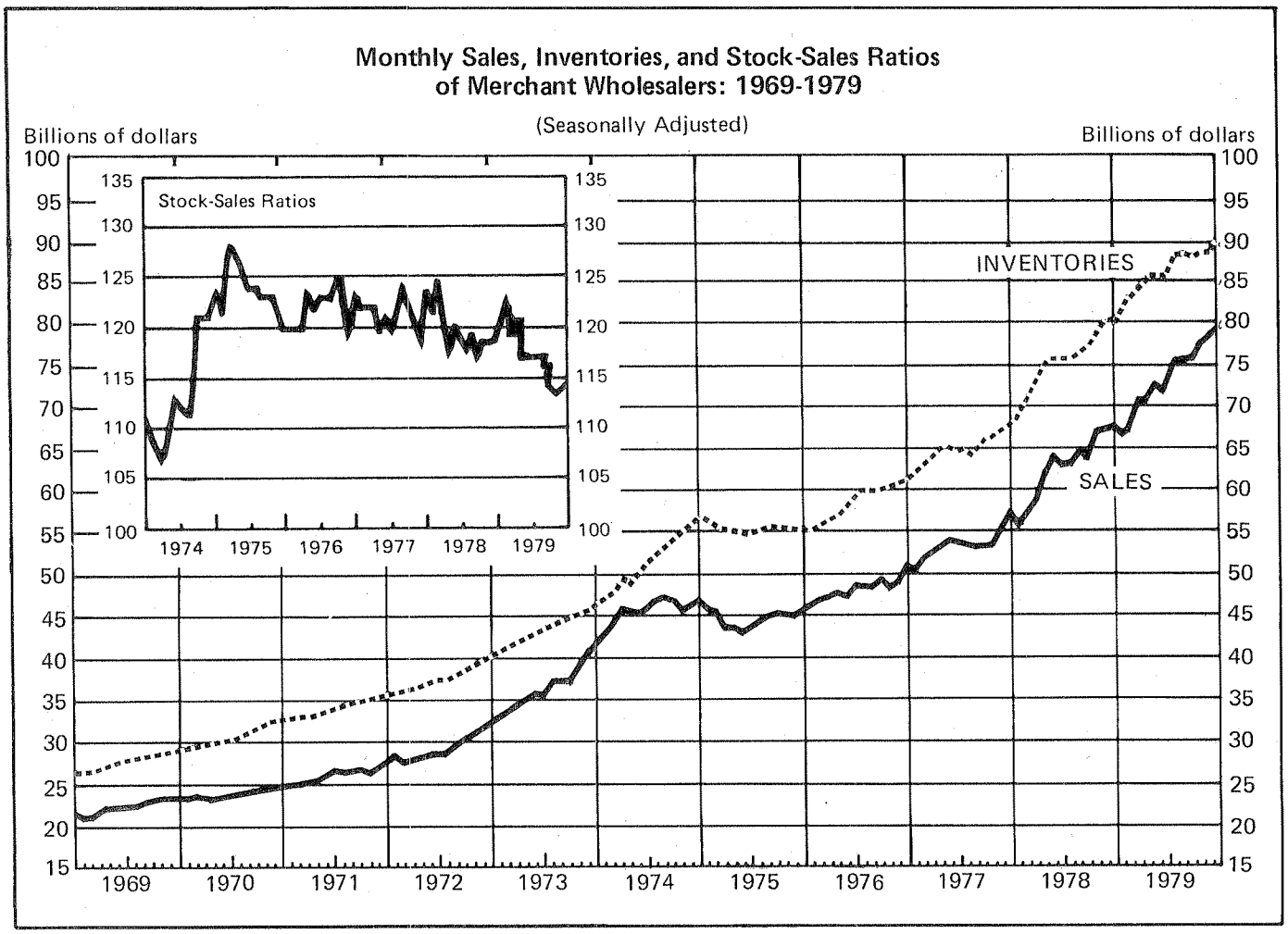


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: December 1979

1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		Dec. 1979 from Nov. 1979	Dec. 1979 from Dec. 1978	12 months 1979 from 12 months 1978	Dec. 1979 from Nov. 1979	Dec. 1979 from Dec. 1978	Dec. 1979 from Nov. 1979	Dec. 1979 from Dec. 1978	Dec. 1979 from Nov. 1979	Dec. 1979 from Dec. 1978
	Merchant wholesalers, total	-4	+17	+17	+1	+12	+1	+17	+1	+12
	Total (excluding farm-product raw materials)	-4	+16	+17	+1	+11	+1	+16	+1	+11
50	Durable goods, total	-5	+12	+16	+1	+10	+2	+13	+1	+10
501	Motor vehicles and automotive parts and supplies	-1	+15	+12	+3	+7	+3	+17	+2	+8
5012	Automobiles and other motor vehicles	+3	+26	+19	+3	0	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	-6	+6	+7	+2	+12	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	-6	+9	+8	+1	+13	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	-10	-1	+8	-3	0	+1	0	0	-2
5021	Furniture--household and office	-5	-3	+14	0	+3	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	-10	-16	+2	+4	+5	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	-3	+4	+20	-3	0	(*)	(*)	(*)	(*)
5023	Home furnishings	-13	+1	+5	-4	-1	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	-18	-3	+15	0	+7	-1	-3	-2	+7
5031	Lumber, plywood, and millwork	-19	-8	+14	0	+6	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c.	-16	+7	+15	-1	+11	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	-16	+10	+17	-2	+8	-12	+7	+2	+7
505	Metals and minerals, except petroleum	-4	+43	+27	+3	+27	+12	+45	+2	+28
5051 pt.	Ferrous metals service centers and offices	-2	+23	+22	+1	+18	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	-7	+18	+20	+2	+23	(*)	(*)	(*)	(*)
5051 pt.	Nonferrous metals service centers and offices	(S)	(S)	(S)	+9	(S)	(*)	(*)	(*)	(*)
506	Electrical goods	-4	+15	+16	-2	+7	-1	+13	-1	+7
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-2	+16	+18	-1	+14	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-6	+13	+14	-4	+1	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	-9	+4	+7	-4	+1	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	-8	+8	+12	+3	+13	+4	+7	+4	+13
5072	Hardware	-7	+18	+13	+3	+23	(*)	(*)	(*)	(*)
5074	Plumbing and heating equipment and supplies (hydronics)	-7	+8	+12	+3	+4	(*)	(*)	(*)	(*)
5075	Warm air heating and air conditioning equipment and supplies	-14	-8	+10	+4	+10	(*)	(*)	(*)	(*)
508	Machinery, equipment, and supplies	-3	+7	+14	0	+8	+1	+6	0	+8
5081	Commercial machines and equipment	-9	+2	+7	+1	-5	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	-11	-10	+7	-1	+4	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	+3	+24	+19	-1	+14	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	-2	+9	+16	+1	+9	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	-3	-5	+12	-1	+4	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	-2	+30	+43	+4	+6	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	-1	+28	+44	+3	+1	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	-3	+33	+41	+7	+19	(*)	(*)	(*)	(*)
51	Nondurable goods, total	-4	+21	+18	0	+15	0	+21	+1	+14
	Total (excluding farm-product raw materials)	-3	+20	+19	0	+12	0	+20	+1	+12
511	Paper and paper products	-3	+10	+12	+2	+14	+2	+11	+1	+14
5111,3	Printing, writing, industrial, and personal service paper	-5	+6	+13	+3	+9	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	-4	+7	+10	-2	+12	+1	+7	+1	+12
5122	Drugs, drug proprietaries, and druggists' sundries	-4	+7	+10	-2	+12	(*)	(*)	(*)	(*)
5122 pt.	General-line drugs	-2	-3	+4	0	-5	(*)	(*)	(*)	(*)
514	Groceries and related products	-3	+7	+11	-1	+6	+1	+6	-1	+6
5141	Groceries, general-line	-5	+9	+12	-4	+6	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	-4	+10	+11	-3	+5	(*)	(*)	(*)	(*)
5141 pt.	Retailer cooperatives	-7	+10	+13	-5	+8	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	-6	+7	+13	-4	+5	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	-3	+10	+11	+2	+9	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	-3	+9	+13	-3	+11	(*)	(*)	(*)	(*)
5145	Confectionery	-13	+7	+13	+6	+9	(*)	(*)	(*)	(*)
5147	Meats and meat products	+3	-3	+9	0	-4	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	-2	+4	+7	-6	-3	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	-7	+24	+18	+2	+26	0	+23	+4	+26
5152	Cotton	+30	+36	+6	+46	+23	(*)	(*)	(*)	(*)
5153	Grain	-10	+27	+21	-4	+29	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	+1	+66	+44	+3	+47	+1	+68	+4	+47
5171	Petroleum bulk stations and terminals	+3	+56	+41	+4	+40	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	+2	+7	+13	-7	+13	-3	+8	+3	+13
5181	Beer and ale	-2	+12	+17	-5	+20	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	+6	+3	+10	-8	+9	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	-8	+17	+23	+1	+7	-8	+17	-1	+7
5191	Farm supplies	-4	+10	+21	+5	+6	(*)	(*)	(*)	(*)
5194	Tobacco and tobacco products	-2	0	+5	-4	+5	(*)	(*)	(*)	(*)
5198	Paints, varnishes, and supplies	-14	+9	+13	+3	+22	(*)	(*)	(*)	(*)
5199 pt.	Books, periodicals, newspapers	-10	0	+9	-1	+4	(*)	(*)	(*)	(*)

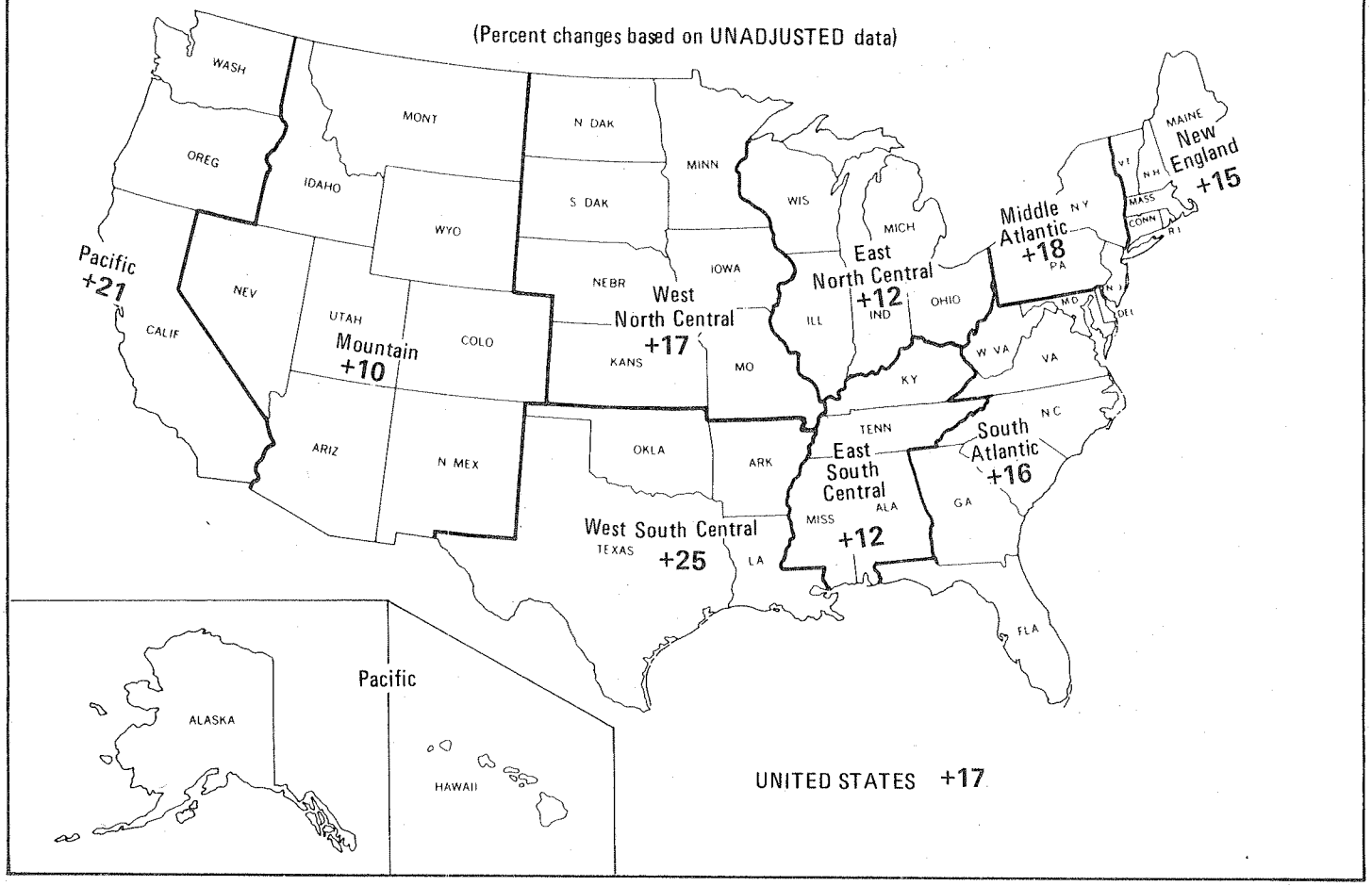
*Adjusted data are available only for summary group totals. r Revised.

[1]Adjusted for seasonal variations and, in the case of sales, also for trading-day differences. Adjusted data are only available for the summary kind-of-business groups shown.

[2]There are indications that the seasonal adjustment factors for this trade group may not reflect recent trends. The seasonally adjusted data for this trade group and also for the summary group totals should, therefore, be used with caution.

