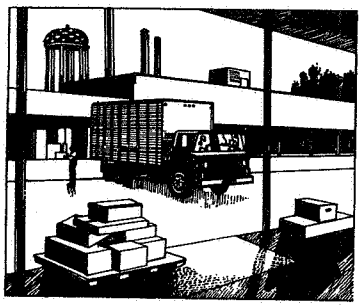


CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued March 1980

January 1980

BW-80-1

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 1979. These data reflect recomputed factors for seasonal adjustment based on monthly estimates through December 1979. Revised factors for seasonal adjustment are presented in table B-1.

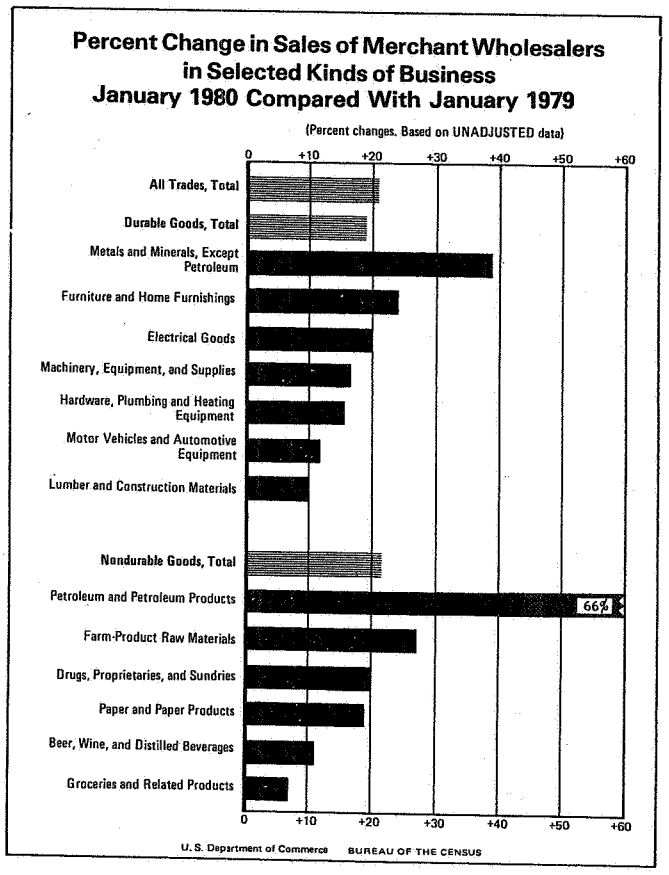
Sales—January 1980 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences, but not for price changes, were $80.9 billion, up 3 percent from the previous month and 20 percent above January 1979. Adjusted November-through-January total sales were up 4 percent from the August-through-October period and were 18 percent above the total sales for the comparable months a year ago.

After adjustment, January sales in the durable goods trades were up 4 percent from the previous month and were 18 percent above January 1979. Nondurable goods sales were up 1 percent from December and were 21 percent above the same month a year ago. Total monthly sales in the durable goods group during the November-through-January period were 3 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 up 4 percent from the August-through-October period and were 21 percent above 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 furniture and home furnishings (14%). Compared with sales of a year ago, all trade groups showed increases. The sharpest increase was reported in petroleum and petroleum products (66%).

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variation, but not for price changes, were valued at $90.8 billion at the end of January, up 1 percent from last month and 11 percent above the same month a year ago. Durable and nondurable goods stocks were up 1 percent from December and were up 10 and 14 percent respectively, from their January 1979 levels.

Based on adjusted data, comparisons with previous month inventories showed mixed results with 8 groups showing gains, 3 indicating declines, and 4 with no change. The most substantial increases appeared in drugs, proprietaries, and sundries and petroleum and petroleum products, both up 5%. The decreases were in motor vehicles and automotive equipment; sporting goods, toys, and hobby goods; and miscellaneous nondurable goods—All down 3%. Compared with year-ago inventories, all trade groups showed increases with the most substantial increase reported in petroleum and petroleum products (55%).



Stock-Sales Ratios—The January stock-sales ratio for merchant wholesalers, based on seasonally adjusted data, was 112, down 2 points from the previous month and 9 points below the year-ago ratio. The stock-sales ratio for durable goods was 157, down 5 points from December and 11 points below the January 1979 ratio. The ratio for nondurable goods was 75, virtually unchanged from the previous month, but down 5 points from the year-ago ratio.

An advance release of January 1980 data was issued March 14, 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: 1980 and 1979

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

1972 SIC code	Kind of business	1980	1979											Total 12 months 1979
		Jan.P	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
	Merchant wholesalers, total	76,844	63,739	61,721	74,319	70,768	76,814	74,361	73,537	78,567	73,213	81,820	79,079	75,396	883,334
	Total (excluding farm-product raw materials)	67,652	56,481	55,208	66,198	63,588	68,714	66,477	64,932	70,390	65,400	72,156	69,354	66,185	785,022
50	Durable goods, total	33,676	28,284	28,141	34,689	33,429	35,723	34,447	33,750	37,048	33,616	37,935	34,711	32,515	404,286
501	Motor vehicles and automotive parts and supplies	6,333	5,634	5,650	6,888	6,845	7,013	6,364	6,259	6,812	5,645	6,784	6,452	6,172	76,519
5013,4	Automotive parts and supplies, tires and tubes	3,125	3,120	3,081	3,459	3,349	3,535	3,318	3,091	3,552	3,081	3,538	3,298	2,972	39,396
5013	Automotive parts and supplies	2,668	2,594	2,603	2,902	2,807	2,966	2,759	2,600	3,014	2,617	2,978	2,817	2,515	33,171
502	Furniture and home furnishings	1,240	1,012	950	1,199	1,130	1,214	1,185	1,121	1,243	1,196	1,390	1,263	1,134	14,055
5021	Furniture--household and office	478	343	332	416	413	450	422	399	449	419	458	430	430	4,980
5023	Home furnishings	762	669	618	783	717	764	763	722	794	778	931	832	704	9,075
503	Lumber and other construction materials	2,625	2,387	2,212	3,006	3,023	3,353	3,410	3,411	3,761	3,274	3,622	2,997	2,543	36,998
5031	Lumber, plywood, and millwork	1,729	1,672	1,544	2,047	2,067	2,269	2,250	2,250	2,515	2,102	2,346	1,899	1,586	24,546
5039	Construction materials, n.e.c.	896	715	668	959	957	1,084	1,160	1,161	1,246	1,172	1,276	1,098	957	12,452
505	Metals and minerals, except petroleum[1]	4,461	3,206	3,215	3,849	3,295	3,913	3,645	3,824	4,196	3,687	4,197	4,064	3,986	45,173
5051 pt.	Ferrous metals service centers and offices	3,101	2,455	2,437	2,925	2,469	2,951	2,759	2,865	3,062	2,806	2,974	2,836	2,743	33,282
5051 pt.	Ferrous metals service centers	2,294	1,652	1,744	2,129	1,798	2,160	2,056	2,046	2,211	1,974	2,208	2,122	1,964	24,064
506	Electrical goods	3,627	3,017	3,083	3,556	3,271	3,744	3,786	3,712	4,163	4,012	4,395	3,962	3,785	44,487
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,799	1,533	1,638	1,807	1,748	2,071	2,006	1,991	2,153	2,079	2,165	1,962	1,916	23,040
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,827	1,484	1,445	1,749	1,554	1,673	1,779	1,700	2,011	1,933	2,230	2,000	1,869	21,447
5064	Electrical appliances, TV and radio sets[2]	1,027	834	849	1,024	881	939	1,064	986	1,116	1,083	1,250	1,154	1,052	12,233
507	Hardware, plumbing, heating equipment, and supplies	2,468	2,142	1,984	2,319	2,374	2,592	2,461	2,524	2,678	2,399	2,794	2,415	2,192	28,875
5072	Hardware	951	802	758	853	852	975	877	892	1,003	877	1,024	916	838	10,667
5074	Plumbing and heating equipment and supplies (hydronics)[3]	1,047	854	800	960	994	1,001	966	1,015	1,038	1,011	1,167	992	920	11,719
508	Machinery, equipment, and supplies	8,903	7,691	7,841	9,664	9,443	10,062	9,745	9,222	10,113	9,394	10,317	9,324	9,026	111,843
5082	Construction and mining machinery and equipment	931	895	927	1,189	1,360	1,351	1,260	1,258	1,366	1,268	1,323	1,144	1,019	14,360
5084,5	Industrial machinery, equipment, and supplies	3,915	3,390	3,464	3,940	3,615	4,004	3,964	3,613	4,039	3,634	4,078	4,020	3,936	45,697
5086	Professional equipment, supplies	957	907	914	1,048	972	1,055	996	996	1,092	972	1,121	948	939	11,959
5093	Scrap and waste materials	1,527	1,132	1,184	1,501	1,492	1,518	1,468	1,395	1,534	1,328	1,456	1,428	1,382	16,818
51	Nondurable goods, total	43,168	35,455	33,580	39,630	37,339	41,091	39,914	39,787	41,519	39,597	43,885	44,368	42,881	479,048
	Total (excluding farm-product raw materials)	33,976	28,197	27,067	31,509	30,159	32,991	32,030	31,182	33,342	31,784	34,221	34,643	33,670	380,736
511	Paper and paper products	1,834	1,540	1,479	1,688	1,551	1,692	1,651	1,585	1,777	1,599	1,821	1,699	1,639	19,721
5111,3	Printing, writing, industrial, and personal service paper	1,319	1,133	1,100	1,272	1,184	1,272	1,252	1,192	1,327	1,202	1,368	1,269	1,218	14,788
512	Drugs, drug proprietaries, and druggists' sundries	1,136	950	917	1,073	1,038	1,102	1,039	1,066	1,099	1,030	1,178	1,092	1,054	12,638
5122	Drugs, drug proprietaries, and druggists' sundries	1,136	950	917	1,073	1,038	1,102	1,039	1,066	1,099	1,030	1,178	1,092	1,054	12,638
5122 pt.	General-line drugs	491	403	403	477	472	509	455	443	477	443	487	448	456	5,612
513	Apparel, piece goods, and notions[4]	2,427	2,094	1,996	2,326	2,107	2,127	2,102	2,389	2,629	2,563	2,704	2,468	2,032	27,537
514	Groceries and related products	11,865	11,122	10,381	11,954	11,281	11,988	11,721	11,500	11,835	11,122	12,140	11,919	11,673	138,635
5141	Groceries, general-line	4,396	3,965	3,658	4,173	3,989	4,241	4,247	4,245	4,429	4,137	4,597	4,511	4,289	50,481
5144	Poultry and poultry products	552	518	489	559	554	592	544	563	569	530	561	603	589	6,670
5145	Confectionery	196	184	177	209	196	212	199	192	214	214	275	243	207	2,521
5147	Meats and meat products	1,869	1,979	1,971	2,198	2,029	2,076	1,908	1,872	1,959	1,770	1,925	1,768	1,811	23,267
5148	Fresh fruits and vegetables	988	1,020	961	1,203	1,086	1,202	1,242	1,063	1,030	917	997	1,024	1,002	12,747
515	Farm-product raw materials	9,192	7,258	6,513	8,121	7,180	8,100	7,884	8,605	8,177	7,813	9,664	9,725	9,211	98,252
5153	Grain	7,575	5,859	5,235	6,740	5,886	6,766	6,730	7,516	7,090	6,594	8,328	8,347	7,630	82,733
517	Petroleum and petroleum products	8,039	4,837	5,008	5,282	5,221	6,078	5,851	5,863	6,355	6,354	7,171	7,602	7,677	73,300
5171	Petroleum bulk stations and terminals	4,462	2,738	2,785	2,997	2,857	3,306	3,170	3,121	3,504	3,456	3,960	4,050	4,193	40,137
518	Beer, wine, and distilled alcoholic beverages	2,241	2,020	1,952	2,490	2,453	2,726	2,704	2,636	2,844	2,387	2,733	2,821	2,882	30,648
5181	Beer and ale	1,092	999	953	1,223	1,258	1,513	1,523	1,507	1,590	1,229	1,299	1,267	1,230	15,591
5182	Wine and distilled alcoholic berverages	1,149	1,021	999	1,267	1,195	1,214	1,181	1,129	1,254	1,158	1,435	1,554	1,652	15,057
519	Miscellaneous nondurable goods	5,184	4,529	4,383	5,528	5,406	6,001	5,801	5,105	5,468	5,570	5,296	5,643	5,238	63,969
5194	Tobacco and tobacco products	807	823	749	852	848	891	863	881	896	795	902	861	843	10,203

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 estimates. See p. 15, Sample Design and Estimation Procedures.

[1]The metals and minerals, except petroleum group is subject to a sampling variability of 13 percent for January 1980.
[2]The electrical appliances, TV and radio sets group is subject to a sampling variability of 8 percent for January 1980.
[3]The plumbing and heating equipment and supplies (hydronics) group is subject to a sampling variability of 8 percent for January 1980.
[4]The apparel, piece foods, and notions group is subject to a sampling variability of 13 percent for January 1980.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980	1979											
		Jan.[p]	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	91,138	81,896	83,917	85,436	85,345	85,199	84,942	86,829	86,890	87,061	88,839	89,632	89,997
	Total (excluding farm-product raw materials)	83,326	75,593	77,627	79,311	79,626	80,246	79,964	81,487	81,570	81,563	82,485	82,184	82,382
50	Durable goods, total	57,106	51,860	53,807	54,381	54,731	55,566	55,523	56,602	56,803	56,361	56,620	56,241	56,470
501	Motor vehicles and automotive parts and supplies	9,610	9,512	10,189	9,797	9,663	9,631	9,207	9,672	9,446	9,240	9,546	9,652	9,723
5013,4	Automotive parts and supplies, tires and tubes	6,162	5,758	5,888	5,781	5,809	5,970	5,753	6,051	6,117	5,933	6,025	6,084	6,030
5013	Automotive parts and supplies	5,149	4,881	5,003	4,870	4,917	5,035	4,818	5,082	5,188	5,018	5,121	5,208	5,074
502	Furniture and home furnishings	1,828	1,764	1,753	1,872	1,837	1,815	1,903	1,847	1,839	1,861	1,909	1,796	1,794
5023	Home furnishings	1,270	1,292	1,282	1,355	1,332	1,309	1,361	1,347	1,339	1,328	1,381	1,291	1,247
503	Lumber and other construction materials	3,362	3,113	3,178	3,337	3,404	3,468	3,496	3,526	3,442	3,382	3,383	3,335	3,353
5031	Lumber, plywood, and millwork	2,068	2,030	2,082	2,116	2,152	2,244	2,204	2,220	2,204	2,129	2,149	2,112	2,090
505	Metals and minerals, except petroleum[1]	6,527	5,106	5,434	5,285	5,254	5,528	5,582	5,763	6,319	6,139	6,376	6,363	6,307
5051 pt.	Ferrous metals service centers and offices	5,102	4,191	4,425	4,365	4,239	4,455	4,586	4,655	4,947	4,953	4,794	4,891	4,897
5051 pt.	Ferrous metals service centers	4,150	3,241	3,459	3,433	3,269	3,506	3,643	3,665	3,956	4,010	3,843	3,999	4,019
506	Electrical goods	5,975	5,509	5,582	5,706	5,737	5,976	6,040	6,223	6,254	6,061	6,082	6,098	5,931
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,854	2,542	2,684	2,676	2,730	2,946	2,838	2,840	2,841	2,771	2,785	2,945	2,820
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3,120	2,966	2,898	3,030	3,007	3,030	3,202	3,383	3,274	3,290	3,296	3,153	3,112
507	Hardware, plumbing, heating equipment, and supplies	4,664	4,251	4,461	4,497	4,719	4,590	4,631	4,628	4,535	4,488	4,537	4,456	4,575
5072	Hardware	1,818	1,476	1,540	1,539	1,598	1,622	1,643	1,659	1,657	1,692	1,698	1,692	1,758
5074	Plumbing and heating equipment and supplies (hydronics)	1,783	1,819	1,900	1,899	1,985	1,848	1,896	1,902	1,828	1,783	1,823	1,777	1,804
508	Machinery, equipment, and supplies	19,788	17,748	18,254	18,807	18,924	19,370	19,465	19,576	19,778	19,974	19,555	19,461	19,554
5082	Construction and mining machinery and equipment	4,216	3,932	4,152	4,334	4,280	4,430	4,512	4,488	4,504	4,573	4,339	4,288	4,182
5084,5	Industrial machinery, equipment, and supplies	6,410	5,728	5,800	6,015	6,030	6,073	6,006	5,979	6,092	6,201	6,251	6,163	6,354
51	Nondurable goods, total	34,032	30,036	30,110	31,055	30,614	29,633	29,419	30,227	30,087	30,700	32,219	33,391	33,527
	Total (excluding farm-product raw materials)	26,220	23,733	23,820	24,930	24,895	24,680	24,441	24,885	24,767	25,202	25,865	25,943	25,912
511	Paper and paper products	1,695	1,424	1,468	1,547	1,501	1,542	1,616	1,608	1,604	1,663	1,597	1,657	1,695
5111,3	Printing, writing, industrial, and personal service paper	1,152	986	1,010	1,053	1,018	1,050	1,090	1,079	1,055	1,109	1,082	1,090	1,141
512	Drugs, drug proprietaries, and druggists' sundries	1,602	1,396	1,412	1,535	1,617	1,563	1,567	1,609	1,570	1,670	1,678	1,580	1,573
514	Groceries and related products	6,842	6,408	6,346	6,719	6,644	6,644	6,686	6,674	6,633	6,793	6,982	6,933	6,984
5141	Groceries, general-line	2,906	2,696	2,744	2,895	2,846	2,785	2,802	2,899	2,857	2,911	3,046	3,044	2,957
517	Petroleum and petroleum products	3,247	2,106	2,101	2,224	2,177	2,401	2,263	2,492	2,618	2,874	2,918	3,062	3,135
518	Beer, wine, and distilled alcoholic beverages	2,695	2,462	2,427	2,684	2,806	2,760	2,732	2,693	2,539	2,538	2,781	2,770	2,597
5181	Beer and ale[2]	910	800	845	1,040	1,085	1,089	1,072	1,030	923	903	934	922	879
5182	Wines and distilled alcoholic beverages	1,785	1,662	1,582	1,645	1,721	1,671	1,660	1,663	1,616	1,634	1,847	1,848	1,718

See footnotes at end of table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980	1979											
		Jan.[p]	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	119	128	136	115	121	111	114	118	111	119	109	113	119
	Total (excluding farm-product raw materials)	123	134	141	120	125	117	120	125	116	125	114	118	124
50	Durable goods, total	170	183	191	157	164	156	161	168	153	168	149	162	174
501	Motor vehicles and automotive parts and supplies	152	169	180	142	141	137	145	155	139	164	141	150	158
5013,4	Automotive parts and supplies, tires and tubes	197	185	191	167	173	169	173	196	172	193	170	184	203
5013	Automotive parts and supplies	193	188	192	168	175	170	175	195	172	192	172	185	202
502	Furniture and home furnishings	147	174	185	156	163	150	161	165	148	156	137	142	158
5023	Home furnishings	167	193	208	173	186	171	178	187	169	171	148	155	177
503	Lumber and other construction materials	128	130	144	111	113	103	102	103	92	103	93	111	132
5031	Lumber, plywood, and millwork	120	121	135	103	104	99	98	99	88	101	92	111	132
505	Metals and minerals, except petroleum	146	159	169	137	159	141	153	151	151	162	152	157	158
5051 pt.	Ferrous metals service centers and offices	165	171	182	149	172	151	166	162	162	177	161	172	178
5051 pt.	Ferrous metals service centers	181	196	198	161	182	162	177	179	179	203	174	188	204
506	Electrical goods	165	183	181	160	175	160	160	168	150	151	138	154	157
5063	Electrical apparatus and equipment, wiring supplies and construction meterials	159	166	164	148	156	142	141	143	132	133	129	150	147
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	171	200	201	173	194	181	180	197	163	170	148	158	167
507	Hardware, plumbing, heating equipment, and supplies	189	198	225	194	199	177	188	183	169	187	162	185	209
5072	Hardware	191	184	203	180	188	166	187	186	165	193	166	185	210
5074	Plumbing and heating equipment and supplies (hydronics)	170	213	237	198	200	185	196	188	176	176	156	179	196
508	Machinery, equipment, and supplies	222	231	238	195	200	192	200	212	196	213	190	209	217
5082	Construction and mining machinery and equipment	453	439	448	364	315	328	358	357	330	361	328	375	411
5084,5	Industrial machinery, equipment, and supplies	164	168	167	153	167	152	152	165	151	171	153	153	161
51	Nondurable goods, total	79	85	90	78	82	72	74	76	72	78	73	75	78
	Total (excluding farm-product raw materials)	77	84	88	79	83	75	76	80	74	79	76	75	77
511	Paper and paper products	92	92	99	92	97	91	98	101	90	104	88	98	103
5111,3	Printing, writing, industrial, and personal service paper	87	87	92	83	86	83	87	90	79	92	79	86	94
512	Drugs, drug proprietaries, and druggists' sundries	141	147	154	143	156	142	151	151	143	162	142	145	149
514	Groceries and related products	58	58	61	56	59	55	57	58	56	61	58	58	60
5141	Groceries, general-line	66	68	75	69	71	66	66	68	64	70	66	67	69
7	Petroleum and petroleum products	40	44	42	42	42	40	39	43	41	45	41	40	41
1	Beer, wine, and distilled alcoholic beverages	120	122	124	108	114	101	101	102	89	106	102	98	90
82	Beer and ale	83	80	89	85	86	72	70	68	58	74	72	73	71
	Wines and distilled alcoholic beverages	155	163	158	130	144	138	141	147	129	141	129	119	104

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. 15, Sample Design and Estimation Procedures.

[1]The metals and minerals, except petroleum group is subject to a sampling variability of 8 percent for January 1980.
[2]The beer and ale group is subject to a sampling variability of 8 percent for January 1980.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980	1979										
		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	80,929	67,585	67,860	70,657	70,402	72,338	72,629	74,778	75,588	76,495	77,489	78,407	78,947
	Total (excluding farm-product raw materials)	71,855	60,538	60,819	63,288	63,171	64,550	64,657	66,015	66,729	67,586	68,363	69,427	69,800
50	Durable goods, total	36,958	31,317	31,812	33,319	32,713	33,177	33,078	34,103	34,509	34,079	35,267	35,171	35,407
501	Motor vehicles and automotive parts and supplies	6,652	6,032	6,229	6,443	6,274	6,250	6,143	6,160	6,500	6,183	6,737	6,835	6,865
502	Furniture and home furnishings	1,385	1,142	1,064	1,166	1,151	1,180	1,156	1,205	1,193	1,182	1,201	1,183	1,213
503	Lumber and other construction materials	3,241	2,922	2,786	3,049	3,101	3,096	3,131	3,200	3,198	3,182	3,152	2,976	3,009
505	Metals and minerals, except petroleum	4,604	3,302	3,468	3,733	3,221	3,630	3,598	3,979	3,850	3,683	4,079	4,194	4,469
506	Electrical goods	3,986	3,334	3,476	3,552	3,362	3,649	3,676	3,731	3,913	4,069	3,931	3,869	3,819
507	Hardware, plumbing, heating equipment, and supplies	2,677	2,331	2,302	2,381	2,360	2,391	2,362	2,418	2,466	2,428	2,506	2,444	2,438
508	Machinery, equipment, and supplies	9,816	8,565	8,880	9,083	9,195	9,223	9,281	9,488	9,613	9,451	9,633	9,612	9,716
51	Nondurable goods, total	43,971	36,268	36,048	37,338	37,689	39,161	39,551	40,675	41,079	42,416	42,222	43,236	43,540
	Total (excluding farm-product raw materials)	34,897	29,221	29,007	29,969	30,458	31,373	31,579	31,912	32,220	33,507	33,096	34,256	34,393
511	Paper and paper products	1,841	1,548	1,590	1,615	1,631	1,627	1,627	1,648	1,664	1,652	1,678	1,711	1,725
512	Drugs, drug proprietaries, and druggists' sundries	1,129	957	1,000	1,034	1,050	1,080	1,076	1,084	1,061	1,060	1,067	1,077	1,092
513	Apparel, piece goods, and notions	2,552	2,240	2,172	2,243	2,270	2,067	2,220	2,494	2,274	2,441	2,372	2,413	2,320
514	Groceries and related products	12,021	11,349	11,370	11,483	11,418	11,309	11,480	11,546	11,402	11,634	11,684	11,883	12,084
515	Farm-product raw materials[1]	9,074	7,047	7,041	7,369	7,231	7,788	7,972	8,763	8,859	8,909	9,126	8,980	9,147
517	Petroleum and petroleum products	7,944	4,794	4,895	5,021	5,322	6,139	6,020	5,940	6,355	6,959	7,142	7,331	7,497
518	Beer, wine, and distilled alcoholic beverages	2,723	2,479	2,392	2,520	2,577	2,548	2,476	2,597	2,621	2,556	2,620	2,649	2,582
519	Miscellaneous nondurable goods	5,361	4,708	4,509	4,909	5,081	5,441	5,567	5,555	5,626	5,976	5,426	5,794	5,502
	Inventories ADJUSTED for seasonal variations													
	Merchant wholesalers, total	90,766	81,498	82,700	83,558	84,632	84,904	85,406	87,662	88,474	88,499	89,146	89,324	89,920
	Total (excluding farm-product raw materials)	84,207	76,206	77,333	78,287	79,180	79,388	79,394	81,026	81,636	81,736	82,689	82,870	83,372
50	Durable goods, total	57,986	52,622	53,641	53,894	54,377	54,772	54,591	55,861	56,529	56,479	57,242	57,129	57,463
501	Motor vehicles and automotive parts and supplies	9,477	9,381	9,621	9,614	9,625	9,479	9,244	9,740	9,708	9,595	9,731	9,759	9,762
502	Furniture and home furnishings	1,850	1,785	1,769	1,880	1,844	1,795	1,851	1,836	1,824	1,828	1,911	1,812	1,844
503	Lumber and other construction materials	3,434	3,173	3,207	3,237	3,311	3,364	3,417	3,453	3,445	3,420	3,459	3,470	3,443
505	Metals and minerals, except petroleum	6,640	5,189	5,556	5,296	5,302	5,452	5,532	5,617	6,053	6,060	6,546	6,434	6,397
506	Electrical goods	6,185	5,703	5,790	5,775	5,772	5,893	5,898	6,125	6,125	5,977	6,034	6,074	5,985
507	Hardware, plumbing, heating equipment, and supplies	4,803	4,378	4,534	4,413	4,469	4,439	4,492	4,520	4,540	4,584	4,611	4,647	4,761
508	Machinery, equipment, and supplies	20,069	18,000	18,145	18,511	18,849	19,121	19,102	19,498	19,818	19,994	19,833	19,777	19,791
51	Nondurable goods, total	32,780	28,876	29,059	29,664	30,255	30,132	30,815	31,801	31,945	32,020	31,904	32,195	32,457
	Total (excluding farm-product raw materials)	26,221	23,584	23,692	24,393	24,803	24,616	24,803	25,165	25,107	25,257	25,447	25,741	25,909
511	Paper and paper products	1,746	1,464	1,496	1,556	1,488	1,537	1,575	1,610	1,615	1,645	1,587	1,655	1,680
512	Drugs, drug proprietaries, and druggists' sundries	1,685	1,465	1,466	1,533	1,604	1,582	1,558	1,607	1,565	1,607	1,594	1,567	1,599
514	Groceries and related products	6,939	6,499	6,352	6,594	6,604	6,671	6,760	6,783	6,775	6,800	6,818	6,871	6,908
517	Petroleum and petroleum products	3,180	2,057	2,131	2,233	2,306	2,440	2,426	2,574	2,590	2,753	2,795	2,936	3,041
518	Beer, wine, and distilled alcoholic beverages	2,790	2,549	2,566	2,703	2,767	2,677	2,655	2,664	2,609	2,553	2,626	2,648	2,769
	Stock-sales ratios based on ADJUSTED data													
	Merchant wholesalers, total	112	121	122	118	120	117	118	117	117	116	115	114	114
	Total (excluding farm-product raw materials)	117	126	127	124	125	123	123	123	122	121	121	119	119
50	Durable goods, total	157	168	169	162	166	165	165	164	164	166	162	162	162
501	Motor vehicles and automotive parts and supplies	142	156	154	149	153	152	150	158	149	155	144	143	142
502	Furniture and home furnishings	134	156	166	161	160	152	160	152	153	155	159	153	152
503	Lumber and other construction materials	106	109	115	106	107	109	109	108	108	107	110	117	114
505	Metals and minerals, except petroleum	144	157	160	142	165	150	154	141	157	165	160	153	143
506	Electrical goods	155	171	167	163	172	161	160	164	157	147	153	157	157
507	Hardware, plumbing, heating equipment, and supplies	179	188	197	185	189	186	190	187	184	189	184	190	195
508	Machinery, equipment, and supplies	204	210	204	204	205	207	206	206	206	212	206	206	204
51	Nondurable goods, total	75	80	81	79	80	77	78	78	78	75	76	74	75
	Total (excluding farm-product raw materials)	75	81	82	81	81	78	79	79	78	75	77	75	75
511	Paper and paper products	95	95	94	96	91	94	97	98	97	100	95	97	97
512	Drugs, drug proprietaries, and druggists' sundries	149	153	147	148	153	146	145	148	148	152	149	145	146
514	Groceries and related products	58	57	56	57	58	59	59	59	59	58	58	58	57
517	Petroleum and petroleum products	40	43	44	44	43	40	40	43	41	40	39	40	41
518	Beer, wine, and distilled alcoholic beverages	102	103	107	107	107	105	107	103	100	100	100	100	107

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 1979 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. 1979-Jan. 1980 from--			
	Aug. 1979-Oct. 1979 (3 months ago)	May 1979-July 1979 (6 months ago)	Feb. 1979-April 1979 (9 months ago)	Nov. 1978-Jan. 1979 (12 months ago)
Merchant wholesalers, total.....	+4	+8	+14	+18
Durable goods, total.....	+3	+7	+10	+14
Nondurable goods, total..	+4	+9	+18	+21

Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers: 1974-1980

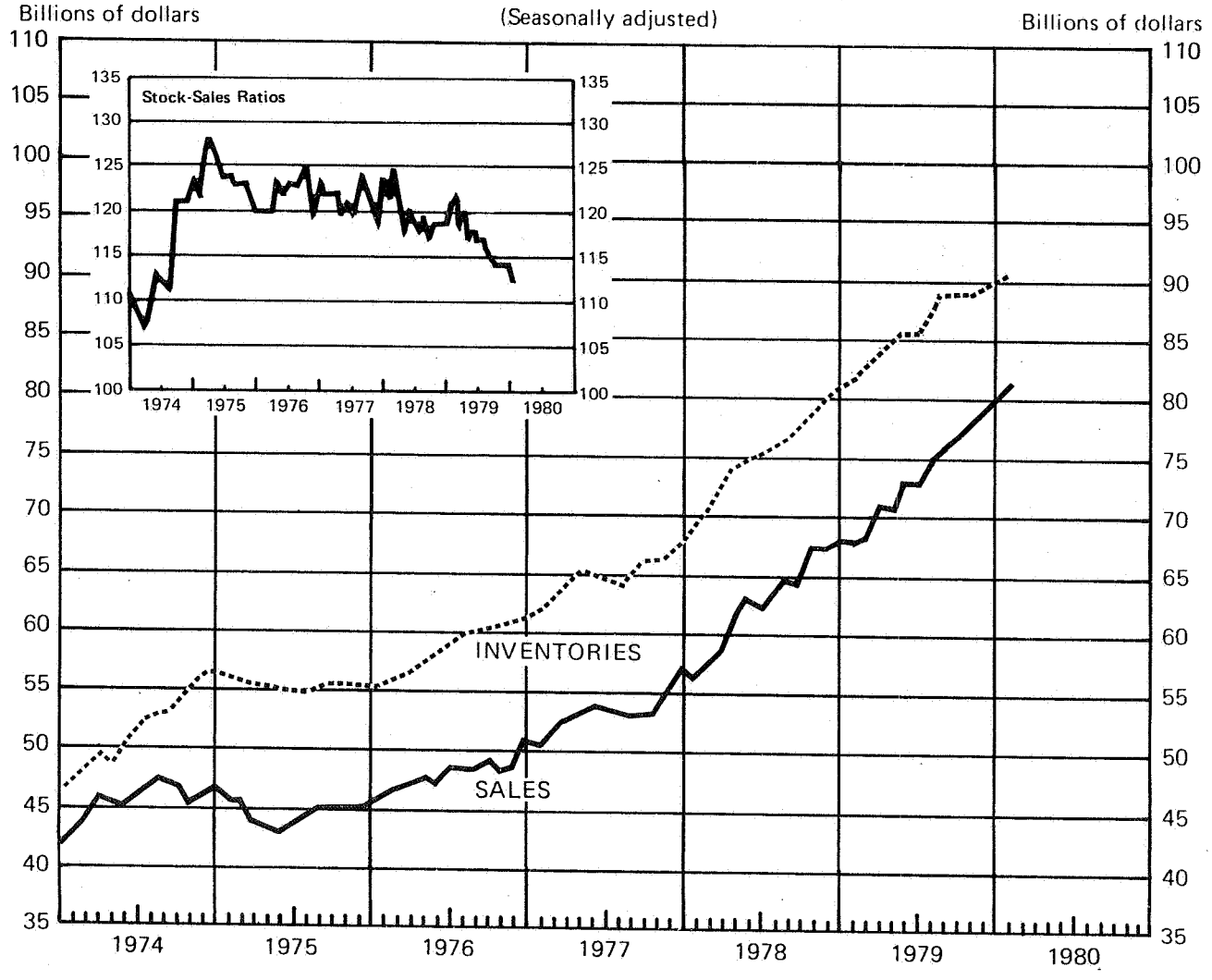


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: January 1980

1972 SIC code	Kind of business	Unadjusted				Adjusted[1]			
		Sales		Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		Jan. 1980 from Dec. 1979	Jan. 1980 from Jan. 1979	Jan. 1980 from Dec. 1979	Jan. 1980 from Jan. 1979	Jan. 1980 from Dec. 1979	Jan. 1980 from Jan. 1979	Jan. 1980 from Dec. 1979	Jan. 1980 from Jan. 1979
	Merchant wholesalers, total	+2	+21	+1	+11	+3	+20	+1	+11
	Total (excluding farm-product raw materials)	+2	+20	+1	+10	+3	+19	+1	+10
50	Durable goods, total	+4	+19	+1	+10	+4	+18	+1	+10
501	Motor vehicles and automotive parts and supplies	+3	+12	-1	+1	-3	+10	-3	+1
5012	Automobiles and other motor vehicles	0	+28	-7	-8	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	+5	0	+2	+7	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	+6	+3	+1	+5	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	+9	+23	+2	+4	+14	+21	0	+4
5021	Furniture--household and office	+11	+40	+2	+18	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	+2	+30	+2	+15	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	+16	+44	+2	+21	(*)	(*)	(*)	(*)
5023	Home furnishings	+8	+14	+2	-2	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	+3	+10	0	+8	+8	+11	0	+8
5031	Lumber, plywood, and millwork	+9	+3	-1	+2	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c.	-6	+25	+2	+19	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	-12	+20	+3	+11	+10	+23	-3	+10
505	Metals and minerals, except petroleum	+12	+39	+4	+28	+3	+39	+4	+28
5051 pt.	Ferrous metals service centers and offices	+13	+26	+4	+22	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	+17	+39	+3	+28	(*)	(*)	(*)	(*)
5051 pt.	Nonferrous metals service centers and offices	+9	+94	+1	+58	(*)	(*)	(*)	(*)
506	Electrical goods	-4	+20	+1	+8	+4	+20	+3	+8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-6	+17	+1	+12	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-2	+23	0	+5	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	-2	+23	-1	+3	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	+13	+15	+2	+10	+10	+15	+1	+10
5072	Hardware	+13	+18	+3	+23	(*)	(*)	(*)	(*)
5074	Plumbing and heating equipment and supplies (hydronics)	+14	+23	-1	-2	(*)	(*)	(*)	(*)
5075	Warm air heating and air conditioning equipment and supplies	+10	-4	+6	+5	(*)	(*)	(*)	(*)
508	Machinery, equipment, and supplies	-1	+16	+1	+11	+1	+15	+1	+11
5081	Commercial machines and equipment	+8	+17	0	+3	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	-9	+4	+1	+7	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	-7	+30	+3	+19	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	-1	+15	+1	+12	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	+2	+6	-1	-1	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	+11	+35	-4	0	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	+11	+28	-5	-4	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	+10	+46	-4	+10	(*)	(*)	(*)	(*)
51	Nondurable goods, total	+1	+22	+2	+13	+1	+21	+1	+14
	Total (excluding farm-product raw materials)	+1	+20	+1	+10	+1	+19	+1	+11
511	Paper and paper products	+12	+19	0	+19	+7	+19	+4	+19
5111,3	Printing, writing, industrial, and personal service paper	+8	+16	+1	+17	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	+8	+20	+2	+15	+3	+18	+5	+15
5122	Drugs, drug proprietaries, and druggists' sundries	+8	+20	+2	+15	(*)	(*)	(*)	(*)
5122 pt.	General-line drugs	+8	+16	+7	+10	(*)	(*)	(*)	(*)
514	Groceries and related products	+2	+7	-2	+7	-1	+6	0	+7
5141	Groceries, general-line	+2	+11	-2	+8	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	+2	+8	-3	+6	(*)	(*)	(*)	(*)
5141 pt.	Retailer cooperatives	0	+8	-5	+8	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	+4	+17	+2	+10	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	+2	+12	-2	+13	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	-6	+7	+1	+16	(*)	(*)	(*)	(*)
5145	Confectionery	-5	+7	-2	+3	(*)	(*)	(*)	(*)
5147	Meats and meat products	+3	-6	-5	-14	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	-1	-3	+3	0	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	0	+27	+3	+24	-1	+29	0	+24
5152	Cotton	+3	+29	+33	+51	(*)	(*)	(*)	(*)
5153	Grain	-1	+29	-4	+19	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	+5	+66	+4	+54	+6	+66	+5	+55
5171	Petroleum bulk stations and terminals	+6	+63	+6	+59	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	-22	+11	+4	+9	+5	+10	+1	+9
5181	Beer and ale	-11	+9	+4	+14	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	-30	+13	+4	+7	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	-1	+14	+1	-1	-3	+14	-3	-1
5191	Farm supplies	+21	+23	+2	-3	(*)	(*)	(*)	(*)
5194	Tobacco and tobacco products	-4	-2	-1	+10	(*)	(*)	(*)	(*)
5198	Paints, varnishes, and supplies	+20	+22	0	+35	(*)	(*)	(*)	(*)
5199 pt.	Books, periodicals, newspapers	-16	-12	-4	-15	(*)	(*)	(*)	(*)

*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.