Sales of Merchant Wholesalers by Geographic Division
12 Months 1979 Compared With 12 Months 1978

(Percent changes based on UNADJUSTED data)



Geographic Distribution of Wholesale Sales: 1979

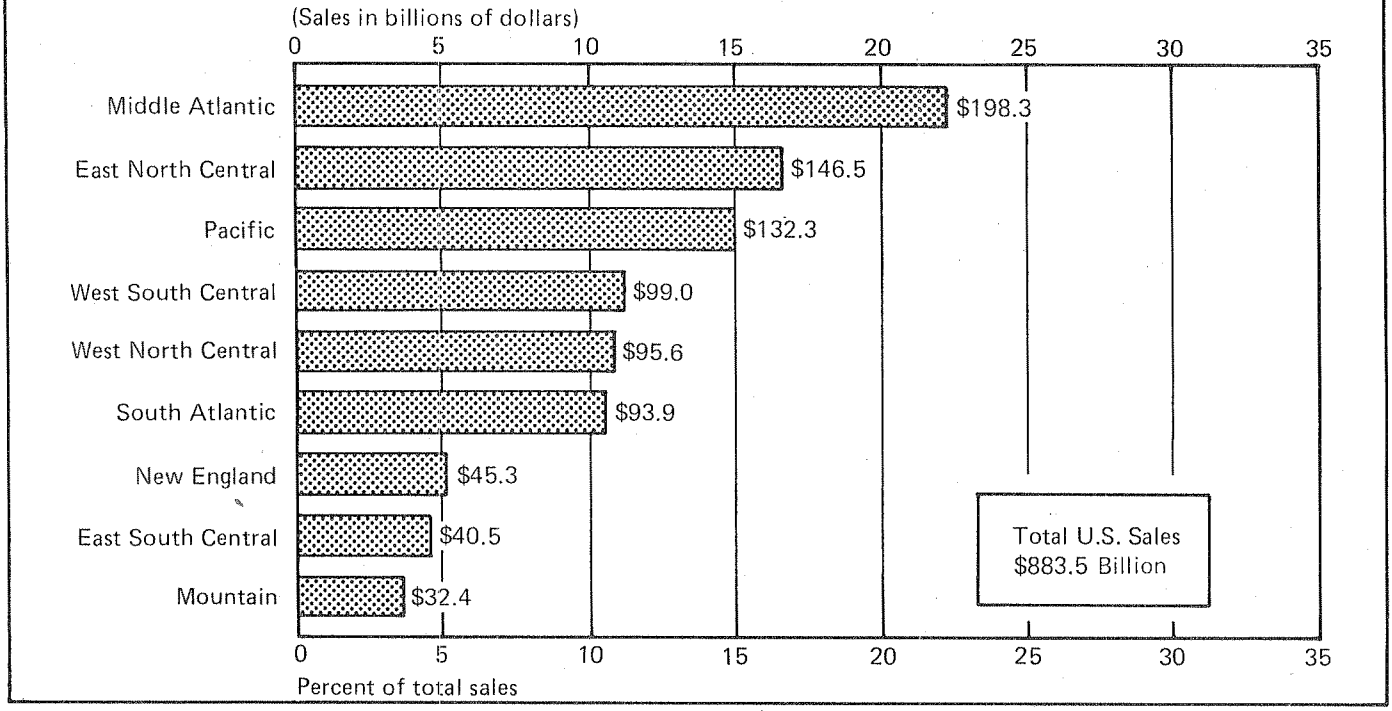


Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1979 and 1978

(Sales, in millions of dollars, are NOT ADJUSTED for seasonal variations or trading-day differences; sampling errors in percent)

1972 SIC code	Kind of business and geographic division[1]	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.[p]	Total 12 mos.	Sampling error of the estimate	
															Range[2]	Median
		1979														
	Merchant wholesalers, total	63,739	61,721	74,319	70,768	76,814	74,361	73,537	78,567	73,213	81,820	79,079	75,558	883,496	0.8-0.9	0.9
	New England	3,393	3,289	3,835	3,652	3,915	3,782	3,572	3,981	3,741	4,167	4,126	3,875	45,327	5-6	6
	Middle Atlantic	14,513	13,785	16,692	15,218	16,416	16,288	16,256	17,786	17,136	18,350	18,319	17,554	198,313	2-2	2
	East North Central	10,573	10,454	12,314	11,906	13,356	12,661	12,182	12,979	11,735	13,552	12,864	11,960	146,535	2-3	3
	West North Central	6,695	6,589	7,834	7,506	8,614	8,005	8,385	8,510	7,921	9,106	8,491	7,907	95,564	2-3	2
	South Atlantic	7,023	6,620	8,329	7,929	8,401	8,014	7,720	8,067	7,558	8,391	7,972	7,772	93,796	2-3	2
	East South Central	2,961	2,801	3,505	3,461	3,557	3,372	3,292	3,534	3,261	3,791	3,505	3,458	40,498	4-5	4
	West South Central	6,703	6,648	7,785	7,673	8,443	8,314	8,248	8,755	8,434	9,347	9,351	9,269	98,969	3-4	4
	Mountain	2,337	2,253	2,904	2,659	2,786	2,851	2,704	2,830	2,760	2,851	2,743	2,688	32,368	5-5	5
	Pacific	9,540	9,281	11,121	10,765	11,325	11,077	11,178	12,125	10,668	12,264	11,710	11,072	132,125	2-3	3
50	Durable goods, total	28,284	28,141	34,689	33,429	35,723	34,447	33,750	37,048	33,616	37,935	34,711	32,982	404,754	0.8-1.0	0.9
	Middle Atlantic	5,936	5,892	7,165	6,601	7,191	6,961	6,769	7,538	6,989	8,083	7,477	7,221	83,824	4-5	4
	East North Central	4,818	4,975	6,057	5,863	6,467	6,023	5,801	6,440	5,833	6,439	5,869	5,442	70,030	3-4	4
	West North Central	2,157	2,208	2,718	2,746	3,009	2,778	2,873	3,209	2,900	3,171	2,851	2,876	33,497	5-6	5
	South Atlantic	3,515	3,211	4,246	4,111	4,269	4,172	4,074	4,173	3,796	4,374	3,934	3,711	47,584	4-5	4
	West South Central	3,020	3,067	3,649	3,637	3,863	3,900	3,702	3,970	3,662	4,174	3,870	3,746	44,260	4-4	4
	Mountain	1,076	1,043	1,408	1,309	1,355	1,358	1,322	1,356	1,280	1,384	1,202	1,155	15,248	6-7	7
	Pacific	5,259	5,268	6,330	6,173	6,433	6,265	6,388	7,143	6,069	6,993	6,576	6,143	75,039	2-3	3
51	Nondurable goods, total	35,455	33,580	39,630	37,339	41,091	39,914	39,787	41,519	39,597	43,885	44,368	42,576	478,742	1.0-1.2	1.0
	New England	2,166	2,066	2,335	2,200	2,377	2,343	2,225	2,453	2,252	2,542	2,635	2,484	28,077	5-7	6
	Middle Atlantic	8,577	7,893	9,527	8,616	9,226	9,327	9,487	10,247	10,147	10,267	10,842	10,333	114,489	3-3	3
	East North Central	5,755	5,479	6,256	6,042	6,888	6,638	6,380	6,539	5,902	7,113	6,994	6,518	76,506	3-4	3
	West North Central	4,538	4,381	5,115	4,760	5,606	5,227	5,512	5,301	5,021	5,935	5,640	5,032	62,067	3-4	3
	South Atlantic	3,508	3,409	4,084	3,818	4,132	3,842	3,646	3,894	3,762	4,017	4,038	4,061	46,212	3-5	3
	East South Central	1,685	1,549	1,889	1,925	1,959	1,820	1,817	1,844	1,664	2,100	2,064	2,160	22,477	3-4	4
	West South Central	3,683	3,581	4,136	4,036	4,580	4,414	4,546	4,785	4,771	5,173	5,481	5,524	54,709	5-5	5
	Pacific	4,281	4,013	4,790	4,591	4,893	4,812	4,790	4,982	4,599	5,270	5,134	4,930	57,085	4-5	4
		1978														
	Merchant wholesalers, total	52,143	52,766	62,900	60,613	66,249	65,834	60,651	67,702	63,933	69,086	67,699	64,527	754,105	0.8-0.9	0.9
	New England	2,693	2,657	3,191	2,913	3,231	3,451	3,206	3,654	3,472	3,638	3,678	3,652	39,435	5-6	6
	Middle Atlantic	11,846	11,840	14,206	13,114	14,345	14,752	13,281	15,382	14,387	15,123	15,304	14,529	168,111	2-2	2
	East North Central	8,929	9,269	10,680	10,708	11,787	11,510	10,461	11,636	10,821	12,195	11,757	10,882	130,634	2-3	3
	West North Central	5,566	5,390	6,419	6,522	7,583	6,999	6,513	7,373	6,836	7,790	7,471	6,894	81,356	2-3	2
	South Atlantic	5,666	5,686	6,792	6,533	6,858	7,044	6,523	7,139	6,877	7,449	7,106	6,979	80,653	2-3	2
	East South Central	2,421	2,534	3,201	3,318	3,453	3,132	2,962	3,127	2,938	3,213	3,075	2,922	36,297	4-5	4
	West South Central	5,582	5,843	6,878	6,433	6,857	6,744	6,382	6,890	6,717	7,036	6,885	6,680	78,927	3-4	4
	Mountain	1,934	1,900	2,536	2,412	2,537	2,777	2,456	2,620	2,693	2,583	2,477	2,540	29,465	5-5	5
	Pacific	7,506	7,649	8,994	8,659	9,600	9,426	8,868	9,881	9,191	10,058	9,946	9,448	109,228	2-3	3
50	Durable goods, total	22,869	23,880	28,985	28,784	30,405	30,991	28,701	32,279	30,404	32,242	31,037	29,340	349,916	0.8-1.0	0.9
	Middle Atlantic	4,973	5,138	6,295	5,952	6,181	6,464	5,808	6,765	6,303	6,618	6,516	6,094	73,109	4-5	4
	East North Central	3,935	4,363	5,081	5,128	5,495	5,407	4,958	5,793	5,342	5,801	5,674	5,177	62,153	3-4	4
	West North Central	1,776	1,805	2,228	2,378	2,548	2,446	2,383	2,695	2,504	2,740	2,652	2,379	28,534	5-6	5
	South Atlantic	2,809	2,768	3,414	3,455	3,538	3,817	3,480	3,738	3,689	3,869	3,608	3,513	41,697	4-5	4
	West South Central	2,413	2,626	3,180	3,097	3,303	3,366	3,135	3,403	3,224	3,438	3,160	3,144	37,487	4-4	4
	Mountain	923	893	1,192	1,208	1,247	1,412	1,303	1,372	1,340	1,283	1,172	1,207	14,553	6-7	7
	Pacific	4,115	4,283	5,007	4,901	5,316	5,256	5,026	5,641	5,214	5,597	5,524	5,250	61,129	2-3	3
51	Nondurable goods, total	29,274	28,886	33,915	31,829	35,844	34,843	31,950	35,423	33,529	36,844	36,662	35,187	404,189	1.0-1.2	1.0
	New England	1,735	1,735	2,017	1,747	2,014	2,151	1,988	2,293	2,117	2,245	2,316	2,349	24,708	5-7	6
	Middle Atlantic	6,873	6,701	7,912	7,162	8,164	8,288	7,473	8,617	8,084	8,505	8,788	8,435	95,002	3-3	3
	East North Central	4,994	4,906	5,599	5,580	6,292	6,103	5,504	5,843	5,479	6,394	6,083	5,704	68,482	3-4	3
	West North Central	3,790	3,584	4,191	4,145	5,035	4,554	4,129	4,678	4,331	5,050	4,820	4,515	52,822	3-4	3
	South Atlantic	2,857	2,918	3,378	3,078	3,320	3,227	3,044	3,400	3,188	3,580	3,498	3,466	38,955	3-5	3
	East South Central	1,453	1,451	1,788	1,819	1,892	1,609	1,572	1,616	1,505	1,710	1,706	1,650	19,770	3-4	4
	West South Central	3,169	3,217	3,699	3,336	3,554	3,378	3,248	3,487	3,493	3,598	3,725	3,536	41,440	5-5	5
	Pacific	3,392	3,367	3,987	3,757	4,284	4,170	3,842	4,241	3,978	4,461	4,422	4,199	48,099	4-5	4

Note: Detail may not add to totals due to rounding and minor revisions.

[p]Preliminary estimate. See p. 21, Sample Design and Estimation Procedure.

[1]See map on page 7.

[2]The range of sampling error of the estimate is based on data for August, September, and October 1977.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: December 1979

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in--					Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		Sales			Inventories			
		Dec. 1979 from Nov. 1979	Dec. 1979 from Dec. 1978	12 months 1979 from 12 months 1978	Dec. 1979 from Nov. 1979	Dec. 1979 from Dec. 1978		
		A	B	C[1]	D	E	A	D
	Merchant wholesalers, total	-4	+17	+17	+1	+12	0.4	0.2
	New England	-6	+6	+15	0	+5	2.0	1.9
	Middle Atlantic	-4	+21	+18	+3	+14	1.1	0.6
	East North Central	-7	+10	+12	-1	+12	1.2	0.8
	West North Central	-7	+15	+17	0	+25	1.3	1.1
	South Atlantic	-3	+11	+16	-1	+6	1.6	1.0
	East South Central	-1	+18	+12	+2	+6	1.7	1.4
	West South Central	-1	+39	+25	+1	+12	1.4	0.8
	Mountain	-2	+6	+10	0	-6	2.4	1.3
	Pacific	-5	+17	+21	+2	+13	1.2	0.5
50	Durable goods, total	-5	+12	+16	+1	+10	0.6	0.3
	New England	-7	+7	+17	0	-1	2.4	1.3
	Middle Atlantic	-3	+18	+15	+4	+16	1.7	1.0
	East North Central	-7	+5	+13	0	+13	1.9	1.0
	West North Central	+1	+21	+17	+2	+24	3.3	1.7
	South Atlantic	-6	+6	+14	-1	+4	1.9	1.2
	East South Central	-10	+2	+9	+2	+2	3.9	2.5
	West South Central	-3	+19	+18	+1	+9	2.1	1.2
	Mountain	-4	-4	+5	-1	-9	2.9	1.7
	Pacific	-7	+17	+23	+1	+10	1.9	0.7
51	Nondurable goods, total	-4	+21	+18	0	+15	0.6	0.4
	New England	-6	+6	+14	+1	+12	1.9	2.7
	Middle Atlantic	-5	+23	+21	+1	+12	1.9	0.9
	East North Central	-7	+14	+12	-2	+10	1.4	1.1
	West North Central	-11	+11	+18	-1	+26	1.6	1.4
	South Atlantic	+1	+17	+19	-1	+10	2.4	1.8
	East South Central	+5	+31	+14	+2	+12	1.7	2.4
	West South Central	+1	+56	+32	+2	+18	2.2	1.3
	Mountain	-1	+15	+15	+3	+2	3.2	1.2
	Pacific	-4	+17	+19	+5	+20	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	-6	+6	+7	+2	+12	2	1
	New England	-2	+25	+23	-2	+35	7	4
	Middle Atlantic	-8	+2	0	+8	+14	4	2
	East North Central	-3	+3	+11	+1	+16	7	1
	West North Central	-6	+10	+11	+5	+21	5	2
	South Atlantic	-12	-5	+8	-2	-8	4	2
	East South Central	-11	+7	+8	+1	+6	4	3
	West South Central	-9	+1	+5	0	+12	5	2
	Mountain	-10	(S)	(S)	-4	(S)	7	3
	Pacific	-2	+19	+11	+5	+29	3	2
502	Furniture and home furnishings	-10	-1	+8	-3	0	2	1
	Middle Atlantic	-12	+1	+6	-2	-5	4	2
	East North Central	-9	-8	+14	-1	-8	7	2
	West North Central	0	-5	-1	-4	+11	5	4
	West South Central	-13	(S)	(S)	-3	+39	5	7
	Pacific	-17	0	+17	-3	+9	5	3
503	Lumber and other construction materials	-18	-3	+15	0	+7	2	1
	New England	-29	+7	+15	+4	+8	4	5
	Middle Atlantic	-18	-16	+5	-1	+5	4	2
	East North Central	-17	+8	+10	0	+3	3	2
	West North Central	-24	-2	+25	-4	+18	7	7
	South Atlantic	-14	+7	+13	+2	+19	4	2
	East South Central	-16	-19	-3	-3	+7	4	3
	West South Central	-18	+1	+13	-3	-8	6	5
	Pacific	-18	-11	+23	+2	+10	5	1
5051 pt.	Ferrous metals service centers	-7	+18	+20	+2	+23	2	1
	New England	-13	+1	+16	+1	+10	6	2
	Middle Atlantic	-11	+23	+23	+1	+21	5	2
	East North Central	-10	+4	+16	+3	+33	5	2
	West North Central	-7	+11	+21	-3	+14	5	2
	South Atlantic	-2	-7	+4	+1	(S)	3	2
	East South Central	-12	+22	+18	+1	+24	4	4
	West South Central	+16	+38	+16	+5	+15	4	2
	Mountain	-6	(S)	(S)	+1	(S)	2	2
	Pacific	-12	+29	+38	+7	+66	2	3
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-2	+16	+18	-1	+14	2	1
	New England	-8	+11	+25	-2	+4	3	2
	Middle Atlantic	+1	+11	+15	-1	+7	5	2
	East North Central	-11	+5	+23	-4	+12	3	2
	West North Central	-1	+29	+14	-1	+35	5	3
	South Atlantic	-1	+16	+14	-4	+4	3	2
	East South Central	-19	-12	+13	+5	+3	3	5
	West South Central	(S)	+62	+32	+5	(S)	4	2
	Mountain	-3	+8	+9	+3	+12	4	2
	Pacific	-5	+16	+20	-1	+13	4	2

See footnotes at end of table.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: December 1979—Continued

(Based on data NOT ADJUSTED for seasonal variations or trading-day differences)

1972 SIC code	Kind of business and geographic division[1]	Percent change in-- Sales: Dec. 1979 from Nov. 1979	Sales: Dec. 1979 from Dec. 1978	Sales: 12 months 1979 from 12 months 1978	Inventories: Dec. 1979 from Nov. 1979	Inventories: Dec. 1979 from Dec. 1978	Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		A	B	C[1]	D	E	A	D
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-6	+13	+14	-4	+1	3	1
	Middle Atlantic	-7	+6	+11	-8	-6	3	2
	East North Central	-10	+17	+24	-4	+13	4	1
	West North Central	+2	+20	+4	+2	+47	4	4
	South Atlantic	-17	-1	+12	-4	-8	6	4
	West South Central	-12	+31	+35	-2	-5	4	4
	Mountain	-9	-27	+9	0	-24	6	3
	Pacific	+2	+28	+14	0	+1	3	2
5072	Hardware	-7	+18	+13	+3	+23	1	1
	New England	-3	+29	+16	-2	+33	6	3
	Middle Atlantic	-1	+24	+15	+1	+25	6	2
	East North Central	+2	+23	+13	+4	+30	4	2
	West North Central	-17	+21	+17	+2	+28	3	3
	South Atlantic	-7	+4	+13	+2	+12	4	2
	East South Central	-17	+13	+3	+3	+7	4	1
	Pacific	-10	+15	+19	+4	+21	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	-7	+8	+12	+3	+4	2	1
	Middle Atlantic	-7	+5	+19	0	0	6	3
	East North Central	-3	+1	-5	+3	(S)	3	3
	South Atlantic	-10	-1	+17	+1	+13	3	2
	Mountain	-4	+15	-8	+10	+26	7	4
	Pacific	-12	+10	+23	+2	+11	5	4
5084,5	Industrial machinery, equipment, and supplies	-2	+9	+16	+1	+9	2	1
	Middle Atlantic	+6	+8	+14	0	+4	7	2
	East North Central	-6	+14	+17	+1	+32	3	2
	West South Central	+1	+9	+20	+1	+5	4	3
	Pacific	-13	+5	+22	+2	+2	5	2
512	Drugs, drug proprietaries, and druggists' sundries	-4	+7	+10	-2	+12	1	1
	New England	-4	+2	+14	-2	+8	5	3
	Middle Atlantic	+10	+15	+6	0	+25	3	2
	East North Central	-8	+1	+11	-3	-9	6	3
	West North Central	-11	+18	+13	-14	-2	2	2
	South Atlantic	-11	-1	+6	-4	-3	6	5
	East South Central	-10	+17	+7	-6	+16	6	5
	West South Central	-4	+13	+9	+5	+38	3	2
	Mountain	+2	+15	+16	+24	+20	3	2
	Pacific	-10	-2	+16	+1	-10	3	3
5141	Groceries, general-line	-5	+9	+12	-4	+6	1	1
	New England	-3	+11	+11	-5	+7	2	1
	Middle Atlantic	-5	+3	+11	-4	+2	1	2
	East North Central	-8	+10	+13	-7	+3	3	1
	West North Central	-3	+11	+8	-4	+7	1	1
	South Atlantic	-10	+12	+15	-3	+5	2	1
	West South Central	-4	+13	+14	-2	+19	2	1
	Mountain	-2	+9	+15	0	-5	2	2
	Pacific	-3	+5	+12	-4	+10	1	1
5142,3,6,9	Specialty-line groceries	-3	+10	+11	+2	+9	1	1
	Middle Atlantic	-4	+13	+10	+5	-10	4	2
	East North Central	-2	-2	+4	0	+15	3	2
	West North Central	-6	+9	+14	+3	+35	3	1
	South Atlantic	+2	+17	+16	+1	+20	5	6
	East South Central	-4	-8	+3	-4	+1	2	2
5148	Fresh fruits and vegetables	-2	+4	+7	-6	-3	2	4
	Middle Atantic	-1	-1	+4	-1	-8	7	5
	East North Central	-5	+2	+1	+28	+33	6	6
	West North Central	-5	-9	+6	-9	-18	6	3
	West South Central	+4	+10	+11	-8	+18	5	3
	Pacific	-8	+7	+8	-20	-23	4	4
5194	Tobacco and tobacco products	-2	0	+5	-4	+5	1	1
	New England	-3	-3	-6	+5	+14	5	3
	Middle Atlantic	+7	+4	+4	-4	+32	4	3
	East North Central	-2	-13	+4	-1	-11	4	3
	West North Central	-9	+23	+12	-9	+5	4	2
	South Atlantic	-5	(S)	-1	-15	(S)	6	6
	East South Central	-9	(S)	-4	-8	(S)	7	4
	West South Central	0	+85	+24	-4	+50	7	6
	Mountain	-8	+2	+13	+1	-27	6	2
	Pacific	-6	+3	+16	0	+15	2	5

Note: Data at the United States level are generally more reliable than data by geographic division. In those kinds of business where the geographic division trends are subject to a high sampling error, it may be desirable to use the United States total trends for the kinds of business rather than the geogrpahic division trends.

(S) Does not meet publication standards because of extreme variability or high nonresponse rate.

[1]See map on page 7.

[2]The sampling errors (in percent) shown in columns A and D are based on medians or measurements on data for August, September, and October 1977. For SIC's 5051 pt., and 5063 the medians of measurements in columns A and D are based on data for June, July, and August 1978.

APPENDIX A. Reliability of Data

There are two types of errors possible in an estimate based on a sample survey—sampling and nonsampling. Sampling errors occur because observations are made only on a sample, not on the entire population. Nonsampling errors can be attributed to many sources in the collection and processing of data. The accuracy of a survey result is determined by the joint effects of sampling and nonsampling errors.

Measures of sampling variability—The particular sample used in this survey is one of a large number of all possible samples of the same size that could have been selected using the same design. Estimates derived from the different samples would differ from each other. The average of these estimates would be close to the estimate derived from a complete enumeration of the population (assuming that a complete enumeration has the same nonsampling errors as the sample survey). The average of the estimates differs from the estimate from a complete census because of the composite estimation technique. Disregarding this difference, the sampling error or standard error of the estimate is a measure of the variability among the estimates from all possible samples of the same size and design and, thus, is a measure of the precision with which an estimate from a particular sample approximates the results of a complete enumeration. The coefficient of variation (expressed as a percent) is the standard error of the estimate times 100 percent, divided by the value being estimated. Note that any measures of sampling variability, such as the standard error or coefficient of variation, are estimates derived from the sample and are also subject to sampling variability.

Estimates of sampling variability (the coefficients of variation in percent) for sales and inventories at the kind-of-business detail provided in this publication are shown in table A-1. These coefficients of variation permit certain confidence statements about the sample estimates. As noted above, the particular sample used in this survey is one of a large number of all possible samples of about the same size that could have been selected using the same design. In about two out of three (67 percent) of these samples, the estimate would differ from a complete enumeration by less than the corresponding percent for that estimate shown in the sampling variability table. In about 19 out of 20 (95 percent) of these samples, the estimate would differ from the results of a complete enumeration by less than twice the percentages shown.

To illustrate the computations involved in the above confidence statements for monthly dollar volume estimates, assume that an estimate for a kind of business published in table 1 for a particular month is $5,000 million and that the median coefficient of variation for this statistic, is 0.9 percent or .009. Multiplying $5,000 million by .009 yields $45 million. Therefore, a 67 percent confidence interval is $4,955 million to $5,045 million (i.e. $5,000 million plus or minus $45 million). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately two out of three (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Similarly a 95 percent confidence interval is $4,910 million to $5,090 million (i.e., $5,000 million plus or minus $90 million).

As an example of the use of the coefficients of variation with ratios, assume that an estimated month-to-month percent change published in table 5 is -1.0 percent for a particular kind of business. This is equivalent to a month-to-month ratio of .990. Assume the median coefficient of variation for this ratio as shown in table A-1 is 0.5 percent (or .005). Multiplying .990 by .005 yields .005. Therefore, a 67 percent confidence interval is .985 to .995 (i.e., .990 plus or minus .005) and a 95 percent confidence interval is .980 to 1.000 (i.e., .990 plus or minus .010).

Nonsampling errors—As calculated for this report, the coefficient of variation measures certain nonsampling errors but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples of the same size and design, between the estimate and the true value being estimated. The accuracy of the tabulated data is determined by the joint effects of the sampling and nonsampling errors.

Nonsampling errors can be attributed to many sources: (1) inability to obtain information about all cases in the sample, (2) response errors, (3) definitional difficulties, (4) differences in the interpretation of questions, (5) mistakes in recording or coding the data obtained, and (6) other errors of collection, response, coverage, and estimation for missing data. These nonsampling errors also occur in complete censuses.

Although no direct measurement of the biases due to nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is due to imputing data for nonrespondents, for late reporters, and for data which fail edit. For all kinds of business combined, imputed data amount to about 15 percent of the sales estimates and 25 percent for inventories.