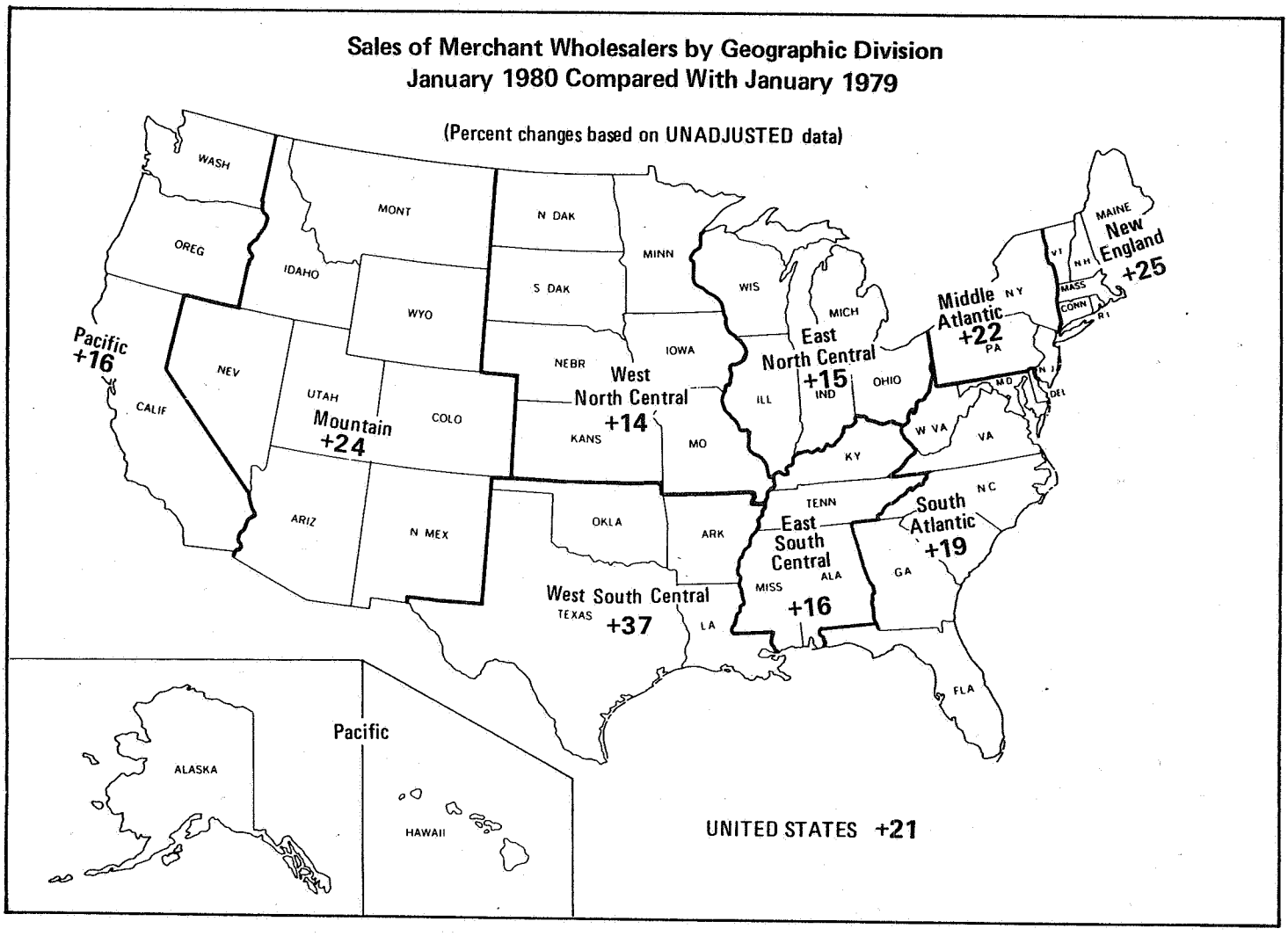


Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1980 and 1979

(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]	1980	1979											Total 12 mos.	Sampling error of the estimate	
		Jan.[P]	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.		Range[2]	Median
		1979															
	Merchant wholesalers, total	76,844	63,739	61,721	74,319	70,768	76,814	74,361	73,537	78,567	73,213	81,820	79,079	75,396	883,334	0.8-0.9	0.9
	New England	4,257	3,393	3,289	3,835	3,652	3,915	3,782	3,572	3,981	3,741	4,167	4,126	3,930	45,382	5-6	6
	Middle Atlantic	17,777	14,513	13,785	16,692	15,218	16,416	16,288	16,256	17,786	17,136	18,350	18,319	17,391	198,150	2-2	2
	East North Central	12,173	10,573	10,454	12,314	11,906	13,356	12,661	12,182	12,979	11,735	13,552	12,864	11,693	146,268	2-3	3
	West North Central	7,640	6,695	6,589	7,834	7,506	8,614	8,005	8,385	8,510	7,921	9,106	8,491	7,874	95,470	2-3	2
	South Atlantic	8,367	7,023	6,620	8,329	7,929	8,401	8,014	7,720	8,067	7,558	8,391	7,972	7,988	94,072	2-3	2
	East South Central	3,441	2,961	2,801	3,505	3,461	3,557	3,372	3,292	3,534	3,261	3,791	3,505	3,443	40,482	4-5	4
	West South Central	9,197	6,703	6,648	7,785	7,673	8,443	8,314	8,248	8,755	8,434	9,347	9,351	9,222	98,922	3-4	4
	Mountain	2,894	2,337	2,253	2,904	2,659	2,786	2,851	2,704	2,830	2,760	2,851	2,743	2,834	32,514	5-5	5
	Pacific	11,097	9,540	9,281	11,121	10,765	11,325	11,077	11,178	12,125	10,668	12,264	11,710	11,021	132,073	2-3	3
50	Durable goods, total	33,676	28,284	28,141	34,689	33,429	35,723	34,447	33,750	37,048	33,616	37,935	34,711	32,515	404,286	0.8-1.0	0.9
	Middle Atlantic	7,381	5,936	5,892	7,165	6,601	7,191	6,961	6,769	7,538	6,989	8,083	7,477	6,697	83,600	4-5	4
	East North Central	5,387	4,818	4,975	6,057	5,863	6,467	6,023	5,801	6,440	5,833	6,439	5,869	5,248	69,836	3-4	4
	West North Central	2,685	2,157	2,208	2,718	2,746	3,009	2,778	2,873	3,209	2,900	3,171	2,851	2,682	33,304	5-6	5
	South Atlantic	4,007	3,515	3,211	4,246	4,111	4,269	4,172	4,074	4,173	3,796	4,374	3,934	3,868	47,742	4-5	4
	West South Central	3,732	3,020	3,067	3,649	3,637	3,863	3,900	3,702	3,970	3,662	4,174	3,870	3,701	44,217	4-4	4
	Mountain	1,265	1,076	1,043	1,408	1,309	1,355	1,358	1,322	1,356	1,280	1,384	1,202	1,225	15,318	6-7	7
	Pacific	6,065	5,259	5,268	6,330	6,173	6,433	6,265	6,388	7,143	6,069	6,993	6,576	6,049	75,096	2-3	3
51	Nondurable goods, total	43,168	35,455	33,580	39,630	37,339	41,091	39,914	39,787	41,519	39,597	43,885	44,368	42,881	479,048	1.0-1.2	1.0
	New England	2,575	2,166	2,066	2,335	2,200	2,377	2,343	2,225	2,453	2,252	2,542	2,635	2,485	28,078	5-7	6
	Middle Atlantic	10,396	8,577	7,893	9,527	8,616	9,226	9,327	9,487	10,247	10,147	10,267	10,842	10,393	114,549	3-3	3
	East North Central	6,786	5,755	5,479	6,256	6,042	6,888	6,638	6,380	6,539	5,902	7,113	6,994	6,445	76,432	3-4	3
	West North Central	4,956	4,538	4,381	5,115	4,760	5,606	5,227	5,512	5,301	5,021	5,935	5,640	5,192	62,227	3-4	3
	South Atlantic	4,360	3,508	3,409	4,084	3,818	4,132	3,842	3,646	3,894	3,762	4,017	4,038	4,119	46,271	3-5	3
	East South Central	1,970	1,685	1,549	1,889	1,925	1,959	1,820	1,817	1,844	1,664	2,100	2,064	2,146	22,463	3-4	4
	West South Central	5,465	3,683	3,581	4,136	4,036	4,580	4,414	4,546	4,785	4,771	5,173	5,481	5,520	54,706	5-5	5
	Pacific	5,031	4,281	4,013	4,790	4,591	4,893	4,812	4,790	4,982	4,599	5,270	5,134	4,972	57,096	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 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: January 1980

(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			
		Jan. 1980 from Dec. 1979	Jan. 1980 from Jan. 1979	Jan. 1980 from Dec. 1979	Jan. 1980 from Jan. 1979		
		A	B	D	E	A	D
	Merchant wholesalers, total	+2	+21	+1	+11	0.4	0.2
	New England	+8	+25	+3	+10	2.0	1.9
	Middle Atlantic	+2	+22	0	+12	1.1	0.6
	East North Central	+4	+15	0	+7	1.2	0.8
	West North Central	-3	+14	0	+15	1.3	1.1
	South Atlantic	+5	+19	+1	+8	1.6	1.0
	East South Central	0	+16	+6	+14	1.7	1.4
	West South Central	0	+37	+1	+12	1.4	0.8
	Mountain	+2	+24	+2	+11	2.4	1.3
	Pacific	+1	+16	0	+12	1.2	0.5
50	Durable goods, total	+4	+19	+1	+10	0.6	0.3
	New England	+16	+37	+2	+1	2.4	1.3
	Middle Atlantic	+5	+24	0	+15	1.7	1.0
	East North Central	+3	+12	0	+7	1.9	1.0
	West North Central	0	+24	+1	+15	3.3	1.7
	South Atlantic	+4	+14	+1	+7	1.9	1.2
	East South Central	+13	+15	-1	+10	3.9	2.5
	West South Central	+1	+24	+1	+10	2.1	1.2
	Mountain	+3	+18	+4	+9	2.9	1.7
	Pacific	0	+15	+1	+8	1.9	0.7
51	Nondurable goods, total	+1	+22	+2	+13	0.6	0.4
	New England	+4	+19	+4	+21	1.9	2.7
	Middle Atlantic	0	+21	+1	+8	1.9	0.9
	East North Central	+5	+18	0	+8	1.4	1.1
	West North Central	-5	+9	0	+15	1.6	1.4
	South Atlantic	+6	+24	+2	+11	2.4	1.8
	East South Central	-8	+17	+16	+19	1.7	2.4
	West South Central	-1	+48	0	+16	2.2	1.3
	Mountain	+1	+29	-1	+17	3.2	1.2
	Pacific	+1	+18	0	+19	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	+5	0	+2	+7	2	1
	New England	-13	0	+1	-4	7	4
	Middle Atlantic	+5	-9	0	+23	4	2
	East North Central	+5	-6	+2	+14	7	1
	West North Central	+4	+12	+2	+25	5	2
	South Atlantic	+10	-6	0	-5	4	2
	East South Central	+1	+10	+5	+33	4	3
	West South Central	+13	+6	0	+3	5	2
	Mountain	+3	-4	+10	-21	7	3
	Pacific	+7	+8	+2	-3	3	2
502	Furniture and home furnishings	+9	+23	+2	+4	2	1
	Middle Atlantic	+19	+17	+2	-6	4	2
	East North Central	+6	+23	-2	+8	7	2
	West North Central	+7	+61	+2	+16	5	4
	West South Central	-6	+10	+2	+1	5	7
	Pacific	+4	+30	-1	+3	5	3
503	Lumber and other construction materials	+3	+10	0	+8	2	1
	New England	-2	+16	+1	+13	4	5
	Middle Atlantic	+7	+4	-1	+3	4	2
	East North Central	-6	+16	-2	+9	3	2
	West North Central	+12	+15	+4	+16	7	7
	South Atlantic	+3	+9	-1	0	4	2
	East South Central	+9	-5	-2	+6	4	3
	West South Central	+15	(S)	+2	-1	6	5
	Pacific	0	0	-3	+13	5	1
5051 pt.	Ferrous metals service centers	+17	+39	+3	+28	2	1
	New England	+35	+35	+7	+36	6	2
	Middle Atlantic	+16	+47	+4	+45	5	2
	East North Central	+21	+26	0	+25	5	2
	West North Central	+23	+21	+11	+25	5	2
	South Atlantic	+10	+20	+10	0	3	2
	East South Central	+26	+37	+1	+33	4	4
	West South Central	+12	+56	+1	+14	4	2
	Mountain	0	(S)	+2	+25	2	2
	Pacific	+8	+37	-1	+32	2	3
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-6	+17	+1	+12	2	1
	New England	-6	-6	0	-16	3	2
	Middle Atlantic	-7	+24	0	+1	5	2
	East North Central	+3	+30	+4	+26	3	2
	West North Central	-13	-1	-1	-3	5	3
	South Atlantic	-9	+20	+4	+16	3	2
	East South Central	-3	-2	-1	+10	3	5
	West South Central	-8	+44	-2	+28	4	2
	Mountain	+1	+9	-1	-5	4	2
	Pacific	-13	+2	-1	+15	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 1980—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			
		Jan. 1980 from Dec. 1979	Jan. 1980 from Jan. 1979	Jan. 1980 from Dec. 1979	Jan. 1980 from Jan. 1979		
		A	B	D	E	A	D
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment.	-2	+23	0	+5	3	1
	Middle Atlantic	-9	+14	-1	-11	3	2
	East North Central	-4	+11	-1	+4	4	1
	West North Central	-7	+49	-2	(S)	4	4
	South Atlantic	-5	+1	0	-1	6	4
	West South Central	+5	+59	+3	+28	4	4
	Mountain	+1	-12	+3	0	6	3
	Pacific	+8	+43	-1	+14	3	2
5072	Hardware	+13	+18	+3	+23	1	1
	New England	+9	-6	-2	-8	6	3
	Middle Atlantic	+9	+31	+2	+34	6	2
	East North Central	+11	+19	+5	+17	4	2
	West North Central	+10	+5	+3	+8	3	3
	South Atlantic	+14	+22	+4	+31	4	2
	East South Central	+34	+27	+2	+8	4	1
	Pacific	(S)	+31	+2	(S)	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	+14	+23	-1	-2	2	1
	Middle Atlantic	+22	+27	0	+5	6	3
	East North Central	+2	-6	-7	(S)	3	3
	South Atlantic	+4	+9	+1	0	3	2
	Mountain	+6	+33	+7	+55	7	4
	Pacific	+6	+26	0	+22	5	4
5084,5	Industrial machinery, equipment, and supplies	-1	+15	+1	+12	2	1
	Middle Atlantic	-2	+27	+2	+9	7	2
	East North Central	+2	+10	-3	+15	3	2
	West South Central	-5	+9	0	+4	4	3
	Pacific	+2	+5	+2	+10	5	2
512	Drugs, drug proprietaries, and druggists' sundries	+8	+20	+2	+15	1	1
	New England	+7	+25	+16	+43	5	3
	Middle Atlantic	-4	+20	-8	-1	3	2
	East North Central	+6	+5	+3	+1	6	3
	West North Central	+21	+30	+3	+9	2	2
	South Atlantic	+8	+16	+8	+14	6	5
	East South Central	+2	+10	-1	+3	6	5
	West South Central	+15	+16	-3	+18	3	2
	Mountain	+15	+10	0	+12	3	2
	Pacific	+22	+15	+8	-1	3	3
5141	Groceries, general-line	+2	+11	-2	+8	1	1
	New England	+1	-1	-6	+11	2	1
	Middle Atlantic	-2	+8	-1	+6	1	2
	East North Central	0	+16	+1	+12	3	1
	West North Central	+4	+6	+1	+4	1	1
	South Atlantic	+11	+14	-2	+1	2	1
	West South Central	+5	+9	-4	+12	2	1
	Mountain	-1	+26	-5	+21	2	2
	Pacific	+3	+8	-2	+2	1	1
5142,3,6,9	Specialty-line groceries	+2	+12	-2	+13	1	1
	Middle Atlantic	+4	+20	-6	-2	4	2
	East North Central	0	-8	-3	+7	3	2
	West North Central	0	+15	-1	+36	3	1
	South Atlantic	-10	+3	+1	+24	5	6
	East South Central	-18	(S)	0	(S)	2	2
5148	Fresh fruits and vegetables	-1	-3	+3	0	2	4
	Middle Atlantic	-6	-18	-3	-2	7	5
	East North Central	-9	-14	(S)	+7	6	6
	West North Central	0	+7	+3	-4	6	3
	West South Central	-13	+3	-4	+1	5	3
	Pacific	-3	0	+14	+2	4	4
5194	Tobacco and tobacco products	-4	-2	-1	+10	1	1
	New England	-18	(S)	-1	-10	5	3
	Middle Atlantic	-6	-10	+4	(S)	4	3
	East North Central	-6	-2	-4	+11	4	3
	West North Central	-2	+16	+3	+15	4	2
	South Atlantic	-9	-18	-5	-11	6	6
	East South Central	+2	+10	+5	+11	7	4
	West South Central	-10	+5	-4	+5	7	6
	Mountain	-1	-5	-4	-23	6	2
	Pacific	+8	+15	-3	+3	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	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
194	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
198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.8-3.8	3.0	(*)	(*)	(*)	(*)	1.5-3.1	2.9
199 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. 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 1979-December 1980**

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	94.6	91.5	104.4	100.2	106.1	101.7	98.6	104.3	95.7	105.3	101.1	96.0
	Total (excluding farm-product raw materials)	93.4	91.2	104.0	100.1	106.4	102.6	98.8	105.9	96.8	105.4	99.9	95.0
50	Durable goods, total	91.6	89.2	103.2	101.6	107.4	103.5	99.6	107.5	97.7	107.7	98.7	92.4
501	Motor vehicles and automotive parts and supplies	93.4	90.7	106.9	109.1	112.2	103.6	101.6	104.8	91.3	100.7	94.4	89.9
502	Furniture and home furnishings	88.6	89.3	102.8	98.2	102.9	102.5	93.0	104.2	101.2	115.7	106.8	93.5
503	Lumber and other construction materials	81.7	79.4	98.6	97.5	108.3	108.9	106.6	117.6	102.9	114.9	100.7	84.5
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	81.7	85.0	101.4	99.9	103.6	99.9	96.0	107.0	105.9	113.9	104.7	100.8
505	Metals and minerals, except petroleum	97.1	92.7	103.1	102.3	107.8	101.3	96.1	109.0	100.1	102.9	96.9	89.2
506	Electrical goods	90.5	88.7	100.1	97.3	102.6	103.0	99.5	106.4	98.6	111.8	102.4	99.1
507	Hardware, plumbing, heating equipment, and supplies	91.9	86.2	97.4	100.6	108.4	104.2	104.4	108.6	98.8	111.5	98.8	89.9
508	Machinery, equipment, and supplies	89.8	88.3	106.4	102.7	109.1	105.0	97.2	105.2	99.4	107.1	97.0	92.9
509	Miscellaneous durable goods	87.9	89.9	109.2	100.0	101.5	104.3	92.9	108.5	98.5	109.0	104.2	93.1
51	Nondurable goods, total	98.1	92.4	105.7	99.6	105.3	100.4	97.9	101.5	93.9	102.7	102.5	99.4
	Total (excluding farm-product raw materials)	96.7	92.9	104.8	99.6	105.3	101.4	98.1	104.3	95.2	102.6	101.4	97.1
511	Paper and paper products	99.5	93.0	104.5	95.1	104.0	101.5	96.2	106.8	96.8	108.5	99.3	95.0
512	Drugs, drug proprietaries, and druggists' sundries	99.3	91.7	103.8	98.9	102.0	96.6	98.3	103.6	97.2	110.4	101.4	96.5
513	Apparel, piece goods, and notions	93.5	91.9	103.7	92.8	102.9	94.7	95.8	115.6	105.0	114.0	102.3	87.6
514	Groceries and related products	98.0	91.3	104.1	98.8	106.0	102.1	99.6	103.8	95.6	103.9	100.3	96.6
515	Farm-product raw materials[1]	103.0	92.5	110.2	99.3	104.0	98.9	98.2	92.3	87.7	105.9	108.3	100.7
516	Chemicals and allied products	93.9	88.1	102.1	99.4	109.9	104.3	99.0	109.7	94.3	106.4	100.1	92.7
517	Petroleum and petroleum products	100.9	102.3	105.2	98.1	99.0	97.2	98.7	100.0	91.3	100.4	103.7	102.4
518	Beer, wine, and distilled alcoholic beverages	81.5	81.6	98.8	95.2	107.0	109.2	101.5	108.5	93.4	104.3	106.5	111.6
519	Miscellaneous nondurable goods	96.2	97.2	112.6	106.4	110.3	104.2	91.9	97.2	93.2	97.6	97.4	95.2
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.4	101.3	102.4	101.4	100.1	99.3	98.8	97.9	98.3	99.8	100.4	100.1
	Total (excluding farm-product raw materials)	98.9	100.1	101.4	100.9	100.9	100.8	100.4	99.6	99.4	99.8	99.4	98.9
50	Durable goods, total	98.4	100.1	100.9	100.9	101.4	101.9	101.1	100.3	99.4	98.9	98.6	98.6
501	Motor vehicles and automotive parts and supplies	101.4	105.9	101.9	100.4	101.6	99.6	99.3	97.3	96.3	98.1	98.9	99.6
502	Furniture and home furnishings	98.8	99.1	99.6	99.6	101.1	102.8	100.6	100.8	101.8	99.9	99.1	97.3
503	Lumber and other construction materials	98.1	99.1	103.1	102.8	103.1	102.3	102.1	99.9	98.9	97.8	96.1	97.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	95.8	99.8	100.9	102.6	102.4	106.4	105.8	101.1	101.8	100.8	93.3	89.8
505	Metals and minerals, except petroleum	98.4	97.8	99.8	99.1	101.4	100.9	102.6	104.4	101.3	97.4	98.9	98.6
506	Electrical goods	96.6	96.4	98.8	99.4	101.4	102.4	101.6	102.1	101.4	100.8	100.4	99.1
507	Hardware, plumbing, heating equipment, and supplies	97.1	98.4	101.9	105.6	103.4	103.1	102.4	99.9	97.9	98.4	95.9	96.1
508	Machinery, equipment, and supplies	98.6	100.6	101.6	100.4	101.3	101.9	100.4	99.8	99.9	98.6	98.4	98.8
509	Miscellaneous durable goods	97.6	98.1	96.6	97.9	97.1	100.4	102.9	102.3	102.6	103.3	102.3	99.4
51	Nondurable goods, total	103.8	103.1	104.8	101.1	97.8	95.4	94.6	94.4	96.3	101.3	104.1	103.4
	Total (excluding farm-product raw materials)	100.1	99.9	101.9	100.9	99.8	98.6	98.6	98.1	99.6	101.6	101.1	100.1
511	Paper and paper products	97.3	98.1	99.4	100.9	100.3	102.6	99.9	99.3	101.1	100.6	100.1	100.9
512	Drugs, drug proprietaries, and druggists' sundries	95.3	96.3	100.1	100.8	98.8	100.6	100.1	100.3	103.9	105.3	100.8	98.4
513	Apparel, piece goods, and notions	101.1	100.6	97.9	98.9	101.4	100.6	101.4	101.1	98.9	99.1	98.8	100.4
514	Groceries and related products	98.6	99.9	101.9	100.6	99.6	98.9	98.4	97.9	99.9	102.4	100.9	101.1
515	Farm-product raw materials[1]	119.1	117.2	116.2	104.9	89.8	82.8	80.5	77.8	81.3	98.4	115.4	116.3
516	Chemicals and allied products	98.1	100.8	101.4	101.3	103.4	102.1	102.8	99.6	100.4	96.6	96.3	97.3
517	Petroleum and petroleum products	102.4	98.6	99.6	94.4	98.4	93.3	96.8	101.1	104.4	104.4	104.3	103.1
518	Beer, wine, and distilled alcoholic beverages	96.6	94.6	99.3	101.4	103.1	102.9	101.1	97.3	99.4	105.9	104.6	93.8
519	Miscellaneous nondurable goods	104.6	105.6	108.3	102.6	99.1	93.3	95.4	95.9	96.1	99.1	99.3	100.6

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1979-December 1980—Continued

1972 SIC code	Kind of business	1980											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	95.4	95.2	101.1	103.3	103.3	101.6	101.9	98.6	100.6	105.8	95.5	100.8
	Total (excluding farm-product raw materials)	94.1	95.2	100.4	103.9	103.6	101.8	102.3	100.3	101.5	106.0	94.8	100.3
50	Durable goods, total	92.3	92.7	99.8	105.0	104.2	103.4	103.2	101.3	103.6	107.7	93.0	97.9
501	Motor vehicles and automotive parts and supplies	95.2	94.3	103.6	114.2	108.1	102.7	104.2	101.3	95.1	100.4	90.7	94.7
502	Furniture and home furnishings	89.5	93.2	99.8	101.8	100.0	101.9	96.5	98.9	104.5	117.2	101.9	98.3
503	Lumber and other construction materials	81.0	83.9	94.0	101.1	106.2	107.1	109.4	110.4	112.2	115.0	92.5	90.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	80.2	86.3	101.3	106.6	99.2	97.7	101.2	101.7	109.7	110.5	104.8	107.0
505	Metals and minerals, except petroleum	96.9	97.4	101.3	107.0	101.9	102.5	98.8	103.2	105.2	102.7	92.3	95.8
506	Electrical goods	91.0	91.5	97.3	100.6	100.0	102.6	103.4	100.5	103.9	111.4	97.5	104.1
507	Hardware, plumbing, heating equipment, and supplies	92.2	88.9	95.3	103.7	105.2	104.6	107.7	102.9	104.0	110.7	94.3	94.6
508	Machinery, equipment, and supplies	90.7	91.5	102.2	105.8	107.2	104.1	101.4	98.8	104.7	108.1	91.1	97.5
509	Miscellaneous durable goods	89.3	94.3	104.4	102.6	99.5	103.8	95.3	102.3	106.6	109.8	95.4	98.3
51	Nondurable goods, total	98.8	96.0	102.4	102.8	102.9	100.1	101.4	96.3	98.3	103.3	97.1	104.3
	Total (excluding farm-product raw materials)	97.7	97.0	101.1	102.5	103.0	100.9	101.5	98.6	99.8	103.7	95.4	102.0
511	Paper and paper products	99.6	97.1	100.3	100.0	101.4	99.2	100.9	99.7	102.7	108.5	93.3	101.7
512	Drugs, drug proprietaries, and druggists' sundries	100.6	95.0	100.4	103.1	98.0	96.7	101.8	98.1	103.5	109.9	95.7	102.5
513	Apparel, piece goods, and notions	95.1	93.4	101.2	97.8	98.3	94.1	101.9	108.6	108.1	113.6	99.6	92.4
514	Groceries and related products	98.7	94.8	100.6	101.9	104.7	100.2	103.4	99.0	99.5	104.5	95.8	100.6
515	Farm-product raw materials[1]	101.3	96.0	107.3	102.6	103.4	97.2	100.8	88.6	92.9	104.2	103.6	105.4
516	Chemicals and allied products	94.3	92.6	98.8	103.4	105.8	104.4	102.0	103.6	99.6	106.8	94.2	99.2
517	Petroleum and petroleum products	101.2	107.8	102.9	97.8	98.6	97.9	97.9	97.6	95.4	100.9	98.6	105.5
518	Beer, wine, and distilled alcoholic beverages	82.3	85.6	94.2	100.0	103.0	108.2	106.8	100.0	99.6	105.8	98.3	120.1
519	Miscellaneous nondurable goods	96.7	101.7	108.5	107.4	109.2	104.9	94.0	92.1	98.3	99.0	90.9	98.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.3	101.3	102.4	101.6	100.1	99.4	98.8	97.9	98.3	99.6	100.4	100.1
	Total (excluding farm-product raw materials)	98.9	100.1	101.4	100.9	100.9	100.9	100.4	99.6	99.4	99.8	99.3	98.9
50	Durable goods, total	98.4	100.1	101.1	100.8	101.4	101.9	101.1	100.3	99.4	98.9	98.6	98.6
501	Motor vehicles and automotive parts and supplies	101.4	106.3	101.9	100.4	101.6	99.6	99.3	97.4	96.1	98.1	98.9	99.6
502	Furniture and home furnishings	98.8	99.1	99.6	99.6	101.1	102.9	100.6	100.6	101.9	99.9	99.1	97.3
503	Lumber and other construction materials	97.9	99.1	103.1	102.8	103.1	102.3	102.1	99.8	98.9	97.9	96.1	97.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	95.6	99.6	101.1	102.9	102.3	106.4	105.9	101.1	101.9	100.8	93.3	89.8
505	Metals and minerals, except petroleum	98.3	97.8	99.6	98.9	101.6	100.9	102.6	104.6	101.3	97.3	98.9	98.4
506	Electrical goods	96.6	96.4	98.8	99.4	101.4	102.4	101.6	102.1	101.4	100.8	100.4	99.1
507	Hardware, plumbing, heating equipment, and supplies	97.1	98.6	101.9	105.9	103.4	103.1	102.4	99.9	97.8	98.3	95.8	96.1
508	Machinery, equipment, and supplies	98.6	100.6	101.6	100.4	101.3	101.9	100.4	99.9	100.1	98.6	98.4	98.8
509	Miscellaneous durable goods	97.6	98.1	96.6	97.8	97.1	100.3	102.9	102.1	102.8	103.1	102.1	99.3
51	Nondurable goods, total	103.8	103.1	104.9	101.3	98.1	95.6	94.6	94.3	96.3	101.1	103.9	103.4
	Total (excluding farm-product raw materials)	100.1	99.8	102.1	101.1	99.9	98.6	98.6	98.1	99.6	101.6	100.9	100.1
511	Paper and paper products	97.1	98.1	99.4	100.9	100.4	102.6	99.9	99.1	101.1	100.6	100.1	100.9
512	Drugs, drug proprietaries, and druggists' sundries	95.1	96.3	100.1	100.8	98.8	100.6	100.1	100.3	104.1	105.3	100.6	98.4
513	Apparel, piece goods, and notions	101.1	100.8	97.9	98.9	101.4	100.8	101.4	101.1	98.9	99.1	98.8	100.4
514	Groceries and related products	98.6	99.9	101.9	100.6	99.6	99.1	98.4	97.9	100.1	102.4	100.9	101.1
515	Farm-product raw materials[1]	119.1	117.4	116.9	105.6	90.3	82.8	80.3	77.4	80.8	98.1	115.4	116.4
516	Chemicals and allied products	98.1	100.9	101.4	101.3	103.4	102.1	102.8	99.6	100.4	96.6	96.3	97.3
517	Petroleum and petroleum products	102.1	98.4	99.9	94.4	98.4	93.3	96.8	101.1	104.4	104.3	104.3	102.9
518	Beer, wine, and distilled alcoholic beverages	96.6	94.4	99.4	101.6	103.1	102.9	101.3	97.3	99.4	105.9	104.6	93.8
519	Miscellaneous nondurable goods	104.8	105.6	108.6	102.8	99.4	93.1	95.4	95.8	95.9	99.3	99.1	100.4

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.

[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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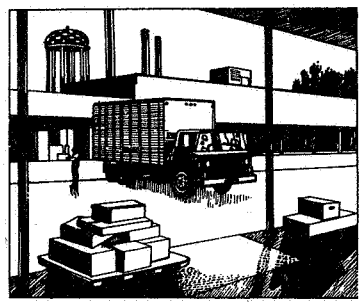
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued April 1980

February 1980

BW-80-2

Sales—February 1980 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences, but not for price changes, were $79.7 billion, down 2 percent from the previous month, but were 17 percent above February 1979. Adjusted December-through-February total sales were up 3 percent from the September-through-November period and were 18 percent above the total sales for the comparable months a year ago.

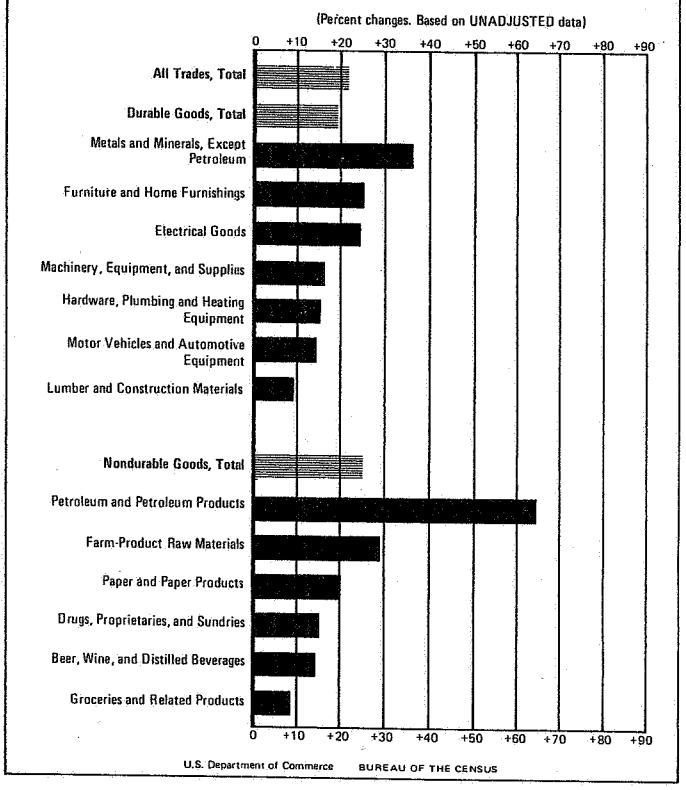
After adjustment, February sales in the durable goods trades were virtually unchanged from the previous month, but were 15 percent above February 1979. Nondurable goods sales were down 3 percent from January, but were 19 percent above the same month a year ago. Total monthly sales in the durable goods group during the December-through-February period were up 4 percent from 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 2 percent above the September-through-November period and were 21 percent above sales for 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 decreases reported in lumber and construction materials and petroleum and petroleum products—both down 9 percent. The largest increase was reported in machinery, equipment, and supplies (3%). Compared with sales of a year ago, all trade groups showed increases with the sharpest one reported in petroleum and petroleum products (51%).

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variation, but not for price changes, were valued at $91.4 billion at the end of February, virtually unchanged from the previous month, but 10 percent above the same month a year ago. Durable and nondurable goods stocks were both virtually unchanged from their previous month levels but were 9 and 14 percent, respectively, above stocks on hand a year ago.

Based on adjusted data, comparisons with previous month inventory levels showed mixed results with 8 trade groups showing increases, 4 indicating declines, and 3 with no change. The sharpest increase was reported in petroleum and petroleum products (6%); while the largest decrease was reported in metals and minerals, except petroleum (-7%). Compared with year-ago inventories, all trade groups reported increases with exception of motor vehicles, and automotive equipment down 2 percent. The sharpest increase was shown in petroleum and petroleum products (60%).

Percent Change in Sales of Merchant Wholesalers in Selected Kinds of Business 2 Months 1980 Compared With 2 Months 1979



Stock-Sales Ratios—The February stock-sales ratio for merchant wholesalers, based on seasonally adjusted data was 115, up 3 points from last month, but down 7 points from the year-ago ratio. The stock-sales ratio for durable goods was 159, 1 point above January, but 10 points below February 1979. The ratio for nondurable goods was 77, up 3 points from the previous month but down 4 points from the year-ago ratio.

An advance release of February 1980 data was issued April 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 1. Estimated Monthly Sales of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980		1979											Total 2 months	
		Jan.	Feb.[p]	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1980	1979
	Merchant wholesalers, total	77,104	75,749	61,721	74,319	70,768	76,814	74,361	73,537	78,567	73,213	81,820	79,079	75,396	152,854	125,459
	Total (excluding farm-product raw materials)	67,867	67,257	55,208	66,198	63,588	68,714	66,477	64,932	70,390	65,400	72,156	69,354	66,185	135,125	111,687
50	Durable goods, total	33,579	33,787	28,141	34,689	33,429	35,723	34,447	33,750	37,048	33,616	37,935	34,711	32,515	67,367	56,423
501	Motor vehicles and automotive parts and supplies	6,421	6,471	5,650	6,888	6,845	7,013	6,364	6,259	6,812	5,645	6,784	6,452	6,172	12,892	11,284
5013,4	Automotive parts and supplies, tires and tubes	3,160	2,964	3,081	3,459	3,349	3,535	3,318	3,091	3,552	3,081	3,538	3,298	2,972	6,124	6,202
5013	Automotive parts and supplies	2,704	2,554	2,603	2,902	2,807	2,966	2,759	2,600	3,014	2,617	2,978	2,817	2,515	5,258	5,197
502	Furniture and home furnishings	1,210	1,244	950	1,199	1,130	1,214	1,185	1,121	1,243	1,196	1,390	1,263	1,134	2,454	1,961
5021	Furniture--household and office[1]	496	475	332	416	413	450	422	399	449	419	458	430	430	971	675
5023	Home furnishings	747	769	618	783	717	764	763	722	794	778	931	832	704	1,516	1,287
503	Lumber and other construction materials	2,582	2,428	2,212	3,006	3,023	3,353	3,410	3,411	3,761	3,274	3,622	2,997	2,543	5,009	4,598
5031	Lumber, plywood, and millwork	1,708	1,641	1,544	2,047	2,067	2,269	2,250	2,250	2,515	2,102	2,346	1,899	1,586	3,349	3,216
5039	Construction materials, n.e.c.	873	787	668	959	957	1,084	1,160	1,161	1,246	1,172	1,276	1,098	957	1,660	1,382
505	Metals and minerals, except petroleum[2]	4,346	4,410	3,215	3,849	3,295	3,913	3,645	3,824	4,196	3,687	4,197	4,064	3,986	8,757	6,421
5051 pt.	Ferrous metals service centers and offices	2,992	2,856	2,437	2,925	2,469	2,951	2,759	2,865	3,062	2,806	2,974	2,836	2,743	5,848	4,891
5051 pt.	Ferrous metals service centers	2,197	2,058	1,744	2,129	1,798	2,160	2,056	2,046	2,211	1,974	2,208	2,122	1,964	4,255	3,396
506	Electrical goods	3,745	3,837	3,083	3,556	3,271	3,744	3,786	3,712	4,163	4,012	4,395	3,962	3,785	7,582	6,100
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,840	1,910	1,638	1,807	1,748	2,071	2,006	1,991	2,153	2,079	2,165	1,962	1,916	3,750	3,171
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,905	1,927	1,445	1,749	1,554	1,673	1,779	1,700	2,011	1,933	2,230	2,000	1,869	3,832	2,929
5064	Electrical appliances, TV and radio sets[3]	1,040	994	849	1,024	881	939	1,064	986	1,116	1,083	1,250	1,154	1,052	2,035	1,683
507	Hardware, plumbing, heating equipment, and supplies	2,466	2,287	1,984	2,319	2,374	2,592	2,461	2,524	2,678	2,399	2,794	2,415	2,192	4,752	4,126
5072	Hardware	936	882	758	853	852	975	877	892	1,003	877	1,024	916	838	1,818	1,560
5074	Plumbing and heating equipment and supplies (hydronics)	1,037	983	800	960	994	1,001	966	1,015	1,038	1,011	1,167	992	920	2,020	1,654
508	Machinery, equipment, and supplies	8,880	9,210	7,841	9,664	9,443	10,062	9,745	9,222	10,113	9,394	10,317	9,324	9,026	18,090	15,532
5082	Construction and mining machinery and equipment	958	1,050	927	1,189	1,360	1,351	1,260	1,258	1,366	1,268	1,323	1,144	1,019	2,008	1,822
5084,5	Industrial machinery, equipment, and supplies	3,924	3,918	3,464	3,940	3,615	4,004	3,964	3,613	4,039	3,634	4,078	4,020	3,936	7,842	6,854
5086	Professional equipment, supplies[4]	982	966	914	1,048	972	1,055	996	996	1,092	972	1,121	948	939	1,948	1,821
5093	Scrap and waste materials	1,489	1,543	1,184	1,501	1,492	1,518	1,468	1,395	1,534	1,328	1,456	1,428	1,382	3,032	2,317
51	Nondurable goods, total	43,525	41,962	33,580	39,630	37,339	41,091	39,914	39,787	41,519	39,597	43,885	44,368	42,881	85,488	69,036
	Total (excluding farm-product raw materials)	34,288	33,470	27,067	31,509	30,159	32,991	32,030	31,182	33,342	31,784	34,221	34,643	33,670	67,758	55,265
511	Paper and paper products	1,837	1,777	1,479	1,688	1,551	1,692	1,651	1,585	1,777	1,599	1,821	1,699	1,639	3,614	3,019
5111,3	Printing, writing, industrial, and personal service paper	1,330	1,303	1,100	1,272	1,184	1,272	1,252	1,192	1,327	1,202	1,368	1,269	1,218	2,633	2,233
512	Drugs, drug proprietaries, and druggists' sundries	1,112	1,039	917	1,073	1,038	1,102	1,039	1,066	1,099	1,030	1,178	1,092	1,054	2,150	1,866
5122	Drugs, drug proprietaries, and druggists' sundries	1,112	1,039	917	1,073	1,038	1,102	1,039	1,066	1,099	1,030	1,178	1,092	1,054	2,150	1,866
5122 pt.	General-line drugs	466	455	403	477	472	509	455	443	477	443	487	448	456	921	849
513	Apparel, piece goods, and notions[5]	2,444	2,444	1,996	2,326	2,107	2,127	2,102	2,389	2,629	2,563	2,704	2,468	2,032	4,887	4,090
514	Groceries and related products	11,892	11,368	10,381	11,954	11,281	11,988	11,721	11,500	11,835	11,122	12,140	11,919	11,673	23,260	21,503
5141	Groceries, general-line	4,395	4,221	3,658	4,173	3,989	4,241	4,247	4,245	4,429	4,137	4,597	4,511	4,289	8,617	7,623
5144	Poultry and poultry products	555	527	489	559	554	592	544	563	569	530	561	603	589	1,082	1,007
5145	Confectionery	198	187	177	209	196	212	199	192	214	214	275	243	207	385	361
5147	Meats and meat products	1,867	1,777	1,971	2,198	2,029	2,076	1,908	1,872	1,959	1,770	1,925	1,768	1,811	3,644	3,950
5148	Fresh fruits and vegetables	997	990	961	1,203	1,086	1,202	1,242	1,063	1,030	917	997	1,024	1,002	1,987	1,981
515	Farm-product raw materials	9,237	8,492	6,513	8,121	7,180	8,100	7,884	8,605	8,177	7,813	9,664	9,725	9,211	17,730	13,771
5153	Grain	7,590	6,988	5,235	6,740	5,886	6,766	6,730	7,516	7,090	6,594	8,328	8,347	7,630	14,578	11,094
517	Petroleum and petroleum products	8,219	7,950	5,008	5,282	5,221	6,078	5,851	5,863	6,355	6,354	7,171	7,602	7,677	16,169	9,845
5171	Petroleum bulk stations and terminals	4,510	4,292	2,785	2,997	2,857	3,306	3,170	3,121	3,504	3,456	3,960	4,050	4,193	8,802	5,523
518	Beer, wine, and distilled alcoholic beverages	2,242	2,269	1,952	2,490	2,453	2,726	2,704	2,636	2,844	2,387	2,733	2,821	2,882	4,511	3,971
5181	Beer and ale	1,087	1,152	953	1,223	1,258	1,513	1,523	1,507	1,590	1,229	1,299	1,267	1,230	2,239	1,952
5182	Wine and distilled alcoholic beverages	1,155	1,117	999	1,267	1,195	1,214	1,181	1,129	1,254	1,158	1,435	1,554	1,652	2,272	2,020
519	Miscellaneous nondurable goods	5,299	5,452	4,383	5,528	5,406	6,001	5,801	5,105	5,468	5,570	5,296	5,643	5,238	10,751	8,912
5194	Tobacco and tobacco products	835	812	749	852	848	891	863	881	896	795	902	861	843	1,647	1,572

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. 15, Sample Design and Estimation Procedures.