Table A-1. Estimated Sampling Variability of Sales and Inventories by Kind of Business for the United States

1972 SIC code	Kind of business	Sales						Inventories					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total	0.8-1.1	0.9	0.8-0.9	0.9	0.4-0.5	0.5	0.8-1.0	0.9	0.7-1.0	0.9	0.2-0.5	0.4
	Total (excluding farm-product raw materials)	0.9-1.2	1.1	0.9-1.0	1.0	0.4-0.6	0.5	0.9-1.0	1.0	0.8-1.0	0.9	0.2-0.5	0.3
50	Durable goods, total	1.1-1.3	1.2	0.9-1.0	1.0	0.6-0.6	0.6	1.1-1.2	1.2	1.0-1.2	1.1	0.3-0.7	0.5
501	Motor vehicles and automotive parts and supplies	2.3-3.3	3.1	1.9-2.8	2.2	1.4-1.9	1.7	2.5-3.3	2.9	2.6-3.1	3.0	0.6-1.3	1.0
5012	Automobiles and other motor vehicles	(*)	(*)	(*)	(*)	1.7-3.9	3.1	(*)	(*)	(*)	(*)	1.7-3.0	2.8
5013,4	Automotive parts and supplies, tires and tubes	2.9-3.7	3.1	2.9-3.2	3.1	1.5-2.0	1.6	4.0-4.5	4.3	3.9-4.4	4.0	0.4-1.4	0.7
5013	Automotive parts and supplies	3.3-4.0	3.9	3.1-3.8	3.7	1.9-2.2	2.0	4.7-5.3	5.2	4.7-5.2	5.0	0.5-1.5	0.9
502'	Furniture and home furnishings	4.2-5.8	4.6	4.2-4.4	4.3	1.7-2.9	2.0	3.2-4.9	3.7	3.4-4.2	3.7	0.8-2.3	2.0
5021	Furniture--household and office	6.6-7.6	6.9	5.6-7.1	6.9	4.0-5.7	4.3	(*)	(*)	(*)	(*)	1.4-3.4	2.2
5021 pt.	Household furniture	(*)	(*)	(*)	(*)	5.0-5.8	5.1	(*)	(*)	(*)	(*)	1.4-4.3	2.0
5021	Office furniture	(*)	(*)	(*)	(*)	5.7-8.0	5.9	(*)	(*)	(*)	(*)	0.7-3.7	2.1
5023	Home furnishings	5.1-7.5	6.1	5.1-6.1	5.5	1.6-3.6	2.2	4.8-6.9	5.6	4.9-6.0	5.0	1.0-3.1	2.6
503	Lumber and other construction materials	2.8-4.4	3.1	2.9-3.9	3.1	1.6-2.5	1.9	4.5-6.5	4.9	4.8-5.8	4.9	0.7-1.8	0.9
5031	Lumber, plywood, and millwork	4.1-4.6	4.3	3.3-4.6	4.0	2.1-2.5	2.4	5.9-8.2	6.5	6.0-6.9	6.5	1.0-2.6	1.8
5039	Construction materials, n.e.c	4.2-7.2	4.9	4.5-5.9	4.9	2.0-3.4	2.2	(*)	(*)	(*)	(*)	1.1-2.0	1.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(*)	(*)	(*)	(*)	2.2-2.4	2.3	(*)	(*)	(*)	(*)	1.0-2.5	1.4
505	Metals and minerals, except petroleum	4.4-6.0	4.7	4.0-5.1	4.0	1.5-3.0	2.8	3.2-3.8	3.7	3.7-4.1	4.0	0.8-1.4	1.3
5051 pt.	Ferrous metals service centers and offices	5.0-5.8	5.7	4.1-5.2	4.7	1.2-3.8	3.1	3.8-4.2	4.1	4.1-4.3	4.2	0.5-1.6	1.4
5051 pt.	Ferrous metals service centers	6.7-8.0	6.8	5.0-6.8	5.8	1.1-5.3	3.5	2.9-4.4	3.4	3.4-4.0	3.5	0.6-2.2	2.1
5051 pt.	Nonferrous metals service centers and offices	(*)	(*)	(*)	(*)	4.5-7.0	6.1	(*)	(*)	(*)	(*)	2.8-5.4	4.7
506	Electrical goods	1.9-2.6	2.3	1.6-2.1	1.7	1.3-1.6	1.4	2.5-2.9	2.6	2.2-2.8	2.4	0.5-1.0	0.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2.2-3.1	2.6	2.3-2.7	2.4	1.4-1.7	1.6	2.9-3.5	3.2	3.0-3.2	3.1	0.6-1.2	0.7
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3.4-4.0	3.8	3.0-3.2	3.1	1.6-2.8	2.5	2.9-4.2	3.2	2.7-3.8	3.0	0.7-1.6	0.9
5064	Electrical appliances, TV and radio sets	3.0-3.8	3.6	2.6-3.7	3.1	1.7-2.7	2.5	(*)	(*)	(*)	(*)	0.9-1.7	1.4
507	Hardware, plumbing, heating equipment, and supplies	2.7-3.0	2.9	2.4-2.6	2.5	1.1-1.9	1.5	2.4-2.8	2.6	2.4-2.9	2.7	0.3-1.4	0.6
5072	Hardware	3.6-4.2	3.8	2.6-3.1	3.0	1.3-2.4	1.9	2.0-4.1	2.7	2.2-3.5	2.8	0.4-2.1	0.8
5074	Plumbing and heating equipment and supplies (hydronics)	4.1-5.3	4.2	3.9-5.1	4.2	1.6-3.8	2.1	5.0-7.0	6.0	4.5-7.1	5.3	0.5-3.1	0,9
5075	Warm air heating and air conditioning equipment and supplies	(*)	(*)	(*)	(*)	2.0-4.4	2.7	(*)	(*)	(*)	(*)	1.1-4.3	1.4
508	Machinery, equipment, and supplies	2.3-2.7	2.6	1.8-2.5	2.1	1.2-1.5	1.4	2.0-2.6	2.3	1.7-2.1	1.9	0.4-1.8	1.1
5081	Commercial machines and equipment	(*)	(*)	(*)	(*)	2.9-4.3	4.1	(*)	(*)	(*)	(*)	1.6-8.5	1.9
5082	Construction and mining machinery and equipment	5.0-7.3	5.8	3.3-5.8	4.9	3.9-4.6	4.4	2.9-7.0	4.0	3.2-4.1	3.3	0.7-5.3	1.0
5083	Farm and garden machinery and equipment	(*)	(*)	(*)	(*)	4.1-6.6	6.0	(*)	(*)	(*)	(*)	1.1-2.9	1.2
5084,5	Industrial machinery, equipment, and supplies	3.1-3.4	3.2	2.8-3.0	2.9	1.1-2.3	1.6	2.4-3.0	2.9	2.4-3.0	2.7	0.5-1.6	0.6
5086	Professional equipment and supplies	3.7-7.5	4.3	4.0-5.5	5.2	1.8-3.3	2.0	(*)	(*)	(*)	(*)	0.6-5.2	0.7
5086 pt.	Surgical, medical, hospital, and supplies	(*)	(*)	(*)	(*)	1.7-3.8	2.5	(*)	(*)	(*)	(*)	0.7-5.4	1.0
5087	Service establishment equipment and supplies	(*)	(*)	(*)	(*)	1.8-11.0	2.9	(*)	(*)	(*)	(*)	1.0-3.4	1.3
5093	Scrap and waste materials	4.6-13.3	9.0	4.6-8.8	5.0	2.2-4.9	2.7	(*)	(*)	(*)	(*)	0.7-3.8	0.9
5093 pt.	Iron and steel scrap	(*)	(*)	(*)	(*)	2.6-3.5	3.1	(*)	(*)	(*)	(*)	0.8-1.4	1.0
5093 pt.	Waste materials	(*)	(*)	(*)	(*)	2.6-8.8	4.8	(*)	(*)	(*)	(*)	1.2-9.1	1.6
51	Nondurable goods, total	1.0-1.3	1.1	1.0-1.1	1.1	0.4-0.7	0.6	1.5-1.7	1.6	1.4-1.6	1.5	0.3-0.7	0.4
	Total (excluding farm-product raw materials)	1.0-1.6	1.2	1.3-1.4	1.4	0.5-0.8	0.6	1.7-2.0	1.9	1.6-1.8	1.7	0.3-0.7	0.4
511	Paper and paper products	2.6-4.0	3.7	2.4-4.1	3.1	1.0-1.4	1.3	2.5-3.4	2.7	2.4-3.2	2.8	0.4-1.5	0.6
5111,3	Printing, writing, industrial, and personal service paper	2.4-3.1	2.7	2.3-2.8	2.4	1.3-1.5	1.4	2.9-3.4	3.1	2.7-3.2	2.8	0.4-1.3	0.9
5112	Stationery supplies	(*)	(*)	(*)	(*)	2.4-3.4	2.5	3.2-6.1	5.8	3.6-5.1	4.4	0.9-4.8	1.4
512	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	5.6-6.3	5.7	5.6-5.7	5.7	0.6-2.2	0.7
5122	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	(*)	(*)	(*)	(*)	0.6-2.2	0.7
5122 pt.	General-line drugs	7.2-9.8	7.9	7.5-8.5	7.6	0.7-3.0	1.0	(*)	(*)	(*)	(*)	0.5-3.1	1.0
513	Apparel, piece goods, and notions	8.3-12.4	8.8	8.6-9.3	9.1	2.6-4.0	3.3	(*)	(*)	(*)	(*)	(*)	(*)
514	Groceries and related products	1.7-2.2	2.0	1.6-2.0	1.9	0.4-1.2	0.5	1.5-2.5	1.8	1.8-2.1	1.9	0.4-1.3	0.6
5141	Groceries, general-line	1.9-2.7	2.1	1.7-2.7	2.0	0.4-1.5	0.7	1.8-2.7	2.3	1.7-2.0	1.8		0.8
5141 pt.	Voluntary groups	(*)	(*)	(*)	(*)	0.5-1.7	0.6	(*)	(*)	(*)	(*)	0.4-1.7	0.5
5141 pt.	Retailer cooperatives	(*)	(*)	(*)	(*)	0.6-1.6	1.1	(*)	(*)	(*)	(*)	0.4-2.4	0.7
5141 pt.	Other general-lines	(*)	(*)	(*)	(*)	0.9-3.1	1.8	(*)	(*)	(*)	(*)	0.5-1.3	0.7
5142,3,6,9	Specialty-line groceries	(*)	(*)	(*)	(*)	0.7-3.4	1.3	(*)	(*)	(*)	(*)	0.9-2.4	1.0
5144	Poultry and poultry products	3.4-5.5	4.4	4.0-4.4	4.2	0.6-2.2	1.5	(*)	(*)	(*)	(*)	2.1-4.1	2.3
5145	Confectionery	4.7-6.3	4.7	3.6-5.4	4.3	2.0-3.2	2.2	(*)	(*)	(*)	(*)	0.8-2.4	2.3
5147	Meats and meat products	4.5-4.8	4.7	4.6-4.6	4.6	1.4-2.9	1.7	(*)	(*)	(*)	(*)	1.7-3.9	2.2
5148	Fresh fruits and vegetables	4.7-5.4	4.9	3.9-4.1	4.0	1.9-4.2	2.7	(*)	(*)	(*)	(*)	2.9-4.4	3.9
515	Farm-product raw materials	1.8-2.2	2.0	1.6-2.0	1.7	1.1-1.7	1.3	(*)	(*)	(*)	(*)	1.1-2.8	2.4
5152	Cotton	(*)	(*)	(*)	(*)	1.8-4.9	2.8	(*)	(*)	(*)	(*)	1.3-2.9	2.4
5153	Grain	2.4-2.7	2.6	2.2-2.4	2.3	1.0-1.7	1.3	(*)	(*)	(*)	(*)	1.6-3.3	1.9
517	Petroleum and petroleum products	4.0-5.0	4.7	4.2-4.6	4.5	1.1-1.9	1.5	4.1-5.2	5.0	4.4-5.4	4.7	1.6-3.0	2.3
5171	Petroleum bulk stations and terminals	2.8-3.3	2.9	2.8-3.0	2.9	0.9-1.4	1.2	(*)	(*)	(*)	(*)	1.7-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages	3.4-3.9	3.7	3.1-3.7	3.2	0.8-1.8	1.7	3.9-4.2	4.1	4.0-4.3	4.2	1.0-2.0	1.3
5181	Beer and ale	2.2-4.4	3.1	2.8-3.2	2.9	1.0-2.5	2.0	3.6-5.5	3.8	3.6-4.1	3.8	1.7-2.7	2.1
5182	Wines and distilled alcoholic beverages	5.2-6.3	5.4	4.6-5.6	4.7	1.2-3.4	1.7	4.6-5.4	4.8	5.0-5.6	5.3	1.4-2.3	1.6
519	Miscellaneous nondurable goods	2.4-3.2	2.9	2.4-2.7	2.5	1.4-2.3	1.6	(*)	(*)	(*)	(*)	0.8-1.7	1.4
5191	Farm supplies	(*)	(*)	(*)	(*)	3.2-3.6	3.3	(*)	(*)	(*)	(*)	1.7-3.9	2.0
5194	Tobacco and tobacco products	4.0-5.2	4.1	3.4-4.5	4.2	1.3-2.4	1.7	(*)	(*)	(*)	(*)	0.8-4.3	1.0
5198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.8-3.8	3.0	(*)	(*)	(*)	(*)	1.5-3.1	2.9
5199 pt.	Books, magazines, newspapers	(*)	(*)	(*)	(*)	3.2-8.0	5.6	(*)	(*)	(*)	(*)	2.0-6.5	5.1

Note: Measures of sampling variability are based on data unadjusted for seasonal variations or trading-day differences. The range of error of the monthly dollar estimates and the ratio of current month to previous month for sales and inventories is based on data for July, August, and September 1977.

*Measures of sampling variability are not shown since sales and/or inventory estimates for these kinds of business are not published.

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

Seasonal factors for adjusting data in this historical publication have been developed by the method described in the **X-11 Variant of the Census Method II Seasonal Adjustment Program**, U.S. Bureau of the Census Technical Paper No. 15, Revised 1967. Trading-day factors for adjusting sales were also derived from the X-11 program.