[1] [2]The furniture, household and office group is subject to a sampling variability of 9 percent for February 1980.
[3]The metals and minerals, except petroleum group is subject to a sampling variability of 18 percent for February 1980.
[4]The electrical appliances, TV, and radio sets group is subject to a sampling variability of 9 percent for February 1980.
[5]The professional equipment, supplies group is subject to a sampling variability of 8 percent for February 1980.
The apparel, piece goods, and notions group is subject to a sampling variability of 11 percent for February 1980.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980		1979										
		Jan.	Feb.[P]	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	91,477	92,665	83,917	85,436	85,345	85,199	84,942	86,829	86,890	87,061	88,839	89,632	89,997
	Total (excluding farm-product raw materials)	83,618	84,969	77,627	79,311	79,626	80,246	79,964	81,487	81,570	81,563	82,485	82,184	82,382
50	Durable goods, total	57,268	58,433	53,807	54,381	54,731	55,566	55,523	56,602	56,803	56,361	56,620	56,241	56,470
501	Motor vehicles and automotive parts and supplies	9,893	10,022	10,189	9,797	9,663	9,631	9,207	9,672	9,446	9,240	9,546	9,652	9,723
5013,4	Automotive parts and supplies, tires and tubes	6,182	5,990	5,888	5,781	5,809	5,970	5,753	6,051	6,117	5,933	6,025	6,084	6,030
5013	Automotive parts and supplies	5,191	5,040	5,003	4,870	4,917	5,035	4,818	5,082	5,188	5,018	5,121	5,208	5,074
502	Furniture and home furnishings	1,807	1,870	1,753	1,872	1,837	1,815	1,903	1,847	1,839	1,861	1,909	1,796	1,794
5023	Home furnishings	1,265	1,284	1,282	1,355	1,332	1,309	1,361	1,347	1,339	1,328	1,381	1,291	1,247
503	Lumber and other construction materials	3,378	3,458	3,178	3,337	3,404	3,468	3,496	3,526	3,442	3,382	3,383	3,335	3,353
5031	Lumber, plywood, and millwork	2,103	2,132	2,082	2,116	2,152	2,244	2,204	2,220	2,204	2,129	2,149	2,112	2,090
505	Metals and minerals, except petroleum	6,497	6,010	5,434	5,285	5,254	5,528	5,582	5,763	6,319	6,139	6,376	6,363	6,307
5051 pt.	Ferrous metals service centers and offices	4,852	4,743	4,425	4,365	4,239	4,455	4,586	4,655	4,947	4,953	4,794	4,891	4,897
5051 pt.	Ferrous metals service centers	3,893	3,825	3,459	3,433	3,269	3,506	3,643	3,665	3,956	4,010	3,843	3,999	4,019
506	Electrical goods	6,092	6,094	5,582	5,706	5,737	5,976	6,040	6,223	6,254	6,061	6,082	6,098	5,931
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,894	2,961	2,684	2,676	2,730	2,946	2,838	2,840	2,841	2,771	2,785	2,945	2,820
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3,199	3,096	2,898	3,030	3,007	3,030	3,202	3,383	3,274	3,290	3,296	3,153	3,112
507	Hardware, plumbing, heating equipment, and supplies	4,692	4,953	4,461	4,497	4,719	4,590	4,631	4,628	4,535	4,488	4,537	4,456	4,575
5072	Hardware	1,806	1,903	1,540	1,539	1,598	1,622	1,643	1,659	1,657	1,692	1,698	1,692	1,758
5074	Plumbing and heating equipment and supplies (hydronics)	1,836	1,924	1,900	1,899	1,985	1,848	1,896	1,902	1,828	1,783	1,823	1,777	1,804
508	Machinery, equipment, and supplies	19,475	20,232	18,254	18,807	18,924	19,370	19,465	19,576	19,778	19,974	19,555	19,461	19,554
5082	Construction and mining machinery and equipment	4,038	4,189	4,152	4,334	4,280	4,430	4,512	4,488	4,504	4,573	4,339	4,288	4,182
5084,5	Industrial machinery, equipment, and supplies	6,375	6,488	5,800	6,015	6,030	6,073	6,006	5,979	6,092	6,201	6,251	6,163	6,354
51	Nondurable goods, total	34,209	34,232	30,110	31,055	30,614	29,633	29,419	30,227	30,087	30,700	32,219	33,391	33,527
	Total (excluding farm-product raw materials)	26,350	26,536	23,820	24,930	24,895	24,680	24,441	24,885	24,767	25,202	25,865	25,943	25,912
511	Paper and paper products	1,670	1,691	1,468	1,547	1,501	1,542	1,616	1,608	1,604	1,663	1,597	1,657	1,695
5111,3	Printing, writing, industrial, and personal service paper	1,137	1,155	1,010	1,053	1,018	1,050	1,090	1,079	1,055	1,109	1,082	1,090	1,141
512	Drugs, drug proprietaries, and druggists' sundries	1,560	1,535	1,412	1,535	1,617	1,563	1,567	1,609	1,570	1,670	1,678	1,580	1,573
514	Groceries and related products	6,775	6,969	6,346	6,719	6,644	6,644	6,686	6,674	6,633	6,793	6,982	6,933	6,984
5141	Groceries, general-line	2,884	2,979	2,744	2,895	2,846	2,785	2,802	2,899	2,857	2,911	3,046	3,044	2,957
517	Petroleum and petroleum products	3,298	3,359	2,101	2,224	2,177	2,401	2,263	2,492	2,618	2,874	2,918	3,062	3,135
518	Beer, wine, and distilled alcoholic beverages	2,742	2,680	2,427	2,684	2,806	2,760	2,732	2,693	2,539	2,538	2,781	2,770	2,597
5181	Beer and ale	916	910	845	1,040	1,085	1,089	1,072	1,030	923	903	934	922	879
5182	Wines and distilled alcoholic beverages	1,825	1,770	1,582	1,645	1,721	1,671	1,660	1,663	1,616	1,634	1,847	1,848	1,718

See footnotes at end of table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980		1979										
		Jan.	Feb.[P]	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	119	122	136	115	121	111	114	118	111	119	109	113	119
	Total (excluding farm-product raw materials)	123	126	141	120	125	117	120	125	116	125	114	118	124
50	Durable goods, total	171	173	191	157	164	156	161	168	153	168	149	162	174
501	Motor vehicles and automotive parts and supplies	154	155	180	142	141	137	145	155	139	164	141	150	158
5013,4	Automotive parts and supplies, tires and tubes	196	202	191	167	173	169	173	196	172	193	170	184	203
5013	Automotive parts and supplies	192	197	192	168	175	170	175	195	172	192	172	185	202
502	Furniture and home furnishings	145	150	185	156	163	150	161	165	148	156	137	142	158
5023	Home furnishings	169	167	208	173	186	171	178	187	169	171	148	155	177
503	Lumber and other construction materials	131	142	144	111	113	103	102	103	92	103	93	111	132
5031	Lumber, plywood, and millwork	123	130	135	103	104	99	98	99	88	101	92	111	132
505	Metals and minerals, except petroleum	149	136	169	137	159	141	153	151	151	162	152	157	158
5051 pt.	Ferrous metals service centers and offices	162	166	182	149	172	151	166	162	162	177	161	172	178
5051 pt.	Ferrous metals service centers	177	186	198	161	182	162	177	179	179	203	174	188	204
506	Electrical goods	163	159	181	160	175	160	160	168	150	151	138	154	157
5063	Electrical apparatus and equipment, wiring supplies and construction meterials	157	155	164	148	156	142	141	143	132	133	129	150	147
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	168	161	201	173	194	181	180	197	163	170	148	158	167
507	Hardware, plumbing, heating equipment, and supplies	190	217	225	194	199	177	188	183	169	187	162	185	209
5072	Hardware	193	216	203	180	188	166	187	186	165	193	166	185	210
5074	Plumbing and heating equipment and supplies (hydronics)	177	196	237	198	200	185	196	188	176	176	156	179	196
508	Machinery, equipment, and supplies	219	220	238	195	200	192	200	212	196	213	190	209	217
5082	Construction and mining machinery and equipment	422	399	448	364	315	328	358	357	330	361	328	375	411
5084,5	Industrial machinery, equipment, and supplies	162	166	167	153	167	152	152	165	151	171	153	153	161
51	Nondurable goods, total	79	82	90	78	82	72	74	76	72	78	73	75	78
	Total (excluding farm-product raw materials)	77	79	88	79	83	75	76	80	74	79	76	75	77
511	Paper and paper products	91	95	99	92	97	91	98	101	90	104	88	98	103
5111,3	Printing, writing, industrial, and personal service paper	85	89	92	83	86	83	87	90	79	92	79	86	94
512	Drugs, drug proprietaries, and druggists' sundries	140	148	154	143	156	142	151	151	143	162	142	145	149
514	Groceries and related products	57	61	61	56	59	55	57	58	56	61	58	58	60
5141	Groceries, general-line	66	71	75	69	71	66	66	68	64	70	66	67	69
517	Petroleum and petroleum products	40	42	42	42	42	40	39	43	41	45	41	40	41
518	Beer, wine, and distilled alcoholic beverages	122	118	124	108	114	101	101	102	89	106	102	98	90
5181	Beer and ale	84	79	89	85	86	72	70	68	58	74	72	73	71
5182	Wines and distilled alcoholic beverages	158	158	158	130	144	138	141	147	129	141	129	119	104

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. 15, Sample Design and Estimation Procedures.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980		1979										
		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	81,178	79,698	67,860	70,657	70,402	72,338	72,629	74,778	75,588	76,495	77,489	78,407	78,947
	Total (excluding farm-product raw materials)	72,060	70,852	60,819	63,288	63,171	64,550	64,657	66,015	66,729	67,586	68,363	69,427	69,800
50	Durable goods, total	36,848	36,667	31,812	33,319	32,713	33,177	33,078	34,103	34,509	34,079	35,267	35,171	35,407
501	Motor vehicles and automotive parts and supplies	6,745	6,862	6,229	6,443	6,274	6,250	6,143	6,160	6,500	6,183	6,737	6,835	6,865
502	Furniture and home furnishings	1,352	1,335	1,064	1,166	1,151	1,180	1,156	1,205	1,193	1,182	1,201	1,183	1,213
503	Lumber and other construction materials	3,188	2,894	2,786	3,049	3,101	3,096	3,131	3,200	3,198	3,182	3,152	2,976	3,009
505	Metals and minerals, except petroleum	4,485	4,528	3,468	3,733	3,221	3,630	3,598	3,979	3,850	3,683	4,079	4,194	4,469
506	Electrical goods	4,115	4,193	3,476	3,552	3,362	3,649	3,676	3,731	3,913	4,069	3,931	3,869	3,819
507	Hardware, plumbing, heating equipment, and supplies	2,675	2,573	2,302	2,381	2,360	2,391	2,362	2,418	2,466	2,428	2,506	2,444	2,438
508	Machinery, equipment, and supplies	9,791	10,066	8,880	9,083	9,195	9,223	9,281	9,488	9,613	9,451	9,633	9,612	9,716
51	Nondurable goods, total	44,330	43,031	36,048	37,338	37,689	39,161	39,551	40,675	41,079	42,416	42,222	43,236	43,540
	Total (excluding farm-product raw materials)	35,212	34,185	29,007	29,969	30,458	31,373	31,579	31,912	32,220	33,507	33,096	34,256	34,393
511	Paper and paper products	1,844	1,830	1,590	1,615	1,631	1,627	1,627	1,648	1,664	1,652	1,678	1,711	1,725
512	Drugs, drug proprietaries, and druggists' sundries	1,105	1,094	1,000	1,034	1,050	1,080	1,076	1,084	1,061	1,060	1,067	1,077	1,092
513	Apparel, piece goods, and notions	2,570	2,617	2,172	2,243	2,270	2,067	2,220	2,494	2,274	2,441	2,372	2,413	2,320
514	Groceries and related products	12,049	11,992	11,370	11,483	11,418	11,309	11,480	11,546	11,402	11,634	11,684	11,883	12,084
515	Farm-product raw materials[1]	9,118	8,846	7,041	7,369	7,231	7,788	7,972	8,763	8,859	8,909	9,126	8,980	9,147
517	Petroleum and petroleum products	8,122	7,375	4,895	5,021	5,322	6,139	6,020	5,940	6,355	6,959	7,142	7,331	7,497
518	Beer, wine, and distilled alcoholic beverages	2,724	2,651	2,392	2,520	2,577	2,548	2,476	2,597	2,621	2,556	2,620	2,649	2,582
519	Miscellaneous nondurable goods	5,480	5,361	4,509	4,909	5,081	5,441	5,567	5,555	5,626	5,976	5,426	5,794	5,502
	Inventories ADJUSTED for seasonal variations													
	Merchant wholesalers, total	91,085	91,352	82,700	83,558	84,632	84,904	85,406	87,662	88,474	88,499	89,146	89,324	89,920
	Total (excluding farm-product raw materials)	84,486	84,797	77,333	78,287	79,180	79,388	79,394	81,026	81,636	81,736	82,689	82,870	83,372
50	Durable goods, total	58,146	58,277	53,641	53,894	54,377	54,772	54,591	55,861	56,529	56,479	57,242	57,129	57,463
501	Motor vehicles and automotive parts and supplies	9,756	9,428	9,621	9,614	9,625	9,479	9,244	9,740	9,708	9,595	9,731	9,759	9,762
502	Furniture and home furnishings	1,829	1,887	1,769	1,880	1,844	1,795	1,851	1,836	1,824	1,828	1,911	1,812	1,844
503	Lumber and other construction materials	3,430	3,489	3,207	3,237	3,311	3,364	3,417	3,453	3,445	3,420	3,459	3,470	3,443
505	Metals and minerals, except petroleum	6,609	6,145	5,556	5,296	5,302	5,452	5,532	5,617	6,053	6,060	6,546	6,434	6,397
506	Electrical goods	6,306	6,322	5,790	5,775	5,772	5,893	5,898	6,125	6,125	5,977	6,034	6,074	5,985
507	Hardware, plumbing, heating equipment, and supplies	4,832	5,023	4,534	4,413	4,469	4,439	4,492	4,520	4,540	4,584	4,611	4,647	4,761
508	Machinery, equipment, and supplies	19,752	20,111	18,145	18,511	18,849	19,121	19,102	19,498	19,818	19,994	19,833	19,777	19,791
51	Nondurable goods, total	32,939	33,075	29,059	29,664	30,255	30,132	30,815	31,801	31,945	32,020	31,904	32,195	32,457
	Total (excluding farm-product raw materials)	26,340	26,520	23,692	24,393	24,803	24,616	24,803	25,165	25,107	25,257	25,447	25,741	25,909
511	Paper and paper products	1,720	1,724	1,496	1,556	1,488	1,537	1,575	1,610	1,615	1,645	1,587	1,655	1,680
512	Drugs, drug proprietaries, and druggists' sundries	1,640	1,594	1,466	1,533	1,604	1,582	1,558	1,607	1,565	1,607	1,594	1,567	1,599
514	Groceries and related products	6,871	6,976	6,352	6,594	6,604	6,671	6,760	6,783	6,775	6,800	6,818	6,871	6,908
517	Petroleum and petroleum products	3,230	3,414	2,131	2,233	2,306	2,440	2,426	2,574	2,590	2,753	2,795	2,936	3,041
518	Beer, wine, and distilled alcoholic beverages	2,839	2,839	2,566	2,703	2,767	2,677	2,655	2,664	2,609	2,553	2,626	2,648	2,769
	Stock-sales ratios based on ADJUSTED data													
	Merchant wholesalers, total	112	115	122	118	120	117	118	117	117	116	115	114	114
	Total (excluding farm-product raw materials)	117	120	127	124	125	123	123	123	122	121	121	119	119
50	Durable goods, total	158	159	169	162	166	165	165	164	164	166	162	162	162
501	Motor vehicles and automotive parts and supplies	145	137	154	149	153	152	150	158	149	155	144	143	142
502	Furniture and home furnishings	135	141	166	161	160	152	160	152	153	155	159	153	152
503	Lumber and other construction materials	108	121	115	106	107	109	109	108	108	107	110	117	114
505	Metals and minerals, except petroleum	147	136	160	142	165	150	154	141	157	165	160	153	143
506	Electrical goods	153	151	167	163	172	161	160	164	157	147	153	157	157
507	Hardware, plumbing, heating equipment, and supplies	181	195	197	185	189	186	190	187	184	189	184	190	195
508	Machinery, equipment, and supplies	202	200	204	204	205	207	206	206	206	212	206	206	204
51	Nondurable goods, total	74	77	81	79	80	77	78	78	78	75	76	74	75
	Total (excluding farm-product raw materials)	75	78	82	81	81	78	79	79	78	75	77	75	75
511	Paper and paper products	93	94	94	96	91	94	97	98	97	100	95	97	97
512	Drugs, drug proprietaries, and druggists' sundries	148	146	147	148	153	146	145	148	148	152	149	145	146
514	Groceries and related products	57	58	56	57	58	59	59	59	59	58	58	58	57
517	Petroleum and petroleum products	40	46	44	44	43	40	40	43	41	40	39	40	41
518	Beer, wine, and distilled alcoholic beverages	104	107	107	107	107	105	107	103	100	100	100	100	107

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. 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, Dec. 1979-Feb. 1980 from--			
	Sept. 1979-Nov. 1979 (3 months ago)	June 1979-Aug. 1979 (6 months ago)	Mar. 1979-May 1979 (9 months ago)	Dec. 1978-Feb. 1979 (12 months ago)
Merchant wholesalers, total.....	+3	+8	+12	+18
Durable goods, total.....	+4	+7	+10	+15
Nondurable goods, total..	+2	+8	+15	+21

Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers: 1974-1980

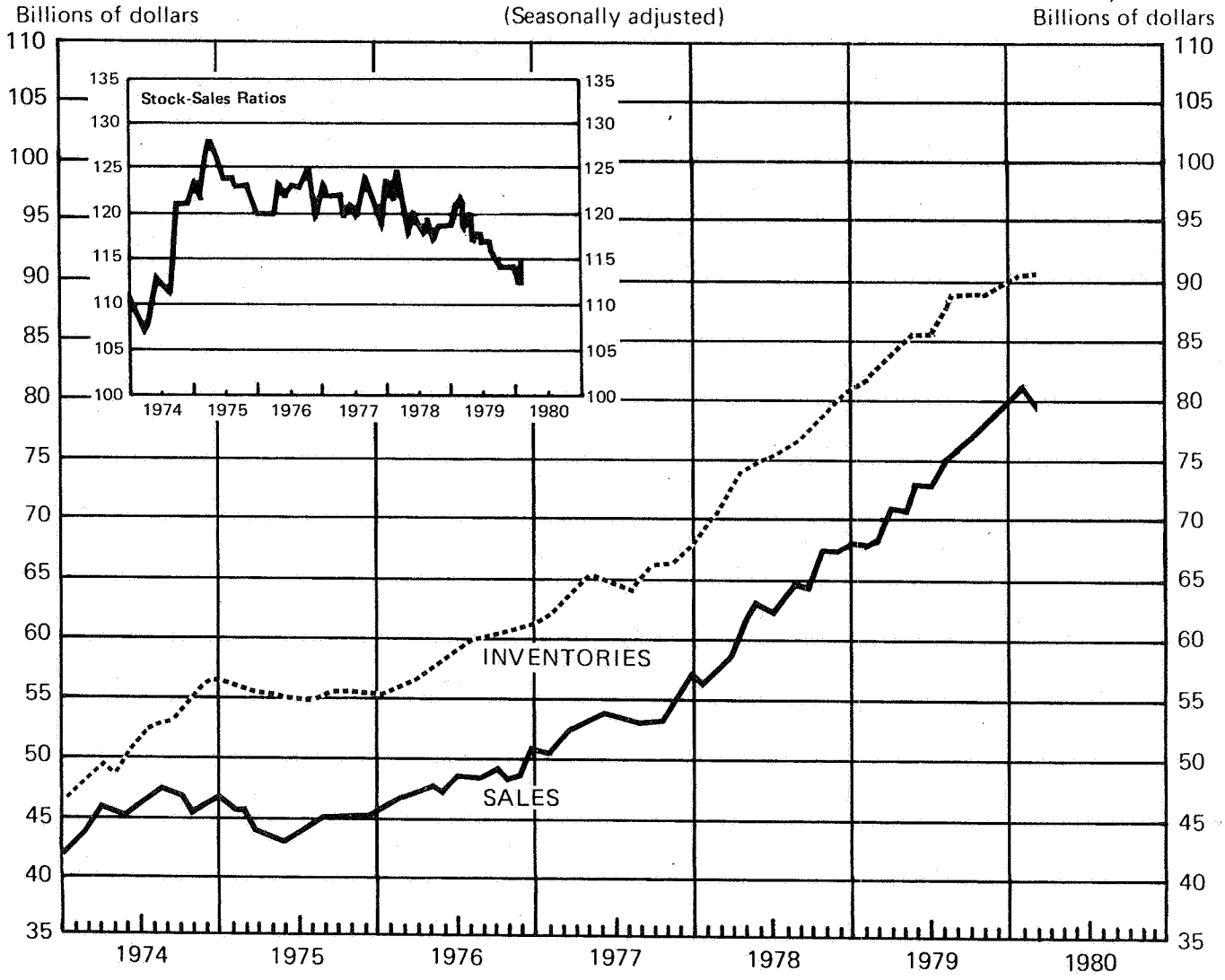


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: February 1980

1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		February 1980 from January 1980	February 1980 from February 1979	2 months 1980 from 2 months 1979	February 1980 from January 1980	February 1980 from February 1979	February 1980 from January 1980	February 1980 from February 1979	February 1980 from January 1980	February 1980 from February 1979
	Merchant wholesalers, total	-2	+23	+22	+1	+10	-2	+17	0	+10
	Total (excluding farm-product raw materials)	-1	+22	+21	+2	+9	-2	+16	0	+10
50	Durable goods, total	+1	+20	+19	+2	+9	0	+15	0	+9
501	Motor vehicles and automotive parts and supplies	+1	+15	+14	+1	-2	+2	+10	-3	-2
5012	Automobiles and other motor vehicles	+8	+37	+33	+7	-8	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	-6	-4	-1	-2	+3	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	-6	-2	+1	-3	+1	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	+3	+31	+25	+3	+7	-1	+25	+3	+7
5021	Furniture--household and office	-4	+43	+44	+5	+21	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	+4	+32	+33	+4	+14	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	-8	+48	+49	+6	+27	(*)	(*)	(*)	(*)
5023	Home furnishings	+3	+25	+18	+3	+1	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	-6	+10	+9	+2	+9	-9	+4	+1	+9
5031	Lumber, plywood, and millwork	-4	+6	+4	+3	+4	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c.	-10	+18	+20	+2	+19	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	+6	+26	+24	+8	+19	-1	+24	+4	+19
505	Metals and minerals, except petroleum	+1	+37	+36	-8	+11	+1	+31	-7	+11
5051 pt.	Ferrous metals service centers and offices	-5	+17	+20	-2	+7	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	-6	+18	+25	-2	+11	(*)	(*)	(*)	(*)
5051 pt.	Nonferrous metals service centers and offices	+19	+118	+107	-24	+26	(*)	(*)	(*)	(*)
506	Electrical goods	+2	+24	+24	0	+9	+2	+21	0	+9
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+4	+17	+18	+2	+10	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+1	+33	+31	-2	+8	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	-4	+17	+21	-5	-2	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	-7	+15	+15	+6	+11	-4	+12	+4	+11
5072	Hardware	-6	+16	+17	+7	+25	(*)	(*)	(*)	(*)
5074	Plumbing and heating equipment and supplies (hydronics)	-5	+23	+22	+5	+1	(*)	(*)	(*)	(*)
5075	Warm air heating and air conditioning equipment and supplies	-18	-2	0	+6	+3	(*)	(*)	(*)	(*)
508	Machinery, equipment, and supplies	+4	+17	+16	+4	+11	+3	+13	+2	+11
5081	Commercial machines and equipment	-4	+10	+12	+9	+8	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	+10	+13	+10	+4	0	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	+17	+45	+35	+4	+17	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	0	+13	+14	+3	+13	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	-2	+6	+7	+4	0	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	+4	+30	+31	+4	+4	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	+4	+17	+20	+3	-3	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	+4	+54	+50	+6	+22	(*)	(*)	(*)	(*)
51	Nondurable goods, total	-4	+25	+24	0	+14	-3	+19	0	+14
	Total (excluding farm-product raw materials)	-2	+24	+23	+1	+11	-3	+18	+1	+12
511	Paper and paper products	-3	+20	+20	+1	+15	-1	+15	0	+15
5111,3	Printing, writing, industrial, and personal service paper	-2	+18	+18	+2	+14	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	-7	+13	+15	-2	+9	-1	+9	-3	+9
5122	Drugs, drug proprietaries, and druggists' sundries	-7	+13	+15	-2	+9	(*)	(*)	(*)	(*)
5122 pt.	General-line drugs	-2	+13	+12	-3	+8	(*)	(*)	(*)	(*)
514	Groceries and related products	-4	+10	+8	+3	+10	0	+5	+2	+10
5141	Groceries, general-line	-4	+15	+13	+3	+9	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	-6	+11	+9	+3	+6	(*)	(*)	(*)	(*)
5141 pt.	Retailer cooperatives	-4	+15	+13	+5	+9	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	-2	+20	+17	+3	+11	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	-6	+17	+15	+3	+20	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	-5	+8	+7	-2	+3	(*)	(*)	(*)	(*)
5145	Confectionery	-5	+6	+7	+3	+4	(*)	(*)	(*)	(*)
5147	Meats and meat products	-5	+10	-8	+1	-6	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	-1	+3	0	+1	-10	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	-8	+30	+29	-2	+22	-3	+26	-1	+22
5152	Cotton	-12	+35	+32	+2	+49	(*)	(*)	(*)	(*)
5153	Grain	-8	+34	+31	-2	+16	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	-3	+59	+64	+2	+60	-9	+51	+6	+60
5171	Petroleum bulk stations and terminals	-5	+54	+59	+2	+63	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	+1	+16	+14	-2	+10	-3	+11	0	+11
5181	Beer and ale	+6	+21	+15	-1	+8	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	-3	+12	+13	-3	+12	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	+3	+24	+21	+2	+2	-2	+19	+1	+2
5191	Farm supplies	-2	+26	+26	+4	-1	(*)	(*)	(*)	(*)
5194	Tobacco and tobacco products	-3	+8	+5	-6	+9	(*)	(*)	(*)	(*)
5198	Paints, varnishes, and supplies	+7	+31	+24	+2	+28	(*)	(*)	(*)	(*)
5199 pt.	Books, periodicals, newspapers	-1	+2	+2	0	-3	(*)	(*)	(*)	(*)

*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]The farm and garden machinery and equipment group is subject to a sampling variability of 10 percent for the February 1980 to February 1979 percent change for sales.
[3]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.

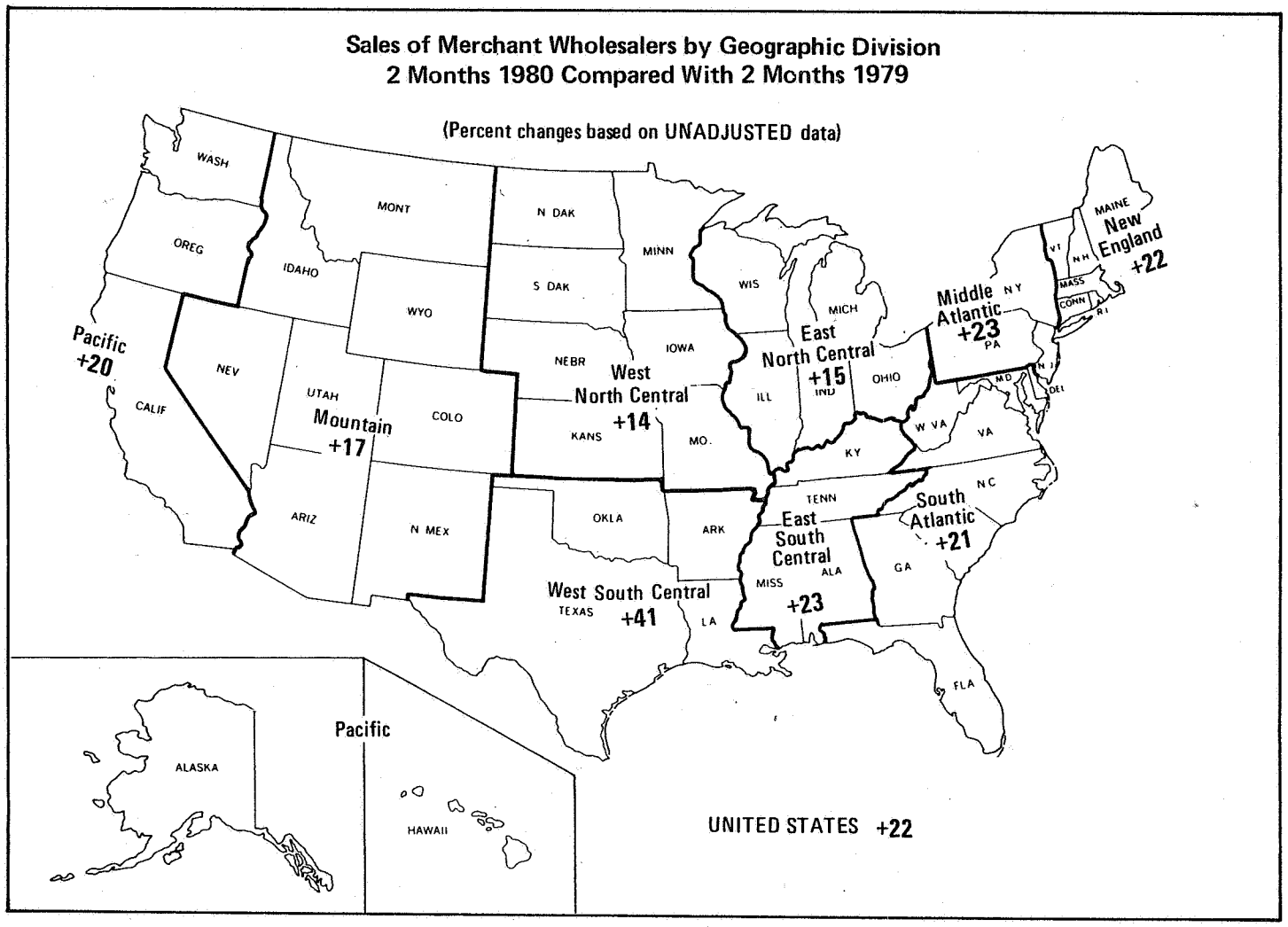


Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1980 and 1979

(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]	1980		1979											Total 2 months		Sampling error of the estimate	
		Jan.	Feb.[P]	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1980	1979	Range[2]	Median
		1979																
	Merchant wholesalers, total	77,104	75,749	61,721	74,319	70,768	76,814	74,361	73,537	78,567	73,213	81,820	79,079	75,396	152,854	125,459	0.8-0.9	0.9
	New England	4,140	4,016	3,289	3,835	3,652	3,915	3,782	3,572	3,981	3,741	4,167	4,126	3,930	8,156	6,682	5-6	6
	Middle Atlantic	17,749	17,197	13,785	16,692	15,218	16,416	16,288	16,256	17,786	17,136	18,350	18,319	17,391	34,946	28,298	2-2	2
	East North Central	12,357	11,831	10,454	12,314	11,906	13,356	12,661	12,182	12,979	11,735	13,552	12,864	11,693	24,188	21,028	2-3	3
	West North Central	7,772	7,417	6,589	7,834	7,506	8,614	8,005	8,385	8,510	7,921	9,106	8,491	7,874	15,189	13,284	2-3	2
	South Atlantic	8,344	8,216	6,620	8,329	7,929	8,401	8,014	7,720	8,067	7,558	8,391	7,972	7,988	16,560	13,644	2-3	2
	East South Central	3,510	3,584	2,801	3,505	3,461	3,557	3,372	3,292	3,534	3,261	3,791	3,505	3,443	7,094	5,762	4-5	4
	West South Central	9,307	9,440	6,648	7,785	7,673	8,443	8,314	8,248	8,755	8,434	9,347	9,351	9,222	18,747	13,351	3-4	4
	Mountain	2,705	2,650	2,253	2,904	2,659	2,786	2,851	2,704	2,830	2,760	2,851	2,743	2,834	5,355	4,590	5-5	5
	Pacific	11,221	11,398	9,281	11,121	10,765	11,325	11,077	11,178	12,125	10,668	12,264	11,710	11,021	22,619	18,821	2-3	3
50	Durable goods, total	33,579	33,787	28,141	34,689	33,429	35,723	34,447	33,705	37,048	33,616	37,935	34,711	32,515	67,367	56,423	0.8-1.0	0.9
	Middle Atlantic	7,389	7,258	5,892	7,165	6,601	7,191	6,961	6,769	7,538	6,989	8,083	7,477	6,697	14,646	11,828	4-5	4
	East North Central	5,486	5,454	4,975	6,057	5,863	6,467	6,023	5,801	6,440	5,833	6,439	5,869	5,248	10,940	9,793	3-4	4
	West North Central	2,663	2,644	2,208	2,718	2,746	3,009	2,778	2,873	3,209	2,900	3,171	2,851	2,682	5,307	4,365	5-6	5
	South Atlantic	3,991	3,980	3,211	4,246	4,111	4,269	4,172	4,074	4,173	3,796	4,374	3,934	3,868	7,970	6,726	4-5	4
	West South Central	3,747	3,928	3,067	3,649	3,637	3,863	3,900	3,702	3,970	3,662	4,174	3,870	3,701	7,675	6,087	4-4	4
	Mountain	1,205	1,232	1,043	1,408	1,309	1,355	1,358	1,322	1,356	1,280	1,384	1,202	1,225	2,437	2,118	6-7	7
	Pacific	6,100	6,292	5,268	6,173	6,433	6,265	6,388	7,143	6,069	6,993	6,576	6,049	12,392	10,527	2-3	3	
51	Nondurable goods, total	43,525	41,962	33,580	39,630	37,339	41,091	39,914	39,787	41,519	39,597	43,885	44,368	42,881	85,488	69,036	1.0-1.2	1.0
	New England	2,579	2,498	2,066	2,335	2,200	2,377	2,343	2,225	2,453	2,252	2,542	2,635	2,485	5,077	4,232	5-7	6
	Middle Atlantic	10,360	9,939	7,893	9,527	8,616	9,226	9,327	9,487	10,247	10,147	10,267	10,842	10,393	20,299	16,470	3-3	3
	East North Central	6,872	6,377	5,479	6,256	6,042	6,888	6,638	6,380	6,539	5,902	7,113	6,994	6,445	13,248	11,234	3-4	3
	West North Central	5,109	4,773	4,381	5,115	4,760	5,606	5,227	5,512	5,301	5,021	5,935	5,640	5,192	9,882	8,918	3-4	3
	South Atlantic	4,353	4,237	3,409	4,084	3,818	4,132	3,842	3,646	3,894	3,762	4,017	4,038	4,119	8,590	6,918	3-5	3
	East South Central	2,071	2,104	1,549	1,889	1,925	1,959	1,820	1,817	1,844	1,664	2,100	2,064	2,146	4,175	3,234	3-4	4
	West South Central	5,560	5,512	3,581	4,136	4,036	4,580	4,414	4,546	4,785	4,771	5,173	5,481	5,520	11,072	7,264	5-5	5
	Pacific	5,121	5,105	4,013	4,790	4,591	4,893	4,812	4,790	4,982	4,599	5,270	5,134	4,972	10,226	8,294	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 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: February 1980

(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 1980 from January 1980	Sales: February 1980 from February 1979	Sales: 2 months 1980 from 2 months 1979	Inventories: February 1980 from January 1980	Inventories: February 1980 from February 1979	Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		A	B	C	D	E	A	D
	Merchant wholesalers, total	-2	+23	+22	+1	+10	0.4	0.2
	New England	-3	+22	+22	+1	+11	2.0	1.9
	Middle Atlantic	-3	+25	+23	-1	+9	1.1	0.6
	East North Central	-4	+13	+15	0	+4	1.2	0.8
	West North Central	-5	+13	+14	+1	+12	1.3	1.1
	South Atlantic	-2	+24	+21	+3	+10	1.6	1.0
	East South Central	+2	+28	+23	+2	+13	1.7	1.4
	West South Central	+1	+42	+41	-1	+13	1.4	0.8
	Mountain	-2	+18	+17	0	+5	2.4	1.3
	Pacific	+2	+23	+20	+1	+12	1.2	0.5
50	Durable goods, total	+1	+20	+19	+2	+9	0.6	0.3
	New England	-3	+24	+26	+2	+4	2.4	1.3
	Middle Atlantic	-2	+23	+24	-2	+8	1.7	1.0
	East North Central	-1	+10	+12	+1	+4	1.9	1.0
	West North Central	-1	+20	+22	+1	+10	3.3	1.7
	South Atlantic	0	+24	+18	+4	+8	1.9	1.2
	East South Central	+3	+18	+15	+2	+4	3.9	2.5
	West South Central	+5	+28	+26	+1	+10	2.1	1.2
	Mountain	+2	+18	+15	+1	+3	2.9	1.7
	Pacific	+3	+19	+18	+2	+8	1.9	0.7
51	Nondurable goods, total	-4	+25	+24	0	+14	0.6	0.4
	New England	-3	+21	+20	0	+19	1.9	2.7
	Middle Atlantic	-4	+26	+23	0	+9	1.9	0.9
	East North Central	-7	+16	+18	0	+5	1.4	1.1
	West North Central	-7	+9	+11	+1	+15	1.6	1.4
	South Atlantic	-3	+24	+24	+2	+13	2.4	1.8
	East South Central	+2	+36	+29	+2	+26	1.7	2.4
	West South Central	-1	+54	+52	-4	+19	2.2	1.3
	Mountain	-6	+17	+18	0	+9	3.2	1.2
	Pacific	0	+27	+23	0	+20	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	-6	-4	-1	-2	+3	2	1
	New England	+10	+23	+16	-2	+26	7	4
	Middle Atlantic	(S)	(S)	(S)	-3	+2	4	2
	East North Central	+2	-4	-6	-6	-4	7	1
	West North Central	-8	-19	-10	-14	-13	5	2
	South Atlantic	-1	+7	+1	+1	-5	4	2
	East South Central	-8	+2	+4	-4	+16	4	3
	West South Central	-2	+16	+13	-4	+16	5	2
	Mountain	+6	+18	+4	-4	-14	7	3
	Pacific	+5	+8	+9	+2	+7	3	2
502	Furniture and home furnishings	+3	+31	+25	+3	+7	2	1
	Middle Atlantic	+11	+28	+21	+2	-7	4	2
	East North Central	+3	+30	+23	+2	+2	7	2
	West North Central	+3	+44	+47	+8	+26	5	4
	West South Central	-9	+21	+18	+3	+3	5	7
	Pacific	+6	+52	+40	+2	+24	5	3
503	Lumber and other construction materials	-6	+10	+9	+2	+9	2	1
	New England	-13	-11	-1	+1	+8	4	5
	Middle Atlantic	-1	+12	+6	+2	+7	4	2
	East North Central	-17	-6	+3	-2	-6	3	2
	West North Central	-3	(S)	+23	+2	+20	7	7
	South Atlantic	+4	+37	+24	+1	+11	4	2
	East South Central	-8	+3	-2	+2	+10	4	3
	West South Central	-2	+61	+48	+2	+13	6	5
	Pacific	-9	-7	-4	+2	+9	5	1
5051 pt.	Ferrous metals service centers	-6	+18	+25	-2	+11	2	1
	New England	-5	+22	+18	-5	+6	6	2
	Middle Atlantic	-6	+23	+28	-6	+21	5	2
	East North Central	-6	+6	+16	-3	+8	5	2
	West North Central	-9	+17	+18	+5	+17	5	2
	South Atlantic	-1	+14	+14	-2	-5	3	2
	East South Central	-5	+16	+21	-3	+8	4	4
	West South Central	-13	+24	+40	-4	0	4	2
	Mountain	-2	(S)	(S)	-9	+1	2	2
	Pacific	-1	+18	+28	+2	+10	2	3
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+4	+17	+18	+2	+10	2	1
	New England	-11	+6	+9	+6	+7	3	2
	Middle Atlantic	-3	+9	+19	0	+7	5	2
	East North Central	-4	+28	+28	+3	+20	3	2
	West North Central	+12	+7	+14	+5	+12	5	3
	South Atlantic	+2	+20	+17	+4	+10	3	2
	East South Central	-6	(S)	-5	+1	(S)	3	5
	West South Central	+37	+58	+48	-7	+23	4	2
	Mountain	+7	+5	+7	+1	-1	4	2
	Pacific	+4	+4	+6	0	0	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 1980—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			
		February 1980 from January 1980	February 1980 from February 1979	2 months 1980 from 2 months 1979	February 1980 from January 1980	February 1980 from February 1979		
		A	B	C	D	E	A	D
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment.	+1	+33	+31	-2	+8	3	1
	Middle Atlantic	+7	+33	+26	-5	-2	3	2
	East North Central	+5	+41	+38	-3	+8	4	1
	West North Central	-4	+54	+66	-3	+11	4	4
	South Atlantic	-1	+18	+11	-2	-2	6	4
	West South Central	-2	+78	+64	-3	+29	4	4
	Mountain	+3	+9	-7	-3	+15	6	3
	Pacific	-6	+29	+34	0	+26	3	2
5072	Hardware	-6	+16	+17	+7	+25	1	1
	New England	-8	+2	+7	+23	+13	6	3
	Middle Atlantic	-13	+20	+22	0	+15	6	2
	East North Central	-4	+29	+25	+10	+44	4	2
	West North Central	-1	+8	+10	+9	+18	3	3
	South Atlantic	-6	+18	+15	+4	+25	4	2
	East South Central	-19	+23	+25	0	+23	4	1
	Pacific	-5	+17	+17	0	+17	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	-5	+23	+22	+5	+1	2	1
	Middle Atlantic	-14	+14	+18	+5	-8	6	3
	East North Central	-8	-7	0	+4	(S)	3	3
	South Atlantic	+3	+27	+21	+6	+6	3	2
	Mountain	+3	+30	+32	0	+58	7	4
	Pacific	-10	+20	+21	+4	+32	5	4
5084,5	Industrial machinery, equipment, and supplies	0	+13	+14	+3	+13	2	1
	Middle Atlantic	-3	+14	+18	+2	+15	7	2
	East North Central	-5	+3	+9	+2	+18	3	2
	West South Central	+4	+16	+14	+4	+15	4	3
	Pacific	0	+10	+10	+1	+4	3	2
512	Drugs, drug proprietaries, and druggists' sundries	-7	+13	+15	-2	+9	1	1
	New England	-8	+34	+28	+1	(S)	5	3
	Middle Atlantic	-1	+15	+16	-3	-2	3	2
	East North Central	-15	+14	+13	-3	+9	6	3
	West North Central	-3	+21	+22	-3	-6	2	2
	South Atlantic	-7	+5	+8	+3	+8	6	5
	East South Central	-1	+2	+5	-1	-4	6	5
	West South Central	-5	+24	+22	-2	+12	3	2
	Mountain	-6	+26	+20	-1	+13	3	2
	Pacific	-10	+5	+17	-4	-12	3	3
5141	Groceries, general-line	-4	+15	+13	+3	+9	1	1
	New England	-9	+12	+8	+6	+24	2	1
	Middle Atlantic	-2	+16	+11	+1	+3	1	2
	East North Central	-4	+12	+12	+4	+6	3	1
	West North Central	-4	+15	+11	0	+8	1	1
	South Atlantic	-5	+17	+15	+5	+7	2	1
	West South Central	-7	+17	+14	+4	+15	2	1
	Mountain	-1	+15	+14	+1	+2	2	2
	Pacific	-2	+17	+14	+3	+9	1	1
5142,3,6,9	Specialty-line groceries	-6	+17	+15	+3	+20	1	1
	Middle Atlantic	-9	+23	+20	+2	+4	4	2
	East North Central	-6	+1	-1	+4	+24	3	2
	West North Central	-5	+16	+16	+4	+48	3	1
	South Atlantic	+1	+10	+5	+6	+8	5	6
	East South Central	-5	-2	-13	+20	+24	2	2
5148	Fresh fruits and vegetables	-1	+3	0	+1	-10	2	4
	Middle Atlantic	-6	-8	-11	-5	-19	7	5
	East North Central	-1	-5	-6	+1	+6	6	6
	West North Central	-8	-20	-15	0	-28	6	3
	West South Central	0	+5	+5	0	-4	5	3
	Pacific	+3	+18	+10	-4	-1	4	4
5194	Tobacco and tobacco products	-3	+8	+5	-6	+9	1	1
	New England	0	+27	+8	-7	+18	5	3
	Middle Atlantic	-4	-4	-5	-5	(S)	4	3
	East North Central	-5	+5	-1	-9	0	4	3
	West North Central	+5	+60	+48	+10	+33	4	2
	South Atlantic	-4	-28	-26	-5	(S)	6	6
	East South Central	-5	+16	+11	-13	-9	7	4
	West South Central	+1	+25	+27	-2	+17	7	6
	Mountain	0	+29	+19	-11	+5	6	2
	Pacific	-3	+19	+17	-13	+5	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	1.4-1.8	1.6	1.4-1.6	1.5	0.5-0.9	0.6	1.3-1.5	1.4	1.2-1.4	1.4	0.2-0.4	0.3
	Total (excluding farm-product raw materials)	1.4-1.9	1.6	1.3-1.6	1.4	0.5-0.9	0.6	1.4-1.7	1.5	1.2-1.5	1.5	0.1-0.4	0.3
50	Durable goods, total	1.5-3.2	2.0	1.4-2.4	1.6	0.6-1.6	1.0	1.0-1.5	1.4	1.0-1.4	1.3	0.2-0.6	0.4
501	Motor vehicles and automotive parts and supplies	3.6-4.6	3.9	3.2-4.4	3.6	1.0-3.0	1.7	2.2-3.5	3.0	2.6-3.5	2.7	0.6-1.4	0.8
5012	Automobiles and other motor vehicles	(*)	(*)	(*)	(*)	1.7-3.8	2.8	(*)	(*)	(*)	(*)	1.5-2.8	1.8
5013,4	Automotive parts and supplies, tires and tubes	3.3-4.7	4.0	3.0-4.9	3.6	1.2-4.1	1.7	3.0-4.1	3.7	2.8-3.9	3.4	0.6-1.4	1.2
5013	Automotive parts and supplies	3.8-5.9	4.7	3.6-5.9	4.2	1.4-4.9	2.1	3.8-5.0	4.5	3.5-4.6	4.2	0.6-1.6	1.3
502	Furniture and home furnishings	4.7-7.0	5.7	4.3-6.1	5.1	1.6-3.8	2.9	4.0-4.6	4.2	3.9-4.5	4.2	0.7-1.3	0.9
5021	Furniture--household and office	4.9-6.5	6.0	4.3-7.1	6.0	2.8-5.7	4.1	(*)	(*)	(*)	(*)	1.1-1.8	1.5
5021 pt.	Household furniture	(*)	(*)	(*)	(*)	5.5-7.6	6.2	(*)	(*)	(*)	(*)	1.1-3.5	1.5
5021 pt.	Office furniture	(*)	(*)	(*)	(*)	4.0-6.3	4.9	(*)	(*)	(*)	(*)	0.9-2.7	1.9
5023	Home furnishings	6.7-9.2	7.6	5.5-8.1	6.6	2.0-4.8	3.3	5.0-6.3	5.6	5.0-6.1	5.7	0.9-1.6	1.1
503	Lumber and other construction materials	4.2-5.8	4.8	4.4-5.4	4.7	1.8-3.5	2.3	5.0-6.7	5.6	5.0-6.6	5.9	0.8-1.3	0.9
5031	Lumber, plywood, and millwork	5.7-7.7	6.3	5.1-6.6	5.9	1.7-5.1	3.3	7.0-9.0	7.9	7.2-8.6	8.1	0.8-1.7	1.2
5039	Construction materials, n.e.c	5.0-6.9	6.0	5.1-6.5	5.7	1.8-4.0	3.1	(*)	(*)	(*)	(*)	0.9-1.7	1.1
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(*)	(*)	(*)	(*)	1.7-6.4	3.5	(*)	(*)	(*)	(*)	1.0-1.9	1.6
505	Metals and minerals, except petroleum	4.3-16.8	8.7	5.1-14.4	8.2	0.9-6.9	2.4	6.2-9.3	7.6	5.7-10.2	8.1	0.7-4.7	1.2
5051 pt.	Ferrous metals service centers and offices	4.3-6.2	5.2	3.9-6.5	4.6	0.8-3.1	2.5	3.9-4.7	4.3	4.0-4.5	4.2	0.7-1.6	0.8
5051 pt.	Ferrous metals service centers	4.8-7.1	5.1	4.9-5.2	5.1	0.9-3.3	2.8	2.8-5.5	4.6	3.1-4.8	4.0	0.8-1.7	0.9
5051 pt.	Nonferrous metals service centers and offices	(*)	(*)	(*)	(*)	1.7-13.2	4.1	(*)	(*)	(*)	(*)	1.4-16.0	5.2
506	Electrical goods	3.8-5.0	4.1	3.3-4.6	3.6	1.5-2.4	2.3	3.2-4.8	3.5	3.3-4.6	3.5	0.6-1.2	0.7
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	3.7-6.7	4.5	3.3-6.9	4.1	2.1-4.5	3.1	3.2-5.1	3.5	3.2-4.5	3.3	0.6-1.8	0.8
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	5.2-7.4	6.0	5.0-6.6	5.6	1.9-4.7	2.8	3.9-6.9	4.4	3.8-6.5	4.7	1.0-1.7	1.2
5064	Electrical appliances, TV and radio sets	4.9-8.2	6.4	5.1-6.7	5.5	1.5-4.5	2.8	(*)	(*)	(*)	(*)	0.9-1.6	1.3
507	Hardware, plumbing, heating equipment, and supplies	3.1-4.5	3.5	2.9-3.7	3.3	1.3-2.3	1.6	2.8-4.2	3.6	2.9-4.2	3.5	0.5-1.0	0.8
5072	Hardware	2.6-3.8	3.6	2.8-3.9	3.2	1.1-3.3	1.6	4.7-6.3	5.6	4.5-6.1	5.7	0.6-1.6	1.3
5074	Plumbing and heating equipment and supplies (hydronics)	5.4-7.7	6.4	5.1-6.6	5.9	1.9-4.2	2.9	5.0-6.0	5.4	4.7-5.6	5.3	0.7-1.5	1.3
5075	Warm air heating and air conditioning equipment and supplies	(*)	(*)	(*)	(*)	2.0-7.3	4.1	(*)	(*)	(*)	(*)	0.8-2.2	1.2
508	Machinery, equipment, and supplies	2.9-4.5	3.3	2.6-3.2	2.8	1.2-4.0	1.8	1.8-2.4	2.2	1.8-2.3	2.1	0.4-0.7	0.4
5081	Commercial machines and equipment	(*)	(*)	(*)	(*)	3.3-6.0	4.4	(*)	(*)	(*)	(*)	0.7-2.3	1.5
5082	Construction and mining machinery and equipment	4.8-6.6	5.4	4.1-5.1	4.5	2.7-4.8	3.9	3.8-5.3	4.2	3.9-4.9	4.1	0.8-1.7	1.1
5083	Farm and garden machinery and equipment	(*)	(*)	(*)	(*)	4.8-16.1	6.0	(*)	(*)	(*)	(*)	1.3-2.0	1.4
5084,5	Industrial machinery, equipment, and supplies	3.2-4.1	3.3	2.4-3.4	2.8	1.6-3.6	2.5	3.2-4.2	3.8	3.1-3.8	3.5	0.5-0.8	0.6
5086 pt.	Professional equipment and supplies	(*)	(*)	(*)	(*)	2.0-4.0	2.7	(*)	(*)	(*)	(*)	0.8-1.4	1.1
5093	Scrap and waste materials	4.2-5.4	5.1	4.2-5.3	4.7	1.6-3.2	2.2	(*)	(*)	(*)	(*)	0.7-1.6	1.3
5093 pt.	Iron and steel scrap	(*)	(*)	(*)	(*)	1.5-4.8	2.2	(*)	(*)	(*)	(*)	1.0-2.3	1.5
5093 pt.	Waste materials	(*)	(*)	(*)	(*)	1.7-5.3	3.9	(*)	(*)	(*)	(*)	1.3-3.4	2.2
51	Nondurable goods, total	1.8-2.1	1.9	1.6-2.0	1.9	0.6-0.9	0.8	2.6-3.0	2.8	2.6-2.8	2.7	0.3-0.6	0.5
	Total (excluding farm-product raw materials)	1.9-2.4	2.1	1.7-2.3	2.0	0.7-1.0	0.9	3.3-3.6	3.5	3.2-3.5	3.3	0.3-0.6	0.4
511	Paper and paper products	4.6-7.7	5.2	4.5-6.9	4.9	1.0-3.1	1.5	4.6-7.3	6.3	4.6-7.1	5.9	0.6-1.3	0.8
5111,3	Printing, writing, industrial, and personal service paper	3.0-5.1	3.3	3.0-4.6	3.2	0.8-2.7	1.1	5.0-6.9	6.4	4.9-6.9	6.3	0.6-1.4	0.8
512	Drugs, drug proprietaries, and druggists' sundries	2.3-3.1	2.7	2.2-2.9	2.7	1.1-2.2	1.5	3.6-5.1	4.4	4.0-5.1	4.6	0.7-1.5	1.4
5122	Drugs, drug proprietaries, and druggists' sundries	2.3-3.1	2.7	2.2-2.9	2.7	1.1-2.2	1.5	(*)	(*)	(*)	(*)	0.7-1.5	1.4
5122 pt.	General-line drugs	6.0-6.9	6.6	6.0-6.9	6.6	0.9-2.5	1.1	(*)	(*)	(*)	(*)	0.5-2.2	0.9
513	Apparel, piece goods, and notions	12.0-15.7	13.2	10.9-14.6	13.4	2.9-5.4	4.0	(*)	(*)	(*)	(*)	(*)	(*)
514	Groceries and related products	1.7-2.4	2.2	1.8-2.3	2.1	0.5-0.7	0.5	1.6-2.2	1.8	1.6-2.0	1.8	0.3-0.6	0.4
5141	Groceries, general-line	2.6-3.4	3.3	2.8-3.3	3.1	0.5-0.7	0.6	1.9-2.8	2.2	1.7-2.7	1.9	0.3-0.7	0.5
5141 pt.	Voluntary groups	(*)	(*)	(*)	(*)	0.7-0.9	0.7	(*)	(*)	(*)	(*)	0.5-1.4	0.7
5141 pt.	Retailer cooperatives	(*)	(*)	(*)	(*)	0.3-1.1	0.6	(*)	(*)	(*)	(*)	0.4-1.6	0.6
5141 pt.	Other general-lines	(*)	(*)	(*)	(*)	0.9-1.9	1.3	(*)	(*)	(*)	(*)	0.7-1.4	1.0
5142,3,6,9	Specialty-line groceries	(*)	(*)	(*)	(*)	0.7-2.4	1.2	(*)	(*)	(*)	(*)	0.5-1.3	1.0
5144	Poultry and poultry products	5.6-7.2	6.5	5.4-7.2	6.7	1.5-2.0	1.8	(*)	(*)	(*)	(*)	0.6-2.6	1.5
5145	Confectionery	5.1-12.9	6.7	4.8-9.5	6.6	1.2-5.5	2.7	(*)	(*)	(*)	(*)	1.0-2.9	1.7
5147	Meats and meat products	5.6-7.0	6.8	5.4-6.9	6.5	1.1-2.2	1.5	(*)	(*)	(*)	(*)	1.2-2.3	1.4
5148	Fresh fruits and vegetables	4.0-5.7	4.4	3.5-5.0	4.7	1.7-2.8	2.3	(*)	(*)	(*)	(*)	0.8-4.8	2.6
515	Farm-product raw materials	2.6-5.2	3.0	2.1-4.6	3.4	1.2-3.1	2.3	(*)	(*)	(*)	(*)	0.9-1.7	1.5
5152	Cotton	(*)	(*)	(*)	(*)	1.8-11.1	6.9	(*)	(*)	(*)	(*)	0.3-2.0	1.0
5153	Grain	3.2-5.9	3.8	2.6-5.3	3.9	1.3-3.2	2.5	(*)	(*)	(*)	(*)	1.2-2.2	1.7
517	Petroleum and petroleum products	5.1-7.8	7.1	4.9-8.0	6.2	1.8-3.5	2.0	5.6-6.5	5.8	5.1-6.1	5.6	1.2-1.9	1.7
5171	Petroleum bulk stations and terminals	3.5-5.1	4.0	3.1-4.2	3.9	0.8-3.5	1.7	(*)	(*)	(*)	(*)	1.1-2.2	2.1
518	Beer, wine, and distilled alcoholic beverages	4.5-5.9	4.9	4.3-5.5	4.9	0.9-1.9	1.2	3.8-5.0	4.2	3.9-5.0	4.3	1.1-1.7	1.4
5181	Beer and ale	5.2-6.1	5.8	5.4-6.2	5.7	0.9-2.2	1.4	7.9-10.2	8.1	7.7-9.9	8.8	1.0-4.1	2.7
5182	Wines and distilled alcoholic beverages	5.1-7.2	5.7	5.1-6.9	5.7	1.8-2.6	1.9	3.4-5.0	4.4	3.7-4.6	4.0	1.0-1.8	1.3
519	Miscellaneous nondurable goods	2.5-4.9	3.9	2.5-3.9	3.4	1.3-2.4	1.9	(*)	(*)	(*)	(*)	0.5-1.5	0.9
5191	Farm supplies	(*)	(*)	(*)	(*)	3.1-5.5	4.4	(*)	(*)	(*)	(*)	0.7-2.6	1.6
5194	Tobacco and tobacco products	5.6-6.7	6.1	5.3-6.8	5.8	1.1-2.4	1.3	(*)	(*)	(*)	(*)	1.1-1.7	1.3
5198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.1-4.9	2.4	(*)	(*)	(*)	(*)	0.7-3.5	1.1
5199 pt.	Books, periodicals, newspapers	(*)	(*)	(*)	(*)	2.9-11.7	6.6	(*)	(*)	(*)	(*)	1.1-2.1	1.4

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 August 1979 through January 1980.

*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 1979-December 1980

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	94.6	91.5	104.4	100.2	106.1	101.7	98.6	104.3	95.7	105.3	101.1	96.0
	Total (excluding farm-product raw materials)	93.4	91.2	104.0	100.1	106.4	102.6	98.8	105.9	96.8	105.4	99.9	95.0
50	Durable goods, total	91.6	89.2	103.2	101.6	107.4	103.5	99.6	107.5	97.7	107.7	98.7	92.4
501	Motor vehicles and automotive parts and supplies	93.4	90.7	106.9	109.1	112.2	103.6	101.6	104.8	91.3	100.7	94.4	89.9
502	Furniture and home furnishings	88.6	89.3	102.8	98.2	102.9	102.5	93.0	104.2	101.2	115.7	106.8	93.5
503	Lumber and other construction materials	81.7	79.4	98.6	97.5	108.3	108.9	106.6	117.6	102.9	114.9	100.7	84.5
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	81.7	85.0	101.4	99.9	103.6	99.9	96.0	107.0	105.9	113.9	104.7	100.8
505	Metals and minerals, except petroleum	97.1	92.7	103.1	102.3	107.8	101.3	96.1	109.0	100.1	102.9	96.9	89.2
506	Electrical goods	90.5	88.7	100.1	97.3	102.6	103.0	99.5	106.4	98.6	111.8	102.4	99.1
507	Hardware, plumbing, heating equipment, and supplies	91.9	86.2	97.4	100.6	108.4	104.2	104.4	108.6	98.8	111.5	98.8	89.9
508	Machinery, equipment, and supplies	89.8	88.3	106.4	102.7	109.1	105.0	97.2	105.2	99.4	107.1	97.0	92.9
509	Miscellaneous durable goods	87.9	89.9	109.2	100.0	101.5	104.3	92.9	108.5	98.5	109.0	104.2	93.1
51	Nondurable goods, total	98.1	92.4	105.7	99.6	105.3	100.4	97.9	101.5	93.9	102.7	102.5	99.4
	Total (excluding farm-product raw materials)	96.7	92.9	104.8	99.6	105.3	101.4	98.1	104.3	95.2	102.6	101.4	97.1
511	Paper and paper products	99.5	93.0	104.5	95.1	104.0	101.5	96.2	106.8	96.8	108.5	99.3	95.0
512	Drugs, drug proprietaries, and druggists' sundries	99.3	91.7	103.8	98.9	102.0	96.6	98.3	103.6	97.2	110.4	101.4	96.5
513	Apparel, piece goods, and notions	93.5	91.9	103.7	92.8	102.9	94.7	95.8	115.6	105.0	114.0	102.3	87.6
514	Groceries and related products	98.0	91.3	104.1	98.8	106.0	102.1	99.6	103.8	95.6	103.9	100.3	96.6
515	Farm-product raw materials[1]	103.0	92.5	110.2	99.3	104.0	98.9	98.2	92.3	87.7	105.9	108.3	100.7
516	Chemicals and allied products	93.9	88.1	102.1	99.4	109.9	104.3	99.0	109.7	94.3	106.4	100.1	92.7
517	Petroleum and petroleum products	100.9	102.3	105.2	98.1	99.0	97.2	98.7	100.0	91.3	100.4	103.7	102.4
518	Beer, wine, and distilled alcoholic beverages	81.5	81.6	98.8	95.2	107.0	109.2	101.5	108.5	93.4	104.3	106.5	111.6
519	Miscellaneous nondurable goods	96.2	97.2	112.6	106.4	110.3	104.2	91.9	97.2	93.2	97.6	97.4	95.2
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.4	101.3	102.4	101.4	100.1	99.3	98.8	97.9	98.3	99.8	100.4	100.1
	Total (excluding farm-product raw materials)	98.9	100.1	101.4	100.9	100.9	100.8	100.4	99.6	99.4	99.8	99.4	98.9
50	Durable goods, total	98.4	100.1	100.9	100.9	101.4	101.9	101.1	100.3	99.4	98.9	98.6	98.6
501	Motor vehicles and automotive parts and supplies	101.4	105.9	101.9	100.4	101.6	99.6	99.3	97.3	96.3	98.1	98.9	99.6
502	Furniture and home furnishings	98.8	99.1	99.6	99.6	101.1	102.8	100.6	100.8	101.8	99.9	99.1	97.3
503	Lumber and other construction materials	98.1	99.1	103.1	102.8	103.1	102.3	102.1	99.9	98.9	97.8	96.1	97.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	95.8	99.8	100.9	102.6	102.4	106.4	105.8	101.1	101.8	100.8	93.3	89.8
505	Metals and minerals, except petroleum	98.4	97.8	99.8	99.1	101.4	100.9	102.6	104.4	101.3	97.4	98.9	98.6
506	Electrical goods	96.6	96.4	98.8	99.4	101.4	102.4	101.6	102.1	101.4	100.8	100.4	99.1
507	Hardware, plumbing, heating equipment, and supplies	97.1	98.4	101.9	105.6	103.4	103.1	102.4	99.9	97.9	98.4	95.9	96.1
508	Machinery, equipment, and supplies	98.6	100.6	101.6	100.4	101.3	101.9	100.4	99.8	99.9	98.6	98.4	98.8
509	Miscellaneous durable goods	97.6	98.1	96.6	97.9	97.1	100.4	102.9	102.3	102.6	103.3	102.3	99.4
51	Nondurable goods, total	103.8	103.1	104.8	101.1	97.8	95.4	94.6	94.4	96.3	101.3	104.1	103.4
	Total (excluding farm-product raw materials)	100.1	99.9	101.9	100.9	99.8	98.6	98.6	98.1	99.6	101.6	101.1	100.1
511	Paper and paper products	97.3	98.1	99.4	100.9	100.3	102.6	99.9	99.3	101.1	100.6	100.1	100.9
512	Drugs, drug proprietaries, and druggists' sundries	95.3	96.3	100.1	100.8	98.8	100.6	100.1	100.3	103.9	105.3	100.8	98.4
513	Apparel, piece goods, and notions	101.1	100.6	97.9	98.9	101.4	100.6	101.4	101.1	98.9	99.1	98.8	100.4
514	Groceries and related products	98.6	99.9	101.9	100.6	99.6	98.9	98.4	97.9	99.9	102.4	100.9	101.1
515	Farm-product raw materials[1]	119.1	117.2	116.2	104.9	89.8	82.8	80.5	77.8	81.3	98.4	115.4	116.3
516	Chemicals and allied products	98.1	100.8	101.4	101.3	103.4	102.1	102.8	99.6	100.4	96.6	96.3	97.3
517	Petroleum and petroleum products	102.4	98.6	99.6	94.4	98.4	93.3	96.8	101.1	104.4	104.4	104.3	103.1
518	Beer, wine, and distilled alcoholic beverages	96.6	94.6	99.3	101.4	103.1	102.9	101.1	97.3	99.4	105.9	104.6	93.8
519	Miscellaneous nondurable goods	104.6	105.6	108.3	102.6	99.1	93.3	95.4	95.9	96.1	99.1	99.3	100.6

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1979-December 1980—Continued

1972 SIC code	Kind of business	1980											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	95.4	95.2	101.1	103.3	103.3	101.6	101.9	98.6	100.6	105.8	95.5	100.8
	Total (excluding farm-product raw materials)	94.1	95.2	100.4	103.9	103.6	101.8	102.3	100.3	101.5	106.0	94.8	100.3
50	Durable goods, total	92.3	92.7	99.8	105.0	104.2	103.4	103.2	101.3	103.6	107.7	93.0	97.9
501	Motor vehicles and automotive parts and supplies	95.2	94.3	103.6	114.2	108.1	102.7	104.2	101.3	95.1	100.4	90.7	94.7
502	Furniture and home furnishings	89.5	93.2	99.8	101.8	100.0	101.9	96.5	98.9	104.5	117.2	101.9	98.3
503	Lumber and other construction materials	81.0	83.9	94.0	101.1	106.2	107.1	109.4	110.4	112.2	115.0	92.5	90.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	80.2	86.3	101.3	106.6	99.2	97.7	101.2	101.7	109.7	110.5	104.8	107.0
505	Metals and minerals, except petroleum	96.9	97.4	101.3	107.0	101.9	102.5	98.8	103.2	105.2	102.7	92.3	95.8
506	Electrical goods	91.0	91.5	97.3	100.6	100.0	102.6	103.4	100.5	103.9	111.4	97.5	104.1
507	Hardware, plumbing, heating equipment, and supplies	92.2	88.9	95.3	103.7	105.2	104.6	107.7	102.9	104.0	110.7	94.3	94.6
508	Machinery, equipment, and supplies	90.7	91.5	102.2	105.8	107.2	104.1	101.4	98.8	104.7	108.1	91.1	97.5
509	Miscellaneous durable goods	89.3	94.3	104.4	102.6	99.5	103.8	95.3	102.3	106.6	109.8	95.4	98.3
51	Nondurable goods, total	98.8	96.0	102.4	102.8	102.9	100.1	101.4	96.3	98.3	103.3	97.1	104.3
	Total (excluding farm-product raw materials)	97.7	97.0	101.1	102.5	103.0	100.9	101.5	98.6	99.8	103.7	95.4	102.0
511	Paper and paper products	99.6	97.1	100.3	100.0	101.4	99.2	100.9	99.7	102.7	108.5	93.3	101.7
512	Drugs, drug proprietaries, and druggists' sundries	100.6	95.0	100.4	103.1	98.0	96.7	101.8	98.1	103.5	109.9	95.7	102.5
513	Apparel, piece goods, and notions	95.1	93.4	101.2	97.8	98.3	94.1	101.9	108.6	108.1	113.6	99.6	92.4
514	Groceries and related products	98.7	94.8	100.6	101.9	104.7	100.2	103.4	99.0	99.5	104.5	95.8	100.6
515	Farm-product raw materials[1]	101.3	96.0	107.3	102.6	103.4	97.2	100.8	88.6	92.9	104.2	103.6	105.4
516	Chemicals and allied products	94.3	92.6	98.8	103.4	105.8	104.4	102.0	103.6	99.6	106.8	94.2	99.2
517	Petroleum and petroleum products	101.2	107.8	102.9	97.8	98.6	97.9	97.9	97.6	95.4	100.9	98.6	105.5
518	Beer, wine, and distilled alcoholic beverages	82.3	85.6	94.2	100.0	103.0	108.2	106.8	100.0	99.6	105.8	98.3	120.1
519	Miscellaneous nondurable goods	96.7	101.7	108.5	107.4	109.2	104.9	94.0	92.1	98.3	99.0	90.9	98.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.3	101.3	102.4	101.6	100.1	99.4	98.8	97.9	98.3	99.6	100.4	100.1
	Total (excluding farm-product raw materials)	98.9	100.1	101.4	100.9	100.9	100.9	100.4	99.6	99.4	99.8	99.3	98.9
50	Durable goods, total	98.4	100.1	101.1	100.8	101.4	101.9	101.1	100.3	99.4	98.9	98.6	98.6
501	Motor vehicles and automotive parts and supplies	101.4	106.3	101.9	100.4	101.6	99.6	99.3	97.4	96.1	98.1	98.9	99.6
502	Furniture and home furnishings	98.8	99.1	99.6	99.6	101.1	102.9	100.6	100.6	101.9	99.9	99.1	97.3
503	Lumber and other construction materials	97.9	99.1	103.1	102.8	103.1	102.3	102.1	99.8	98.9	97.9	96.1	97.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	95.6	99.6	101.1	102.9	102.3	106.4	105.9	101.1	101.9	100.8	93.3	89.8
505	Metals and minerals, except petroleum	98.3	97.8	99.6	98.9	101.6	100.9	102.6	104.6	101.3	97.3	98.9	98.4
506	Electrical goods	96.6	96.4	98.8	99.4	101.4	102.4	101.6	102.1	101.4	100.8	100.4	99.1
507	Hardware, plumbing, heating equipment, and supplies	97.1	98.6	101.9	105.9	103.4	103.1	102.4	99.9	97.8	98.3	95.8	96.1
508	Machinery, equipment, and supplies	98.6	100.6	101.6	100.4	101.3	101.9	100.4	99.9	100.1	98.6	98.4	98.8
509	Miscellaneous durable goods	97.6	98.1	96.6	97.8	97.1	100.3	102.9	102.1	102.8	103.1	102.1	99.3
51	Nondurable goods, total	103.8	103.1	104.9	101.3	98.1	95.6	94.6	94.3	96.3	101.1	103.9	103.4
	Total (excluding farm-product raw materials)	100.1	99.8	102.1	101.1	99.9	98.6	98.6	98.1	99.6	101.6	100.9	100.1
511	Paper and paper products	97.1	98.1	99.4	100.9	100.4	102.6	99.9	99.1	101.1	100.6	100.1	100.9
512	Drugs, drug proprietaries, and druggists' sundries	95.1	96.3	100.1	100.8	98.8	100.6	100.1	100.3	104.1	105.3	100.6	98.4
513	Apparel, piece goods, and notions	101.1	100.8	97.9	98.9	101.4	100.8	101.4	101.1	98.9	99.1	98.8	100.4
514	Groceries and related products	98.6	99.9	101.9	100.6	99.6	99.1	98.4	97.9	100.1	102.4	100.9	101.1
515	Farm-product raw materials[1]	119.1	117.4	116.9	105.6	90.3	82.8	80.3	77.4	80.8	98.1	115.4	116.4
516	Chemicals and allied products	98.1	100.9	101.4	101.3	103.4	102.1	102.8	99.6	100.4	96.6	96.3	97.3
517	Petroleum and petroleum products	102.1	98.4	99.9	94.4	98.4	93.3	96.8	101.1	104.4	104.3	104.3	102.9
518	Beer, wine, and distilled alcoholic beverages	96.6	94.4	99.4	101.6	103.1	102.9	101.3	97.3	99.4	105.9	104.6	93.8
519	Miscellaneous nondurable goods	104.8	105.6	108.6	102.8	99.4	93.1	95.4	95.8	95.9	99.3	99.1	100.4

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.

[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

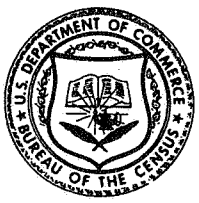
plumbing, heating, and air-conditioning equipment and electrical supplies were classified in wholesale trade rather than retail trade. However, establishments primarily selling lumber and other building materials and paint, glass, and wallpaper were classified in retail trade if they sell to the public, 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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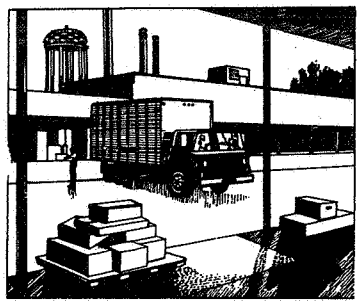
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued May 1980

March 1980

BW-80-3

Sales—March 1980 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences, but not for price changes, were $79.3 billion, down 1 percent from the previous month, but were 12 percent above March 1979. Adjusted January-through-March total sales were up 2 percent from the October-through-December period and were 17 percent above the total sales for the comparable months a year ago.

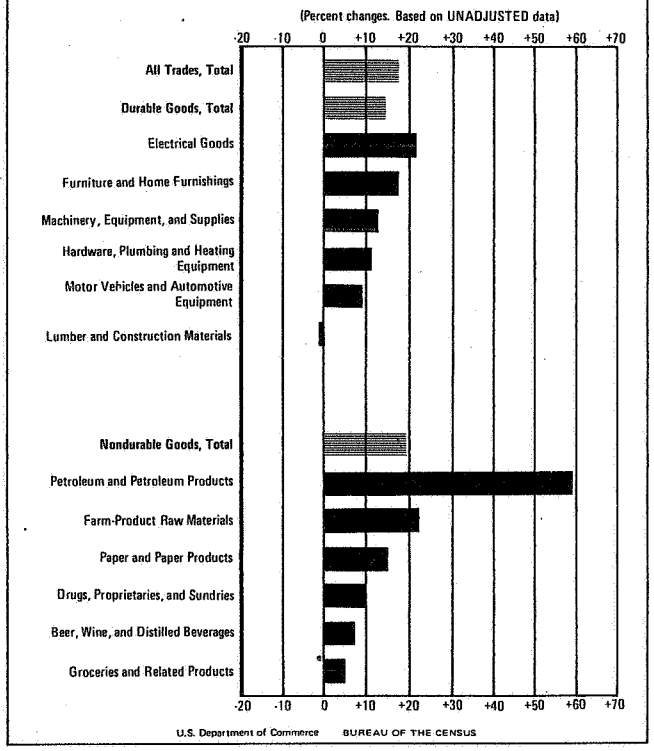
After adjustment, March sales in the durable goods trades were down 2 percent from the previous month, but were 9 percent above sales for the same month a year ago. Nondurable goods sales were virtually unchanged from February, but were 15 percent above the same month a year ago. Total monthly sales in the durable goods group during the January-through-March period were up 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 19 percent above sales for the same period a year ago.

Based on adjusted data, most trade groups showed decreases from their previous month sales levels with the larger ones reported in motor vehicles and automotive equipment and sporting goods, toys, and hobby goods—both down 7 percent. The most notable increase was shown in miscellaneous nondurable goods (13%). Compared with sales of a year ago, all trade groups showed increases with the exception of lumber and construction materials (-10%). The sharpest increase was reported in petroleum and petroleum products (51%).

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variations, but not for price changes, were valued at $90.6 billion at the end of March, down 1 percent from last month, but 8 percent above the same month a year ago. Durable goods, stocks were down 1 percent from February, but were 8 percent above March 1979. Nondurable goods stocks were down 2 percent from last month, but were 10 percent above March 1979.

Based on adjusted data, most trade groups showed decreases from February, with the largest decrease shown in farm-product raw materials (-10%). The largest increase was reported in motor vehicles and automotive equipment (3%). Compared with year-ago inventories, most trade groups showed increases with the largest one reported in petroleum and petroleum products (51%).

Percent Change in Sales of Merchant Wholesalers in Selected Kinds of Business
3 Months 1980 Compared With 3 Months 1979



Stock-Sales Ratios—The March stock-sales ratio for merchant wholesalers, based on seasonally adjusted data, was 114, down 1 point from the previous month and down 4 points from the year-ago level. The stock-sales ratio for durable goods was 160, up 2 points from February, but down 2 points from March 1979. The ratio for nondurable goods was 76, down 2 points from last month and down 3 points from the year-ago ratio.

An advance release of March 1980 data was issued on May 6, 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: 1980 and 1979

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

1972 SIC code	Kind of business	1980			1979									Total 3 months	
		Jan.	Feb.	Mar.[P]	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1980	1979
	Merchant wholesalers, total	77,104	75,746	80,814	74,319	70,768	76,814	74,361	73,537	78,567	73,213	81,820	79,079	75,396	233,663	199,777
	Total (excluding farm-product raw materials)	67,867	67,271	71,903	66,198	63,588	68,714	66,477	64,932	70,390	65,400	72,156	69,354	66,185	207,042	177,885
50	Durable goods, total	33,579	33,949	36,490	34,689	33,429	35,723	34,447	33,750	37,048	33,616	37,935	34,711	32,515	104,018	91,111
501	Motor vehicles and automotive parts and supplies	6,421	6,586	6,765	6,888	6,845	7,013	6,364	6,259	6,812	5,645	6,784	6,452	6,172	19,772	18,172
5013,4	Automotive parts and supplies, tires and tubes	3,160	3,093	3,320	3,459	3,349	3,535	3,318	3,091	3,552	3,081	3,538	3,298	2,972	9,572	9,661
5013	Automotive parts and supplies	2,704	2,685	2,838	2,902	2,807	2,966	2,759	2,600	3,014	2,617	2,978	2,817	2,515	8,227	8,099
502	Furniture and home furnishings	1,210	1,186	1,303	1,199	1,130	1,214	1,185	1,121	1,243	1,196	1,390	1,263	1,134	3,689	3,160
5021	Furniture--household and office[1]	496	452	489	416	413	450	422	399	449	419	458	430	430	1,403	1,090
5023	Home furnishings	747	734	814	783	717	764	763	722	794	778	931	832	704	2,295	2,070
503	Lumber and other construction materials	2,582	2,408	2,574	3,006	3,023	3,353	3,410	3,411	3,761	3,274	3,622	2,997	2,543	7,563	7,604
5031	Lumber, plywood, and millwork	1,708	1,622	1,723	2,047	2,067	2,269	2,250	2,250	2,515	2,102	2,346	1,899	1,586	5,054	5,263
5039	Construction materials, n.e.c.[2]	873	785	851	959	957	1,084	1,160	1,161	1,246	1,172	1,276	1,098	957	2,509	2,341
505	Metals and minerals, except petroleum	4,346	(S)	(S)	3,849	3,295	3,913	3,645	3,824	4,196	3,687	4,197	4,064	3,986	(S)	10,270
5051 pt.	Ferrous metals service centers and offices	2,992	2,852	3,167	2,925	2,469	2,951	2,759	2,865	3,062	2,806	2,974	2,836	2,743	9,011	7,816
5051 pt.	Ferrous metals service centers	2,197	2,064	2,250	2,129	1,798	2,160	2,056	2,046	2,211	1,974	2,208	2,122	1,964	6,511	5,525
506	Electrical goods	3,745	3,904	3,988	3,556	3,271	3,744	3,786	3,712	4,163	4,012	4,395	3,962	3,785	11,637	9,656
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,840	2,032	2,037	1,807	1,748	2,071	2,006	1,991	2,153	2,079	2,165	1,962	1,916	5,909	4,978
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,905	1,872	1,951	1,749	1,554	1,673	1,779	1,700	2,011	1,933	2,230	2,000	1,869	5,727	4,678
5064	Electrical appliances, TV and radio sets[3]	1,040	985	1,066	1,024	881	939	1,064	986	1,116	1,083	1,250	1,154	1,052	3,091	2,707
507	Hardware, plumbing, heating equipment, and supplies	2,466	2,250	2,441	2,319	2,374	2,592	2,461	2,524	2,678	2,399	2,794	2,415	2,192	7,157	6,445
5072	Hardware	936	885	945	853	852	975	877	892	1,003	877	1,024	916	838	2,766	2,414
5074	Plumbing and heating equipment and supplies (hydronics)	1,037	934	1,000	960	994	1,001	966	1,015	1,038	1,011	1,167	992	920	2,971	2,614
508	Machinery, equipment, and supplies	8,880	9,322	10,177	9,664	9,443	10,062	9,745	9,222	10,113	9,394	10,317	9,324	9,026	28,379	25,196
5082	Construction and mining machinery and equipment	958	1,098	1,213	1,189	1,360	1,351	1,260	1,258	1,366	1,268	1,323	1,144	1,019	3,269	3,012
5084,5	Industrial machinery, equipment, and supplies	3,924	4,061	4,247	3,940	3,615	4,004	3,964	3,613	4,039	3,634	4,078	4,020	3,936	12,233	10,794
5086	Professional equipment, supplies	982	970	1,013	1,048	972	1,055	996	996	1,092	972	1,121	948	939	2,965	2,868
5093	Scrap and waste materials	1,489	1,571	1,716	1,501	1,492	1,518	1,468	1,395	1,534	1,328	1,456	1,428	1,382	4,776	3,818
51	Nondurable goods, total	43,525	41,797	44,324	39,630	37,339	41,091	39,914	39,787	41,519	39,597	43,885	44,368	42,881	129,645	108,665
	Total (excluding farm-product raw materials)	34,288	33,323	35,414	31,509	30,159	32,991	32,030	31,182	33,342	31,784	34,221	34,643	33,670	103,024	86,773
511	Paper and paper products	1,837	1,774	1,783	1,688	1,551	1,692	1,651	1,585	1,777	1,599	1,821	1,699	1,639	5,393	4,707
5111,3	Printing, writing, industrial, and personal service paper	1,330	1,290	1,326	1,272	1,184	1,272	1,252	1,192	1,327	1,202	1,368	1,269	1,218	3,945	3,504
5111	Printing and writing paper	665	668	661	636	593	619	609	594	648	584	685	623	601	1,994	1,752
5113	Industrial and personal service paper	665	622	665	636	591	653	642	599	679	618	683	646	617	1,952	1,752
512	Drugs, drug proprietaries, and druggists' sundries	1,112	1,045	1,076	1,079	1,038	1,102	1,039	1,066	1,099	1,030	1,178	1,092	1,054	3,233	2,939
5122	Drugs, drug proprietaries, and druggists' sundries	1,112	1,045	1,076	1,073	1,038	1,102	1,039	1,066	1,099	1,030	1,178	1,092	1,054	3,233	2,939
5122 pt.	General-line drugs	466	460	484	477	472	509	455	443	477	443	487	448	456	1,409	1,356
513	Apparel, piece goods, and notions[4]	2,444	2,412	2,591	2,326	2,107	2,127	2,102	2,389	2,629	2,563	2,704	2,468	2,032	7,447	6,416
514	Groceries and related products	11,892	11,244	12,018	11,954	11,281	11,988	11,721	11,500	11,835	11,122	12,140	11,919	11,673	35,154	33,457
5141	Groceries, general-line	4,395	4,190	4,538	4,173	3,989	4,241	4,247	4,245	4,429	4,137	4,597	4,511	4,289	13,123	11,795
5144	Poultry and poultry products	555	531	561	559	554	592	544	563	569	530	561	603	589	1,647	1,566
5145	Confectionery	198	187	206	209	196	212	199	192	214	214	275	243	207	591	570
5147	Meats and meat products	1,867	1,741	1,823	2,198	2,029	2,076	1,908	1,872	1,959	1,770	1,925	1,768	1,811	5,431	6,148
5148	Fresh fruits and vegetables	997	1,005	1,121	1,203	1,086	1,202	1,242	1,063	1,030	917	997	1,024	1,002	3,122	3,184
515	Farm-product raw materials	9,237	8,474	8,910	8,121	7,180	8,100	7,884	8,605	8,177	7,813	9,664	9,725	9,211	26,621	21,892
5153	Grain	7,590	6,939	7,465	6,740	5,886	6,766	6,730	7,516	7,090	6,594	8,328	8,347	7,630	21,994	17,787
517	Petroleum and petroleum products	8,219	8,001	7,814	5,282	5,221	6,078	5,851	5,863	6,355	6,354	7,171	7,602	7,677	24,035	15,127
5171	Petroleum bulk stations and terminals	4,510	4,339	4,174	2,997	2,857	3,306	3,170	3,121	3,504	3,456	3,960	4,050	4,193	13,023	8,520
518	Beer, wine, and distilled alcoholic beverages	2,242	2,254	2,447	2,490	2,453	2,726	2,704	2,636	2,844	2,387	2,733	2,821	2,882	6,944	6,462
5181	Beer and ale	1,087	1,156	1,219	1,223	1,258	1,513	1,523	1,507	1,590	1,229	1,299	1,267	1,230	3,462	3,175
5182	Wine and distilled alcoholic beverages[5]	1,155	1,098	1,228	1,267	1,195	1,214	1,181	1,129	1,254	1,158	1,435	1,554	1,652	3,481	3,286
519	Miscellaneous nondurable goods	5,299	5,393	6,508	5,528	5,406	6,001	5,801	5,105	5,468	5,570	5,296	5,643	5,238	17,200	14,439
5194	Tobacco and tobacco products	835	771	814	852	848	891	863	881	896	795	902	861	843	2,420	2,424

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.

[P]Preliminary estimates. See p. 15, Sample Design and Estimation Procedures. (S) Does not publication standards because of extreme variability.