Adjustment of estimates is an approximation based on past experiences, and therefore, will be less precise to the extent that current competitive pressures, changes in economic condition, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of trading-day adjustment factors may be found in **Estimating Trading-Day Variation in Monthly Economic Time Series**, Bureau of the Census Technical Paper No. 1? 1965. Additional details concerning the adjustment factors may be obtained from the Chi Business Division, Bureau of the Census, Washington, D.C. 20233.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.7	91.8	107.1	97.7	104.3	104.7	95.6	104.7	98.3	102.2	100.6	96.3
	Total (excluding farm-product raw materials)	91.6	91.6	106.6	97.8	105.1	105.8	95.8	106.1	100.3	102.3	99.3	95.0
50	Durable goods, total	89.6	89.0	105.7	99.0	106.5	107.3	96.4	107.7	101.9	104.1	98.6	91.5
501	Motor vehicles and automotive parts and supplies	93.3	89.8	107.6	107.7	108.4	107.5	98.6	106.9	96.1	98.3	93.3	90.5
502	Furniture and home furnishings	84.8	89.8	105.2	96.8	101.6	106.6	89.2	105.2	103.9	112.1	107.2	95.2
503	Lumber and other construction materials	80.6	80.2	100.9	94.6	109.8	112.2	102.4	117.4	106.2	109.9	100.0	84.0
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	78.7	88.7	104.5	101.5	109.3	97.0	96.1	105.2	105.4	106.0	108.0	95.5
505	Metals and minerals, except petroleum	98.2	91.4	108.2	98.6	107.6	104.4	91.2	108.6	103.1	100.0	97.1	90.3
506	Electrical goods	89.3	89.1	102.0	96.0	99.4	106.5	99.0	104.8	100.8	107.5	103.5	98.8
507	Hardware, plumbing, heating equipment, and supplies	89.2	87.4	99.9	97.9	106.7	108.0	100.7	109.2	102.4	107.2	100.6	88.3
508	Machinery, equipment, and supplies	88.1	88.6	107.9	99.9	107.7	108.8	95.4	104.6	103.3	103.5	96.5	92.3
509	Miscellaneous durable goods	86.2	89.8	106.2	96.2	100.2	110.7	88.4	109.5	101.9	108.1	103.7	96.0
51	Nondurable goods, total	96.4	93.8	108.5	97.1	103.5	102.3	94.9	102.1	96.1	100.2	101.8	
	Total (excluding farm-product raw materials)	94.3	94.0	106.8	96.6	103.2	104.5	95.5	104.5	97.6	100.6	100.6	98.4
511	Paper and paper products	95.5	92.6	106.3	93.4	103.3	103.6	95.6	107.3	102.6	104.0	99.4	92..
512	Drugs, drug proprietaries, and druggists' sundries	97.8	92.6	106.0	96.3	100.3	99.8	92.9	104.7	100.8	108.1	101.0	96.6
513	Apparel, piece goods, and notions	90.1	94.4	107.1	91.8	101.2	98.8	93.7	115.6	106.3	107.7	103.4	87.1
514	Groceries and related products	94.7	91.1	104.2	97.2	105.4	105.0	99.0	105.3	98.9	101.0	99.8	95.0
515	Farm-product raw materials[1]	103.1	94.7	112.6	98.0	103.9	96.9	93.0	92.4	91.5	100.8	108.3	99.9
516	Chemicals and allied products	90.2	89.2	106.3	98.0	107.1	108.3	96.1	108.0	97.8	105.0	98.8	93.3
517	Petroleum and petroleum products	99.7	102.3	107.7	96.2	95.9	100.0	96.5	100.2	93.1	100.9	100.3	104.8
518	Beer, wine, and distilled alcoholic beverages	77.8	81.4	102.2	90.7	106.8	113.9	97.6	107.8	97.8	100.6	106.9	113.5
519	Miscellaneous nondurable goods	96.0	100.5	116.6	102.4	107.4	105.2	88.2	95.5	95.4	96.8	95.6	96.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.8	101.2	101.7	100.7	99.4	99.3	98.6	98.1	98.7	100.1	100.9	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.0	100.3	100.6	100.7	100.2	99.4	99.6	99.9	99.7	99.1
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.5
501	Motor vehicles and automotive parts and supplies	101.3	103.0	101.6	100.6	102.0	100.5	99.2	97.0	97.4	98.1	99.0	99.9
502	Furniture and home furnishings	99.1	99.3	99.7	99.5	100.8	101.9	100.5	100.6	101.2	100.2	99.5	97.3
503	Lumber and other construction materials	98.4	99.1	103.6	102.7	103.6	101.7	101.4	99.8	99.2	96.7	96.2	97.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.6	99.8	100.7	102.4	106.5	105.3	100.9	101.5	100.9	93.9	89.9
505	Metals and minerals, except petroleum	99.4	98.2	100.2	100.8	100.2	100.2	102.8	102.8	99.9	96.7	98.9	99.7
506	Electrical goods	96.7	96.8	99.0	99.6	101.2	102.6	101.4	100.7	101.3	101.2	100.5	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.4	103.2	102.6	101.6	100.6	98.4	98.7	97.1	96.1
508	Machinery, equipment, and supplies	99.0	101.0	101.6	100.1	101.0	102.1	100.3	99.0	99.4	99.0	98.7	98.7
509	Miscellaneous durable goods	97.0	97.6	96.0	97.5	96.4	100.8	102.4	102.6	102.9	103.8	102.4	100.5
51	Nondurable goods, total	104.1	103.2	103.3	99.4	96.7	95.1	94.7	95.3	97.4	102.1	104.6	103.4
	Total (excluding farm-product raw materials)	100.0	100.0	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.6	100.5
511	Paper and paper products	97.8	98.3	99.1	101.1	100.4	102.6	100.0	100.2	100.7	100.0	99.6	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.1	99.8	100.6	97.9	100.6	99.0	100.0	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.0	100.2	101.9	101.5	99.8	99.0	98.6	99.3
514	Groceries and related products	98.7	100.2	102.1	100.5	99.2	98.7	98.5	98.0	99.9	102.0	100.9	101.0
515	Farm-product raw materials[1]	118.8	115.2	112.2	100.3	88.9	84.6	78.8	79.4	83.8	103.8	117.4	115.
516	Chemicals and allied products	98.0	100.0	101.9	101.6	102.4	100.9	101.6	100.2	100.4	96.9	97.0	98.
517	Petroleum and petroleum products	104.4	99.3	99.2	94.2	96.0	94.3	96.3	100.7	102.9	104.8	104.2	103..
518	Beer, wine, and distilled alcoholic beverages	96.3	95.8	97.4	99.1	102.3	102.9	99.9	97.9	100.3	107.0	105.7	95.3
519	Miscellaneous nondurable goods	103.6	104.6	105.0	102.1	97.2	93.2	95.1	96.0	97.4	99.7	101.9	104.0

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1978-December 1979—Continued

1972 SIC code	Kind of business	1979											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	95.9	91.8	104.7	100.0	105.3	101.5	98.4	104.2	95.8	104.5	100.4	96.2
	Total (excluding farm-product raw materials)	94.0	91.6	103.9	99.8	106.1	102.9	98.6	105.7	97.6	104.9	99.2	94.5
50	Durable goods, total	91.9	89.1	103.2	101.1	107.3	104.3	99.4	107.0	99.3	106.8	98.4	91.2
501	Motor vehicles and automotive parts and supplies	94.0	89.9	106.2	108.4	110.5	104.7	102.9	104.4	94.7	99.1	93.7	89.3
502	Furniture and home furnishings	87.1	89.8	101.8	98.4	102.6	104.0	91.2	105.5	101.7	115.1	106.5	94.2
503	Lumber and other construction materials	83.0	80.2	97.3	98.0	110.4	107.7	107.0	117.2	102.4	113.5	100.3	83.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	84.3	88.7	102.1	101.4	107.8	98.7	95.0	103.6	103.6	113.3	102.3	97.8
505	Metals and minerals, except petroleum	100.7	91.4	102.7	101.4	107.6	101.3	95.4	108.3	101.3	102.6	96.1	89.0
506	Electrical goods	92.0	89.1	99.9	99.3	98.8	103.9	100.6	104.5	98.2	110.6	102.9	100.1
507	Hardware, plumbing, heating equipment, and supplies	91.0	87.4	97.8	100.1	108.1	104.5	103.4	108.6	100.5	109.2	100.3	88.6
508	Machinery, equipment, and supplies	90.9	88.7	106.1	102.1	108.9	105.2	97.1	104.4	100.1	106.7	96.3	92.9
509	Miscellaneous durable goods	86.8	89.8	105.0	99.4	101.6	105.4	92.6	109.0	98.1	109.1	106.2	95.5
51	Nondurable goods, total	93.8	93.7	106.2	99.2	104.4	99.5	97.2	101.8	93.9	102.7	101.5	99.8
	Total (excluding farm-product raw materials)	96.8	94.0	104.0	99.0	104.1	101.2	98.0	104.7	94.9	103.2	100.7	98.0
511	Paper and paper products	100.0	92.7	103.2	94.8	103.3	102.4	97.4	107.1	99.3	108.7	97.7	92.2
512	Drugs, drug proprietaries, and druggists' sundries	99.7	92.6	104.0	98.9	100.6	96.9	96.6	103.9	97.6	110.1	101.8	96.1
513	Apparel, piece goods, and notions	93.9	94.4	103.7	92.4	101.8	97.8	95.7	115.5	102.9	112.3	102.1	85.9
514	Groceries and related products	97.5	91.0	103.1	98.3	106.3	103.0	100.0	105.0	96.2	104.0	99.5	95.1
515	Farm-product raw materials[1]	106.7	94.5	111.9	100.2	102.7	97.1	94.1	91.8	87.9	104.3	108.3	100.5
516	Chemicals and allied products	92.5	89.2	101.9	100.8	107.7	105.0	100.2	108.2	94.8	107.6	98.9	91.7
517	Petroleum and petroleum products	99.2	102.1	106.6	99.2	95.9	96.9	100.0	100.7	90.7	100.1	103.6	103.5
518	Beer, wine, and distilled alcoholic beverages	81.1	81.5	98.0	93.8	107.9	109.4	101.0	108.2	94.0	104.8	106.4	112.3
519	Miscellaneous nondurable goods	97.5	100.5	114.0	106.1	108.2	101.4	90.4	96.3	92.4	98.3	96.6	96.6
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.7	101.2	101.7	100.8	99.5	99.3	98.6	98.1	98.7	100.1	100.8	100.1
	Total (excluding farm-product raw materials)	99.2	100.0	101.1	100.4	100.6	100.7	100.2	99.4	99.6	99.9	99.6	99.0
50	Durable goods, total	98.9	100.0	100.8	100.7	101.2	101.7	101.0	99.9	99.4	98.9	98.7	98.4
501	Motor vehicles and automotive parts and supplies	101.3	103.1	101.6	100.6	102.0	100.5	99.3	97.0	97.4	98.2	99.0	99.8
502	Furniture and home furnishings	99.2	99.3	99.7	99.5	100.9	102.0	100.4	100.6	101.2	100.2	99.5	97.2
503	Lumber and other construction materials	98.5	99.1	103.7	102.7	103.4	101.5	101.3	99.8	99.2	96.8	96.2	97.6
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	96.5	101.7	99.8	100.7	102.3	106.4	105.3	100.9	101.6	100.9	93.8	90.0
505	Metals and minerals, except petroleum	99.3	98.3	100.2	100.8	100.2	100.2	102.8	102.9	100.0	96.6	98.8	99.6
506	Electrical goods	96.7	96.7	99.0	99.7	101.3	102.7	101.4	100.7	101.4	101.1	100.4	98.7
507	Hardware, plumbing, heating equipment, and supplies	97.0	98.2	101.7	104.6	103.3	102.6	101.6	100.6	98.4	98.7	97.0	96.0
508	Machinery, equipment, and supplies	99.0	101.0	101.5	100.1	101.0	102.1	100.3	99.1	99.4	98.9	98.6	98.7
509	Miscellaneous durable goods	97.1	97.5	96.0	97.4	96.4	100.9	102.4	102.6	103.0	103.8	102.4	100.5
51	Nondurable goods, total	103.9	103.2	103.4	99.5	96.9	95.3	94.7	95.3	97.4	102.0	104.5	103.4
	Total (excluding farm-product raw materials)	100.0	99.9	101.4	100.2	99.1	98.6	98.4	98.4	99.8	101.9	101.5	100.5
511	Paper and paper products	97.7	98.3	99.1	101.1	100.5	102.7	99.9	100.1	100.7	100.0	99.5	100.0
512	Drugs, drug proprietaries, and druggists' sundries	95.9	97.0	99.8	100.5	97.8	100.6	99.0	100.1	102.5	104.7	102.1	99.7
513	Apparel, piece goods, and notions	100.6	99.8	97.6	99.3	102.1	100.2	101.8	101.6	99.8	99.1	98.5	99.2
514	Groceries and related products	98.7	100.2	102.1	100.5	99.3	98.7	98.5	98.0	99.9	102.0	100.8	101.0
515	Farm-product raw materials[1]	118.5	115.2	112.3	100.8	89.6	85.4	78.5	79.2	83.5	103.3	117.1	115.1
516	Chemicals and allied products	98.0	100.0	102.0	101.6	102.4	101.0	101.6	100.2	100.5	96.9	96.8	98.6
517	Petroleum and petroleum products	104.4	99.4	99.4	94.2	95.9	94.2	96.2	100.9	102.9	104.7	104.2	103.2
518	Beer, wine, and distilled alcoholic beverages	96.3	95.7	97.4	99.1	102.3	102.8	99.9	97.9	100.3	106.9	105.7	95.3
519	Miscellaneous nondurable goods	103.7	104.6	105.1	102.1	97.2	93.1	95.1	95.9	97.3	99.7	101.8	104.0

Note: The adjustment factors shown above for sales are a combination of the seasonal and trading-day factors. These are separately available, however, upon request. Adjustment factors are included in this table for some kinds of business for which adjusted data are not published separately.

Adjusted sales and inventory data shown in table 4 are obtained by dividing the unadjusted data shown in tables 1 and 2 by the adjustment factors shown above for the corresponding kinds of business. Adjusted data for the summary trade totals are obtained by summarizing the adjusted data for the individual kinds of business. Seasonal factors shown for the summary trade totals provide an approximation to these totals but may show small differences from the published data. The seasonally adjusted data for 1978 may vary slightly from the method shown above because of insignificant rounding differences.

[1]There are indications that the seasonal adjustment factors for the farm-product raw materials category may not reflect recent trends in this trade. The seasonally adjusted data for this category and also for the merchant wholesale and nondurable goods totals should, therefore, be used with caution.