[1]The furniture, household and office group is subject to a sampling variability of 8 percent for March 1980.
[2]The construction materials, n.e.c. group is subject to a sampling variability of 8 percent for March 1980.
[3]The electrical appliances, TV, and radio sets is subject to a sampling variability of 9 percent for March 1980.
[4]The apparel, piece goods, and notions is subject to a sampling variability of 12 percent for March 1980.
[5]The wine and distilled alcoholic beverages is subject to a sampling variability of 9 percent for March 1980.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980			1979									
		Jan.	Feb.	Mar.[P]	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	91,477	92,854	92,629	85,436	85,345	85,199	84,942	86,829	86,890	87,061	88,839	89,632	89,997
	Total (excluding farm-product raw materials)	83,618	85,076	85,644	79,311	79,626	80,246	79,964	81,487	81,570	81,563	82,485	82,184	82,382
50	Durable goods, total	57,268	58,463	58,512	54,381	54,731	55,566	55,523	56,602	56,803	56,361	56,620	56,241	56,470
501	Motor vehicles and automotive parts and supplies	9,893	10,167	10,043	9,797	9,663	9,631	9,207	9,672	9,446	9,240	9,546	9,652	9,723
5013,4	Automotive parts and supplies, tires and tubes	6,182	6,130	6,105	5,781	5,809	5,970	5,753	6,051	6,117	5,933	6,025	6,084	6,030
5013	Automotive parts and supplies	5,191	5,124	5,089	4,870	4,917	5,035	4,818	5,082	5,188	5,018	5,121	5,208	5,074
502	Furniture and home furnishings	1,807	1,816	1,795	1,872	1,837	1,815	1,903	1,847	1,839	1,861	1,909	1,796	1,794
5023	Home furnishings	1,265	1,271	1,264	1,355	1,332	1,309	1,361	1,347	1,339	1,328	1,381	1,291	1,247
503	Lumber and other construction materials	3,378	3,423	3,555	3,337	3,404	3,468	3,496	3,526	3,442	3,382	3,383	3,335	3,353
5031	Lumber, plywood, and millwork	2,103	2,169	2,260	2,116	2,152	2,244	2,204	2,220	2,204	2,129	2,149	2,112	2,090
505	Metals and minerals, except petroleum	6,497	(S)	(S)	5,285	5,254	5,528	5,582	5,763	6,319	6,139	6,376	6,363	6,307
5051 pt.	Ferrous metals service centers and offices	4,852	4,766	4,779	4,365	4,239	4,455	4,586	4,655	4,947	4,953	4,794	4,891	4,897
5051 pt.	Ferrous metals service centers	3,893	3,851	3,902	3,433	3,269	3,506	3,643	3,665	3,956	4,010	3,843	3,999	4,019
506	Electrical goods	6,092	6,140	5,960	5,706	5,737	5,976	6,040	6,223	6,254	6,061	6,082	6,098	5,931
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,894	3,051	3,068	2,676	2,730	2,946	2,838	2,840	2,841	2,771	2,785	2,945	2,820
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3,199	3,089	2,891	3,030	3,007	3,030	3,202	3,383	3,274	3,290	3,296	3,153	3,112
507	Hardware, plumbing, heating equipment, and supplies	4,692	4,883	4,986	4,497	4,719	4,590	4,631	4,628	4,535	4,488	4,537	4,456	4,575
5072	Hardware	1,806	1,888	1,902	1,539	1,598	1,622	1,643	1,659	1,657	1,692	1,698	1,692	1,758
5074	Plumbing and heating equipment and supplies (hydronics)	1,836	1,904	2,005	1,899	1,985	1,848	1,896	1,902	1,828	1,783	1,823	1,777	1,804
508	Machinery, equipment, and supplies	19,475	20,476	20,629	18,807	18,924	19,370	19,465	19,576	19,778	19,974	19,555	19,461	19,554
5082	Construction and mining machinery and equipment	4,038	4,279	4,312	4,334	4,280	4,430	4,512	4,488	4,504	4,573	4,339	4,288	4,182
5084,5	Industrial machinery, equipment, and supplies	6,375	6,588	6,712	6,015	6,030	6,073	6,006	5,979	6,092	6,201	6,251	6,163	6,354
51	Nondurable goods, total	34,209	34,390	34,117	31,055	30,614	29,633	29,419	30,227	30,087	30,700	32,219	33,391	33,527
	Total (excluding farm-product raw materials)	26,350	26,615	27,132	24,930	24,895	24,680	24,441	24,885	24,767	25,202	25,865	25,943	25,912
511	Paper and paper products	1,670	1,694	1,695	1,547	1,501	1,542	1,616	1,608	1,604	1,663	1,597	1,657	1,695
5111,3	Printing, writing, industrial, and personal service paper	1,137	1,144	1,158	1,053	1,018	1,050	1,090	1,079	1,055	1,109	1,082	1,090	1,141
5111	Printing and writing paper	473	479	487	421	426	431	447	442	427	440	439	444	474
5113	Industrial and personal service paper	664	665	671	632	592	619	644	637	629	669	644	645	667
512	Drugs, drug proprietaries, and druggists' sundries	1,560	1,539	1,587	1,535	1,617	1,563	1,567	1,609	1,570	1,670	1,678	1,580	1,573
514	Groceries and related products	6,775	6,877	6,931	6,719	6,644	6,644	6,686	6,674	6,633	6,793	6,982	6,933	6,984
5141	Groceries, general-line	2,884	2,952	3,007	2,895	2,846	2,785	2,802	2,899	2,857	2,911	3,046	3,044	2,957
517	Petroleum and petroleum products[1]	3,298	3,424	3,377	2,224	2,177	2,401	2,263	2,492	2,618	2,874	2,918	3,062	3,135
518	Beer, wine, and distilled alcoholic beverages	2,742	2,652	2,830	2,684	2,806	2,760	2,732	2,693	2,539	2,538	2,781	2,770	2,597
5181	Beer and ale	916	917	1,101	1,040	1,085	1,089	1,072	1,030	923	903	934	922	879
5182	Wines and distilled alcoholic beverages[2]	1,825	1,735	1,729	1,645	1,721	1,671	1,660	1,663	1,616	1,634	1,847	1,848	1,718

See footnotes at end of table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980			1979									
		Jan.	Feb.	Mar.[P]	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	119	123	115	115	121	111	114	118	111	119	109	113	119
	Total (excluding farm-product raw materials)	123	126	119	120	125	117	120	125	116	125	114	118	124
50	Durable goods, total	171	172	160	157	164	156	161	168	153	168	149	162	174
501	Motor vehicles and automotive parts and supplies	154	154	148	142	141	137	145	155	139	164	141	150	158
5013,4	Automotive parts and supplies, tires and tubes	196	198	184	167	173	169	173	196	172	193	170	184	203
5013	Automotive parts and supplies	192	191	179	168	175	170	175	195	172	192	172	185	202
502	Furniture and home furnishings	145	153	138	156	163	150	161	165	148	156	137	142	158
5023	Home furnishings	169	173	155	173	186	171	178	187	169	171	148	155	177
503	Lumber and other construction materials	131	142	138	111	113	103	102	103	92	103	93	111	132
5031	Lumber, plywood, and millwork	123	134	131	103	104	99	98	99	88	101	92	111	132
505	Metals and minerals, except petroleum	149	(S)	(S)	137	159	141	153	151	151	162	152	157	158
5051 pt.	Ferrous metals service centers and offices	162	167	151	149	172	151	166	162	162	177	161	172	178
5051 pt.	Ferrous metals service centers	177	187	173	161	182	162	177	179	179	203	174	188	204
506	Electrical goods	163	157	149	160	175	160	160	168	150	151	138	154	157
5063	Electrical apparatus and equipment, wiring supplies and construction meterials	157	150	151	148	156	142	141	143	132	133	129	150	147
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	168	165	148	173	194	181	180	197	163	170	148	158	167
507	Hardware, plumbing, heating equipment, and supplies	190	217	204	194	199	177	188	183	169	187	162	185	209
5072	Hardware	193	213	201	180	188	166	187	186	165	193	166	185	210
5074	Plumbing and heating equipment and supplies (hydronics)	177	204	201	198	200	185	196	188	176	176	156	179	196
508	Machinery, equipment, and supplies	219	220	203	195	200	192	200	212	196	213	190	209	217
5082	Construction and mining machinery and equipment	422	390	356	364	315	328	358	357	330	361	328	375	411
5084,5	Industrial machinery, equipment, and supplies	162	162	158	153	167	152	152	165	151	171	153	153	161
51	Nondurable goods, total	79	82	77	78	82	72	74	76	72	78	73	75	78
	Total (excluding farm-product raw materials)	77	80	77	79	83	75	76	80	74	79	76	75	77
511	Paper and paper products	91	96	95	92	97	91	98	101	90	104	88	98	103
5111,3	Printing, writing, industrial, and personal service paper	85	89	87	83	86	83	87	90	79	92	79	86	94
5111	Printing and writing paper	71	72	74	66	72	70	73	74	66	75	64	71	79
5113	Industrial and personal service paper	100	107	101	99	100	95	100	106	93	108	94	100	108
512	Drugs, drug proprietaries, and druggists' sundries	140	147	147	143	156	142	151	151	143	162	142	145	149
514	Groceries and related products	57	61	58	56	59	55	57	58	56	61	58	58	60
5141	Groceries, general-line	66	70	66	69	71	66	66	68	64	70	66	67	69
517	Petroleum and petroleum products	40	43	43	42	42	40	39	43	41	45	41	40	41
518	Beer, wine, and distilled alcoholic beverages	122	118	116	108	114	101	101	102	89	106	102	98	90
5181	Beer and ale	84	79	90	85	86	72	70	68	58	74	72	73	71
5182	Wines and distilled alcoholic beverages	158	158	141	130	144	138	141	147	129	141	129	119	104

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.

[P]Preliminary estime. See p. 15, Sample Design and Estimation Procedures. (S) Does not meet publication standards because of extreme variability.

[1]The petroleum and petroleum products group is subject to a sampling variability of 8 percent for March 1980.
[2]The wine and distilled alcoholic beverages is subject to a sampling variability of 9 percent for March 1980.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980			1979								
		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	81,178	79,689	79,259	70,657	70,402	72,338	72,629	74,778	75,588	76,495	77,489	78,407	78,947
	Total (excluding farm-product raw materials)	72,060	70,862	70,955	63,288	63,171	64,550	64,657	66,015	66,729	67,586	68,363	69,427	69,800
50	Durable goods, total	36,848	36,838	36,218	33,319	32,713	33,177	33,078	34,103	34,509	34,079	35,267	35,171	35,407
501	Motor vehicles and automotive parts and supplies	6,745	6,984	6,530	6,443	6,274	6,250	6,143	6,160	6,500	6,183	6,737	6,835	6,865
502	Furniture and home furnishings	1,352	1,273	1,306	1,166	1,151	1,180	1,156	1,205	1,193	1,182	1,201	1,183	1,213
503	Lumber and other construction materials	3,188	2,870	2,738	3,049	3,101	3,096	3,131	3,200	3,198	3,182	3,152	2,976	3,009
505	Metals and minerals, except petroleum	4,485	(S)	(S)	3,733	3,221	3,630	3,598	3,979	3,850	3,683	4,079	4,194	4,469
506	Electrical goods	4,115	4,267	4,099	3,552	3,362	3,649	3,676	3,731	3,913	4,069	3,931	3,869	3,819
507	Hardware, plumbing, heating equipment, and supplies	2,675	2,531	2,561	2,381	2,360	2,391	2,362	2,418	2,466	2,428	2,506	2,444	2,438
508	Machinery, equipment, and supplies	9,791	10,188	9,958	9,083	9,195	9,223	9,281	9,488	9,613	9,451	9,633	9,612	9,716
51	Nondurable goods, total	44,330	42,851	43,041	37,338	37,689	39,161	39,551	40,675	41,079	42,416	42,222	43,236	43,540
	Total (excluding farm-product raw materials)	35,212	34,024	34,737	29,969	30,458	31,373	31,579	31,912	32,220	33,507	33,096	34,256	34,393
511	Paper and paper products	1,844	1,827	1,778	1,615	1,631	1,627	1,627	1,648	1,664	1,652	1,678	1,711	1,725
512	Drugs, drug proprietaries, and druggists' sundries	1,105	1,100	1,072	1,034	1,050	1,080	1,076	1,084	1,061	1,060	1,067	1,077	1,092
513	Apparel, piece goods, and notions	2,570	2,582	2,560	2,243	2,270	2,067	2,220	2,494	2,274	2,441	2,372	2,413	2,320
514	Groceries and related products	12,049	11,861	11,946	11,483	11,418	11,309	11,480	11,546	11,402	11,634	11,684	11,883	12,084
515	Farm-product raw materials[1]	9,118	8,827	8,304	7,369	7,231	7,788	7,972	8,763	8,859	8,909	9,126	8,980	9,147
517	Petroleum and petroleum products	8,122	7,422	7,594	5,021	5,322	6,139	6,020	5,940	6,355	6,959	7,142	7,331	7,497
518	Beer, wine, and distilled alcoholic beverages	2,724	2,633	2,598	2,520	2,577	2,548	2,476	2,597	2,621	2,556	2,620	2,649	2,582
519	Miscellaneous nondurable goods	5,480	5,303	5,998	4,909	5,081	5,441	5,567	5,555	5,626	5,976	5,426	5,794	5,502
	Inventories ADJUSTED for seasonal variations													
	Merchant wholesalers, total	91,085	91,508	90,598	83,558	84,632	84,904	85,406	87,662	88,474	88,499	89,146	89,324	89,920
	Total (excluding farm-product raw materials)	84,486	84,884	84,623	78,287	79,180	79,388	79,394	81,026	81,636	81,736	82,689	82,870	83,372
50	Durable goods, total	58,146	58,293	57,989	53,894	54,377	54,772	54,591	55,861	56,529	56,479	57,242	57,129	57,463
501	Motor vehicles and automotive parts and supplies	9,756	9,564	9,853	9,614	9,625	9,479	9,244	9,740	9,708	9,595	9,731	9,759	9,762
502	Furniture and home furnishings	1,829	1,832	1,803	1,880	1,844	1,795	1,851	1,836	1,824	1,828	1,911	1,812	1,844
503	Lumber and other construction materials	3,450	3,454	3,449	3,237	3,311	3,364	3,417	3,453	3,445	3,420	3,459	3,470	3,443
505	Metals and minerals, except petroleum	6,609	(S)	(S)	5,296	5,302	5,452	5,532	5,617	6,053	6,060	6,546	6,434	6,397
506	Electrical goods	6,306	6,369	6,031	5,775	5,772	5,893	5,898	6,125	6,125	5,977	6,034	6,074	5,985
507	Hardware, plumbing, heating equipment, and supplies	4,832	4,952	4,893	4,413	4,469	4,439	4,492	4,520	4,540	4,584	4,611	4,647	4,761
508	Machinery, equipment, and supplies	19,752	20,354	20,304	18,511	18,849	19,121	19,102	19,498	19,818	19,994	19,833	19,777	19,791
51	Nondurable goods, total	32,939	33,215	32,609	29,664	30,255	30,132	30,815	31,801	31,945	32,020	31,904	32,195	32,457
	Total (excluding farm-product raw materials)	26,340	26,591	26,634	24,393	24,803	24,616	24,803	25,165	25,107	25,257	25,447	25,741	25,909
511	Paper and paper products	1,720	1,727	1,705	1,556	1,488	1,537	1,575	1,610	1,615	1,645	1,587	1,655	1,680
512	Drugs, drug proprietaries, and druggists' sundries	1,640	1,598	1,585	1,533	1,604	1,582	1,558	1,607	1,565	1,607	1,594	1,567	1,599
514	Groceries and related products	6,871	6,884	6,802	6,594	6,604	6,671	6,760	6,783	6,775	6,800	6,818	6,871	6,908
517	Petroleum and petroleum products	3,230	3,480	3,380	2,233	2,306	2,440	2,426	2,574	2,590	2,753	2,795	2,936	3,041
518	Beer, wine, and distilled alcoholic beverages	2,839	2,809	2,847	2,703	2,767	2,677	2,655	2,664	2,609	2,553	2,626	2,648	2,769
	Stock-sales ratios based on ADJUSTED data													
	Merchant wholesalers, total	112	115	114	118	120	117	118	117	117	116	115	114	114
	Total (excluding farm-product raw materials)	117	120	119	124	125	123	123	123	122	121	121	119	119
50	Durable goods, total	158	158	160	162	166	165	165	164	164	166	162	162	162
501	Motor vehicles and automotive parts and supplies	145	137	151	149	153	152	150	158	149	155	144	143	142
502	Furniture and home furnishings	135	144	138	161	160	152	160	152	153	155	159	153	152
503	Lumber and other construction materials	108	120	126	106	107	109	109	108	108	107	110	117	114
505	Metals and minerals, except petroleum	147	(S)	(S)	142	165	150	154	141	157	165	160	153	143
506	Electrical goods	153	149	147	163	172	161	160	164	157	147	153	157	157
507	Hardware, plumbing, heating equipment, and supplies	181	196	191	185	189	186	190	187	184	189	184	190	195
508	Machinery, equipment, and supplies	202	200	204	204	205	207	206	206	206	212	206	206	204
51	Nondurable goods, total	74	78	76	79	80	77	78	78	78	75	76	74	75
	Total (excluding farm-product raw materials)	75	78	77	81	81	78	79	79	78	75	77	75	75
511	Paper and paper products	93	95	96	96	91	94	97	98	97	100	95	97	97
512	Drugs, drug proprietaries, and druggists' sundries	148	145	148	148	153	146	145	148	148	152	149	145	146
514	Groceries and related products	57	58	57	57	58	59	59	59	59	58	58	58	57
517	Petroleum and petroleum products	40	47	45	44	43	40	40	43	41	40	39	40	41
518	Beer, wine, and distilled alcoholic beverages	104	107	110	107	107	105	107	103	100	100	100	100	107

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.

[P]Preliminary estimates. See p. 15, Sample Design and Estimation Procedures. (S) Does not meet publication standards because of extreme variability.

[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. 1980-Mar. 1980 from--			
	Oct. 1979-Dec. 1979 (3 months ago)	July 1979-Sept. 1979 (6 months ago)	April 1979-June 1979 (9 months ago)	Jan. 1979 Mar. 1979 (12 months ago)
Merchant wholesalers, total.....	+2	+6	+11	+17
Durable goods, total.....	+4	+7	+11	+14
Nondurable goods, total..	+1	+5	+12	+19

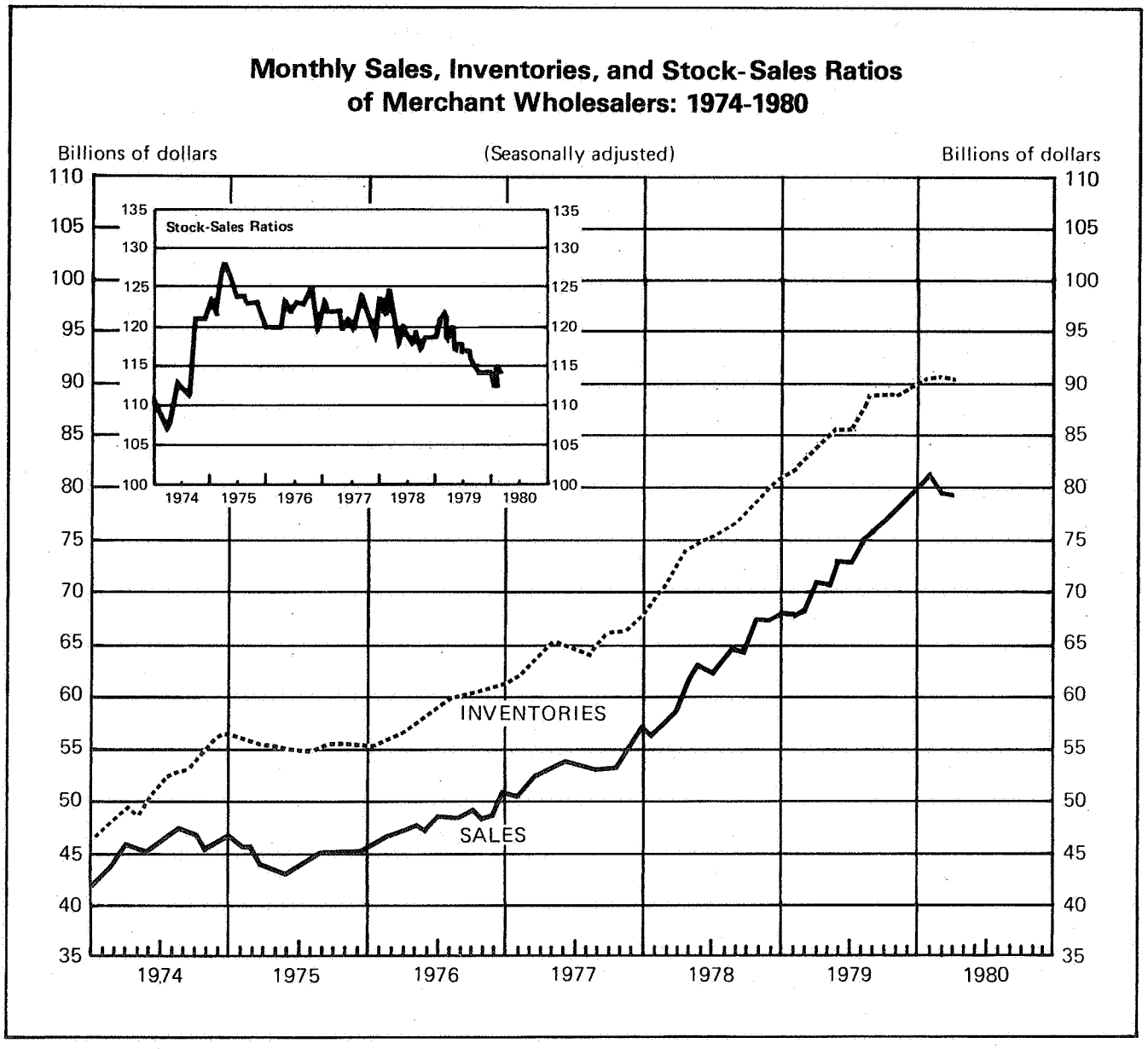


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: March 1980

1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		March 1980 from February 1980	March 1980 from March 1979	3 months 1980 from 3 months 1979	March 1980 from February 1980	March 1980 from March 1979	March 1980 from February 1980	March 1980 from March 1979	March 1980 from February 1980	March 1980 from March 1979
	Merchant wholesalers, total	+7	+9	+17	0	+8	-1	+12	-1	+8
	Total (excluding farm-product raw materials)	+7	+9	+16	+1	+8	0	+12	0	+8
50	Durable goods, total	+7	+5	+14	0	+8	-2	+9	-1	+8
501	Motor vehicles and automotive parts and supplies	+3	-2	+9	-1	+3	-7	+1	+3	+2
5012	Automobiles and other motor vehicles	-1	0	+20	-2	-2	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	+7	-4	-1	0	+6	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	+6	-2	+2	-1	+5	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	+10	+9	+17	-1	-4	+3	+12	-2	-4
5021	Furniture--household and office	+8	+18	+29	-2	+3	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	+12	+13	+23	-5	-2	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	+6	+20	+32	-1	+6	(*)	(*)	(*)	(*)
5023	Home furnishings	+11	+4	+11	-1	-7	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	+7	-14	-1	+4	+7	-5	-10	0	+7
5031	Lumber, plywood, and millwork	+6	-16	-4	+4	+7	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c.	+8	-11	+7	+3	+6	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	+9	+7	+17	0	+5	-7	+7	-2	+5
505	Metals and minerals, except petroleum	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
5051 pt.	Ferrous metals service centers and offices	+11	+8	+15	0	+9	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	+9	+6	+18	+1	+14	(*)	(*)	(*)	(*)
5051 pt.	Nonferrous metals service centers and offices	(S)	(S)	(S)	(S)	(S)	(*)	(*)	(*)	(*)
506	Electrical goods	+2	+12	+21	-3	+4	-4	+15	-5	+4
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	0	+13	+19	+1	+15	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+4	+12	+22	-6	-5	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	+8	+4	+14	-3	-8	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	+8	+5	+11	+2	+11	+1	+8	-1	+11
5072	Hardware	+7	+11	+15	+1	+24	(*)	(*)	(*)	(*)
5074	Plumbing and heating equipment and supplies (hydronics)	+7	+4	+14	+5	+6	(*)	(*)	(*)	(*)
5075	Warm air heating and air conditioning equipment and supplies	+22	-1	0	-2	-4	(*)	(*)	(*)	(*)
508	Machinery, equipment, and supplies	+9	+5	+13	+1	+10	-2	+10	0	+10
5081	Commercial machines and equipment	+8	+3	+10	-10	-6	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	+10	+2	+9	+1	+1	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	+24	+6	+20	+1	+15	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	+5	+8	+13	+2	+12	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	+4	-3	+3	0	+8	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	+9	+14	+25	-4	-3	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	+12	+7	+16	-3	-7	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	+6	+27	+41	-6	+8	(*)	(*)	(*)	(*)
51	Nondurable goods, total	+6	+12	+19	-1	+10	0	+15	-2	+10
	Total (excluding farm-product raw materials)	+6	+12	+19	+2	+9	+2	+16	0	+9
511	Paper and paper products	+1	+6	+15	0	+10	-3	+10	-1	+10
5111,3	Printing, writing, industrial, and personal service paper	+3	+4	+13	+1	+10	(*)	(*)	(*)	(*)
5111	Printing, and writing paper	-1	+4	+14	+2	+16	(*)	(*)	(*)	(*)
5113	Industrial and personal service paper	+7	+5	+11	+1	+6	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	+3	0	+10	+3	+3	-3	+4	-1	+3
5122	Drugs, drug proprietaries, and druggists' sundries	+3	0	+10	+3	+3	(*)	(*)	(*)	(*)
5122 pt.	General-line drugs	+5	+1	+4	+2	-8	(*)	(*)	(*)	(*)
514	Groceries and related products	+7	+1	+5	+1	+3	+1	+4	-1	+3
5141	Groceries, general-line	+8	+9	+11	+2	+4	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	+8	+8	+9	+1	+2	(*)	(*)	(*)	(*)
5141 pt.	Retailer cooperatives	+12	+15	+13	+4	+4	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	+5	+4	+12	+1	+6	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	+5	+4	+10	-1	+10	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	+6	0	+5	+7	+3	(*)	(*)	(*)	(*)
5145	Confectionery	+10	-1	+4	-2	+5	(*)	(*)	(*)	(*)
5147	Meats and meat products	+5	-17	-12	+2	-16	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	+12	-7	-2	+1	-6	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	+5	+10	+22	-10	+14	-6	+13	-10	+13
5152	Cotton	-1	+30	+31	-17	+35	(*)	(*)	(*)	(*)
5153	Grain	+8	+11	+24	-8	+12	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	-2	+48	+59	-1	+52	+2	+51	-3	+51
5171	Petroleum bulk stations and terminals	-4	+39	+53	-6	+48	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	+9	-2	+7	+7	+5	-1	+3	+1	+5
5181	Beer and ale	+5	0	+9	+20	+6	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	+12	-3	+6	0	+5	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	+21	+18	+19	+5	+4	+13	+22	+2	+3
5191	Farm supplies	+16	+16	+23	+6	+7	(*)	(*)	(*)	(*)
5194	Tobacco and tobacco products	+5	-5	0	-1	+2	(*)	(*)	(*)	(*)
5198	Paints, varnishes, and supplies	+7	+12	+19	+2	(S)	(*)	(*)	(*)	(*)
5199 pt.	Books, periodicals, newspapers	+8	-6	0	+2	-3	(*)	(*)	(*)	(*)

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

[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
3 Months 1980 Compared With 3 Months 1979

(Percent changes based on UNADJUSTED data)

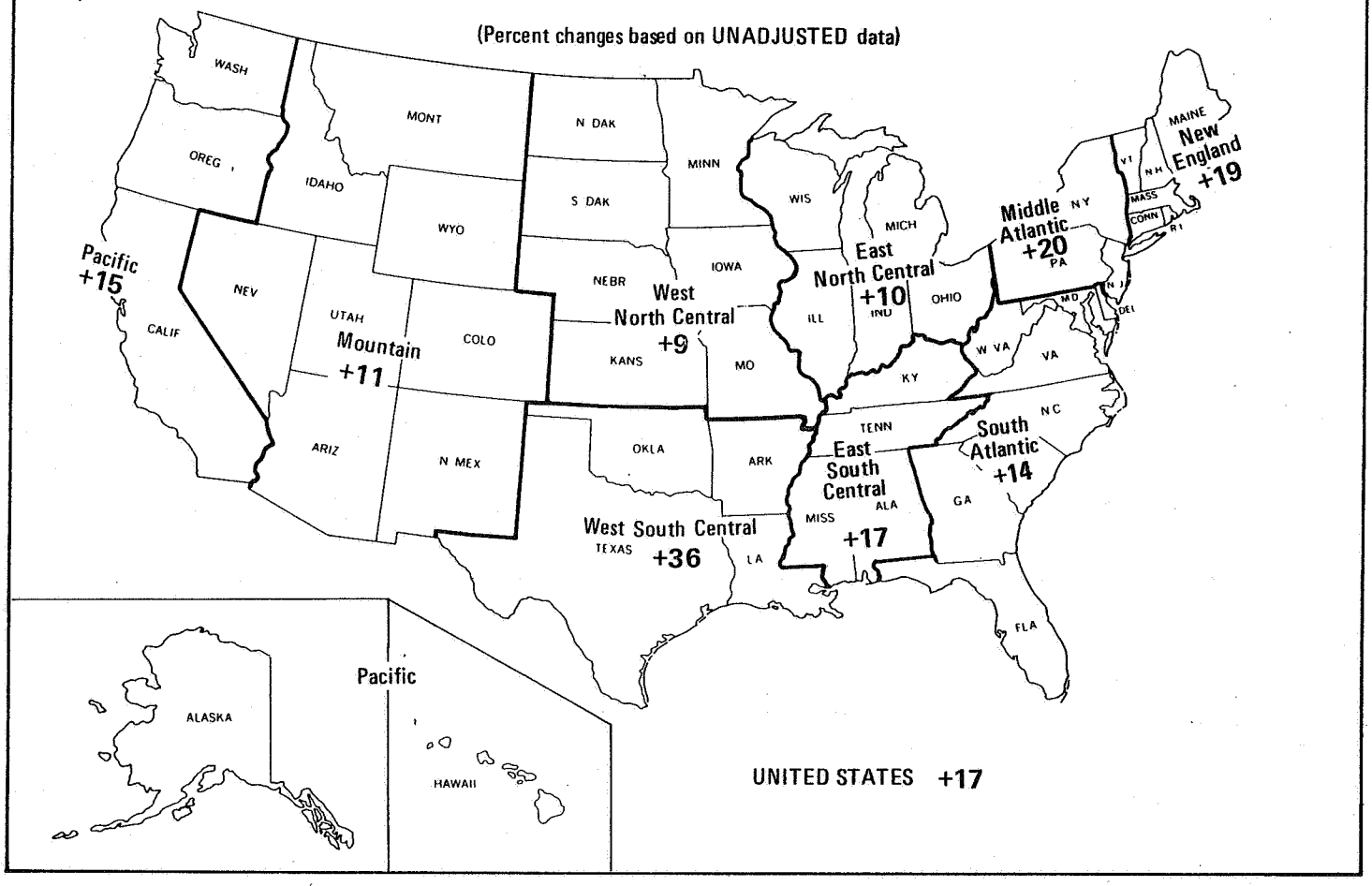


Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1980 and 1979

(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]	1980			1979										Total 3 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.[p]	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1980	1979	Range[2]	Median
		1979																
	Merchant wholesalers, total	77,104	75,746	80,814	74,319	70,768	76,814	74,361	73,537	78,567	73,213	81,820	79,079	75,396	233,663	199,777	1.4-1.7	1.5
	New England	4,140	4,001	4,351	3,835	3,652	3,915	3,782	3,572	3,981	3,741	4,167	4,126	3,930	12,492	10,517	4-6	5
	Middle Atlantic	17,749	17,129	18,989	16,692	15,218	16,416	16,288	16,256	17,786	17,136	18,350	18,319	17,391	53,866	44,990	3-4	4
	East North Central	12,357	11,872	12,568	12,314	11,906	13,356	12,661	12,182	12,979	11,735	13,552	12,864	11,693	36,797	33,341	2-3	2
	West North Central	7,772	7,458	7,833	7,834	7,506	8,614	8,005	8,385	8,510	7,921	9,106	8,491	7,874	23,062	21,117	2-3	3
	South Atlantic	8,344	8,137	8,561	8,329	7,929	8,401	8,014	7,720	8,067	7,558	8,391	7,972	7,988	25,042	21,973	2-3	2
	East South Central	3,510	3,583	3,758	3,505	3,461	3,557	3,372	3,292	3,534	3,261	3,791	3,505	3,443	10,850	9,267	3-4	4
	West South Central	9,307	9,426	9,965	7,785	7,673	8,443	8,314	8,248	8,755	8,434	9,347	9,351	9,222	28,697	21,136	4-6	5
	Mountain	2,705	2,703	2,926	2,904	2,659	2,786	2,851	2,704	2,830	2,760	2,851	2,743	2,834	8,334	7,495	4-6	6
	Pacific	11,221	11,438	11,862	11,121	10,765	11,325	11,077	11,178	12,125	10,668	12,264	11,710	11,021	34,521	29,942	2-3	3
50	Durable goods, total	33,579	33,949	36,490	34,689	33,429	35,723	34,447	33,705	37,048	33,616	37,935	34,711	32,515	104,018	91,111	1.6-2.6	1.8
	Middle Atlantic	7,389	7,347	8,003	7,165	6,601	7,191	6,961	6,769	7,538	6,989	8,083	7,477	6,697	22,739	18,993	6-8	6
	East North Central	5,486	5,572	5,891	6,057	5,863	6,467	6,023	5,801	6,440	5,833	6,439	5,869	5,248	16,948	15,851	3-4	3
	West North Central	2,663	2,663	2,909	2,718	2,746	3,009	2,778	2,873	3,209	2,900	3,171	2,851	2,682	8,234	7,084	5-7	5
	South Atlantic	3,991	3,815	4,163	4,246	4,111	4,269	4,172	4,074	4,173	3,796	4,374	3,934	3,868	11,969	10,971	2-4	3
	West South Central	3,747	3,940	4,200	3,649	3,637	3,863	3,900	3,702	3,970	3,662	4,174	3,870	3,701	11,887	9,736	4-5	4
	Mountain	1,205	1,185	1,318	1,408	1,309	1,355	1,358	1,322	1,356	1,280	1,384	1,202	1,225	3,707	3,527	7-9	8
	Pacific	6,100	6,438	6,798	6,330	6,173	6,433	6,265	6,388	7,143	6,069	6,993	6,576	6,049	19,335	16,857	4-5	4
51	Nondurable goods, total	43,525	41,797	44,324	39,630	37,339	41,091	39,914	39,787	41,519	39,597	43,885	44,368	42,881	129,645	108,665	1.6-2.0	1.8
	New England	2,579	2,498	2,684	2,335	2,200	2,377	2,343	2,225	2,453	2,252	2,542	2,635	2,485	7,761	6,567	6-7	6
	Middle Atlantic	10,360	9,782	10,986	9,527	8,616	9,226	9,327	9,487	10,247	10,147	10,267	10,842	10,393	31,127	25,997	3-4	4
	East North Central	6,872	6,301	6,677	6,256	6,042	6,888	6,638	6,380	6,539	5,902	7,113	6,994	6,445	19,849	17,490	3-4	4
	West North Central	5,109	4,795	4,924	5,115	4,760	5,606	5,227	5,512	5,301	5,021	5,935	5,640	5,192	14,828	14,034	3-4	4
	South Atlantic	4,353	4,322	4,398	4,084	3,818	4,132	3,842	3,646	3,894	3,762	4,017	4,038	4,119	13,073	11,001	3-5	4
	East South Central	2,071	2,095	2,217	1,889	1,925	1,959	1,820	1,817	1,844	1,664	2,100	2,064	2,146	6,383	5,123	3-5	4
	West South Central	5,560	5,486	5,764	4,136	4,036	4,580	4,414	4,546	4,785	4,771	5,173	5,481	5,520	16,810	11,400	6-10	8
	Pacific	5,121	5,000	5,065	4,790	4,591	4,893	4,812	4,790	4,982	4,599	5,270	5,134	4,972	15,186	13,084	4-5	5

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

[p]Preliminary estimate. See p. 15, 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 the period September 1979 thru February 1980.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: March 1980

(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			
		March 1980 from February 1980	March 1980 from March 1979	3 months 1980 from 3 months 1979	March 1980 from February 1980	March 1980 from March 1979		
		A	B	C	D	E	A	D
	Merchant wholesalers, total	+7	+9	+17	0	+8	0.4	0.2
	New England	+9	+13	+19	+1	+8	2.0	1.9
	Middle Atlantic	+11	+14	+20	0	+9	1.1	0.6
	East North Central	+6	+2	+10	0	+5	1.2	0.8
	West North Central	+5	0	+9	+1	+15	1.3	1.1
	South Atlantic	+5	+3	+14	+1	+7	1.6	1.0
	East South Central	+5	+7	+17	0	+11	1.7	1.4
	West South Central	+6	+28	+36	+1	+12	1.4	0.8
	Mountain	+8	+1	+11	+1	-5	2.4	1.3
	Pacific	+4	+7	+15	0	+13	1.2	0.5
50	Durable goods, total	+7	+5	+14	0	+8	0.6	0.3
	New England	+11	+11	+20	+2	+2	2.4	1.3
	Middle Atlantic	+9	+12	+20	+1	+11	1.7	1.0
	East North Central	+6	-3	+7	0	+7	1.9	1.0
	West North Central	+9	+7	+16	+3	+20	3.3	1.7
	South Atlantic	+9	-2	+9	+2	+3	1.9	1.2
	East South Central	+4	-5	+8	+3	+5	3.9	2.5
	West South Central	+7	+15	+22	+3	+11	2.1	1.2
	Mountain	+11	-6	+5	0	-6	2.9	1.7
	Pacific	+6	+7	+15	0	+13	1.9	0.7
51	Nondurable goods, total	+6	+12	+19	-1	+10	0.6	0.4
	New England	+7	+15	+18	+1	+14	1.9	2.7
	Middle Atlantic	+12	+15	+20	0	+7	1.9	0.9
	East North Central	+6	+7	+13	+1	+1	1.4	1.1
	West North Central	+3	-4	+6	-2	+10	1.6	1.4
	South Atlantic	+2	+8	+19	0	+15	2.4	1.8
	East South Central	+6	+17	+25	-4	+20	1.7	2.4
	West South Central	+5	+39	+47	-4	+16	2.2	1.3
	Mountain	+6	+8	+17	+1	0	3.2	1.2
	Pacific	+1	+6	+16	0	+13	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	+7	-4	-1	0	+6	2	1
	New England	+5	+26	+17	-1	+20	7	4
	Middle Atlantic	+14	-15	(S)	-4	+2	4	2
	East North Central	+1	-10	-6	0	+10	7	1
	West North Central	+4	-14	-6	+4	+5	5	2
	South Atlantic	+19	-9	-4	+2	-8	4	2
	East South Central	+4	-13	0	+3	+11	4	3
	West South Central	+9	-1	+6	-1	+13	5	2
	Mountain	+5	-23	-11	-2	(S)	7	3
	Pacific	+5	+12	+12	+4	+29	3	2
502	Furniture and home furnishings	+10	+9	+17	-1	-4	2	1
	Middle Atlantic	+16	+10	+15	+1	-10	4	2
	East North Central	+8	+4	+15	-3	-14	7	2
	West North Central	+1	+12	+31	+3	+24	5	4
	West South Central	+3	+17	+18	-1	+16	5	7
	Pacific	+5	+5	+22	-1	-1	5	3
503	Lumber and other construction materials	+7	-14	-1	+4	+7	2	1
	New England	+27	-2	+3	+19	+16	4	5
	Middle Atlantic	+10	-9	0	+6	0	4	2
	East North Central	+9	-18	-2	+6	+9	3	2
	West North Central	+8	-16	+3	+9	+19	7	7
	South Atlantic	+14	+7	+15	+8	+15	4	2
	East South Central	-3	-31	-15	+6	+2	4	3
	West South Central	-5	+5	+29	-1	+5	6	5
	Pacific	+2	-28	-14	-1	+7	5	1
5051 pt.	Ferrous metals service centers	+9	+6	+18	+1	+14	2	1
	New England	-1	-20	-2	+3	+4	6	2
	Middle Atlantic	+12	+9	+20	+2	+18	5	2
	East North Central	+5	-6	+8	+1	+14	5	2
	West North Central	+6	-16	+3	+3	+21	5	2
	South Atlantic	+7	(S)	-7	0	(S)	3	2
	East South Central	+10	+7	+15	+1	+5	4	4
	West South Central	+12	+23	+34	+8	+12	4	2
	Mountain	-6	+44	(S)	+3	-4	2	2
	Pacific	+16	+59	+48	+3	+79	2	3
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	0	+13	+19	+1	+15	2	1
	New England	+1	0	+5	0	+12	3	2
	Middle Atlantic	+3	+8	+17	0	+11	5	2
	East North Central	-1	+7	+20	-1	+19	3	2
	West North Central	+8	+16	+16	+3	+32	5	3
	South Atlantic	+11	+28	+24	+5	+14	3	2
	East South Central	-14	(S)	-5	+4	+5	3	5
	West South Central	-23	+28	+45	+2	+30	4	2
	Mountain	+4	+5	+8	+7	+12	4	2
	Pacific	+12	+28	+17	+1	+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: March 1980—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			
		March 1980 from February 1980	March 1980 from March 1979	3 months 1980 from 3 months 1979	March 1980 from February 1980	March 1980 from March 1979		
		A	B	C	D	E	A	D
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment.	+4	+12	+22	-6	-5	3	1
	Middle Atlantic	+8	+15	+20	-4	-9	3	2
	East North Central	+1	+15	+26	-15	-6	4	1
	West North Central	+14	+43	+57	-3	+27	4	4
	South Atlantic	+9	+8	+11	-1	-14	6	4
	West South Central	+3	+20	+44	-1	+5	4	4
	Mountain	+4	-32	-20	+1	-24	6	3
	Pacific	-2	-1	+18	-7	+2	3	2
5072	Hardware	+7	+11	+15	+1	+24	1	1
	New England	+9	+33	+18	+2	+44	6	3
	Middle Atlantic	-1	+5	+17	0	+11	6	2
	East North Central	+3	+16	+21	+3	+43	4	2
	West North Central	+14	+33	+20	+4	+29	3	3
	South Atlantic	+10	-3	+6	+1	+13	4	2
	East South Central	+7	-4	+12	+1	+5	4	1
	Pacific	+10	+6	+12	+2	+24	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	+7	+4	+14	+5	+6	2	1
	Middle Atlantic	+6	+1	+13	+8	+2	6	3
	East North Central	+7	-4	-1	+2	-14	3	3
	South Atlantic	0	-2	+10	+12	+21	3	2
	Mountain	+14	+5	+18	+3	+15	7	4
	Pacific	+10	+12	+17	+8	+20	5	4
5084,5	Industrial machinery, equipment, and supplies	+5	+8	+13	+2	+12	2	1
	Middle Atlantic	-4	-7	+9	-4	0	7	2
	East North Central	+1	+2	+9	+2	+26	3	2
	West South Central	+12	+27	+20	+10	+28	4	3
	Pacific	+11	+17	+14	0	+2	5	2
512	Drugs, drug proprietaries, and druggists' sundries	+3	0	+10	+3	+3	1	1
	New England	+1	-6	+13	0	+12	5	3
	Middle Atlantic	-2	+5	+12	+7	-8	3	2
	East North Central	+10	-10	+3	-4	-18	6	3
	West North Central	+1	+21	+24	+3	+4	2	2
	South Atlantic	+5	-1	+6	+2	+7	6	5
	East South Central	+5	+2	+5	+10	+24	6	5
	West South Central	+5	+30	+27	+3	+30	3	2
	Mountain	+2	+19	+20	-1	+17	3	2
	Pacific	+2	-15	+4	+6	-20	3	3
5141	Groceries, general-line	+8	+9	+11	+2	+4	1	1
	New England	+10	+6	+5	-2	+8	2	1
	Middle Atlantic	+2	-3	+6	-1	-7	1	2
	East North Central	+17	+15	+13	+1	+1	3	1
	West North Central	+6	+5	+8	+1	-5	1	1
	South Atlantic	+3	+10	+14	+4	+9	2	1
	West South Central	+4	+15	+15	+5	+19	2	1
	Mountain	+7	+1	+11	+1	-10	2	2
	Pacific	+10	+13	+12	+3	+13	1	1
5142,3,6,9	Specialty-line groceries	+5	+4	+10	-1	+10	1	1
	Middle Atlantic	+5	+5	+13	-3	-5	4	2
	East North Central	+7	-3	-2	0	+8	3	2
	West North Central	+4	+10	+15	+4	+29	3	1
	South Atlantic	+4	+1	+6	-1	+18	5	6
	East South Central	+1	-18	-17	-5	+17	2	2
5148	Fresh fruits and vegetables	+12	-7	-2	+1	-6	2	4
	Middle Atlantic	+15	-10	-11	+1	-9	7	5
	East North Central	+12	+1	-3	+3	-1	6	6
	West North Central	+13	-29	-20	-1	(S)	6	3
	West South Central	+11	-3	+3	+5	-2	5	3
	Pacific	+15	+11	+10	-7	-9	4	4
5194	Tobacco and tobacco products	+5	-5	0	-1	+2	1	1
	New England	+1	+3	+1	-2	+3	5	3
	Middle Atlantic	+11	-6	-6	0	(S)	4	3
	East North Central	+6	-18	-9	+1	-21	4	3
	West North Central	-1	+18	+29	-8	0	4	2
	South Atlantic	+8	-24	-23	+2	-22	6	6
	East South Central	+6	-14	-2	0	-19	7	4
	West South Central	+6	(S)	+47	0	(S)	7	6
	Mountain	-3	-9	+2	-8	-27	6	2
	Pacific	+1	+2	+10	-2	-13	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.

[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

(Coefficients of variation in percent)

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	1.4-1.8	1.6	1.4-1.6	1.5	0.5-0.9	0.6	1.3-1.5	1.4	1.2-1.4	1.4	0.2-0.4	0.3
	Total (excluding farm-product raw materials)	1.4-1.9	1.6	1.3-1.6	1.4	0.5-0.9	0.6	1.4-1.7	1.5	1.2-1.5	1.5	0.1-0.4	0.3
50	Durable goods, total	1.5-3.2	2.0	1.4-2.4	1.6	0.6-1.6	1.0	1.0-1.5	1.4	1.0-1.4	1.3	0.2-0.6	0.4
501	Motor vehicles and automotive parts and supplies	3.6-4.6	3.9	3.2-4.4	3.6	1.0-3.0	1.7	2.2-3.5	3.0	2.6-3.5	2.7	0.6-1.4	0.8
5012	Automobiles and other motor vehicles	(*)	(*)	(*)	(*)	1.7-3.8	2.8	(*)	(*)	(*)	(*)	1.5-2.8	1.8
5013,4	Automotive parts and supplies, tires and tubes	3.3-4.7	4.0	3.0-4.9	3.6	1.2-4.1	1.7	3.0-4.1	3.7	2.8-3.9	3.4	0.6-1.4	1.2
5013	Automotive parts and supplies	3.8-5.9	4.7	3.6-5.9	4.2	1.4-4.9	2.1	3.8-5.0	4.5	3.5-4.6	4.2	0.6-1.6	1.3
502	Furniture and home furnishings	4.7-7.0	5.7	4.3-6.1	5.1	1.6-3.8	2.9	4.0-4.6	4.2	3.9-4.5	4.2	0.7-1.3	0.9
5021	Furniture--household and office	4.9-6.5	6.0	4.3-7.1	6.0	2.8-5.7	4.1	(*)	(*)	(*)	(*)	1.1-1.8	1.5
5021 pt.	Household furniture	(*)	(*)	(*)	(*)	5.5-7.6	6.2	(*)	(*)	(*)	(*)	1.1-3.5	1.5
5021 pt.	Office furniture	(*)	(*)	(*)	(*)	4.0-6.3	4.9	(*)	(*)	(*)	(*)	0.9-2.7	1.9
5023	Home furnishings	6.7-9.2	7.6	5.5-8.1	6.6	2.0-4.8	3.3	5.0-6.3	5.6	5.0-6.1	5.7	0.9-1.6	1.1
503	Lumber and other construction materials	4.2-5.8	4.8	4.4-5.4	4.7	1.8-3.5	2.3	5.0-6.7	5.6	5.0-6.6	5.9	0.8-1.3	0.9
5031	Lumber, plywood, and millwork	5.7-7.7	6.3	5.1-6.6	5.9	1.7-5.1	3.3	7.0-9.0	7.9	7.2-8.6	8.1	0.8-1.7	1.2
5039	Construction materials, n.e.c.	5.0-6.9	6.0	5.1-6.5	5.7	1.8-4.0	3.1	(*)	(*)	(*)	(*)	0.9-1.7	1.1
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(*)	(*)	(*)	(*)	1.7-6.4	3.5	(*)	(*)	(*)	(*)	1.0-1.9	1.6
505	Metals and minerals, except petroleum	4.3-16.8	8.7	5.1-14.4	8.2	0.9-6.9	2.4	6.2-9.3	7.6	5.7-10.2	8.1	0.7-4.7	1.2
5051 pt.	Ferrous metals service centers and offices	4.3-6.2	5.2	3.9-6.5	4.6	0.8-3.1	2.5	3.9-4.7	4.3	4.0-4.5	4.2	0.7-1.6	0.8
5051 pt.	Ferrous metals service centers	4.8-7.1	5.1	4.9-5.2	5.1	0.9-3.3	2.8	2.8-5.5	4.6	3.1-4.8	4.0	0.8-1.7	0.9
5051 pt.	Nonferrous metals service centers and offices	(*)	(*)	(*)	(*)	1.7-13.2	4.1	(*)	(*)	(*)	(*)	1.4-16.0	5.2
506	Electrical goods	3.8-5.0	4.1	3.3-4.6	3.6	1.5-2.4	2.3	3.2-4.8	3.5	3.3-4.6	3.5	0.6-1.2	0.7
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	3.7-6.7	4.5	3.3-6.9	4.1	2.1-4.5	3.1	3.2-5.1	3.5	3.2-4.5	3.3	0.6-1.8	0.8
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	5.2-7.4	6.0	5.0-6.6	5.6	1.9-4.7	2.8	3.9-6.9	4.4	3.8-6.5	4.7	1.0-1.7	1.2
5064	Electrical appliances, TV and radio sets	4.9-8.2	6.4	5.1-6.7	5.5	1.5-4.5	2.8	(*)	(*)	(*)	(*)	0.9-1.6	1.3
507	Hardware, plumbing, heating equipment, and supplies	3.1-4.5	3.5	2.9-3.7	3.3	1.3-2.3	1.6	2.8-4.2	3.6	2.9-4.2	3.5	0.5-1.0	0.8
5072	Hardware	2.6-3.8	3.6	2.8-3.9	3.2	1.1-3.3	1.6	4.7-6.3	5.6	4.5-6.1	5.7	0.6-1.6	1.3
5074	Plumbing and heating equipment and supplies (hydronics)	5.4-7.7	6.4	5.1-6.6	5.9	1.9-4.2	2.9	5.0-6.0	5.4	4.7-5.6	5.3	0.7-1.5	1.3
5075	Warm air heating and air conditioning equipment and supplies	(*)	(*)	(*)	(*)	2.0-7.3	4.1	(*)	(*)	(*)	(*)	0.8-2.2	1.2
508	Machinery, equipment, and supplies	2.9-4.5	3.3	2.6-3.2	2.8	1.2-4.0	1.8	1.8-2.4	2.2	1.8-2.3	2.1	0.4-0.7	0.4
5081	Commercial machines and equipment	(*)	(*)	(*)	(*)	3.3-6.0	4.4	(*)	(*)	(*)	(*)	0.7-2.3	1.5
5082	Construction and mining machinery and equipment	4.8-6.6	5.4	4.1-5.1	4.5	2.7-4.8	3.9	3.8-5.3	4.2	3.9-4.9	4.1	0.8-1.7	1.1
5083	Farm and garden machinery and equipment	(*)	(*)	(*)	(*)	4.8-16.1	6.0	(*)	(*)	(*)	(*)	1.3-2.0	1.4
5084,5	Industrial machinery, equipment, and supplies	3.2-4.1	3.3	2.4-3.4	2.8	1.6-3.6	2.5	3.2-4.2	3.8	3.1-3.8	3.5	0.5-0.8	0.6
5086 pt.	Professional equipment and supplies	(*)	(*)	(*)	(*)	2.0-4.0	2.7	(*)	(*)	(*)	(*)	0.8-1.4	1.1
5093	Scrap and waste materials	4.2-5.4	5.1	4.2-5.3	4.7	1.6-3.2	2.2	(*)	(*)	(*)	(*)	0.7-1.6	1.3
5093 pt.	Iron and steel scrap	(*)	(*)	(*)	(*)	1.5-4.8	2.2	(*)	(*)	(*)	(*)	1.0-2.3	1.5
5093 pt.	Waste materials	(*)	(*)	(*)	(*)	1.7-5.3	3.9	(*)	(*)	(*)	(*)	1.3-3.4	2.2
51	Nondurable goods, total	1.8-2.1	1.9	1.6-2.0	1.9	0.6-0.9	0.8	2.6-3.0	2.8	2.6-2.8	2.7	0.3-0.6	0.5
	Total (excluding farm-product raw materials)	1.9-2.4	2.1	1.7-2.3	2.0	0.7-1.0	0.9	3.3-3.6	3.5	3.2-3.5	3.3	0.3-0.6	0.4
511	Paper and paper products	4.6-7.7	5.2	4.5-6.9	4.9	1.0-3.1	1.5	4.6-7.3	6.3	4.6-7.1	5.9	0.6-1.3	0.8
5111,3	Printing, writing, industrial, and personal service paper	3.0-5.1	3.3	3.0-4.6	3.2	0.8-2.7	1.1	5.0-6.9	6.4	4.9-6.9	6.3	0.6-1.4	0.8
512	Drugs, drug proprietaries, and druggists' sundries	2.3-3.1	2.7	2.2-2.9	2.7	1.1-2.2	1.5	3.6-5.1	4.4	4.0-5.1	4.6	0.7-1.5	1.4
5122	Drugs, drug proprietaries, and druggists' sundries	2.3-3.1	2.7	2.2-2.9	2.7	1.1-2.2	1.5	(*)	(*)	(*)	(*)	0.7-1.5	1.4
5122 pt.	General-line drugs	6.0-6.9	6.6	6.0-6.9	6.6	0.9-2.5	1.1	(*)	(*)	(*)	(*)	0.5-2.2	0.9
513	Apparel, piece goods, and notions	12.0-15.7	13.2	10.9-14.6	13.4	2.9-5.4	4.0	(*)	(*)	(*)	(*)	(*)	(*)
514	Groceries and related products	1.7-2.4	2.2	1.8-2.3	2.1	0.5-0.7	0.5	1.6-2.2	1.8	1.6-2.0	1.8	0.3-0.6	0.4
5141	Groceries, general-line	2.6-3.4	3.3	2.8-3.3	3.1	0.5-0.7	0.6	1.9-2.8	2.2	1.7-2.7	1.9	0.3-0.7	0.5
5141 pt.	Voluntary groups	(*)	(*)	(*)	(*)	0.7-0.9	0.7	(*)	(*)	(*)	(*)	0.5-1.4	0.7
5141 pt.	Retailer cooperatives	(*)	(*)	(*)	(*)	0.3-1.1	0.6	(*)	(*)	(*)	(*)	0.4-1.6	0.6
5141 pt.	Other general-lines	(*)	(*)	(*)	(*)	0.9-1.9	1.3	(*)	(*)	(*)	(*)	0.7-1.4	1.0
5142,3,6,9	Specialty-line groceries	(*)	(*)	(*)	(*)	0.7-2.4	1.2	(*)	(*)	(*)	(*)	0.5-1.3	1.0
5144	Poultry and poultry products	5.6-7.2	6.5	5.4-7.2	6.7	1.5-2.0	1.8	(*)	(*)	(*)	(*)	0.6-2.6	1.5
5145	Confectionery	5.1-12.9	6.7	4.8-9.5	6.6	1.2-5.5	2.7	(*)	(*)	(*)	(*)	1.0-2.9	1.7
5147	Meats and meat products	5.6-7.0	6.8	5.4-6.9	6.5	1.1-2.2	1.5	(*)	(*)	(*)	(*)	1.2-2.3	1.4
5148	Fresh fruits and vegetables	4.0-5.7	4.4	3.5-5.0	4.7	1.7-2.8	2.3	(*)	(*)	(*)	(*)	0.8-4.8	2.6
515	Farm-product raw materials	2.6-5.2	3.0	2.1-4.6	3.4	1.2-3.1	2.3	(*)	(*)	(*)	(*)	0.9-1.7	1.5
5152	Cotton	(*)	(*)	(*)	(*)	1.8-11.1	6.9	(*)	(*)	(*)	(*)	0.3-2.0	1.0
5153	Grain	3.2-5.9	3.8	2.6-5.3	3.9	1.3-3.2	2.5	(*)	(*)	(*)	(*)	1.2-2.2	1.7
517	Petroleum and petroleum products	5.1-7.8	7.1	4.9-8.0	6.2	1.8-3.5	2.0	5.6-6.5	5.8	5.1-6.1	5.6	1.2-1.9	1.7
5171	Petroleum bulk stations and terminals	3.5-5.1	4.0	3.1-4.2	3.9	0.8-3.5	1.7	(*)	(*)	(*)	(*)	1.1-2.2	2.1
518	Beer, wine, and distilled alcoholic beverages	4.5-5.9	4.9	4.3-5.5	4.9	0.9-1.9	1.2	3.8-5.0	4.2	3.9-5.0	4.3	1.1-1.7	1.4
5181	Beer and ale	5.2-6.1	5.8	5.4-6.2	5.7	0.9-2.2	1.4	7.9-10.2	8.1	7.7-9.9	8.8	1.0-4.1	2.7
5182	Wines and distilled alcoholic beverages	5.1-7.2	5.7	5.1-6.9	5.7	1.8-2.6	1.9	3.4-5.0	4.4	3.7-4.6	4.0	1.0-1.8	1.3
519	Miscellaneous nondurable goods	2.5-4.9	3.9	2.5-3.9	3.4	1.3-2.4	1.9	(*)	(*)	(*)	(*)	0.5-1.5	0.9
5191	Farm supplies	(*)	(*)	(*)	(*)	3.1-5.5	4.4	(*)	(*)	(*)	(*)	0.7-2.6	1.6
5194	Tobacco and tobacco products	5.6-6.7	6.1	5.3-6.8	5.8	1.1-2.4	1.3	(*)	(*)	(*)	(*)	1.1-1.7	1.3
5198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.1-4.9	2.4	(*)	(*)	(*)	(*)	0.7-3.5	1.1
5199 pt.	Books, periodicals, newspapers	(*)	(*)	(*)	(*)	2.9-11.7	6.6	(*)	(*)	(*)	(*)	1.1-2.1	1.4

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 August 1979 through January 1980.

*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 1979-December 1980

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	94.6	91.5	104.4	100.2	106.1	101.7	98.6	104.3	95.7	105.3	101.1	96.0
	Total (excluding farm-product raw materials)	93.4	91.2	104.0	100.1	106.4	102.6	98.8	105.9	96.8	105.4	99.9	95.0
50	Durable goods, total	91.6	89.2	103.2	101.6	107.4	103.5	99.6	107.5	97.7	107.7	98.7	92.4
501	Motor vehicles and automotive parts and supplies	93.4	90.7	106.9	109.1	112.2	103.6	101.6	104.8	91.3	100.7	94.4	89.9
502	Furniture and home furnishings	88.6	89.3	102.8	98.2	102.9	102.5	93.0	104.2	101.2	115.7	106.8	93.5
503	Lumber and other construction materials	81.7	79.4	98.6	97.5	108.3	108.9	106.6	117.6	102.9	114.9	100.7	84.5
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	81.7	85.0	101.4	99.9	103.6	99.9	96.0	107.0	105.9	113.9	104.7	100.8
505	Metals and minerals, except petroleum	97.1	92.7	103.1	102.3	107.8	101.3	96.1	109.0	100.1	102.9	96.9	89.2
506	Electrical goods	90.5	88.7	100.1	97.3	102.6	103.0	99.5	106.4	98.6	111.8	102.4	99.1
507	Hardware, plumbing, heating equipment, and supplies	91.9	86.2	97.4	100.6	108.4	104.2	104.4	108.6	98.8	111.5	98.8	89.9
508	Machinery, equipment, and supplies	89.8	88.3	106.4	102.7	109.1	105.0	97.2	105.2	99.4	107.1	97.0	92.9
509	Miscellaneous durable goods	87.9	89.9	109.2	100.0	101.5	104.3	92.9	108.5	98.5	109.0	104.2	93.1
51	Nondurable goods, total	98.1	92.4	105.7	99.6	105.3	100.4	97.9	101.5	93.9	102.7	102.5	99.4
	Total (excluding farm-product raw materials)	96.7	92.9	104.8	99.6	105.3	101.4	98.1	104.3	95.2	102.6	101.4	97.1
511	Paper and paper products	99.5	93.0	104.5	95.1	104.0	101.5	96.2	106.8	96.8	108.5	99.3	95.0
512	Drugs, drug proprietaries, and druggists' sundries	99.3	91.7	103.8	98.9	102.0	96.6	98.3	103.6	97.2	110.4	101.4	96.5
513	Apparel, piece goods, and notions	93.5	91.9	103.7	92.8	102.9	94.7	95.8	115.6	105.0	114.0	102.3	87.6
514	Groceries and related products	98.0	91.3	104.1	98.8	106.0	102.1	99.6	103.8	95.6	103.9	100.3	96.6
515	Farm-product raw materials[1]	103.0	92.5	110.2	99.3	104.0	98.9	98.2	92.3	87.7	105.9	108.3	100.7
516	Chemicals and allied products	93.9	88.1	102.1	99.4	109.9	104.3	99.0	109.7	94.3	106.4	100.1	92.7
517	Petroleum and petroleum products	100.9	102.3	105.2	98.1	99.0	97.2	98.7	100.0	91.3	100.4	103.7	102.4
518	Beer, wine, and distilled alcoholic beverages	81.5	81.6	98.8	95.2	107.0	109.2	101.5	108.5	93.4	104.3	106.5	111.6
519	Miscellaneous nondurable goods	96.2	97.2	112.6	106.4	110.3	104.2	91.9	97.2	93.2	97.6	97.4	95.2
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.4	101.3	102.4	101.4	100.1	99.3	98.8	97.9	98.3	99.8	100.4	100.1
	Total (excluding farm-product raw materials)	98.9	100.1	101.4	100.9	100.9	100.8	100.4	99.6	99.4	99.8	99.4	98.9
50	Durable goods, total	98.4	100.1	100.9	100.9	101.4	101.9	101.1	100.3	99.4	98.9	98.6	98.6
501	Motor vehicles and automotive parts and supplies	101.4	105.9	101.9	100.4	101.6	99.6	99.3	97.3	96.3	98.1	98.9	99.6
502	Furniture and home furnishings	98.8	99.1	99.6	99.6	101.1	102.8	100.6	100.8	101.8	99.9	99.1	97.3
503	Lumber and other construction materials	98.1	99.1	103.1	102.8	103.1	102.3	102.1	99.9	98.9	97.8	96.1	97.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	95.8	99.8	100.9	102.6	102.4	106.4	105.8	101.1	101.8	100.8	93.3	89.8
505	Metals and minerals, except petroleum	98.4	97.8	99.8	99.1	101.4	100.9	102.6	104.4	101.3	97.4	98.9	98.6
506	Electrical goods	96.6	96.4	98.8	99.4	101.4	102.4	101.6	102.1	101.4	100.8	100.4	99.1
507	Hardware, plumbing, heating equipment, and supplies	97.1	98.4	101.9	105.6	103.4	103.1	102.4	99.9	97.9	98.4	95.9	96.1
508	Machinery, equipment, and supplies	98.6	100.6	101.6	100.4	101.3	101.9	100.4	99.8	99.9	98.6	98.4	98.8
509	Miscellaneous durable goods	97.6	98.1	96.6	97.9	97.1	100.4	102.9	102.3	102.6	103.3	102.3	99.4
51	Nondurable goods, total	103.8	103.1	104.8	101.1	97.8	95.4	94.6	94.4	96.3	101.3	104.1	103.4
	Total (excluding farm-product raw materials)	100.1	99.9	101.9	100.9	99.8	98.6	98.6	98.1	99.6	101.6	101.1	100.1
511	Paper and paper products	97.3	98.1	99.4	100.9	100.3	102.6	99.9	99.3	101.1	100.6	100.1	100.9
512	Drugs, drug proprietaries, and druggists' sundries	95.3	96.3	100.1	100.8	98.8	100.6	100.1	100.3	103.9	105.3	100.8	98.4
513	Apparel, piece goods, and notions	101.1	100.6	97.9	98.9	101.4	100.6	101.4	101.1	98.9	99.1	98.8	100.4
514	Groceries and related products	98.6	99.9	101.9	100.6	99.6	98.9	98.4	97.9	99.9	102.4	100.9	101.1
515	Farm-product raw materials[1]	119.1	117.2	116.2	104.9	89.8	82.8	80.5	77.8	81.3	98.4	115.4	116.3
516	Chemicals and allied products	98.1	100.8	101.4	101.3	103.4	102.1	102.8	99.6	100.4	96.6	96.3	97.3
517	Petroleum and petroleum products	102.4	98.6	99.6	94.4	98.4	93.3	96.8	101.1	104.4	104.4	104.3	103.1
518	Beer, wine, and distilled alcoholic beverages	96.6	94.6	99.3	101.4	103.1	102.9	101.1	97.3	99.4	105.9	104.6	93.8
519	Miscellaneous nondurable goods	104.6	105.6	108.3	102.6	99.1	93.3	95.4	95.9	96.1	99.1	99.3	100.6

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1979-December 1980—Continued

1972 SIC code	Kind of business	1980											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	95.4	95.2	101.1	103.3	103.3	101.6	101.9	98.6	100.6	105.8	95.5	100.8
	Total (excluding farm-product raw materials)	94.1	95.2	100.4	103.9	103.6	101.8	102.3	100.3	101.5	106.0	94.8	100.3
50	Durable goods, total	92.3	92.7	99.8	105.0	104.2	103.4	103.2	101.3	103.6	107.7	93.0	97.9
501	Motor vehicles and automotive parts and supplies	95.2	94.3	103.6	114.2	108.1	102.7	104.2	101.3	95.1	100.4	90.7	94.7
502	Furniture and home furnishings	89.5	93.2	99.8	101.8	100.0	101.9	96.5	98.9	104.5	117.2	101.9	98.3
503	Lumber and other construction materials	81.0	83.9	94.0	101.1	106.2	107.1	109.4	110.4	112.2	115.0	92.5	90.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	80.2	86.3	101.3	106.6	99.2	97.7	101.2	101.7	109.7	110.5	104.8	107.0
505	Metals and minerals, except petroleum	96.9	97.4	101.3	107.0	101.9	102.5	98.8	103.2	105.2	102.7	92.3	95.8
506	Electrical goods	91.0	91.5	97.3	100.6	100.0	102.6	103.4	100.5	103.9	111.4	97.5	104.1
507	Hardware, plumbing, heating equipment, and supplies	92.2	88.9	95.3	103.7	105.2	104.6	107.7	102.9	104.0	110.7	94.3	94.6
508	Machinery, equipment, and supplies	90.7	91.5	102.2	105.8	107.2	104.1	101.4	98.8	104.7	108.1	91.1	97.5
509	Miscellaneous durable goods	89.3	94.3	104.4	102.6	99.5	103.8	95.3	102.3	106.6	109.8	95.4	98.3
51	Nondurable goods, total	98.8	96.0	102.4	102.8	102.9	100.1	101.4	96.3	98.3	103.3	97.1	104.3
	Total (excluding farm-product raw materials)	97.7	97.0	101.1	102.5	103.0	100.9	101.5	98.6	99.8	103.7	95.4	102.0
511	Paper and paper products	99.6	97.1	100.3	100.0	101.4	99.2	100.9	99.7	102.7	108.5	93.3	101.7
512	Drugs, drug proprietaries, and druggists' sundries	100.6	95.0	100.4	103.1	98.0	96.7	101.8	98.1	103.5	109.9	95.7	102.5
513	Apparel, piece goods, and notions	95.1	93.4	101.2	97.8	98.3	94.1	101.9	108.6	108.1	113.6	99.6	92.4
514	Groceries and related products	98.7	94.8	100.6	101.9	104.7	100.2	103.4	99.0	99.5	104.5	95.8	100.6
515	Farm-product raw materials[1]	101.3	96.0	107.3	102.6	103.4	97.2	100.8	88.6	92.9	104.2	103.6	105.4
516	Chemicals and allied products	94.3	92.6	98.8	103.4	105.8	104.4	102.0	103.6	99.6	106.8	94.2	99.2
517	Petroleum and petroleum products	101.2	107.8	102.9	97.8	98.6	97.9	97.9	97.6	95.4	100.9	98.6	105.5
518	Beer, wine, and distilled alcoholic beverages	82.3	85.6	94.2	100.0	103.0	108.2	106.8	100.0	99.6	105.8	98.3	120.1
519	Miscellaneous nondurable goods	96.7	101.7	108.5	107.4	109.2	104.9	94.0	92.1	98.3	99.0	90.9	98.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.3	101.3	102.4	101.6	100.1	99.4	98.8	97.9	98.3	99.6	100.4	100.1
	Total (excluding farm-product raw materials)	98.9	100.1	101.4	100.9	100.9	100.9	100.4	99.6	99.4	99.8	99.3	98.9
50	Durable goods, total	98.4	100.1	101.1	100.8	101.4	101.9	101.1	100.3	99.4	98.9	98.6	98.6
501	Motor vehicles and automotive parts and supplies	101.4	106.3	101.9	100.4	101.6	99.6	99.3	97.4	96.1	98.1	98.9	99.6
502	Furniture and home furnishings	98.8	99.1	99.6	99.6	101.1	102.9	100.6	100.6	101.9	99.9	99.1	97.3
503	Lumber and other construction materials	97.9	99.1	103.1	102.8	103.1	102.3	102.1	99.8	98.9	97.9	96.1	97.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	95.6	99.6	101.1	102.9	102.3	106.4	105.9	101.1	101.9	100.8	93.3	89.8
505	Metals and minerals, except petroleum	98.3	97.8	99.6	98.9	101.6	100.9	102.6	104.6	101.3	97.3	98.9	98.4
506	Electrical goods	96.6	96.4	98.8	99.4	101.4	102.4	101.6	102.1	101.4	100.8	100.4	99.1
507	Hardware, plumbing, heating equipment, and supplies	97.1	98.6	101.9	105.9	103.4	103.1	102.4	99.9	97.8	98.3	95.8	96.1
508	Machinery, equipment, and supplies	98.6	100.6	101.6	100.4	101.3	101.9	100.4	99.9	100.1	98.6	98.4	98.8
509	Miscellaneous durable goods	97.6	98.1	96.6	97.8	97.1	100.3	102.9	102.1	102.8	103.1	102.1	99.3
51	Nondurable goods, total	103.8	103.1	104.9	101.3	98.1	95.6	94.6	94.3	96.3	101.1	103.9	103.4
	Total (excluding farm-product raw materials)	100.1	99.8	102.1	101.1	99.9	98.6	98.6	98.1	99.6	101.6	100.9	100.1
511	Paper and paper products	97.1	98.1	99.4	100.9	100.4	102.6	99.9	99.1	101.1	100.6	100.1	100.9
512	Drugs, drug proprietaries, and druggists' sundries	95.1	96.3	100.1	100.8	98.8	100.6	100.1	100.3	104.1	105.3	100.6	98.4
513	Apparel, piece goods, and notions	101.1	100.8	97.9	98.9	101.4	100.8	101.4	101.1	98.9	99.1	98.8	100.4
514	Groceries and related products	98.6	99.9	101.9	100.6	99.6	99.1	98.4	97.9	100.1	102.4	100.9	101.1
515	Farm-product raw materials[1]	119.1	117.4	116.9	105.6	90.3	82.8	80.3	77.4	80.8	98.1	115.4	116.4
516	Chemicals and allied products	98.1	100.9	101.4	101.3	103.4	102.1	102.8	99.6	100.4	96.6	96.3	97.3
517	Petroleum and petroleum products	102.1	98.4	99.9	94.4	98.4	93.3	96.8	101.1	104.4	104.3	104.3	102.9
518	Beer, wine, and distilled alcoholic beverages	96.6	94.4	99.4	101.6	103.1	102.9	101.3	97.3	99.4	105.9	104.6	93.8
519	Miscellaneous nondurable goods	104.8	105.6	108.6	102.8	99.4	93.1	95.4	95.8	95.9	99.3	99.1	100.4

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.

[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 etail 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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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued June 1980

April 1980

BW-80-4

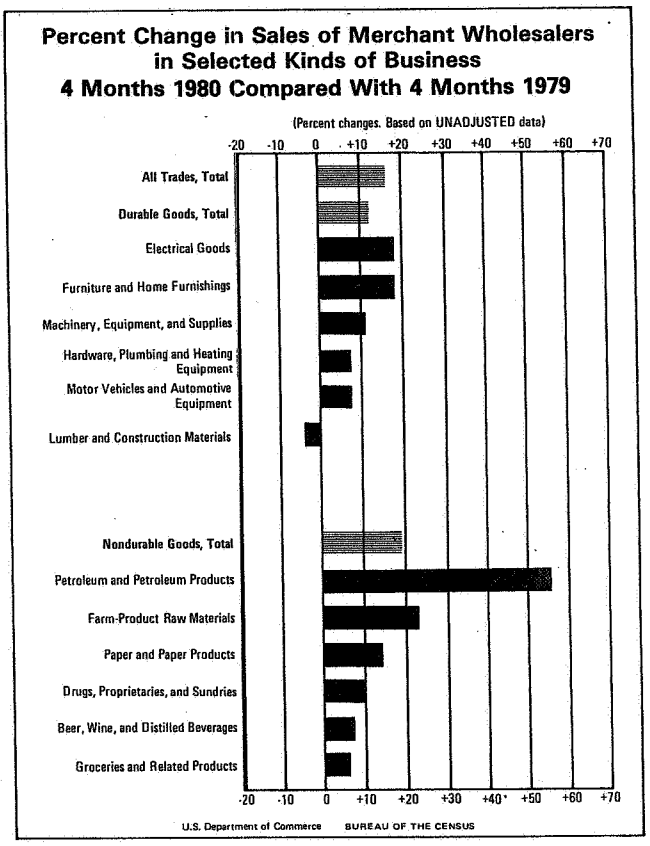
Sales—April 1980 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences, but not for price changes, were $76.7 billion, down 3 percent from the previous month, but up 9 percent from April 1979. Adjusted February-through-April total sales were down 1 percent from the November-through-January period, but were 13 percent above the total sales for the comparable months a year ago.

After adjustment, April sales in the durable goods trades were down 7 percent from the previous month, but were 2 percent above sales for the same month a year ago. Nondurable goods sales were up 1 percent from March and were 15 percent above April 1979. Total monthly sales in the durable and nondurable goods groups during the February-through-April period were both down 1 percent from the prior three months, but were up 8 and 16 percent, respectively, from the same period a year ago.

Based on adjusted data, most trade groups showed decreases from their previous months sales levels with the largest one in hardware, plumbing, and heating equipment (-14%). The largest increase was reported in farm-product raw materials (6%). Compared with sales of a year ago most trade groups showed increases with the largest increase noted in petroleum and petroleum products (45%). The largest year-to-year decrease was reported in lumber and construction materials (-15%).

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variations, but not for price changes, were valued at $92.3 billion at the end of April, up 1 percent from last month and 9 percent above the same month a year ago. Durable goods stocks were up 2 percent from March and 10 percent above April 1979. Nondurable goods stocks were down 1 percent from last month, but were 7 percent above stocks on hand a year ago.

Based on adjusted data, comparisons with previous month inventory levels showed mixed results with 7 trade groups showing increases, 3 indicating declines, and 4 with no change. The largest increase was reported in sporting goods, toys, and hobby goods (5%). The most substantial decrease was reported in farm-product raw materials (-7%). Compared with year-ago inventories, all trade groups showed increases with the exception of miscellaneous nondurable goods (-4%) and drugs proprietaries and sundries (-1%). The largest year-to-year increase was reported in petroleum and petroleum products (51%).



Stock-Sales Ratios—The April stock-sales ratio for merchant wholesalers, based on seasonally adjusted data, was 120, up 4 points from March but virtually unchanged from April 1979. The stock-sales ratio for durable goods was 179, up 15 points from last month and 13 points above the year-ago ratio. The ratio for nondurable goods was 75, down 1 point from March and down 5 points from the year-ago ratio.

An advance release of April 1980 data was issued June 6, 1980

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: 1980 and 1979

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

1972 SIC code	Kind of business	1980				1979									Total 4 months	
		Jan.	Feb.	Mar.	Apr.[P]	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1980	1979
	Merchant wholesalers, total	77,104	75,746	80,597	79,471	70,768	76,814	74,361	73,537	78,567	73,213	81,820	79,079	75,396	312,917	270,546
	Total (excluding farm-product raw materials)	67,867	67,271	71,603	70,338	63,588	68,714	66,477	64,932	70,390	65,400	72,156	69,354	66,185	277,080	241,474
50	Durable goods, total	33,579	33,949	36,170	35,383	33,429	35,723	34,447	33,750	37,048	33,616	37,935	34,711	32,515	139,081	124,541
501	Motor vehicles and automotive parts and supplies	6,421	6,586	6,779	7,077	6,845	7,013	6,364	6,259	6,812	5,645	6,784	6,452	6,172	26,864	25,018
5013,4	Automotive parts and supplies, tires and tubes	3,160	3,093	3,317	3,389	3,349	3,535	3,318	3,091	3,552	3,081	3,538	3,298	2,972	12,959	13,010
5013	Automotive parts and supplies	2,704	2,685	2,831	2,915	2,807	2,966	2,759	2,600	3,014	2,617	2,978	2,817	2,515	11,136	10,906
502	Furniture and home furnishings	1,210	1,186	1,304	1,377	1,130	1,214	1,185	1,121	1,243	1,196	1,390	1,263	1,134	5,076	4,290
5021	Furniture--household and office[1]	496	452	496	518	413	450	422	399	449	419	458	430	430	1,928	1,503
5023	Home furnishings[1]	747	734	808	859	717	764	763	722	794	778	931	832	704	3,149	2,787
503	Lumber and other construction materials	2,582	2,408	2,595	2,665	3,023	3,353	3,410	3,411	3,761	3,274	3,622	2,997	2,543	10,249	10,627
5031	Lumber, plywood, and millwork	1,708	1,622	1,696	1,687	2,067	2,269	2,250	2,250	2,515	2,102	2,346	1,899	1,586	6,714	7,329
5039	Construction materials, n.e.c[2]	873	785	899	978	957	1,084	1,160	1,161	1,246	1,172	1,276	1,098	957	3,535	3,298
505	Metals and minerals, except petroleum	4,346	(S)	(S)	(S)	3,295	3,913	3,645	3,824	4,196	3,687	4,197	4,064	3,986	(S)	13,565
5051 pt.	Ferrous metals service centers and offices[3]	2,992	2,852	3,136	2,919	2,469	2,951	2,759	2,865	3,062	2,806	2,974	2,836	2,743	11,898	10,286
5051 pt.	Ferrous metals service centers	2,197	2,064	2,271	2,228	1,798	2,160	2,056	2,046	2,211	1,974	2,208	2,122	1,964	8,760	7,322
506	Electrical goods	3,745	3,904	3,931	3,691	3,271	3,744	3,786	3,712	4,163	4,012	4,395	3,962	3,785	15,271	12,927
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,840	2,032	1,992	1,903	1,748	2,071	2,006	1,991	2,153	2,079	2,165	1,962	1,916	7,767	6,695
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,905	1,872	1,939	1,788	1,554	1,673	1,779	1,700	2,011	1,933	2,230	2,000	1,869	7,504	6,232
5064	Electrical appliances, TV and radio sets[4]	1,040	985	1,054	955	881	939	1,064	986	1,116	1,083	1,250	1,154	1,052	4,033	3,589
507	Hardware, plumbing, heating equipment, and supplies	2,466	2,250	2,436	2,277	2,374	2,592	2,461	2,524	2,678	2,399	2,794	2,415	2,192	9,429	8,819
5072	Hardware	936	885	932	897	852	975	877	892	1,003	877	1,024	916	838	3,650	3,266
5074	Plumbing and heating equipment and supplies (hydronics)	1,037	934	1,003	925	994	1,001	966	1,015	1,038	1,011	1,167	992	920	3,899	3,608
508	Machinery, equipment, and supplies	8,880	9,322	10,058	10,164	9,443	10,062	9,745	9,222	10,113	9,394	10,317	9,324	9,026	38,423	34,640
5082	Construction and mining machinery and equipment	958	1,098	1,208	1,157	1,360	1,351	1,260	1,258	1,366	1,268	1,323	1,144	1,019	4,421	4,371
5084,5	Industrial machinery, equipment, and supplies	3,924	4,061	4,208	4,238	3,615	4,004	3,964	3,613	4,039	3,634	4,078	4,020	3,936	16,431	14,408
5086	Professional equipment, supplies	982	970	1,014	1,070	972	1,055	996	996	1,092	972	1,121	948	939	4,036	3,840
5093	Scrap and waste materials	1,489	1,571	1,685	1,609	1,492	1,518	1,468	1,395	1,534	1,328	1,456	1,428	1,382	6,354	5,310
51	Nondurable goods, total	43,525	41,797	44,427	44,088	37,339	41,091	39,914	39,787	41,519	39,597	43,885	44,368	42,881	173,836	146,005
	Total (excluding farm-product raw materials)	34,288	33,323	35,433	34,956	30,159	32,991	32,030	31,182	33,342	31,784	34,221	34,643	33,670	137,999	116,932
511	Paper and paper products	1,837	1,774	1,799	1,726	1,551	1,692	1,651	1,585	1,777	1,599	1,821	1,699	1,639	7,136	6,258
5111,3	Printing, writing, industrial, and personal service paper	1,330	1,290	1,354	1,298	1,184	1,272	1,252	1,192	1,327	1,202	1,368	1,269	1,218	5,271	4,688
5111	Printing and writing paper	665	668	665	657	593	619	609	594	648	584	685	623	601	2,656	2,344
5113	Industrial and personal service paper	665	622	688	640	591	653	642	599	679	618	683	646	617	2,615	2,343
512	Drugs, drug proprietaries, and druggists' sundries	1,112	1,045	1,113	1,110	1,038	1,102	1,039	1,066	1,099	1,030	1,178	1,092	1,054	4,379	3,977
5122	Drugs, drug proprietaries, and druggists' sundries	1,112	1,045	1,113	1,110	1,038	1,102	1,039	1,066	1,099	1,030	1,178	1,092	1,054	4,379	3,977
5122 pt.	General-line drugs	466	460	494	492	472	509	455	443	477	443	487	448	456	2,468	2,149
513	Apparel, piece goods, and notions[5]	2,444	2,412	2,520	2,422	2,107	2,127	2,102	2,389	2,629	2,563	2,704	2,468	2,032	9,797	8,523
514	Groceries and related products	11,892	11,244	12,057	12,256	11,281	11,988	11,721	11,500	11,835	11,122	12,140	11,919	11,673	47,449	44,738
5141	Groceries, general-line	4,395	4,190	4,537	4,569	3,989	4,241	4,247	4,245	4,429	4,137	4,597	4,511	4,289	17,692	15,784
5144	Poultry and poultry products	555	531	559	565	554	592	544	563	569	530	561	603	589	2,210	2,120
5145	Confectionery	198	187	209	206	196	212	199	192	214	214	275	243	207	800	766
5147	Meats and meat products	1,867	1,741	1,799	1,785	2,029	2,076	1,908	1,872	1,959	1,770	1,925	1,768	1,811	7,192	8,177
5148	Fresh fruits and vegetables	997	1,005	1,117	1,202	1,086	1,202	1,242	1,063	1,030	917	997	1,024	1,002	4,321	4,270
515	Farm-product raw materials	9,237	8,474	8,995	9,131	7,180	8,100	7,884	8,605	8,177	7,813	9,664	9,725	9,211	35,838	29,072
5153	Grain	7,590	6,939	7,537	7,712	5,886	6,766	6,730	7,516	7,090	6,594	8,328	8,347	7,630	29,778	23,673
517	Petroleum and petroleum products	8,219	8,001	7,858	7,572	5,221	6,078	5,851	5,863	6,355	6,354	7,171	7,602	7,677	31,650	20,349
5171	Petroleum bulk stations and terminals	4,510	4,339	4,236	4,031	2,857	3,306	3,170	3,121	3,504	3,456	3,960	4,050	4,193	17,116	11,376
518	Beer, wine, and distilled alcoholic beverages	2,242	2,254	2,436	2,641	2,453	2,726	2,704	2,636	2,844	2,387	2,733	2,821	2,882	9,573	8,914
5181	Beer and ale	1,087	1,156	1,207	1,373	1,258	1,513	1,523	1,507	1,590	1,229	1,299	1,267	1,230	4,823	4,433
5182	Wine and distilled alcoholic beverages	1,155	1,098	1,230	1,268	1,195	1,214	1,181	1,129	1,254	1,158	1,435	1,554	1,652	4,751	4,481
519	Miscellaneous nondurable goods	5,299	5,393	6,479	6,080	5,406	6,001	5,801	5,105	5,468	5,570	5,296	5,643	5,238	23,251	19,846
5194	Tobacco and tobacco products	835	771	815	858	848	891	863	881	896	795	902	861	843	3,280	3,271

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.