Table B-2. Average Month-to-Month Percent Changes and Related Summary Measures for Sales and Inventories of Merchant Wholesalers

1972 SIC code	Kind of business	$\bar{O}$	$\bar{S}$	$\bar{CI}$	$\bar{I}$	$\bar{C}$	$\bar{I}/\bar{C}$	MCD	Average duration of run			
									CI	I	C	MCD
		Sales										
	Merchant wholesalers, total	4.74	3.10	1.31	.82	.96	.86	1	3.10	1.57	14.11	3.10
50	Durable goods, total	5.30	4.84	1.43	.89	1.08	.82	1	3.53	1.63	15.87	3.53
501	Motor vehicles and automotive parts and supplies	5.53	4.22	2.67	2.33	1.24	1.87	3	2.05	1.59	25.40	5.43
502	Furniture and home furnishings	6.00	7.29	2.06	1.68	1.07	1.57	2	2.27	1.55	9.07	3.00
503	Lumber and other construction materials	7.40	6.25	2.67	1.72	1.76	.98	1	2.76	1.51	14.11	2.76
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	9.79	9.32	4.02	3.74	1.20	3.12	4	1.81	1.67	7.06	3.44
505	Metals and minerals, except petroleum	6.79	3.78	3.10	2.38	1.63	1.46	2	2.19	1.41	9.07	3.71
506	Electrical goods	5.79	5.17	1.89	1.52	1.04	1.47	2	2.08	1.46	10.58	3.32
507	Hardware, plumbing, heating equipment, and supplies	5.42	4.86	1.78	1.33	1.09	1.22	2	1.98	1.41	12.70	3.94
508	Machinery, equipment, and supplies	6.10	5.41	1.87	1.51	.97	1.56	2	1.92	1.46	7.94	3.32
509	Miscellaneous durable goods	7.66	6.11	3.51	2.79	1.79	1.56	2	1.87	1.48	9.77	2.93
51	Nondurable goods, total	5.07	2.80	1.58	1.10	.95	1.16	2	2.59	1.43	9.07	3.60
511	Paper and paper products	5.41	3.16	1.99	1.44	1.10	1.30	2	1.98	1.48	7.94	3.60
512	Drugs, drug proprietaries, and druggists' sundries	5.97	3.89	1.90	1.64	.76	2.15	3	1.95	1.57	9.77	4.31
513	Apparel, piece goods, and notions	7.73	6.91	2.70	2.36	1.01	2.34	3	1.72	1.38	10.58	4.17
514	Groceries and related products	4.44	2.01	1.67	1.41	.82	1.72	2	1.92	1.51	12.70	3.15
515	Farm-product raw materials	9.27	5.04	4.87	4.29	1.59	2.70	4	1.90	1.53	6.68	3.54
516	Chemicals and allied products	6.21	4.53	2.47	1.93	1.46	1.32	2	2.19	1.49	8.47	3.32
517	Petroleum and petroleum products	7.38	4.71	4.81	4.47	1.35	3.30	4	1.67	1.55	9.07	2.70
518	Beer, wine, and distilled alcoholic beverages	10.94	8.71	1.86	1.64	.69	2.39	3	1.76	1.59	21.17	3.68
519	Miscellaneous nondurable goods	5.89	4.84	2.53	2.23	.96	2.32	3	1.92	1.63	8.47	3.47
		Inventories										
	Merchant wholesalers, total	1.10	.72	.94	.39	.83	.47	1	4.88	1.79	18.14	4.88
50	Durable goods, total	1.07	.57	.89	.35	.86	.41	1	7.94	1.46	31.75	7.94
501	Motor vehicles and automotive parts and supplies	2.20	1.22	1.69	1.13	1.21	.93	1	2.54	1.63	12.70	2.54
502	Furniture and home furnishings	2.13	1.28	1.60	1.19	1.00	1.19	2	2.40	1.57	21.17	5.25
503	Lumber and other construction materials	2.60	1.77	1.83	1.28	1.09	1.17	2	2.54	1.67	15.87	4.20
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	3.60	2.92	2.17	1.80	1.20	1.50	2	2.27	1.48	25.40	3.60
505	Metals and minerals, except petroleum	3.14	2.53	1.79	1.01	1.33	.76	1	3.26	1.72	8.47	3.26
506	Electrical goods	1.75	1.08	1.32	.90	.92	.98	1	2.49	1.31	42.33	2.49
507	Hardware, plumbing, heating equipment, and supplies	1.69	1.10	1.23	.87	.89	.98	1	2.70	1.53	18.14	2.70
508	Machinery, equipment, and supplies	1.36	.92	1.03	.66	.82	.82	1	2.65	1.65	31.75	2.65
509	Miscellaneous durable goods	2.29	1.47	1.85	1.28	1.18	1.08	2	1.95	1.53	25.40	4.34
51	Nondurable goods, total	2.49	2.19	1.44	.83	1.07	.78	1	3.74	1.74	7.06	3.74
511	Paper and paper products	1.82	.94	1.38	1.04	.75	.94	2	2.12	1.44	9.07	4.20
512	Drugs, drug proprietaries, and druggists' sundries	2.39	1.46	1.60	1.37	.67	2.04	3	1.81	1.51	31.75	3.38
513	Apparel, piece goods, and notions	2.28	1.43	1.86	1.43	1.05	1.35	2	2.40	1.74	9.07	3.15
514	Groceries and related products	1.87	1.29	1.43	.92	1.01	.91	1	2.54	1.38	11.55	2.54
515	Farm-product raw materials	8.88	8.22	4.86	3.99	2.03	1.96	3	2.49	1.90	8.47	3.91
516	Chemicals and allied products	3.14	1.58	1.36	1.89	1.39	1.36	2	2.35	1.49	12.70	3.71
517	Petroleum and petroleum products	6.09	3.19	5.01	4.34	2.00	2.17	3	1.87	1.59	15.87	3.68
518	Beer, wine, and distilled alcoholic beverages	4.28	3.68	1.76	1.46	.74	1.98	3	2.35	1.63	9.77	4.03
519	Miscellaneous nondurable goods	2.53	1.52	1.88	1.48	.84	1.75	2	2.19	1.59	7.06	3.15

Description of Measures Shown Above

The following are brief descriptions of the measures shown in this table. More complete explanations appear in "Electronic Computers and Business Indicators," Occasional Paper 57, National Bureau of Economic Research, Inc., New York, 1957.

$\bar{O}$ is the average month-to-month percentage change, without regard to sign, in the original series before seasonal or trading-day adjustment.

$\bar{S}$ is the average month-to-month percentage change, without regard to sign, in the seasonal component. It is a measure of the average monthly seasonal change in the unadjusted series.

$\bar{CI}$ is the average month-to-month percentage change, without regard to sign, in the seasonally adjusted series.

$\bar{I}$ is the average month-to-month percentage change without regard to sign, for the irregular component. The irregular component is obtained by dividing the seasonally adjusted series by the cyclical component.

$\bar{C}$ is the average month-to-month percentage change, without regard to sign, for the cyclical component, which is a smooth, flexible moving average.

$\bar{I}/\bar{C}$ is a measure of the relative smoothness (small values) or irregularity (large values) of the seasonally adjusted series.

MCD (months for cyclical dominance) gives an estimate of the appropriate time span over which to observe cyclical movements in a monthly series. In deriving MCD, the average (without regard to sign) percentage changes in the irregular and cyclical components are computed for 1-month spans (Jan.-Feb., Feb.-Mar., etc.) 2-months spans (Jan.-Mar., Feb.-Apr., etc.), and so on. MCD is the shortest span for which the average change (without regard to sign) in the cyclical component is larger than the average change (without regard to sign) in the irregular component; that is, it indicates the point at which fluctuations begin to be more attributable to cyclical than to irregular movements. MCD is small for smooth series and large for erratic series.

Average duration of run (ADR) is a measure of smoothness, and is equal to the average number of consecutive monthly changes in the same direction in any series of observations. When there is no change between 2 months, a change in the same direction as the preceding change is assumed. The ADR is shown for the seasonally adjusted series CI, irregular component I, cyclical component C, and the MCD moving average. The MCD moving average is an unweighted moving average (with the number of terms equal to MCD) of the seasonally adjusted series.

A comparison of these measures with the expected ADR of a random series gives an indication of whether the changes approximate those of a random series. (The expected value of ADR for a random series is 1.5 and it falls between 1.36 and 1.75 about 95 percent of the time. For a moving average of a random series the expected value is 2.0). For example, the ADR of CI is 2.08 for electrical goods sales. This indicates that 1-month changes in the seasonally adjusted series, on the average, reverse sign slightly less often than a random series. In the next two columns, 1.46 for I and 10.58 for C indicate the separation of the seasonally adjusted series into an essentially random component and the cyclical (nonrandom) component. Finally, 3.32 for MCD indicates that a 2-month moving average of the seasonally adjusted series (2 months being the MCD span) reverses direction on the average about every 3 months. The increase in the average duration of run from 2.08 for CI to 3.32 for the MCD moving average indicates that for this series the use of MCD spans reduces the effect of the irregular component upon the seasonally adjusted series.

These averages are based on a seasonally adjusted series which is adjusted historically; that is, the months used to compute the measures were the same months used to estimate the seasonal factors. Current data, however, are adjusted by use of factors projected 1 year ahead, and are thus subject to additional error. Therefore, current data are probably somewhat more irregular and subject to larger MCD than shown above.

APPENDIX C. Explanatory Material

I. SCOPE OF THE SURVEY

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the Standard Industrial Classification (SIC) Manual[1] and as covered in the 1972 census, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm or professional business users; or to other wholesalers; or acting as agents or brokers in buying merchandise for or selling merchandise to such persons or companies.

The principal types of establishments included are: (1) merchant wholesalers who take title to the goods they sell, such as wholesale merchants or jobbers, industrial distributors, voluntary group wholesalers, exporters, importers, cash-and-carry wholesalers, drop shippers, major distributors, retailer cooperative warehouses, terminal elevators, and cooperative buying associations; (2) sales branches and sales offices (but not retail stores) maintained by domestic manufacturing or mining enterprises apart from their plants or mines for the purpose of marketing their products; (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), which constitute the major portion of the broad field of wholesale trade, and excludes the other types of wholesale trade. All kinds of business in which merchant wholesalers operate are represented in this survey.

Kind-of-business classifications are not interchangeable with commodity classifications. Most businesses sell several kinds of commodities. The kind-of-business code assigned generally reflects either the individual commodity or the commodity group which is the primary source of the establishments receipts, or some mixture of commodities which characterizes the establishment's business. Thus, the classification of establishments by kind of business generally does not make it possible to determine either the number of establishments handling a particular commodity or the sales of that commodity. For example, the "grocery" classification excludes establishments selling groceries if the sale of groceries is not the primary source of receipts; moreover, even though establishments are classified as "grocery wholesalers" some of their sales may be derived from the sale of nonfood products.

A description of each kind of business included in the accompanying statistical data is shown in appendix D.

II. SAMPLE DESIGN AND ESTIMATION PROCEDURES

Framework of old series—The first publication in this series based on probability sampling, was the January 1954 report. Effective with the July 1956 publication an entirely new sample was selected from the 1954 Census of Business. Other changes in the sample have been made since 1956, representing, for the most part, revisions to reflect the findings of successive censuses of wholesale trade.

Selection of sample for new series—The new sample[2] like the old is a probability sample, and the estimating procedures used are similar in many respects to the old sample.

The new sample originally was drawn from the Standard Statistical Establishment List (SSEL) as updated to December 31, 1974. The initial SSEL consisted of two lists. One list was composed of all Employer Identification (EI) numbers issued by the Internal Revenue Service (IRS) with reported payroll in at least one quarter of 1973 or 1974, with payroll in the 1972 census, or with sales/receipts greater than $100,000 in the 1972 census. The second list consisted of all establishments of known multiestablishment companies as of December 31, 1974. These lists contained information on sales/receipts, payroll, employment, name and address, kind-of-business classification, etc.

Before the 1974 SSEL was available, a study was made, using files from the 1972 Census of Wholesale Trade. This study determined the stratification of the sampling units based on 1972 sales, inventories, and kind of business, and also determined the optimal allocation of the sample necessary to meet specified variance objectives for sales and inventory estimates for different kind-of-business groups. The primary stratum boundary determined in the study was the certainty cutoff to be used for each kind of business. The cutoff was particularly important since it also determined the type of sampling unit.

The sampling units for the new sample consisted of both companies and EI's. To be eligible for the initial sampling, an EI had to be active, i.e., had payroll in 1974 and was on the Internal Revenue Service mailing list for Federal Insurance Contribution Act (FICA) taxpayers. If a known multiestablishment company had total merchant wholesale sales (on a 1972 basis) above the cutoff for its major kind of business, the company was selected for the sample with certainty. Single establishment companies, whether or not selected with certainty, were considered as EI sampling units.

All merchant wholesale companies below the certainty cutoff were treated on an EI basis; that is, the EI was the sampling unit. The EI's were then stratified according to their major kind of business and their estimated sales (on a 1972

[1] Executive Office of the President, Office of Management and Budget, **Standard Industrial Classification Manual,** 1972.

[2] For a complete exposition of the new sample, see C. T. Isaki et al., "Sample Redesign Aspects of the Census Bureau's Monthly Business Surveys" and K. M. Wolter et al., "Sample Selection and Estimation Aspects of the Census Bureau's Monthly Business Surveys," **Proceedings of the Business and Economic Statistics Section: American Statistical Association,** 1976.

basis). Within each stratum, a simple random sample of EI's was selected. The sampling rates for these EI's varied between 1 in 3 and 1 in 600.

For those EI's in the inital sample that did not have kind-of-business classifications and for all EI "births" after the initial selection, a two-phase selection procedure was used. EI "births," as used here, are new EI's recently assigned by SSA and currently on the IRS mailing list for FICA taxpayers. In the first phase, "births" were stratified by kind of business and size (expected employment or quarterly payroll). A relatively large sample was drawn and canvassed in order to obtain a more reliable measure of size (sales in two recent months) and a more detailed kind-of-business code, if needed.