[P]Preliminary estimates. See p. 15, Sample Design and Estimation Procedures. (S) Does not publication standards because of extreme variability.

[1]The home furnishings group is subject to a sampling variability of 9 percent for April 1980.
[2]The construction materials, n.e.c. group is subject to a sampling variability of 8 percent for April 1980.
[3]The ferrous metals service centers and offices group is subject to a sampling variability of 8 percent for April 1980.
[4]The electrical appliances, TV, and radio sets group is subject to a sampling variability of 8 percent for April 1980.
[5]The apparel, piece goods, and notions group is subject to a sampling variability of 14 percent for April 1980.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980				1979								
		Jan.	Feb.	Mar.	Apr.[P]	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	91,477	92,854	93,745	93,041	85,345	85,199	84,942	86,829	86,890	87,061	88,839	89,632	89,997
	Total (excluding farm-product raw materials)	83,618	85,076	86,658	[r]87,089	79,626	80,246	79,964	81,487	81,570	81,563	82,485	82,184	82,382
50	Durable goods, total	57,268	58,463	59,460	60,244	54,731	55,566	55,523	56,602	56,803	56,361	56,620	56,241	56,470
501	Motor vehicles and automotive parts and supplies	9,893	10,167	10,109	10,293	9,663	9,631	9,207	9,672	9,446	9,240	9,546	9,652	9,723
5013,4	Automotive parts and supplies, tires and tubes	6,182	6,130	6,107	6,123	5,809	5,970	5,753	6,051	6,117	5,933	6,025	6,084	6,030
5013	Automotive parts and supplies	5,191	5,124	5,068	5,080	4,917	5,035	4,818	5,082	5,188	5,018	5,121	5,208	5,074
502	Furniture and home furnishings	1,807	1,816	1,906	1,897	1,837	1,815	1,903	1,847	1,839	1,861	1,909	1,796	1,794
5023	Home furnishings	1,265	1,271	1,330	1,319	1,332	1,309	1,361	1,347	1,339	1,328	1,381	1,291	1,247
503	Lumber and other construction materials	3,378	3,423	3,595	3,506	3,404	3,468	3,496	3,526	3,442	3,382	3,383	3,335	3,353
5031	Lumber, plywood, and millwork[1]	2,103	2,169	2,220	2,166	2,152	2,244	2,204	2,220	2,204	2,129	2,149	2,112	2,090
505	Metals and minerals, except petroleum	6,497	(S)	(S)	(S)	5,254	5,528	5,582	5,763	6,319	6,139	6,376	6,363	6,307
5051 pt.	Ferrous metals service centers and offices	4,852	4,766	4,853	4,931	4,239	4,455	4,586	4,655	4,947	4,953	4,794	4,891	4,897
5051 pt.	Ferrous metals service centers	3,893	3,851	3,981	4,027	3,269	3,506	3,643	3,665	3,956	4,010	3,843	3,999	4,019
506	Electrical goods	6,092	6,140	6,083	6,168	5,737	5,976	6,040	6,223	6,254	6,061	6,082	6,098	5,931
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,894	3,051	2,983	3,005	2,730	2,946	2,838	2,840	2,841	2,771	2,785	2,945	2,820
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3,199	3,089	3,101	3,163	3,007	3,030	3,202	3,383	3,274	3,290	3,296	3,153	3,112
507	Hardware, plumbing, heating equipment, and supplies	4,692	4,883	4,984	5,042	4,719	4,590	4,631	4,628	4,535	4,488	4,537	4,456	4,575
5072	Hardware	1,806	1,888	1,945	1,943	1,598	1,622	1,643	1,659	1,657	1,692	1,698	1,692	1,758
5074	Plumbing and heating equipment and supplies (hydronics)	1,836	1,904	1,944	1,985	1,985	1,848	1,896	1,902	1,828	1,783	1,823	1,777	1,804
508	Machinery, equipment, and supplies	19,475	20,476	21,056	21,244	18,924	19,370	19,465	19,576	19,778	19,974	19,555	19,461	19,554
5082	Construction and mining machinery and equipment	4,038	4,279	4,326	4,433	4,280	4,430	4,512	4,488	4,504	4,573	4,339	4,288	4,182
5084,5	Industrial machinery, equipment, and supplies	6,375	6,588	6,922	6,907	6,030	6,073	6,006	5,979	6,092	6,201	6,251	6,163	6,354
51	Nondurable goods, total	34,209	34,390	34,285	32,797	30,614	29,633	29,419	30,227	30,087	30,700	32,219	33,391	33,527
	Total (excluding farm-product raw materials)	26,350	26,615	27,196	26,845	24,895	24,680	24,441	24,885	24,767	25,202	25,865	25,943	25,912
511	Paper and paper products	1,670	1,694	1,740	1,782	1,501	1,542	1,616	1,608	1,604	1,663	1,597	1,657	1,695
5111,3	Printing, writing, industrial, and personal service paper	1,137	1,144	1,185	1,217	1,018	1,050	1,090	1,079	1,055	1,109	1,082	1,090	1,141
5111	Printing and writing paper	473	479	498	503	426	431	447	442	427	440	439	444	474
5113	Industrial and personal service paper[2]	664	665	687	713	592	619	644	637	629	669	644	645	667
512	Drugs, drug proprietaries, and druggists' sundries	1,560	1,539	1,595	1,604	1,617	1,563	1,567	1,609	1,570	1,670	1,678	1,580	1,573
514	Groceries and related products	6,775	6,877	7,101	6,998	6,644	6,644	6,686	6,674	6,633	6,793	6,982	6,933	6,984
5141	Groceries, general-line	2,884	2,952	3,054	3,029	2,846	2,785	2,802	2,899	2,857	2,911	3,046	3,044	2,957
517	Petroleum and petroleum products	3,298	3,424	3,343	3,277	2,177	2,401	2,263	2,492	2,618	2,874	2,918	3,062	3,135
518	Beer, wine, and distilled alcoholic beverages	2,742	2,652	2,853	2,933	2,806	2,760	2,732	2,693	2,539	2,538	2,781	2,770	2,597
5181	Beer and ale[3]	916	917	1,109	1,176	1,085	1,089	1,072	1,030	923	903	934	922	879
5182	Wines and distilled alcoholic beverages	1,825	1,735	1,743	1,757	1,721	1,671	1,660	1,663	1,616	1,634	1,847	1,848	1,718

See footnotes at end of table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980				1979								
		Jan.	Feb.	Mar.	Apr.[P]	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	119	123	116	117	121	111	114	118	111	119	109	113	119
	Total (excluding farm-product raw materials)	123	126	121	124	125	117	120	125	116	125	114	118	124
50	Durable goods, total	171	172	164	170	164	156	161	168	153	168	149	162	174
501	Motor vehicles and automotive parts and supplies	154	154	149	145	141	137	145	155	139	164	141	150	158
5013,4	Automotive parts and supplies, tires and tubes	196	198	184	182	173	169	173	196	172	193	170	184	203
5013	Automotive parts and supplies	192	191	179	174	175	170	175	195	172	192	172	185	202
502	Furniture and home furnishings	145	153	146	138	163	150	161	165	148	156	137	142	158
5023	Home furnishings	169	173	165	154	186	171	178	187	169	171	148	155	177
503	Lumber and other construction materials	131	142	139	132	113	103	102	103	92	103	93	111	132
5031	Lumber, plywood, and millwork	123	134	131	128	104	99	98	99	88	101	92	111	132
505	Metals and minerals, except petroleum	149	(S)	(S)	(S)	159	141	153	151	151	162	152	157	158
5051 pt.	Ferrous metals service centers and offices	162	167	155	169	172	151	166	162	162	177	161	172	178
5051 pt.	Ferrous metals service centers	177	187	175	181	182	162	177	179	179	203	174	188	204
506	Electrical goods	163	157	155	167	175	160	160	168	150	151	138	154	157
5063	Electrical apparatus and equipment, wiring supplies and construction meterials	157	150	150	158	156	142	141	143	132	133	129	150	147
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	168	165	160	177	194	181	180	197	163	170	148	158	167
507	Hardware, plumbing, heating equipment, and supplies	190	217	205	221	199	177	188	183	169	187	162	185	209
5072	Hardware	193	213	209	216	188	166	187	186	165	193	166	185	210
5074	Plumbing and heating equipment and supplies (hydronics)	177	204	194	215	200	185	196	188	176	176	156	179	196
508	Machinery, equipment, and supplies	219	220	209	209	200	192	200	212	196	213	190	209	217
5082	Construction and mining machinery and equipment	422	390	358	383	315	328	358	357	330	361	328	375	411
5084,5	Industrial machinery, equipment, and supplies	162	162	164	163	167	152	152	165	151	171	153	153	161
51	Nondurable goods, total	79	82	77	74	82	72	74	76	72	78	73	75	78
	Total (excluding farm-product raw materials)	77	80	77	77	83	75	76	80	74	79	76	75	77
511	Paper and paper products	91	96	97	103	97	91	98	101	90	104	88	98	103
5111,3	Printing, writing, industrial, and personal service paper	85	89	88	94	86	83	87	90	79	92	79	86	94
5111	Printing and writing paper	71	72	75	77	72	70	73	74	66	75	64	71	79
5113	Industrial and personal service paper	100	107	100	111	100	95	100	106	93	108	94	100	108
512	Drugs, drug proprietaries, and druggists' sundries	140	147	143	145	156	142	151	151	143	162	142	145	149
514	Groceries and related products	57	61	59	57	59	55	57	58	56	61	58	58	60
514	Groceries, general-line	66	70	67	66	71	66	66	68	64	70	66	67	69
517	Petroleum and petroleum products	40	43	43	43	42	40	39	43	41	45	41	40	41
518	Beer, wine, and distilled alcoholic beverages	122	118	117	111	114	101	101	102	89	106	102	98	90
5181	Beer and ale	84	79	92	86	86	72	70	68	58	74	72	73	71
5182	Wines and distilled alcoholic beverages	158	158	142	139	144	138	141	147	129	141	129	119	104

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.

[P]Preliminary estime. See p. 15, Sample Design and Estimation Procedures. (S) Does not meet publication standards because of extreme variability. [r]Revised.

[1]The lumber, plywood, and milwork group is subject to a sampling variability of 8 percent for April 1980.
[2]The industrial and personal service paper group is subject to a sampling variability of 11 percent for April 1980.
[3]The beer and ale group is subject to a sampling variability of 10 percent for April 1980.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980				1979								
		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	81,178	79,689	79,042	76,744	70,402	72,338	72,629	74,778	75,588	76,495	77,489	78,407	78,947
	Total (excluding farm-product raw materials)	72,060	70,862	70,659	67,844	63,171	64,550	64,657	66,015	66,729	67,586	68,363	69,427	69,800
50	Durable goods, total	36,848	36,838	35,903	33,382	32,713	33,177	33,078	34,103	34,509	34,079	35,267	35,171	35,407
501	Motor vehicles and automotive parts and supplies	6,745	6,984	6,543	6,197	6,274	6,250	6,143	6,160	6,500	6,183	6,737	6,835	6,865
502	Furniture and home furnishings	1,352	1,273	1,307	1,353	1,151	1,180	1,156	1,205	1,193	1,182	1,201	1,183	1,213
503	Lumber and other construction materials	3,188	2,870	2,761	2,636	3,101	3,096	3,131	3,200	3,198	3,182	3,152	2,976	3,009
505	Metals and minerals, except petroleum	4,485	(S)	(S)	(S)	3,221	3,630	3,598	3,979	3,850	3,683	4,079	4,194	4,469
506	Electrical goods	4,115	4,267	4,040	3,669	3,362	3,649	3,676	3,731	3,913	4,069	3,931	3,869	3,819
507	Hardware, plumbing, heating equipment, and supplies	2,675	2,531	2,556	2,196	2,360	2,391	2,362	2,418	2,466	2,428	2,506	2,444	2,438
508	Machinery, equipment, and supplies	9,791	10,188	9,841	9,607	9,195	9,223	9,281	9,488	9,613	9,451	9,633	9,612	9,716
51	Nondurable goods, total	44,330	42,851	43,139	43,362	37,689	39,161	39,551	40,675	41,079	42,416	42,222	43,236	43,540
	Total (excluding farm-product raw materials)	35,212	34,024	34,756	34,462	30,458	31,373	31,579	31,912	32,220	33,507	33,096	34,256	34,393
511	Paper and paper products	1,844	1,827	1,794	1,726	1,631	1,627	1,627	1,648	1,664	1,652	1,678	1,711	1,725
512	Drugs, drug proprietaries, and druggists' sundries	1,105	1,100	1,109	1,077	1,050	1,080	1,076	1,084	1,061	1,060	1,067	1,077	1,092
513	Apparel, piece goods, and notions	2,570	2,582	2,490	2,476	2,270	2,067	2,220	2,494	2,274	2,441	2,372	2,413	2,320
514	Groceries and related products	12,049	11,861	11,985	12,027	11,418	11,309	11,480	11,546	11,402	11,634	11,684	11,883	12,084
515	Farm-product raw materials[1]	9,118	8,827	8,383	8,900	7,231	7,788	7,972	8,763	8,859	8,909	9,126	8,980	9,147
517	Petroleum and petroleum products	8,122	7,422	7,637	7,742	5,322	6,139	6,020	5,940	6,355	6,959	7,142	7,331	7,497
518	Beer, wine, and distilled alcoholic beverages	2,724	2,633	2,586	2,641	2,577	2,548	2,476	2,597	2,621	2,556	2,620	2,649	2,582
519	Miscellaneous nondurable goods	5,480	5,303	5,971	5,661	5,081	5,441	5,567	5,555	5,626	5,976	5,426	5,794	5,502
	Inventories ADJUSTED for seasonal variations													
	Merchant wholesalers, total	91,085	91,508	91,708	92,304	84,632	84,904	85,406	87,662	88,474	88,499	89,146	89,324	89,920
	Total (excluding farm-product raw materials)	84,486	84,884	85,645	86,668	79,180	79,388	79,394	81,026	81,636	81,736	82,689	82,870	83,372
50	Durable goods, total	58,146	58,293	58,937	59,867	54,377	54,772	54,591	55,861	56,529	56,479	57,242	57,129	57,463
501	Motor vehicles and automotive parts and supplies	9,756	9,564	9,921	10,252	9,625	9,479	9,244	9,740	9,708	9,595	9,731	9,759	9,762
502	Furniture and home furnishings	1,829	1,832	1,914	1,905	1,844	1,795	1,851	1,836	1,824	1,828	1,911	1,812	1,844
503	Lumber and other construction materials	3,450	3,454	3,487	3,411	3,311	3,364	3,417	3,453	3,445	3,420	3,459	3,470	3,443
505	Metals and minerals, except petroleum	6,609	(S)	(S)	(S)	5,302	5,452	5,532	5,617	6,053	6,060	6,546	6,434	6,397
506	Electrical goods	6,306	6,369	6,157	6,205	5,772	5,893	5,898	6,125	6,125	5,977	6,034	6,074	5,985
507	Hardware, plumbing, heating equipment, and supplies	4,832	4,952	4,891	4,762	4,469	4,439	4,492	4,520	4,540	4,584	4,611	4,647	4,761
508	Machinery, equipment, and supplies	19,752	20,354	20,724	21,159	18,849	19,121	19,102	19,498	19,818	19,994	19,833	19,777	19,791
51	Nondurable goods, total	32,939	33,215	32,771	32,437	30,255	30,132	30,815	31,801	31,945	32,020	31,904	32,195	32,457
	Total (excluding farm-product raw materials)	26,340	26,591	26,708	26,801	24,803	24,616	24,803	25,165	25,107	25,257	25,447	25,741	25,909
511	Paper and paper products	1,720	1,727	1,751	1,766	1,488	1,537	1,575	1,610	1,615	1,645	1,587	1,655	1,680
512	Drugs, drug proprietaries, and druggists' sundries	1,640	1,598	1,593	1,591	1,604	1,582	1,558	1,607	1,565	1,607	1,594	1,567	1,599
514	Groceries and related products	6,871	6,884	6,969	6,956	6,604	6,671	6,760	6,783	6,775	6,800	6,818	6,871	6,908
517	Petroleum and petroleum products	3,230	3,480	3,346	3,471	2,306	2,440	2,426	2,574	2,590	2,753	2,795	2,936	3,041
518	Beer, wine, and distilled alcoholic beverages	2,839	2,809	2,870	2,887	2,767	2,677	2,655	2,664	2,609	2,553	2,626	2,648	2,769
	Stock-sales ratios based on ADJUSTED data													
	Merchant wholesalers, total	112	115	116	120	120	117	118	117	117	116	115	114	114
	Total (excluding farm-product raw materials)	117	120	121	128	125	123	123	123	122	121	121	119	119
50	Durable goods, total	158	158	164	179	166	165	165	164	164	166	162	162	162
501	Motor vehicles and automotive parts and supplies	145	137	152	165	153	152	150	158	149	155	144	143	142
502	Furniture and home furnishings	135	144	146	141	160	152	160	152	153	155	159	153	152
503	Lumber and other construction materials	108	120	126	129	107	109	109	108	108	107	110	117	114
505	Metals and minerals, except petroleum	147	(S)	(S)	(S)	165	150	154	141	157	165	160	153	143
506	Electrical goods	153	149	152	169	172	161	160	164	157	147	153	157	157
507	Hardware, plumbing, heating equipment, and supplies	181	196	191	217	189	186	190	187	184	189	184	190	195
508	Machinery, equipment, and supplies	202	200	211	220	205	207	206	206	206	212	206	206	204
51	Nondurable goods, total	74	78	76	75	80	77	78	78	78	75	76	74	75
	Total (excluding farm-product raw materials)	75	78	77	78	81	78	79	79	78	75	77	75	75
511	Paper and paper products	93	95	98	102	91	94	97	98	97	100	95	97	97
512	Drugs, drug proprietaries, and druggists' sundries	148	145	144	148	153	146	145	148	148	152	149	145	146
514	Groceries and related products	57	58	58	58	58	59	59	59	59	58	58	58	57
517	Petroleum and petroleum products	40	47	44	45	43	40	40	43	41	40	39	40	41
518	Beer, wine, and distilled alcoholic beverages	104	107	111	109	107	105	107	103	100	100	100	100	107

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.

[p] Preliminary estimates. See p. 15, Sample Design and Estimation Procedures. (S) Does not meet publication standards because of extreme variability.

[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. 1980-Apr. 1980 from--			
	Nov. 1979-Jan. 1980 (3 months ago)	Aug. 1979-Oct. 1979 (6 months ago)	May 1979-July 1979 (9 months ago)	Feb. 1979-Apr. 1979 (12 months ago)
Merchant wholesalers, total.....	-1	+3	+7	+13
Durable goods, total.....	-1	+2	+6	+8
Nondurable goods, total..	-1	+3	+8	+16

Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers: 1974-1980

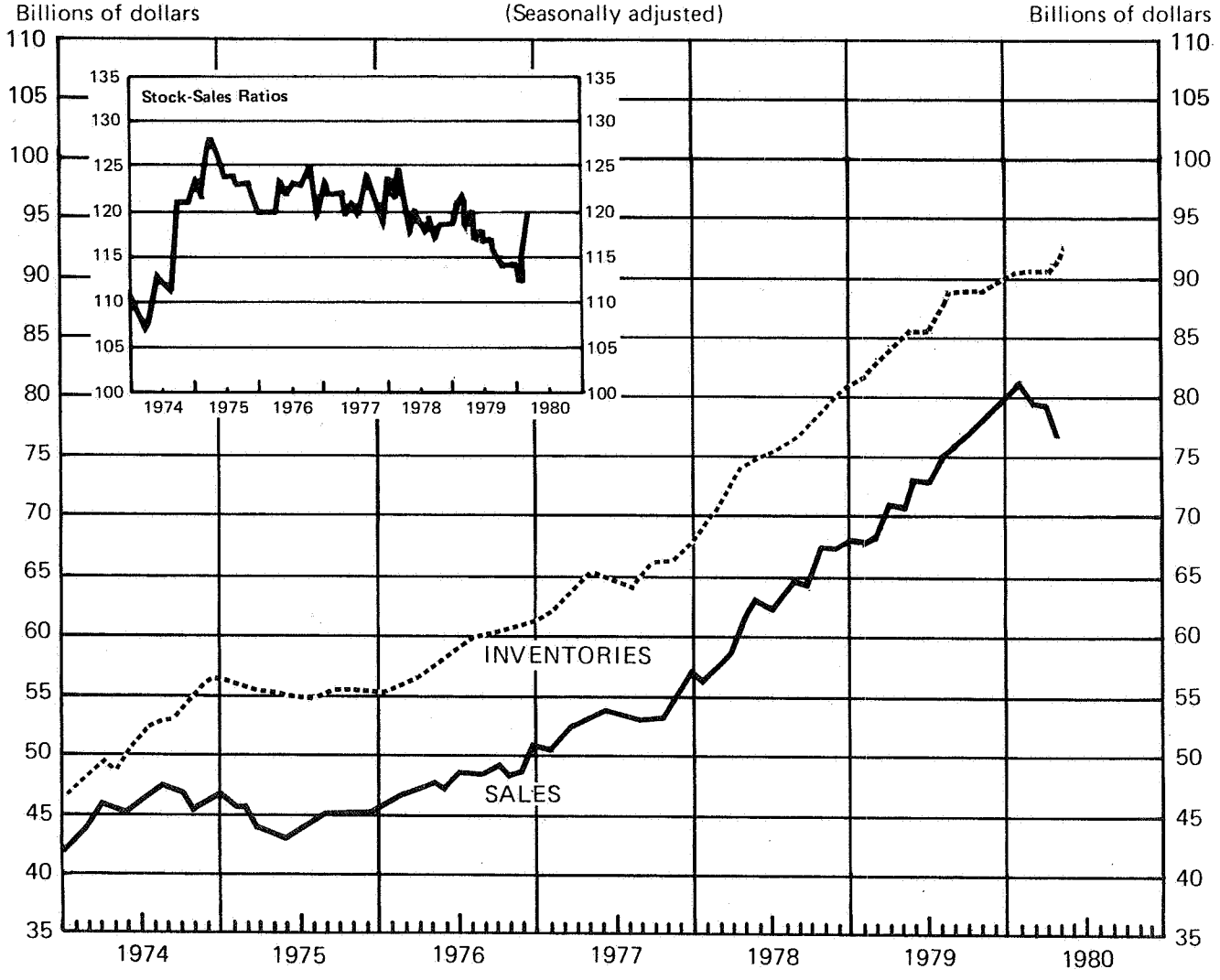


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: April 1980

1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		April 1980 from March 1980	April 1980 from April 1979	4 months 1980 from 4 months 1979	April 1980 from March 1980	April 1980 from April 1979	April 1980 from March 1980	April 1980 from April 1979	April 1980 from March 1980	April 1980 from April 1979
	Merchant wholesalers, total	-1	+12	+16	-1	+9	-3	+9	+1	+9
	Total (excluding farm-product raw materials)	-2	+11	+15	0	+9	-4	+7	+1	+9
50	Durable goods, total	-2	+6	+12	+1	+10	-7	+2	+2	+10
501	Motor vehicles and automotive parts and supplies	+4	+3	+7	+2	+7	-5	-1	+3	+7
5012	Automobiles and other motor vehicles	+6	+5	+16	+3	+7	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	+2	+1	0	+1	+6	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	+3	+4	+2	0	+3	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	+6	+22	+18	0	+3	+4	+18	0	+3
5021	Furniture--household and office	+4	+25	+28	0	+15	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	+2	+26	+23	+3	+8	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	+6	+25	+31	-1	+19	(*)	(*)	(*)	(*)
5023	Home furnishings	+6	+20	+13	-1	-1	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	+3	-12	-4	-2	+3	-5	-15	-2	+3
5031	Lumber, plywood, and millwork	-1	-18	-8	-2	+1	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c.	+9	+2	+7	-3	+7	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	-4	+3	+13	+7	+10	-9	-3	+5	+9
505	Metals and minerals, except petroleum	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
5051 pt.	Ferrous metals service centers and offices	-7	+18	+16	+2	+16	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	-2	+24	+20	+1	+23	(*)	(*)	(*)	(*)
5051 pt.	Nonferrous metals service centers and offices	(S)	(S)	(S)	(S)	(S)	(*)	(*)	(*)	(*)
506	Electrical goods	-6	+13	+18	+1	+8	-9	+9	+1	+8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-4	+11	+16	+1	+10	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-8	+15	+20	+2	+5	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	-9	+8	+12	+4	+2	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	-7	-4	+7	+1	+7	-14	-7	-3	+7
5072	Hardware	-4	+5	+12	0	+22	(*)	(*)	(*)	(*)
5074	Plumbing and heating equipment and supplies (hydronics)	-8	-7	+8	+2	0	(*)	(*)	(*)	(*)
5075	Warm air heating and air conditioning equipment and supplies	-10	-14	-4	+2	-9	(*)	(*)	(*)	(*)
508	Machinery, equipment, and supplies	+1	+8	+11	+1	+12	-2	+4	+2	+12
5081	Commercial machines and equipment	-3	+26	+14	+4	+5	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	-4	-15	+1	+2	+4	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	+3	-5	+10	+1	+20	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	+1	+17	+14	0	+15	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	+5	+10	+5	+1	+1	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	-4	+8	+20	+4	-1	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	-5	+2	+11	+3	-4	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	-4	+18	+34	+6	+10	(*)	(*)	(*)	(*)
51	Nondurable goods, total	-1	+18	+19	-4	+7	+1	+15	-1	+7
	Total (excluding farm-product raw materials)	-1	+16	+18	-1	+8	-1	+13	0	+9
511	Paper and paper products	-4	+11	+14	+2	+19	-4	+6	+1	+19
5111,3	Printing, writing, industrial, and personal service paper	-4	+10	+12	+3	+20	(*)	(*)	(*)	(*)
5111	Printing, and writing paper	-1	+11	+13	+1	+18	(*)	(*)	(*)	(*)
5113	Industrial and personal service paper	-7	+8	+12	+4	+20	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	0	+7	+10	+1	-1	-3	+3	0	-1
5122	Drugs, drug proprietaries, and druggists' sundries	0	+7	+10	+1	-1	(*)	(*)	(*)	(*)
5122 pt.	General-line drugs	0	+4	+5	0	-3	(*)	(*)	(*)	(*)
514	Groceries and related products	+2	+9	+6	-1	+5	0	+5	0	+5
5141	Groceries, general-line	+1	+15	+12	-1	+6	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	-1	+10	+9	-2	+3	(*)	(*)	(*)	(*)
5141 pt.	Retailer cooperatives	-1	+18	+14	0	+7	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	+3	+16	+13	0	+9	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	+2	+15	+12	-2	+14	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	+1	+2	+4	-12	-13	(*)	(*)	(*)	(*)
5145	Confectionery	-1	+5	+4	+1	+7	(*)	(*)	(*)	(*)
5147	Meats and meat products	-1	(S)	(S)	-2	(S)	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	+8	+11	+1	+2	+4	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	+2	+27	+23	-16	+4	+6	+23	-7	+3
5152	Cotton	-11	+21	+28	-18	+27	(*)	(*)	(*)	(*)
5153	Grain	+2	+31	+26	-15	+4	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	-4	+45	+56	-2	+51	+1	+45	+4	+51
5171	Petroleum bulk stations and terminals	-5	+41	+50	+1	+58	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	+8	+8	+7	+3	+5	+2	+2	+1	+4
5181	Beer and ale	+14	+9	+9	+6	+8	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	+3	+6	+6	+1	+2	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	-6	+12	+17	-5	-4	-5	+11	0	-4
5191	Farm supplies	+16	+27	+24	-11	-1	(*)	(*)	(*)	(*)
5194	Tobacco and tobacco products	+5	+1	0	+5	+11	(*)	(*)	(*)	(*)
5198	Paints, varnishes, and supplies	+8	+17	+18	+1	+25	(*)	(*)	(*)	(*)
5199 pt.	Books, periodicals, newspapers	-5	(S)	(S)	-3	(S)	(*)	(*)	(*)	(*)

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

[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
4 Months 1980 Compared With 4 Months 1979

(Percent changes based on UNADJUSTED data)

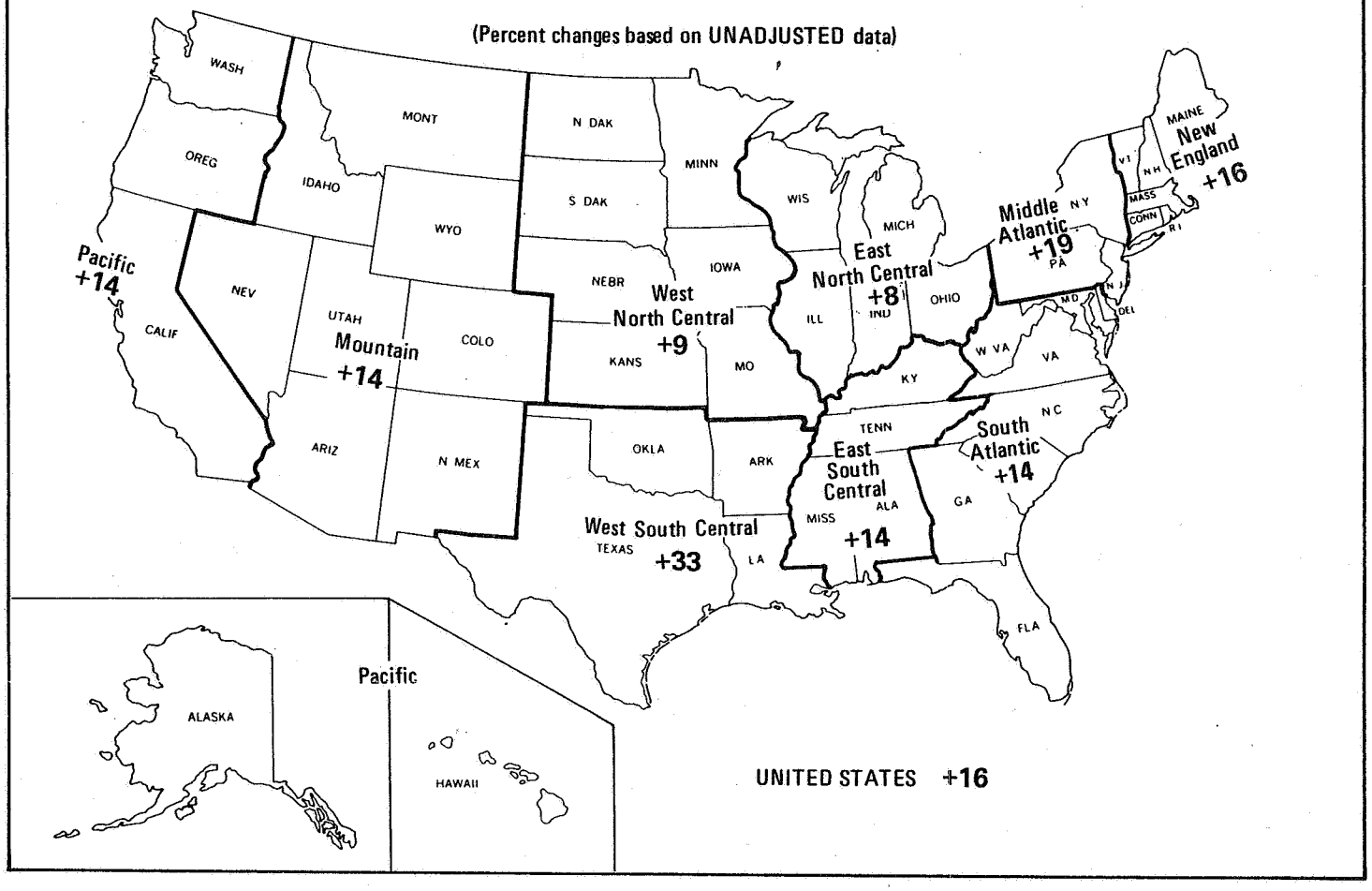


Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1980 and 1979

(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]	1980				1979									Total 4 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.	Apr.[P]	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1980	1979	Range[2]	Median
		1979																
	Merchant wholesalers, total	77,104	75,746	80,597	79,471	70,768	76,814	74,361	73,537	78,567	73,213	81,820	79,079	75,396	312,917	270,546	1.4-1.7	1.5
	New England	4,140	4,001	4,309	3,985	3,652	3,915	3,782	3,572	3,981	3,741	4,167	4,126	3,930	16,434	14,169	4-6	5
	Middle Atlantic	17,749	17,129	18,978	17,543	15,218	16,416	16,288	16,256	17,786	17,136	18,350	18,319	17,391	71,398	60,208	3-4	4
	East North Central	12,357	11,872	12,336	12,519	11,906	13,356	12,661	12,182	12,979	11,735	13,552	12,864	11,693	49,085	45,247	2-3	2
	West North Central	7,772	7,458	7,739	8,261	7,506	8,614	8,005	8,385	8,510	7,921	9,106	8,491	7,874	31,228	28,623	2-3	3
	South Atlantic	8,344	8,137	8,698	8,855	7,929	8,401	8,014	7,720	8,067	7,558	8,391	7,972	7,988	34,034	29,902	2-3	2
	East South Central	3,510	3,583	3,683	3,766	3,461	3,557	3,372	3,292	3,534	3,261	3,791	3,505	3,443	14,542	12,728	3-4	4
	West South Central	9,307	9,426	9,861	9,601	7,673	8,443	8,314	8,248	8,755	8,434	9,347	9,351	9,222	38,195	28,809	4-6	5
	Mountain	2,705	2,703	3,091	3,099	2,659	2,786	2,851	2,704	2,830	2,760	2,851	2,743	2,834	11,598	10,154	4-6	6
	Pacific	11,221	11,438	11,902	11,841	10,765	11,325	11,077	11,178	12,125	10,668	12,264	11,710	11,021	46,402	40,706	2-3	3
50	Durable goods, total	33,579	33,949	36,170	35,383	33,429	35,723	34,447	33,705	37,048	33,616	37,935	34,711	32,515	139,081	124,541	1.6-2.6	1.8
	Middle Atlantic	7,389	7,347	8,003	7,625	6,601	7,191	6,961	6,769	7,538	6,989	8,083	7,477	6,697	30,363	25,595	6-8	6
	East North Central	5,486	5,572	5,711	5,631	5,863	6,467	6,023	5,801	6,440	5,833	6,439	5,869	5,248	22,399	21,714	3-4	3
	West North Central	2,663	2,663	2,734	2,643	2,746	3,009	2,778	2,873	3,209	2,900	3,171	2,851	2,682	10,703	9,830	5-7	5
	South Atlantic	3,991	3,815	4,267	4,376	4,111	4,269	4,172	4,074	4,173	3,796	4,374	3,934	3,868	16,448	15,082	2-4	3
	West South Central	3,747	3,940	4,175	4,088	3,637	3,863	3,900	3,702	3,970	3,662	4,174	3,870	3,701	15,950	13,372	4-5	4
	Mountain	1,205	1,185	1,362	1,408	1,309	1,355	1,358	1,322	1,356	1,280	1,384	1,202	1,225	5,160	4,836	7-9	8
	Pacific	6,100	6,438	6,748	6,489	6,173	6,433	6,265	6,388	7,143	6,069	6,993	6,576	6,049	25,776	23,031	4-5	4
51	Nondurable goods, total	43,525	41,797	44,427	44,088	37,339	41,091	39,914	39,787	41,519	39,597	43,885	44,368	42,881	173,836	146,005	1.6-2.0	1.8
	New England	2,579	2,498	2,649	2,451	2,200	2,377	2,343	2,225	2,453	2,252	2,542	2,635	2,485	10,176	8,766	6-7	6
	Middle Atlantic	10,360	9,782	10,975	9,918	8,616	9,226	9,327	9,487	10,247	10,147	10,267	10,842	10,393	41,035	34,613	3-4	4
	East North Central	6,872	6,301	6,626	6,888	6,042	6,888	6,638	6,380	6,539	5,902	7,113	6,994	6,445	26,686	23,533	3-4	4
	West North Central	5,109	4,795	5,004	5,618	4,760	5,606	5,227	5,512	5,301	5,021	5,935	5,640	5,192	20,525	18,794	3-4	4
	South Atlantic	4,353	4,322	4,431	4,479	3,818	4,132	3,842	3,646	3,894	3,762	4,017	4,038	4,119	17,586	14,819	3-5	4
	East South Central	2,071	2,095	2,174	2,178	1,925	1,959	1,820	1,817	1,844	1,664	2,100	2,064	2,146	8,518	7,049	3-5	4
	West South Central	5,560	5,486	5,686	5,513	4,036	4,580	4,414	4,546	4,785	4,771	5,173	5,481	5,520	22,245	15,436	6-10	8
	Pacific	5,121	5,000	5,154	5,352	4,591	4,893	4,812	4,790	4,982	4,599	5,270	5,134	4,972	20,627	17,676	4-5	5

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

[P]Preliminary estimate. See p. 15, 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 the period September 1979 thru February 1980.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: April 1980

(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 1980 from March 1980	April 1980 from April 1979	4 months 1980 from 4 months 1979	April 1980 from March 1980	April 1980 from April 1979				
		A	B	C	D	E	A	B	D	E
	Merchant wholesalers, total	-1	+12	+16	-1	+9	0.7	1.2	0.3	0.9
	New England	-8	+9	+16	+1	+9	2.1	4.8	0.9	4.2
	Middle Atlantic	-8	+15	+19	+1	+12	1.7	3.2	0.8	2.6
	East North Central	+1	+5	+8	-1	+3	1.3	2.5	0.5	2.4
	West North Central	+7	+10	+9	-5	+4	1.4	2.4	0.8	2.2
	South Atlantic	+2	+12	+14	0	+9	1.1	2.4	0.6	2.0
	East South Central	+2	+9	+14	-5	+6	2.3	3.4	0.9	2.8
	West South Central	-3	+25	+33	-3	+10	2.0	4.5	0.8	2.5
	Mountain	0	+17	+14	0	+10	2.1	3.4	1.1	3.4
	Pacific	-1	+10	+14	0	+12	1.0	2.4	0.6	2.2
50	Durable goods, total	-2	+6	+12	+1	+10	0.9	2.3	0.4	1.1
	New England	-8	+6	+16	+2	+6	4.3	10.7	1.1	6.0
	Middle Atlantic	-5	+16	+19	+2	+15	2.1	6.3	1.0	3.5
	East North Central	-1	-4	+3	+1	+5	1.6	3.1	0.6	3.2
	West North Central	-3	-4	+9	-1	+9	2.3	5.0	1.1	2.7
	South Atlantic	+3	+6	+9	+2	+10	1.5	3.7	0.8	2.8
	East South Central	+5	+3	+6	-2	+6	4.2	6.0	1.4	4.5
	West South Central	-2	+12	+19	-1	+8	3.0	5.1	0.8	3.3
	Mountain	+3	+8	+7	0	+7	3.2	6.1	1.3	4.7
	Pacific	-4	+5	+12	-1	+12	1.6	3.4	0.8	2.8
51	Nondurable goods, total	-1	+18	+19	-4	+7	0.8	1.3	0.5	1.2
	New England	-8	+11	+16	+1	+14	1.9	3.8	1.2	4.5
	Middle Atlantic	-10	+15	+19	-1	+8	2.0	3.1	0.8	3.6
	East North Central	+4	+14	+13	-4	+1	2.1	2.8	1.0	3.3
	West North Central	+12	+18	+9	-10	+1	1.9	2.7	1.2	3.1
	South Atlantic	+1	+17	+19	-4	+8	1.8	2.9	1.1	3.0
	East South Central	0	+13	+21	-10	+5	1.6	3.6	1.8	3.1
	West South Central	-3	+37	+44	-7	+13	2.6	6.3	1.6	4.5
	Mountain	-2	+25	+21	-1	+18	2.0	5.2	1.7	5.8
	Pacific	+4	+17	+17	-1	+12	1.7	2.9	1.0	3.4
5013,4	Automotive parts and supplies, tires and tubes	+2	+1	0	+1	+6	2	4	1	3
	New England	(S)	(S)	+12	-2	-8	(*)	(*)	3	14
	Middle Atlantic	+1	0	-9	+4	+19	4	8	1	7
	East North Central	+3	-9	-8	0	+11	3	8	1	5
	West North Central	+3	0	-6	-2	+8	3	13	2	11
	South Atlantic	-4	-6	-5	-2	-6	4	10	2	8
	East South Central	+13	+14	+5	+1	+27	3	12	3	12
	West South Central	+1	+5	+6	+2	+4	3	10	2	10
	Mountain	-1	(S)	(S)	0	(S)	6	(*)	3	(*)
	Pacific	+2	+13	+12	0	+7	3	6	2	12
502	Furniture and home furnishings	+6	+22	+18	0	+3	3	4	1	3
	Middle Atlantic	+6	+34	+18	+4	-4	6	10	1	8
	East North Central	+18	(S)	+22	-5	-2	6	13	2	8
	West North Central	+5	+24	+31	-3	(S)	6	(*)	3	10
	West South Central	0	-7	+8	-2	-3	4	10	2	10
	Pacific	-5	+8	+20	-2	-1	6	12	2	10
503	Lumber and other construction materials	+3	-12	-4	-2	+3	2	3	1	3
	New England	(S)	+9	+3	+5	+28	(*)	14	3	12
	Middle Atlantic	+7	-6	-1	-1	-6	6	11	2	12
	East North Central	+6	-7	-4	-10	+2	4	8	2	9
	West North Central	-6	-26	-5	-3	+9	7	11	4	12
	South Atlantic	+2	-3	+8	-3	-5	4	9	2	8
	East South Central	+11	-23	-17	-1	-8	7	13	2	12
	West South Central	+3	-9	+19	0	-7	5	13	2	10
	Pacific	+1	-18	-14	-4	+8	4	9	2	9
5051 pt.	Ferrous metals service centers	-2	+24	+20	+1	+23	3	4	1	3
	New England	+11	(S)	+11	+4	(S)	7	(*)	6	(*)
	Middle Atlantic	+14	(S)	+32	+1	+37	6	9	2	12
	East North Central	-9	+2	+6	0	+16	5	7	1	6
	West North Central	-21	(S)	(S)	+1	+23	5	10	2	9
	South Atlantic	-5	(S)	+2	+1	(S)	5	(*)	2	(*)
	East South Central	-2	+38	+22	-6	+10	3	11	2	14
	West South Central	-4	+32	+31	+3	+17	4	10	2	9
	Mountain	0	(S)	(S)	+6	(S)	3	(*)	3	(*)
	Pacific	-13	(S)	+35	0	(S)	5	(*)	4	(*)
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-4	+11	+16	+1	+10	3	4	1	3
	New England	-13	-25	-3	+1	-10	4	12	2	12
	Middle Atlantic	-3	+6	+14	+1	+4	4	11	2	7
	East North Central	-5	+20	+23	+3	+27	3	8	2	7
	West North Central	-5	-13	-3	-1	-6	5	12	3	12
	South Atlantic	-1	+33	+27	+1	+16	3	8	2	8
	East South Central	(S)	(S)	-7	-2	+13	(*)	(*)	3	14
	West South Central	-8	(S)	+37	-1	(S)	7	(*)	3	(*)
	Mountain	-7	0	+4	-3	0	4	14	2	11
	Pacific	-5	+21	+16	-3	+3	4	10	2	6