Using this more reliable information, the cases were re-stratified and the final sample drawn with overall probabilities equivalent to those used in drawing the initial sample from the 1974 SSEL. Because of the lag in reporting "births" to the IRS and Social Security Administration (SSA) and the time needed to accomplish the two-phase birth-selection procedure, "births" are actually added to the sample about eight or nine months after they begin operation. The ongoing birth-selection procedure is carried out quarterly.

Since "births" are not represented in the sample, until they go through the selection procedure described above, an interium procedure is required to account for "births" during the period between the onset of activity and the time of birth selection. This consists of imputing for all cases which go out of business, but which are still on the IRS mailing list. This imputation procedure was also used in the old series. However, because of recent delays in obtaining "births," this procedure now accounts for a larger percentage of the estimates.

To be eligible for the sample canvass and tabulation in a given month, a merchant wholesale business must meet both of the following requirements:

1. It must be on the IRS mailing list for FICA taxpayers from the previous quarter.

2. It must have been selected from either the SSEL or the file of employer "births." For this purpose, a universe file of all businesses ever given a chance of selection is maintained. This file shows, among other things, which EI numbers actually have been selected.

In the case of businesses that were selected into the sample with certainty, the first requirement is changed. These certainty sampling units are not dropped from canvass and tabulation if they are no longer on the IRS mailing list. If there are successor businesses, they are added to the survey. This is a tighter form of control used for these larger businesses.

Use of the rotating sample and composite estimating procedures–Rotating samples or panels are used except for very large businesses which are selected with certainty. For sampling units in the rotating panels, two months of data are obtained at each enumeration. For example, February rotating panel cases report data for February (the current month) and January (the previous month). In the following month, a different rotating panel (the March panel) reports figures for March and February. Three sample panels are used. This permits the use of a composite estimating procedure which provides estimates more reliable than those which would be obtained from a completely fixed sample of about twice the size. In addition, this procedure reduces the reporting burden of selected businesses.

The first estimate issued each month, based on the full sample, is called the preliminary estimate. The preliminary composite estimate for the current month is a weighted average of two estimates: (1) the current month unbiased estimate (weight .35), and (2) a ratio estimate (weight .65) obtained by multiplying the preliminary composite estimate for the previous month by the current-to-previous-month ratio obtained from the current month reports. Preliminary inventory estimates have been modified, prior to publication, based on past relationships between preliminary and final estimates.

A final estimate is developed one month later using information available from the following month's enumeration. The final composite estimate is also a weighted average of two estimates: (1) the preliminary composite estimate for a given month (weight .7), and (2) the unbiased estimate (weight .3) for the same month as obtained from the next month's reporting panel.

The preliminary composite estimates provide a measure of the dollar volume level that is considerably more reliable than the unbiased estimates, and the final composite estimates are generally more reliable than the preliminary composite estimates. The indication of the month-to-month trend considered to be most reliable is the ratio of the current month's preliminary composite estimate divided by the previous month's final composite estimate. This is true because the numerator and denominator of this ratio are more highly correlated than would be the case if the numerator and denominator were two preliminary estimates or two final estimates. The trend of the preliminary/final ratio, therefore, has less variability than one based on two preliminary figures or two final figures.

Another advantage of the use of the rotating panel system is that the frequency of canvass of very large noncertainty cases can be increased with a consequent reduction, in an unbiased manner, of their statistical weight. This increases the reliability of the estimates, particularly the measure of month-to-month change.

III. PREVIOUSLY PUBLISHED DATA

Data developed from the new sample are not comparable with data previously published in this series. Sales and inventory estimates prior to September 1977 have been revised to reflect: (1) a new sample design; (2) benchmarking of sales to the results of the 1967 and 1972 censuses of wholesale trade; (3) conversion of classifications based on the 1967 SIC manual to classifications based on the 1972 SIC manual (4) addition

of farm assemblers and bulk petroleum establishments; and (5) revision and updating of seasonal adjustment factors.

The revised historical sales series were derived in a manner designed to minimize the changes to the month-to-month trends in the old series. The inventory series were revised by applying the stock-sales ratios from the old series to the revised sales series to obtain the preliminary revised inventory series. These preliminary series were then revised slightly so that August 1977 estimates would equal the new sample estimates.

Although the month-to-month movements in the old and new series show very little change, the level of the revised series show substantial change from the old series for some kinds of business. The change in levels depends on the difference between the old series for census years and the benchmark levels and on the difference between the new series level and the old series level for the link month, August 1977.

Additional details concerning the sample design, and revised estimates of merchant wholesale sales and inventories from January 1967 through August 1977, have been provided in a special supplementary publication **Monthly Wholesale, Sales and Inventories: January 1967-August 1977, Revised BW-13-77S.** This report may be obtained from Subscriber Services (Publications), Bureau of the Census, Washington, D.C. 20233 at $.90 per copy.

IV. UNPUBLISHED DATA

Additional data, such as dollar volume estimates for some kinds of business not separately shown in this report, are produced as a byproduct of the regularly published statistics. These additional data have not been included in this publication because the sampling variability associated with these data does not meet the Census Bureau's publication criteria. The Census Bureau, on written request will release these data for individual use, though not for publication.

V. DEFINITION OF TERMS

Sales—Sales include the following: merchandise sold for cash or credit at wholesale and retail by establishments primarily engaged in merchant wholesale trade; receipts from customers for rental or leasing of equipment, instruments, tools, etc.; receipts for delivery, installation, alteration, maintenance, repair, storage, and other services; and gasoline, liquor, tobacco and other excise taxes which are paid by the manufacturer and passed along to the wholesaler. Sales are net after deductions for refunds and allowances for merchandise returned by customers. Sales which are made on an agency basis for others are included as gross sales. Direct shipments on orders from wholesalers are also included in sales. Total sales do not include nonoperating income from such sources as investments, rental or sale of real estate, etc.

In the new series, sales exclude sales and excise taxes collected directly from customers and paid directly to a local, State, or Federal tax agency. Also excluded are receipts from customers for carrying or other credit charges. In the old series respondents were requested to include these taxes and credit charges in the reported sales. The impact of this change is considered minimal.

Inventories—Inventories represent stocks, at cost, of merchandise on hand for sale at the end of the month regardless of location, except for goods outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included.

Stock-sales ratios—The stock-sales ratios are percentages derived by dividing the dollar value of inventories, at cost, by the dollar value of sales. No adjustment is made in these ratios for the markup in sales which may vary from trade to trade.

The sales and inventory figures represent total sales and inventories of all establishments primarily engaged in merchant wholesale trade. Also included are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments.

APPENDIX D. Kind-of-Business Classifications

DURABLE GOODS (SIC Major Group 50)

This major group includes establishments primarily engaged in the wholesale distribution of durable goods.

MOTOR VEHICLES AND AUTOMOTIVE PARTS AND SUPPLIES (SIC 501)

Automobiles and Other Motor Vehicles (SIC 5012)[1]—Establishments primarily engaged in the wholesale distribution of new and used passenger automobiles, trucks, and other motor vehicles. Automotive distributors primarily engaged in selling at retail to individual consumers for personal use, and also selling a limited amount of new and used passenger automobiles and trucks at wholesale to dealers, are classified in retail trade, industry 5511.

Automotive Parts and Supplies (SIC 5013)—Establishments primarily engaged in the wholesale distribution of automotive parts, supplies, accessories, tools and equipment.

Tires and Tubes (SIC 5014)[1]—Establishments primarily engaged in the wholesale distribution of rubber tires and tubes for passenger and commercial vehicles.

FURNITURE AND HOME FURNISHINGS (SIC 502)

Furniture (SIC 5021)—Establishments primarily engaged in the wholesale distribution of furniture, including bedsprings, mattresses, and other household furniture; office furniture; and furniture for public parks, buildings, etc.

SIC 5021 is subdivided into—

1. Household and lawn furniture.
2. Office and business furniture.

Home Furnishings (SIC 5023)—Establishments primarily engaged in the wholesale distribution of home furnishings and homewares, including antiques; china; glassware and earthenware; lamps; curtains and draperies; linens and towels; carpets, linoleum, and all other types of hard and soft surface floor coverings. Establishments primarily engaged in the wholesale distribution of electrical household goods are classified in industry 5064.

[1] Data for this kind of business are not shown separately but are included in the group total.

LUMBER AND OTHER CONSTRUCTION MATERIALS (SIC 503)

Lumber, Plywood, and Millwork (SIC 5031)—Establishments, with or without yards, primarily engaged in the wholesale distribution of rough, dressed, and finished lumber (but not timber); plywood; door and window frames (wood or metal); and other wood and metal millwork. Establishments selling lumber, plywood and millwork to the general public and known as "retail" in the trade are classified in industry 521.

Construction Materials, Not Elsewhere Classified (SIC 5039)—Establishments primarily engaged in the wholesale distribution of such building materials as brick, building stone, cement, granite, gravel, lime, marble, plaster, building glass, roofing materials, sand, and tile. Establishments selling construction materials to the general public and known as "retail" in the trade are classified in industry 521. Establishments primarily engaged in marketing heavy structural metal products are classified in industry 5051. Establishments primarily selling readymade concrete are classified in manufacturing.

SPORTING, RECREATIONAL, PHOTOGRAPHIC, AND HOBBY GOODS, TOYS, AND SUPPLIES (SIC 504)[1]

Establishments primarily engaged in the wholesale distribution of all types of amusement and sporting goods and accessories—billiard and pool supplies; cameras and photographic equipment; coin-operated game machines; games, toys; ammunition and fireworks; etc.

METALS AND MINERALS, EXCEPT PETROLEUM (SIC 505)

Ferrous Metals Service Centers and Offices (SIC 5051 pt.)—Establishments primarily engaged in marketing ferrous metal semifinished products such as nails, pig iron, steel and tin bars. Establishments in this industry may operate with warehouses (ferrous metals service centers) or without warehouses (ferrous metals sales offices).

Sales branches of domestic manufacturers are included in this category if the establishment is separate from the manufacturing plant and has warehouse space greater than 5,000 square feet.

Nonferrous Metals Service Centers and Offices and Other Minerals and Ores (SIC 5051 pt. and SIC 5052 pt.)[1]—Establishments primarily engaged in marketing nonferrous metal semifinished products such as aluminum bars and copper rods. Establishments in this industry may operate with warehouses (nonferrous metals service centers) or without warehouses (nonferrous metals sales offices). Also included are establishments primarily engaged in the wholesale distribution of copper, iron, lead, and other metallic ores except precious; and crude nonmetallic minerals (including concentrates) except crude petroleum. Establishments primarily engaged in the wholesale distribution of nonmetallic minerals used in construction, such as sand and gravel, are included in industry 5039.

Coal (SIC 5052 pt.)[1]—Establishments primarily engaged in the wholesale distribution of coal and coke. Included are establishments which have products shipped direct from mine to customer, and establishments operating yards and dock space and making deliveries therefrom at wholesale as well as other coal merchants.

ELECTRICAL GOODS (SIC 506)

Electrical Apparatus and Equipment, Wiring Supplies, and Construction Materials (SIC 5063)—Establishments primarily engaged in the wholesale distribution of electrical power equipment for the generation, transmission, or utilization of electric energy; and electrical construction materials for outside power transmission lines and for electrical systems. Construction contractors primarily engaged in installing electrical systems and equipment from their own stock are classified in industry 1731.

Electrical Appliances, TV and Radio Sets (SIC 5064)—Establishments primarily engaged in the wholesale distribution of radio and television sets and household electrical appliances.

Electronic Parts and Equipment (SIC 5065)[1]—Establishments primarily engaged in the wholesale distribution of electronic parts and equipment, such as industrial and radio and television receiving and transmitting electronic tubes; electronic intercommunication equipment; radio parts and accessories; and electronic sound equipment. Establishments primarily engaged in the wholesale distribution of radio and television receiving sets and phonographs are classified in industry 5064.

HARDWARE, PLUMBING, HEATING EQUIPMENT, AND SUPPLIES (SIC 507)

Hardware (SIC 5072)—Establishments primarily engaged in the wholesale distribution of hardware, such as builders; shelf or light hardware; handtools (except automotive and machinists' precision); handsaws and cutlery; brads, staples, and tacks; and bolts, nuts, rivets, and screws. Establishments primarily engaged in the wholesale distribution of nails, noninsulated wire, and screening are classified in industry 5051.

Plumbing and Heating Equipment and Supplies (Hydronics) (SIC 5074)—Establishments primarily engaged in the wholesale distribution of hydronic plumbing and heating equipment and supplies. Construction contractors primarily engaged in installing plumbing and heating equipment from their own stock are classified in industry 1711.

Warm Air Heating and Air-Conditioning Equipment and Supplies (SIC 5075)[1]—Establishments primarily engaged in the distribution of warm air heating and air-conditioning equipment and supplies. Construction contractors primarily engaged in installing warm air heating and air-conditioning equipment are classified in industry 1711.

Refrigeration Equipment and Supplies (SIC 5078)[1]—Establishments primarily engaged in the distribution of refrigeration equipment and supplies. Construction contractors primarily engaged in installing refrigeration equipment from their own stock are classified in industry 1711.

MACHINERY, EQUIPMENT, AND SUPPLIES (SIC 508)

Commercial Machines and Equipment (SIC 5081)[1]—Establishments primarily engaged in wholesaling commercial machines and equipment, such as office, store, and business machines and equipment; commercial food service equipment; and fountain and store fixtures.

Construction and Mining Machinery and Equipment (SIC 5082)—Establishments primarily engaged in marketing cranes, excavating machinery and equipment, power shovels, road construction and maintenance machinery, tractor-mounting equipment and other specialized machinery and equipment used in the construction, mining, and logging industries. Establishments engaged in marketing oil well machinery and equipment are classified in industry 5084.

Farm and Garden Machinery and Equipment (SIC 5083)[1]—Establishments primarily engaged in marketing agricultural machinery and equipment for use in the preparation and maintenance of the soil, the planting and harvesting of crops, and other operations and processes pertaining to work on the farm or the lawn or garden; and dairy and other livestock equipment.

Industrial Machinery and Equipment (SIC 5084)[1]—Establishments primarily engaged in marketing industrial machinery and equipment, such as metal working tools, food industries machinery, oil well and oil refining machinery, industrial

[1] Data for this kind of business are not shown separately but are included in the group total.

trucks and tractors (except over-the-road types), printing machinery, and machinery and equipment for other manufacturing industries.

Industrial Supplies (SIC 5085)[1]—Establishments primarily engaged in marketing industrial supplies, such as abrasives and materials, rope and cordage, and mechanical rubber goods; welding supplies; mechanical power transmission supplies, including bearings; industrial valves and fittings; metal containers; industrial leather; and reconditioned barrels and drums.

Professional Equipment and Supplies (SIC 5086)—Establishments primarily engaged in the wholesale distribution of mechanical devices and other equipment used by architects, dentists, engineers, physicians, surgeons, veterinarians, optometrists, osteopaths, and other professional groups.

Surgical, Medical, Hospital Supplies (SIC 5086 pt.)[1]—Establishments primarily engaged in selling surgical and medical instruments; doctors' apparatus and equipment; orthopedic appliances; artifical limbs; operating room and other hospital equipment, X-ray machines and accessories and other scientific instruments used by physicians and in hospitals.

Service Establishment Equipment and Supplies (SIC 5087)[1]—Establishments primarily engaged in the wholesale distribution of equipment and supplies for barber shops, beauty parlors power laundries, dry-cleaning plants, upholsterers, undertakers, and related personal service establishments.

Transportation Equipment and Supplies, Except Motor Vehicles (SIC 5088)[1]—Establishments primarily engaged in the wholesale distribution of transportation equipment and supplies. Establishments primarily engaged in the wholesale distribution of motor vehicles and motor vehicle parts are classified in group 501.

MISCELLANEOUS DURABLE GOODS (SIC 509)[1]

Scrap and Waste Materials (SIC 5093)—Establishments primarily engaged in assembling, breaking up, sorting and wholesale distribution of scrap and waste materials. This industry includes auto wreckers engaged in dismantling automobiles for scrap. However, those engaged in dismantling cars for the purpose of selling secondhand parts at retail are classified in industry 5931.

SIC 5093 is subdivided into—

1. *Iron and Steel scrap.*
2. *Waste and secondary materials dealers.*

[1] Data for this kind of business are not shown separately but are included in the group total.

Jewelry, Watches, Diamonds, and Other Precious Stones (SIC 5094)[1]—Establishments primarily engaged in the wholesale distribution of jewelry, precious stones and metals, costume jewelry, watches, clocks, silverware, and jewelers' findings.

Durable Goods, Not Elsewhere Classified (SIC 5099)[1]—Establishments primarily engaged in the wholesale distribution of durable goods, not elsewhere classified, such as musical instruments and forest products, except lumber.

NONDURABLE GOODS (SIC Major Group 51)

This major group includes establishments primarily engaged in the wholesale distribution of nondurable goods.

PAPER AND PAPER PRODUCTS (SIC 511)

Printing and Writing Paper (SIC 5111)[1]—Establishments primarily engaged in the wholesale distribution of writing paper, including envelope paper, fine paper, and ground wood, printing, and rotogravure paper.

Stationery Supplies (SIC 5112)[1]—Establishments primarily engaged in the wholesale distribution of stationery and office supplies, including envelopes, typewriter and mimeograph paper, file cards and folders, pens, social stationery, and greeting cards.

Industrial and Personal Service Paper (SIC 5113)[1]—Establishments primarily engaged in the wholesale distribution of wrapping and other coarse paper, paperboard, cellophane, and converted paper products, such as bags, boxes, dishes, napkins, and shipping supplies.

DRUGS, DRUG PROPRIETARIES, AND DRUGGISTS' SUNDRIES (SIC 512)

Drugs, Drug Proprietaries, and Druggists' Sundries (SIC 5122)—Establishments primarily engaged in the wholesale distribution of drugs, drug proprietaries, druggists' sundries, and toiletries. Establishments primarily engaged in the wholesale distribution of surgical, dental, and hospital equipment are classified in industry 5086.

SIC 5122 is subdivided into—

1. *General-line drugs*—These are distinguished from specialty-line drug and toiletries wholesalers on the basis of their commodity-line mix. Drug wholesalers were classified as general line if they reported a substantial portion of their sales in "pharmaceuticals, antibiotics, druggists' chemicals, biologicals, botanicals" and "proprietary products, toilet-

ries, druggists' sundries," and if annual sales volume was $1 million or more.

2. *Specialty-line pharmaceuticals, cosmetics, and toiletries.*

APPAREL, PIECE GOODS, AND NOTIONS (SIC 513)

Piece Goods (SIC 5133)[1]—Establishments primarily engaged in the wholesale distribution of woven piece goods or yard goods of natural or manmade fibers. "Converters" who buy goods in the grey, have them finished on contract, and sell at wholesale are included here. This industry does not include establishments primarily engaged in the wholesale distribution of home furnishings, which are classified in industry 5023.

Notions and Other Dry Goods (SIC 5134)[1]—Establishments primarily engaged in the wholesale distribution of notions (sewing and hair accessories, etc.), knit goods, and other dry goods, except piece goods.

Men's and Boys' Clothing and Furnishings (SIC 5136)[1]—Establishments primarily engaged in the wholesale distribution of men's and boys' apparel and furnishings, sportswear, hosiery, underwear, nightwear, and work clothing.

Women's Children's, and Infants' Clothing and Accessories (SIC 5137)[1]—Establishments primarily engaged in the wholesale distribution of women's, children's, and infants' clothing and accessories, including hosiery, lingerie, millinery and millinery supplies, and furs.

Footwear (SIC 5139)[1]—Establishments primarily engaged in the wholesale distribution of footwear of leather, rubber, and other materials.

GROCERIES AND RELATED PRODUCTS (SIC 514)

Groceries, General-Line (SIC 5141)—Establishments primarily engaged in the wholesale distribution of a general line of groceries. Establishments primarily engaged in roasting coffee and establishments primarily engaged in blending tea or grinding and packaging spices are classified in major group 20.

SIC 5141 is subdivided into—

1. *Voluntary group wholesalers.*
2. *Retailer cooperative wholesalers.*
3. *Other general-line wholesalers.*

Frozen Foods (SIC 5142)[1]—Establishments primarily engaged in the wholesale distribution of packaged quick-frozen vegetables, juices, meats, fish, poultry, pastries, and other "deep freeze" products. Establishments primarily engaged in the wholesale distribution of frozen dairy products are classified in industry 5143. Frozen poultry, fish, and meat which are not packaged are classified in industries 5144, 5146, and 5147, respectively.

Dairy Products (SIC 5143)[1]—Establishments primarily engaged in the wholesale distribution of dairy products, such as butter, cheese, ice cream and ices, and fluid milk and cream. This industry does not include establishments primarily engaged in pasteurizing and bottling milk, which are classified in group 202.

Poultry and Poultry Products (SIC 5144)—Establishments primarily engaged in the wholesale distribution of poultry and poultry products, except canned and packaged frozen products. This industry does not include establishments primarily engaged in the killing and dressing of poultry, which are classified in industry 2016. Establishments primarily engaged in the wholesale distribution of packaged frozen poultry are classified in industry 5142, and of canned poultry in industry 5149.

Confectionery (SIC 5145)—Establishments primarily engaged in the wholesale distribution of confectionery, such as candy, chewing gum, fountain fruits, salted or roasted nuts, popcorn, and fountain syrups; and potato, corn, and similar chips.

Fish and Seafoods (SIC 5146)[1]—Establishments primarily engaged in the wholesale distribution (not packaging) of fresh, cured, and frozen fish and seafoods, except canned (industry 5149) or packaged frozen (industry 5142). The preparation, packaging, and freezing of fresh fish and other seafood, and the shucking and packing of fresh oysters in nonsealed containers, are classified in industry 2092.

Meats and Meat Products (SIC 5147)—Establishments primarily engaged in the wholesale distribution of fresh, cured, and processed (but not canned) meats and lard. The wholesale distribution of frozen packaged meats is classified in industry 5142 and canned meats in industry 5149.

Fresh Fruits and Vegetables (SIC 5148)—Establishments primarily engaged in the wholesale distribution of fresh fruits and vegetables.

Groceries and Related Products, Not Elsewhere Classified (SIC 5149)[1]—Establishments primarily engaged in the wholesale distribution of groceries and related products, not elsewhere classified. Establishments primarily engaged in the wholesale distribution of soft drinks, and in bottling and distributing natural spring and mineral waters, are classified in this industry, but establishments primarily engaged in bottling soft drinks are classified in major group 20. This industry does not include farm-product raw materials (group 515), or beer, wine, and distilled alcholic beverages (group 518).

[1] Data for this kind of business are not shown separately but are included in the group total.

FARM-PRODUCT RAW MATERIALS (SIC 515)

Cotton (SIC 5152)[1]—Establishments primarily engaged in buying and/or marketing cotton and cotton linters.

Grain (SIC 5153)—Establishments primarily engaged in buying and/or marketing grain (such as corn, wheat, oats, barley, and unpolished rice); dry beans; soybeans, and other inedible beans. Country grain elevators primarily engaged in buying or receiving grain from farmers are included as are terminal elevators and other merchants marketing grain.

Livestock (SIC 5154)[1]—Establishments primarily engaged in buying and/or marketing cattle, hogs, sheep, and goats.

Farm-Product Raw Materials, Not Elsewhere Classified (SIC 5159)[1]—Establishments primarily engaged in buying and/or marketing farm products not elsewhere classified, such as horses and mules, leaf tobacco, hides, skins, furs, wool, mohair, raw silk, hops, and nuts, except roasted or salted (industry 5145). Establishments primarily engaged in the wholesale distribution of milk are classified in industry 5143 and live poultry in industry 5144.

CHEMICALS AND ALLIED PRODUCTS (SIC 516)[1]

Chemicals and Allied Products (SIC 5161)[1]—Establishments primarily engaged in the wholesale distribution of chemicals and allied products, not elsewhere classified, such as acids, industrial and heavy chemicals, dyestuffs, industrial salts, naval stores, plastics materials, rosin, and turpentine. Establishments primarily engaged in the wholesale distribution of ammunition are classified in industry 5041; agricultural chemicals and pesticides in industry 5191; drugs in industry 5122; and paints and varnishes in industry 5198.

PETROLEUM AND PETROLEUM PRODUCTS (SIC 517)

Petroleum Bulk Stations and Terminals (SIC 5171)—Establishments primarily engaged in wholesaling petroleum products, including liquefied petroleum gas, from bulk liquid storage facilities.

Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals (SIC 5172)[1]—Establishments primarily engaged in wholesaling petroleum and petroleum products, except those with bulk liquid storage facilities. Included are packaged and bottled petroleum products distributors, truck jobbers, and others marketing petroleum and products at wholesale but without bulk liquid storage facilities.

[1] Data for this kind of business are not shown separately but are included in the group total.

BEER, WINE, AND DISTILLED ALCOHOLIC BEVERAGES (SIC 518)

Beer and Ale (SIC 5181)—Establishments primarily engaged in the wholesale distribution of beer, ale, porter, and other fermented malt beverages.

Wines and Distilled Alcoholic Beverages (SIC 5182)—Establishments primarily engaged in the wholesale distribution of distilled spirits, including neutral spirits and ethyl alcohol used in blending wines and distilled liquors.

MISCELLANEOUS NONDURABLE GOODS (SIC 519)

Farm Supplies (SIC 5191)[1]—Establishments primarily engaged in the wholesale distribution of animal feeds, fertilizers, agricultural chemicals, pesticides, seeds, and other farm supplies, except grains.

Tobacco and Tobacco Products (SIC 5194)—Establishments primarily engaged in the wholesale distribution of tobacco and tobacco products. Leaf tobacco wholesalers are classified in industry 5159 and establishments primarily engaged in stemming and redrying tobacco in industry 2141.

Paints, Varnishes, and Supplies (SIC 5198)[1]—Establishments primarily engaged in the wholesale distribution of paints, varnishes, wallpaper, and supplies, and sometimes glass. Establishments selling to the general public and known as "retail" in the trade are classified in industry 5231.

Books, Periodicals, Newspapers (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of books, lithographed matter, magazines, newspapers, and all other forms of reading material.

Nondurable Goods, Not Elsewhere Classified (SIC 5199 pt.)[1]—Establishments primarily engaged in the wholesale distribution of nondurable goods, not elswhere classified, such as art goods, flowers and florist supplies, industrial yarn, textile bags, bagging and burlap.

CHANGES IN WHOLESALE KIND-OF-BUSINESS CLASSIFICATIONS IN 1972 FROM 1967

The wholesale trade kind-of-business structure was expanded from one SIC major group (SIC 50) in 1967 to two major groups in 1972, "durable goods" (SIC 50) and "nondurable goods" (SIC 51). There were 61 four-digit industries in 1972 compared to 48 four-digit industries in 1967.

The definitions of some kinds of business also were changed in 1972. Establishments primarily selling farm supplies and equipment to farmers, and establishments primarily selling

plumbing, heating, and air-conditioning equipment and electrical supplies were classified in wholesale trade rather than retail trade. However, establishments primarily selling lumber and other building materials and paint, glass, and wallpaper were classified in retail trade if they sell to the public, even though sales to contractors account for a larger portion of the total. The change resulted in moving to wholesale trade those establishments primarily selling plumbing, heating, and air-conditioning equipment; electrical supplies; farm equipment; hay, grain, and feed; and other farm supplies. The change also theoretically could have shifted to wholesale trade some establishments primarily selling lumber and paint, glass and wallpaper to contractors, but not to the public.

In addition to the kind-of-business changes noted above the special nonmerchant classifications of farm assemblers and bulk petroleum were eliminated in the 1972 census. These establishments were classified in the appropriate merchant, or sales branch category.

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