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 1980—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: April 1980 from March 1980	Sales: April 1980 from April 1979	Sales: 4 months 1980 from 4 months 1979	Inventories: April 1980 from March 1980	Inventories: April 1980 from April 1979	Sampling errors of the ratio corresponding to the percent change in column[2]--			
		A	B	C[1]	D	E	A	B	D	E
5064, 5	Electrical appliances, TV and ratio sets, and electronic parts and equipment	-8	+15	+20	+2	+5	2	4	1	4
	Middle Atlantic	-4	+15	+19	-1	-5	4	9	2	10
	East North Central	-12	-8	+16	+5	-2	5	10	2	13
	West North Central	-21	(S)	+53	-4	(S)	5	(*)	2	(*)
	South Atlantic	-1	+23	+12	+1	-6	4	12	2	7
	West South Central	+7	(S)	(S)	+3	(S)	4	13	2	12
	Mountain	(S)	(S)	-12	+8	+5	(*)	(*)	3	13
	Pacific	-11	+9	+17	+5	+13	7	11	3	9
5072	Hardware	-4	+5	+12	0	+22	2	3	1	3
	New England	-4	-2	+7	-5	-5	4	13	3	14
	Middle Atlantic	0	+8	+15	0	+20	3	9	2	11
	East North Central	-10	-9	+11	-2	+26	4	9	4	10
	West North Central	-3	+11	+14	0	+10	4	7	2	6
	South Atlantic	+1	+17	+11	+1	+25	3	8	2	10
	East South Central	-1	+9	+14	+1	+9	4	10	2	9
	Pacific	-1	+14	+15	+1	+35	3	10	2	11
5074	Plumbing and heating equipment and supplies (hydronics)	-8	-7	+8	+2	0	2	5	1	9
	Middle Atlantic	+3	+15	+15	+2	(S)	6	14	3	(*)
	East North Central	-9	(S)	-12	+6	(S)	7	14	2	(*)
	South Atlantic	-1	-9	+5	-3	+6	3	11	2	9
	Mountain	+13	(S)	+16	+4	+31	4	(*)	2	14
	Pacific	-7	0	+13	+1	+17	4	14	2	11
5084, 5	Industrial machinery, equipment, and supplies	+1	+17	+14	0	+15	2	5	1	3
	Middle Atlantic	+4	+17	+12	+1	+11	5	9	2	7
	East North Central	+1	+6	+7	0	+13	4	6	1	6
	West South Central	-1	(S)	+22	-7	+12	4	(*)	1	6
	Pacific	+1	+13	+12	+1	+12	3	8	2	8
512	Drugs, drug proprietaries, and druggists' sundries	0	+7	+10	+1	-1	2	3	1	4
	New England	+1	+7	+15	-1	+10	3	12	3	14
	Middle Atlantic	-6	+7	+12	0	-9	4	8	2	7
	East North Central	-1	+5	+6	+2	-7	4	8	2	8
	West North Central	0	+11	+19	+1	+2	5	12	2	9
	South Atlantic	+3	+7	+8	+3	+13	2	10	2	8
	East South Central	+5	-2	+2	-3	-4	2	9	2	10
	West South Central	-3	+18	+21	-3	+12	2	12	2	14
	Mountain	+1	+17	+18	+1	+13	1	7	1	6
	Pacific	+3	+6	+7	+2	(S)	2	13	1	(*)
5141	Groceries, general-line	+1	+15	+12	-1	+6	1	2	0	2
	New England	+1	+5	+6	-1	+2	2	6	2	7
	Middle Atlantic	+3	+14	+9	-1	+4	1	3	1	7
	East North Central	0	+24	+16	+1	+6	1	4	1	5
	West North Central	+2	+6	+8	-4	-10	2	5	2	7
	South Atlantic	+1	+11	+13	-2	+5	2	5	1	4
	West South Central	+1	+11	+14	-3	+12	2	7	2	6
	Mountain	0	+34	+19	+4	+28	2	6	2	9
	Pacific	-1	+10	+11	+1	+10	0	3	1	3
5142,3,6,9	Specialty-line groceries	+2	+15	+12	-2	+14	1	3	1	4
	Middle Atlantic	+5	+25	+17	-1	+10	2	5	2	7
	East North Central	0	-6	-4	+3	+5	3	6	1	6
	West North Central	+8	+24	+17	-3	+20	3	5	1	6
	South Atlantic	+2	+16	+9	-8	+14	4	13	2	13
	East South Central	0	(S)	-20	0	(S)	4	12	2	13
5148	Fresh fruits and vegetables	+8	+11	+1	+2	+4	2	3	2	7
	Middle Atlantic	+10	-5	-10	+9	+13	3	9	5	14
	East North Central	+7	-4	-5	-2	+1	3	8	3	10
	West North Central	+6	-1	-11	+2	(S)	4	14	3	(*)
	West South Central	+7	+17	+4	+2	(S)	7	13	3	(*)
	Pacific	+6	+22	+14	-1	+3	6	9	2	10
5194	Tobacco and tobacco products	+5	+1	0	+5	+11	1	4	1	5
	New England	+13	-4	0	+1	(S)	3	14	3	(*)
	Middle Atlantic	+5	-10	-9	+3	(S)	4	14	3	(*)
	East North Central	+6	+10	-1	+5	+17	2	10	2	11
	West North Central	+1	(S)	+19	+7	(S)	6	(*)	6	(*)
	South Atlantic	-4	(S)	-24	0	(S)	4	14	3	12
	East South Central	+13	(S)	+4	+3	(S)	3	(*)	4	(*)
	West South Central	-3	(S)	+24	-2	+1	3	(*)	4	11
	Mountain	-12	(S)	-2	+13	(S)	3	(*)	5	(*)
	Pacific	+10	(S)	+16	+14	+1	2	10	3	12

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, B, D and E are based on medians or measurements on data for September 1979 through February 1980.

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

(Coefficients of variation in percent)

1972 SIC code	Kind of business	SALES						INVENTORIES					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Median sampling error of the ratio of:		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Median sampling error of the ratio of:	
		Range	Median	Range	Median	Two consecutive months	Same month a year ago	Range	Median	Range	Median	Two consecutive months	Same month a year ago
	Merchant wholesalers, total	1.4-1.8	1.6	1.4-1.6	1.5	0.6	1.0	1.3-1.5	1.4	1.2-1.4	1.4	0.3	0.9
	Total (excluding farm-product raw materials)	1.4-1.9	1.6	1.3-1.6	1.4	0.6	1.1	1.4-1.7	1.5	1.2-1.5	1.5	0.3	0.9
50	Durable goods, total	1.5-3.2	2.0	1.4-2.4	1.6	1.0	1.7	1.0-1.5	1.4	1.0-1.4	1.3	0.4	1.1
501	Motor vehicles and automotive parts and supplies	3.6-4.6	3.9	3.2-4.4	3.6	1.7	2.8	2.2-3.5	3.0	2.6-3.5	2.7	0.8	2.6
5012	Automobiles and other motor vehicles	(*)	(*)	(*)	(*)	2.8	5.4	(*)	(*)	(*)	(*)	1.8	5.5
5013,4	Automotive parts and supplies, tires and tubes	3.3-4.7	4.0	3.0-4.9	3.6	1.7	3.1	3.0-4.1	3.7	2.8-3.9	3.4	1.2	3.0
5013	Automotive parts and supplies	3.8-5.9	4.7	3.6-5.9	4.2	2.1	3.8	3.8-5.0	4.5	3.5-4.6	4.2	1.3	3.2
502	Furniture and home furnishings	4.7-7.0	5.7	4.3-6.1	5.1	2.9	4.0	4.0-4.6	4.2	3.9-4.5	4.2	0.9	3.3
5021	Furniture--household and office	4.9-6.5	6.0	4.3-7.1	6.0	4.1	5.7	(*)	(*)	(*)	(*)	1.5	5.1
5021 pt.	Household furniture	(*)	(*)	(*)	(*)	6.2	11.2	(*)	(*)	(*)	(*)	1.5	8.7
5021 pt.	Office furniture	(*)	(*)	(*)	(*)	4.9	6.5	(*)	(*)	(*)	(*)	1.9	5.2
5023	Home furnishings	6.7-9.2	7.6	5.5-8.1	6.6	3.3	5.1	5.0-6.3	5.6	5.0-6.1	5.7	1.1	4.5
503	Lumber and other construction materials	4.2-5.8	4.8	4.4-5.4	4.7	2.3	3.5	5.0-6.7	5.6	5.0-6.6	5.9	0.9	2.9
5031	Lumber, plywood, and millwork	5.7-7.7	6.3	5.1-6.6	5.9	3.3	4.5	7.0-9.0	7.9	7.2-8.6	8.1	1.2	3.6
5039	Construction materials, n.e.c.	5.0-6.9	6.0	5.1-6.5	5.7	3.1	5.9	(*)	(*)	(*)	(*)	1.1	4.8
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(*)	(*)	(*)	(*)	3.5	5.1	(*)	(*)	(*)	(*)	1.6	4.6
505	Metals and minerals, except petroleum	4.3-16.8	8.7	5.1-14.4	8.2	2.4	5.4	6.2-9.3	7.6	5.7-10.2	8.1	1.2	5.2
5051 pt.	Ferrous metals service centers and offices	4.3-6.2	5.2	3.9-6.5	4.6	2.5	3.3	3.9-4.7	4.3	4.0-4.5	4.2	0.8	3.0
5051 pt.	Ferrous metals service centers	4.8-7.1	5.1	4.9-5.2	5.1	2.8	3.6	2.8-5.5	4.6	3.1-4.8	4.0	0.9	3.4
5051 pt.	Nonferrous metals service centers and offices	(*)	(*)	(*)	(*)	4.1	23.3	(*)	(*)	(*)	(*)	5.2	22.5
506	Electrical goods	3.8-5.0	4.1	3.3-4.6	3.6	2.3	3.0	3.2-4.8	3.5	3.3-4.6	3.5	0.7	2.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	3.7-6.7	4.5	3.3-6.9	4.1	3.1	4.5	3.2-5.1	3.5	3.2-4.5	3.3	0.8	2.9
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	5.2-7.4	6.0	5.0-6.6	5.6	2.8	4.4	3.9-6.9	4.4	3.8-6.5	4.7	1.2	4.1
5064	Electrical appliances, TV and radio sets	4.9-8.2	6.4	5.1-6.7	5.5	2.8	4.3	(*)	(*)	(*)	(*)	1.3	5.0
507	Hardware, plumbing, heating equipment, and supplies	3.1-4.5	3.5	2.9-3.7	3.3	1.6	2.3	2.8-4.2	3.6	2.9-4.2	3.5	0.8	3.8
5072	Hardware	2.6-3.8	3.6	2.8-3.9	3.2	1.6	2.9	4.7-6.3	5.6	4.5-6.1	5.7	1.3	3.5
5074	Plumbing and heating equipment and supplies (hydronics)	5.4-7.7	6.4	5.1-6.6	5.9	2.9	5.4	5.0-6.0	5.4	4.7-5.6	5.3	1.3	8.6
5075	Warm air heating and air conditioning equipment and supplies	(*)	(*)	(*)	(*)	4.1	5.7	(*)	(*)	(*)	(*)	1.2	5.1
508	Machinery, equipment, and supplies	2.9-4.5	3.3	2.6-3.2	2.8	1.8	3.3	1.8-2.4	2.2	1.8-2.3	2.1	0.4	1.8
5081	Commercial machines and equipment	(*)	(*)	(*)	(*)	4.4	6.6	(*)	(*)	(*)	(*)	1.5	5.7
5082	Construction and mining machinery and equipment	4.8-6.6	5.4	4.1-5.1	4.5	3.9	5.4	3.8-5.3	4.2	3.9-4.9	4.1	1.1	4.1
5083	Farm and garden machinery and equipment	(*)	(*)	(*)	(*)	6.0	9.8	(*)	(*)	(*)	(*)	1.4	4.7
5084,5	Industrial machinery, equipment, and supplies	3.2-4.1	3.3	2.4-3.4	2.8	2.5	4.9	3.2-4.2	3.8	3.1-3.8	3.5	0.6	2.5
5086	Professional equipment and supplies	(*)	(*)	(*)	(*)	2.7	4.7	(*)	(*)	(*)	(*)	1.1	5.2
5093	Scrap and waste materials	4.2-5.4	5.1	4.2-5.3	4.7	2.2	3.9	(*)	(*)	(*)	(*)	1.3	3.2
5093 pt.	Iron and steel scrap	(*)	(*)	(*)	(*)	2.2	5.0	(*)	(*)	(*)	(*)	1.5	4.3
5093 pt.	Waste materials	(*)	(*)	(*)	(*)	3.9	6.9	(*)	(*)	(*)	(*)	2.2	5.4
51	Nondurable goods, total	1.8-2.1	1.9	1.6-2.0	1.9	0.8	1.2	2.6-3.0	2.8	2.6-2.8	2.7	0.5	1.3
	Total (excluding farm-product raw materials)	1.9-2.4	2.1	1.7-2.3	2.0	0.9	1.4	3.3-3.6	3.5	3.2-3.5	3.3	0.4	1.4
5111	Paper and paper products	4.6-7.7	5.2	4.5-6.9	4.9	1.5	3.0	4.6-7.3	6.3	4.6-7.1	5.9	0.8	3.4
5111,3	Printing, writing, industrial, and personal service paper	3.0-5.1	3.3	3.0-4.6	3.2	1.1	2.3	5.0-6.9	6.4	4.9-6.9	6.3	0.8	3.1
5111	Printing and writing paper	2.6-3.9	2.8	2.4-3.4	2.7	1.3	2.7	3.9-4.9	4.3	3.7-4.8	4.2	0.7	3.2
5113	Industrial and personal service paper	4.4-7.7	5.0	4.4-6.8	4.5	1.9	4.8	7.3-11.4	9.9	6.9-11.2	9.7	1.3	4.2
512	Drugs, drug proprietaries, and druggists' sundries	2.3-3.1	2.7	2.2-2.9	2.7	1.5	3.1	3.6-5.1	4.4	4.0-5.1	4.6	1.4	4.0
5122	Drugs, drug proprietaries, and druggists' sundries	2.3-3.1	2.7	2.2-2.9	2.7	1.5	3.1	(*)	(*)	(*)	(*)	1.4	4.0
5122 pt.	General-line drugs	6.0-6.9	6.6	6.0-6.9	6.6	1.1	4.1	(*)	(*)	(*)	(*)	0.9	6.6
513	Apparel, piece goods, and notions	12.0-15.7	13.2	10.9-14.6	13.4	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
514	Groceries and related products	1.7-2.4	2.2	1.8-2.3	2.1	0.5	1.3	1.6-2.2	1.8	1.6-2.0	1.8	0.4	1.6
5141	Groceries, general-line	2.6-3.4	3.3	2.8-3.3	3.1	0.6	1.7	1.9-2.8	2.2	1.7-2.7	1.9	0.5	1.7
5141 pt.	Voluntary groups	(*)	(*)	(*)	(*)	0.7	2.1	(*)	(*)	(*)	(*)	0.7	2.8
5141 pt.	Retailer cooperatives	(*)	(*)	(*)	(*)	0.6	1.8	(*)	(*)	(*)	(*)	0.6	2.3
5141 pt.	Other general-lines	(*)	(*)	(*)	(*)	1.3	2.8	(*)	(*)	(*)	(*)	1.0	3.7
5142,3,6,9	Specialty-line groceries	(*)	(*)	(*)	(*)	1.2	3.3	(*)	(*)	(*)	(*)	1.0	3.6
5144	Poultry and poultry products	5.6-7.2	6.5	5.4-7.2	6.7	1.8	3.2	(*)	(*)	(*)	(*)	1.5	5.2
5145	Confectionery	5.1-12.9	6.7	4.8-9.5	6.6	2.7	5.5	(*)	(*)	(*)	(*)	1.7	4.0
5147	Meats and meat products	5.6-7.0	6.8	5.4-6.9	6.5	1.5	4.2	(*)	(*)	(*)	(*)	1.4	6.3
5148	Fresh fruits and vegetables	4.0-5.7	4.4	3.5-5.0	4.7	2.3	3.2	(*)	(*)	(*)	(*)	2.6	6.2
515	Farm-product raw materials	2.6-5.2	3.0	2.1-4.6	3.4	2.3	2.9	(*)	(*)	(*)	(*)	1.5	4.0
5152	Cotton	(*)	(*)	(*)	(*)	6.9	10.2	(*)	(*)	(*)	(*)	1.0	2.5
5153	Grain	3.2-5.9	3.8	2.6-5.3	3.9	2.5	3.3	(*)	(*)	(*)	(*)	1.7	5.0
517	Petroleum and petroleum products	5.1-7.8	7.1	4.9-8.0	6.2	2.0	4.1	5.6-6.5	5.8	5.1-6.1	5.6	1.7	3.3
5171	Petroleum bulk stations and terminals	3.5-5.1	4.0	3.1-4.2	3.9	1.7	3.7	(*)	(*)	(*)	(*)	2.1	3.9
518	Beer, wine, and distilled alcoholic beverages	4.5-5.9	4.9	4.3-5.5	4.9	1.2	3.0	3.8-5.0	4.2	3.9-5.0	4.3	1.4	3.2
5181	Beer and ale	5.2-6.1	5.8	5.4-6.2	5.7	1.4	3.5	7.9-10.2	8.1	7.7-9.9	8.8	2.7	4.7
5182	Wines and distilled alcoholic beverages	5.1-7.2	5.7	5.1-6.9	5.7	1.9	4.1	3.4-5.0	4.4	3.7-4.6	4.0	1.3	4.5
519	Miscellaneous nondurable goods	2.5-4.9	3.9	2.5-3.9	3.4	1.9	3.2	(*)	(*)	(*)	(*)	0.9	2.7
5191	Farm supplies	(*)	(*)	(*)	(*)	4.4	5.7	(*)	(*)	(*)	(*)	1.6	4.5
5194	Tobacco and tobacco products	5.6-6.7	6.1	5.3-6.8	5.8	1.3	3.9	(*)	(*)	(*)	(*)	1.3	4.7
5198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.4	6.8	(*)	(*)	(*)	(*)	1.1	5.8
199 pt.	Books, periodicals, newspapers	(*)	(*)	(*)	(*)	6.6	17.4	(*)	(*)	(*)	(*)	1.4	14.4

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 August 1979 through January 1980.

* 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 1979-December 1980

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	94.6	91.5	104.4	100.2	106.1	101.7	98.6	104.3	95.7	105.3	101.1	96.0
	Total (excluding farm-product raw materials)	93.4	91.2	104.0	100.1	106.4	102.6	98.8	105.9	96.8	105.4	99.9	95.0
50	Durable goods, total	91.6	89.2	103.2	101.6	107.4	103.5	99.6	107.5	97.7	107.7	98.7	92.4
501	Motor vehicles and automotive parts and supplies	93.4	90.7	106.9	109.1	112.2	103.6	101.6	104.8	91.3	100.7	94.4	89.9
502	Furniture and home furnishings	88.6	89.3	102.8	98.2	102.9	102.5	93.0	104.2	101.2	115.7	106.8	93.5
503	Lumber and other construction materials	81.7	79.4	98.6	97.5	108.3	108.9	106.6	117.6	102.9	114.9	100.7	84.5
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	81.7	85.0	101.4	99.9	103.6	99.9	96.0	107.0	105.9	113.9	104.7	100.8
505	Metals and minerals, except petroleum	97.1	92.7	103.1	102.3	107.8	101.3	96.1	109.0	100.1	102.9	96.9	89.2
506	Electrical goods	90.5	88.7	100.1	97.3	102.6	103.0	99.5	106.4	98.6	111.8	102.4	99.1
507	Hardware, plumbing, heating equipment, and supplies	91.9	86.2	97.4	100.6	108.4	104.2	104.4	108.6	98.8	111.5	98.8	89.9
508	Machinery, equipment, and supplies	89.8	88.3	106.4	102.7	109.1	105.0	97.2	105.2	99.4	107.1	97.0	92.9
509	Miscellaneous durable goods	87.9	89.9	109.2	100.0	101.5	104.3	92.9	108.5	98.5	109.0	104.2	93.1
51	Nondurable goods, total	98.1	92.4	105.7	99.6	105.3	100.4	97.9	101.5	93.9	102.7	102.5	99.4
	Total (excluding farm-product raw materials)	96.7	92.9	104.8	99.6	105.3	101.4	98.1	104.3	95.2	102.6	101.4	97.1
511	Paper and paper products	99.5	93.0	104.5	95.1	104.0	101.5	96.2	106.8	96.8	108.5	99.3	95.0
512	Drugs, drug proprietaries, and druggists' sundries	99.3	91.7	103.8	98.9	102.0	96.6	98.3	103.6	97.2	110.4	101.4	96.5
513	Apparel, piece goods, and notions	93.5	91.9	103.7	92.8	102.9	94.7	95.8	115.6	105.0	114.0	102.3	87.6
514	Groceries and related products	98.0	91.3	104.1	98.8	106.0	102.1	99.6	103.8	95.6	103.9	100.3	96.6
515	Farm-product raw materials[1]	103.0	92.5	110.2	99.3	104.0	98.9	98.2	92.3	87.7	105.9	108.3	100.7
516	Chemicals and allied products	93.9	88.1	102.1	99.4	109.9	104.3	99.0	109.7	94.3	106.4	100.1	92.7
517	Petroleum and petroleum products	100.9	102.3	105.2	98.1	99.0	97.2	98.7	100.0	91.3	100.4	103.7	102.4
518	Beer, wine, and distilled alcoholic beverages	81.5	81.6	98.8	95.2	107.0	109.2	101.5	108.5	93.4	104.3	106.5	111.6
519	Miscellaneous nondurable goods	96.2	97.2	112.6	106.4	110.3	104.2	91.9	97.2	93.2	97.6	97.4	95.2
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.4	101.3	102.4	101.4	100.1	99.3	98.8	97.9	98.3	99.8	100.4	100.1
	Total (excluding farm-product raw materials)	98.9	100.1	101.4	100.9	100.9	100.8	100.4	99.6	99.4	99.8	99.4	98.9
50	Durable goods, total	98.4	100.1	100.9	100.9	101.4	101.9	101.1	100.3	99.4	98.9	98.6	98.6
501	Motor vehicles and automotive parts and supplies	101.4	105.9	101.9	100.4	101.6	99.6	99.3	97.3	96.3	98.1	98.9	99.6
502	Furniture and home furnishings	98.8	99.1	99.6	99.6	101.1	102.8	100.6	100.8	101.8	99.9	99.1	97.3
503	Lumber and other construction materials	98.1	99.1	103.1	102.8	103.1	102.3	102.1	99.9	98.9	97.8	96.1	97.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	95.8	99.8	100.9	102.6	102.4	106.4	105.8	101.1	101.8	100.8	93.3	89.8
505	Metals and minerals, except petroleum	98.4	97.8	99.8	99.1	101.4	100.9	102.6	104.4	101.3	97.4	98.9	98.6
506	Electrical goods	96.6	96.4	98.8	99.4	101.4	102.4	101.6	102.1	101.4	100.8	100.4	99.1
507	Hardware, plumbing, heating equipment, and supplies	97.1	98.4	101.9	105.6	103.4	103.1	102.4	99.9	97.9	98.4	95.9	96.1
508	Machinery, equipment, and supplies	98.6	100.6	101.6	100.4	101.3	101.9	100.4	99.8	99.9	98.6	98.4	98.8
509	Miscellaneous durable goods	97.6	98.1	96.6	97.9	97.1	100.4	102.9	102.3	102.6	103.3	102.3	99.4
51	Nondurable goods, total	103.8	103.1	104.8	101.1	97.8	95.4	94.6	94.4	96.3	101.3	104.1	103.4
	Total (excluding farm-product raw materials)	100.1	99.9	101.9	100.9	99.8	98.6	98.6	98.1	99.6	101.6	101.1	100.1
511	Paper and paper products	97.3	98.1	99.4	100.9	100.3	102.6	99.9	99.3	101.1	100.6	100.1	100.9
512	Drugs, drug proprietaries, and druggists' sundries	95.3	96.3	100.1	100.8	98.8	100.6	100.1	100.3	103.9	105.3	100.8	98.4
513	Apparel, piece goods, and notions	101.1	100.6	97.9	98.9	101.4	100.6	101.4	101.1	98.9	99.1	98.8	100.4
514	Groceries and related products	98.6	99.9	101.9	100.6	99.6	98.9	98.4	97.9	99.9	102.4	100.9	101.1
515	Farm-product raw materials[1]	119.1	117.2	116.2	104.9	89.8	82.8	80.5	77.8	81.3	98.4	115.4	116.3
516	Chemicals and allied products	98.1	100.8	101.4	101.3	103.4	102.1	102.8	99.6	100.4	96.6	96.3	97.3
517	Petroleum and petroleum products	102.4	98.6	99.6	94.4	98.4	93.3	96.8	101.1	104.4	104.4	104.3	103.1
518	Beer, wine, and distilled alcoholic beverages	96.6	94.6	99.3	101.4	103.1	102.9	101.1	97.3	99.4	105.9	104.6	93.8
519	Miscellaneous nondurable goods	104.6	105.6	108.3	102.6	99.1	93.3	95.4	95.9	96.1	99.1	99.3	100.6

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1979-December 1980—Continued

1972 SIC code	Kind of business	1980											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	95.4	95.2	101.1	103.3	103.3	101.6	101.9	98.6	100.6	105.8	95.5	100.8
	Total (excluding farm-product raw materials)	94.1	95.2	100.4	103.9	103.6	101.8	102.3	100.3	101.5	106.0	94.8	100.3
50	Durable goods, total	92.3	92.7	99.8	105.0	104.2	103.4	103.2	101.3	103.6	107.7	93.0	97.9
501	Motor vehicles and automotive parts and supplies	95.2	94.3	103.6	114.2	108.1	102.7	104.2	101.3	95.1	100.4	90.7	94.7
502	Furniture and home furnishings	89.5	93.2	99.8	101.8	100.0	101.9	96.5	98.9	104.5	117.2	101.9	98.3
503	Lumber and other construction materials	81.0	83.9	94.0	101.1	106.2	107.1	109.4	110.4	112.2	115.0	92.5	90.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	80.2	86.3	101.3	106.6	99.2	97.7	101.2	101.7	109.7	110.5	104.8	107.0
505	Metals and minerals, except petroleum	96.9	97.4	101.3	107.0	101.9	102.5	98.8	103.2	105.2	102.7	92.3	95.8
506	Electrical goods	91.0	91.5	97.3	100.6	100.0	102.6	103.4	100.5	103.9	111.4	97.5	104.1
507	Hardware, plumbing, heating equipment, and supplies	92.2	88.9	95.3	103.7	105.2	104.6	107.7	102.9	104.0	110.7	94.3	94.6
508	Machinery, equipment, and supplies	90.7	91.5	102.2	105.8	107.2	104.1	101.4	98.8	104.7	108.1	91.1	97.5
509	Miscellaneous durable goods	89.3	94.3	104.4	102.6	99.5	103.8	95.3	102.3	106.6	109.8	95.4	98.3
51	Nondurable goods, total	98.8	96.0	102.4	102.8	102.9	100.1	101.4	96.3	98.3	103.3	97.1	104.3
	Total (excluding farm-product raw materials)	97.7	97.0	101.1	102.5	103.0	100.9	101.5	98.6	99.8	103.7	95.4	102.0
511	Paper and paper products	99.6	97.1	100.3	100.0	101.4	99.2	100.9	99.7	102.7	108.5	93.3	101.7
512	Drugs, drug proprietaries, and druggists' sundries	100.6	95.0	100.4	103.1	98.0	96.7	101.8	98.1	103.5	109.9	95.7	102.5
513	Apparel, piece goods, and notions	95.1	93.4	101.2	97.8	98.3	94.1	101.9	108.6	108.1	113.6	99.6	92.4
514	Groceries and related products	98.7	94.8	100.6	101.9	104.7	100.2	103.4	99.0	99.5	104.5	95.8	100.6
515	Farm-product raw materials[1]	101.3	96.0	107.3	102.6	103.4	97.2	100.8	88.6	92.9	104.2	103.6	105.4
516	Chemicals and allied products	94.3	92.6	98.8	103.4	105.8	104.4	102.0	103.6	99.6	106.8	94.2	99.2
517	Petroleum and petroleum products	101.2	107.8	102.9	97.8	98.6	97.9	97.9	97.6	95.4	100.9	98.6	105.5
518	Beer, wine, and distilled alcoholic beverages	82.3	85.6	94.2	100.0	103.0	108.2	106.8	100.0	99.6	105.8	98.3	120.1
519	Miscellaneous nondurable goods	96.7	101.7	108.5	107.4	109.2	104.9	94.0	92.1	98.3	99.0	90.9	98.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.3	101.3	102.4	101.6	100.1	99.4	98.8	97.9	98.3	99.6	100.4	100.1
	Total (excluding farm-product raw materials)	98.9	100.1	101.4	100.9	100.9	100.9	100.4	99.6	99.4	99.8	99.3	98.9
50	Durable goods, total	98.4	100.1	101.1	100.8	101.4	101.9	101.1	100.3	99.4	98.9	98.6	98.6
501	Motor vehicles and automotive parts and supplies	101.4	106.3	101.9	100.4	101.6	99.6	99.3	97.4	96.1	98.1	98.9	99.6
502	Furniture and home furnishings	98.8	99.1	99.6	99.6	101.1	102.9	100.6	100.6	101.9	99.9	99.1	97.3
503	Lumber and other construction materials	97.9	99.1	103.1	102.8	103.1	102.3	102.1	99.8	98.9	97.9	96.1	97.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	95.6	99.6	101.1	102.9	102.3	106.4	105.9	101.1	101.9	100.8	93.3	89.8
505	Metals and minerals, except petroleum	98.3	97.8	99.6	98.9	101.6	100.9	102.6	104.6	101.3	97.3	98.9	98.4
506	Electrical goods	96.6	96.4	98.8	99.4	101.4	102.4	101.6	102.1	101.4	100.8	100.4	99.1
507	Hardware, plumbing, heating equipment, and supplies	97.1	98.6	101.9	105.9	103.4	103.1	102.4	99.9	97.8	98.3	95.8	96.1
508	Machinery, equipment, and supplies	98.6	100.6	101.6	100.4	101.3	101.9	100.4	99.9	100.1	98.6	98.4	98.8
509	Miscellaneous durable goods	97.6	98.1	96.6	97.8	97.1	100.3	102.9	102.1	102.8	103.1	102.1	99.3
51	Nondurable goods, total	103.8	103.1	104.9	101.3	98.1	95.6	94.6	94.3	96.3	101.1	103.9	103.4
	Total (excluding farm-product raw materials)	100.1	99.8	102.1	101.1	99.9	98.6	98.6	98.1	99.6	101.6	100.9	100.1
511	Paper and paper products	97.1	98.1	99.4	100.9	100.4	102.6	99.9	99.1	101.1	100.6	100.1	100.9
512	Drugs, drug proprietaries, and druggists' sundries	95.1	96.3	100.1	100.8	98.8	100.6	100.1	100.3	104.1	105.3	100.6	98.4
513	Apparel, piece goods, and notions	101.1	100.8	97.9	98.9	101.4	100.8	101.4	101.1	98.9	99.1	98.8	100.4
514	Groceries and related products	98.6	99.9	101.9	100.6	99.6	99.1	98.4	97.9	100.1	102.4	100.9	101.1
515	Farm-product raw materials[1]	119.1	117.4	116.9	105.6	90.3	82.8	80.3	77.4	80.8	98.1	115.4	116.4
516	Chemicals and allied products	98.1	100.9	101.4	101.3	103.4	102.1	102.8	99.6	100.4	96.6	96.3	97.3
517	Petroleum and petroleum products	102.1	98.4	99.9	94.4	98.4	93.3	96.8	101.1	104.4	104.3	104.3	102.9
518	Beer, wine, and distilled alcoholic beverages	96.6	94.4	99.4	101.6	103.1	102.9	101.3	97.3	99.4	105.9	104.6	93.8
519	Miscellaneous nondurable goods	104.8	105.6	108.6	102.8	99.4	93.1	95.4	95.8	95.9	99.3	99.1	100.4

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.

[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 (SIC5137)[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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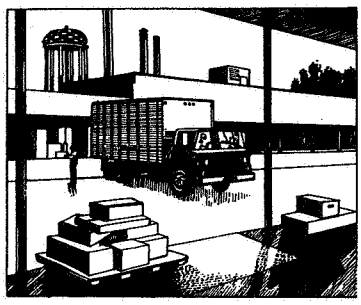
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued July 1980

May 1980

BW-80-5

Sales—May 1980 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences, but not for price changes, were $76.2 billion, down 1 percent from the previous month, but up 5 percent from May 1979. Adjusted March-through-May total sales were down 3 percent from the December-through-February period, but were 9 percent above the total sales for the comparable months a year ago.

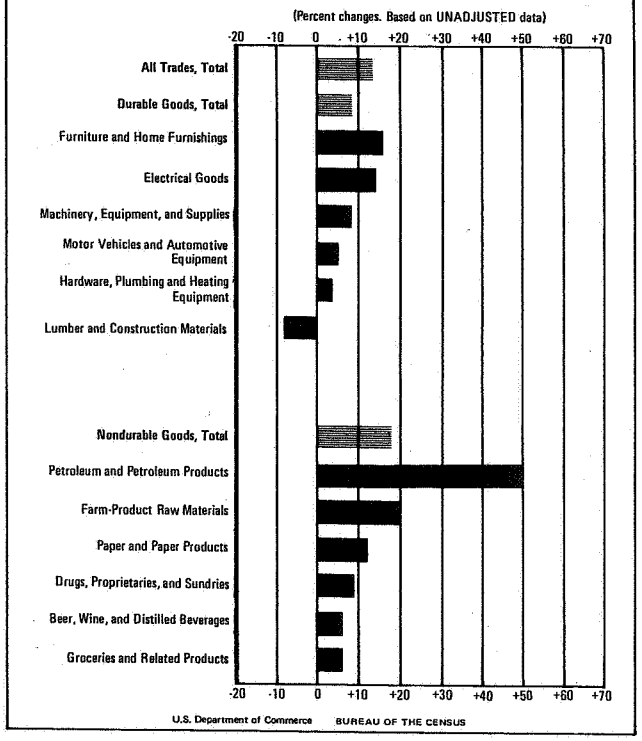
After adjustment, May sales in the durable goods trades were down 3 percent from the previous month and down 2 percent from the same month a year ago. Nondurable goods sales were up 1 percent from April and were up 12 percent from May 1979. Total monthly sales in the durable goods group during the March-through-May period were down 7 percent from the prior three months, but were 2 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were virtually unchanged from the December-through-February period, but were 14 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, 4 indicating declines, and 4 with no change. The largest increase was reported in drugs, proprietaries, and sundries (8%). Compared with sales of a year ago, most trade groups showed increases with the sharpest increase reported in petroleum and petroleum products (30%). The largest year-to-year decrease was shown in lumber and construction materials (-20%).

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variations, but not for price changes, were valued at $92.4 billion at the end of May, virtually unchanged from the previous month, but up 9 percent from the year-ago level. Durable goods stocks were virtually unchanged from April, but were 9 percent above May 1979. Nondurable goods stocks were down 1 percent from the previous month, but were 8 percent above May 1979.

Based on adjusted data, most trade groups showed declines from their previous month inventory levels with the larger declines reported in lumber and other construction materials and beer, wine, and distilled beverages—both down 3 percent. Compared with year-ago inventories, most trade groups showed increases with the sharpest increase reported in petroleum and petroleum products (42%).

Percent Change in Sales of Merchant Wholesalers in Selected Kinds of Business 5 Months 1980 Compared With 5 Months 1979



Stock-Sales Ratios—The May stock-sales ratio for merchant wholesalers, based on seasonally adjusted data, was 121, virtually unchanged from the previous month and up 4 points from May 1979. The stock-sales ratio for durable goods was 185, up 5 points from April and up 20 points 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 May 1980 data was issued July 7, 1980.

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: 1980 and 1979

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

1972 SIC code	Kind of business	1980					1979								Total 5 months	
		Jan.	Feb.	Mar.	Apr.	May[p]	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1980	1979
	Merchant wholesalers, total	77,104	75,746	80,597	79,388	79,093	76,814	74,361	73,537	78,567	73,213	81,820	79,079	75,396	391,931	347,360
	Total (excluding farm-product raw materials)	67,867	67,271	71,603	70,565	70,202	68,714	66,477	64,932	70,390	65,400	72,156	69,354	66,185	347,510	310,187
50	Durable goods, total	33,579	33,949	36,170	35,302	33,835	35,723	34,447	33,750	37,048	33,616	37,935	34,711	32,515	172,836	160,264
501	Motor vehicles and automotive parts and supplies	6,421	6,586	6,779	7,045	6,671	7,013	6,364	6,259	6,812	5,645	6,784	6,452	6,172	33,503	32,030
5013,4	Automotive parts and supplies, tires and tubes	3,160	3,093	3,317	3,356	3,151	3,535	3,318	3,091	3,552	3,081	3,538	3,298	2,972	16,076	16,546
5013	Automotive parts and supplies	2,704	2,685	2,831	2,889	2,706	2,966	2,759	2,600	3,014	2,617	2,978	2,817	2,515	13,815	13,872
502	Furniture and home furnishings	1,210	1,186	1,304	1,344	1,323	1,214	1,185	1,121	1,243	1,196	1,390	1,263	1,134	6,366	5,504
5021	Furniture--household and office	496	452	496	503	484	450	422	399	449	419	458	430	430	2,396	1,953
5023	Home furnishings[1]	747	734	808	841	839	764	763	722	794	778	931	832	704	3,970	3,550
503	Lumber and other construction materials	2,582	2,408	2,595	2,598	2,623	3,353	3,410	3,411	3,761	3,274	3,622	2,997	2,543	12,804	13,980
5031	Lumber, plywood, and millwork	1,708	1,622	1,696	1,638	1,635	2,269	2,250	2,250	2,515	2,102	2,346	1,899	1,586	8,299	9,598
5039	Construction materials, n.e.c.	873	785	899	960	988	1,084	1,160	1,161	1,246	1,172	1,276	1,098	957	4,505	4,382
505	Metals and minerals, except petroleum	4,346	(S)	(S)	(S)	(S)	3,913	3,645	3,824	4,196	3,687	4,197	4,064	3,986	(S)	17,477
5051 pt.	Ferrous metals service centers and offices	2,992	2,852	3,136	2,773	2,512	2,951	2,759	2,865	3,062	2,806	2,974	2,836	2,743	14,013	12,855
5051 pt.	Ferrous metals service centers	2,197	2,064	2,271	2,110	1,827	2,160	2,056	2,046	2,211	1,974	2,208	2,122	1,964	10,469	9,482
506	Electrical goods	3,745	3,904	3,931	3,718	3,681	3,744	3,786	3,712	4,163	4,012	4,395	3,962	3,785	18,980	16,671
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,840	2,032	1,992	1,925	1,848	2,071	2,006	1,991	2,153	2,079	2,165	1,962	1,916	9,650	8,766
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,905	1,872	1,939	1,793	1,833	1,673	1,779	1,700	2,011	1,933	2,230	2,000	1,869	9,342	7,904
5064	Electrical appliances, TV and radio sets[2]	1,040	985	1,054	950	936	939	1,064	986	1,116	1,083	1,250	1,154	1,052	4,964	4,528
507	Hardware, plumbing, heating equipment, and supplies	2,466	2,250	2,436	2,311	2,302	2,592	2,461	2,524	2,678	2,399	2,794	2,415	2,192	11,765	11,411
5072	Hardware	936	885	932	896	866	975	877	892	1,003	877	1,024	916	838	4,515	4,241
5074	Plumbing and heating equipment and supplies (hydronics)	1,037	934	1,003	938	929	1,001	966	1,015	1,038	1,011	1,167	992	920	4,842	4,609
508	Machinery, equipment, and supplies	8,880	9,322	10,058	10,196	9,955	10,062	9,745	9,222	10,113	9,394	10,317	9,324	9,026	48,411	44,702
5082	Construction and mining machinery and equipment[3]	958	1,098	1,208	1,185	1,239	1,351	1,260	1,258	1,366	1,268	1,323	1,144	1,019	5,688	5,723
5084,5	Industrial machinery, equipment, and supplies	3,924	4,061	4,208	4,310	4,213	4,004	3,964	3,613	4,039	3,634	4,078	4,020	3,936	20,716	18,412
5086	Professional equipment, supplies	982	970	1,014	1,083	1,110	1,055	996	996	1,092	972	1,121	948	939	5,160	4,895
5093	Scrap and waste materials	1,489	1,571	1,685	1,581	1,448	1,518	1,468	1,395	1,534	1,328	1,456	1,428	1,382	7,773	6,828
51	Nondurable goods, total	43,525	41,797	44,427	44,086	45,258	41,091	39,914	39,787	41,519	39,597	43,885	44,368	42,881	219,095	187,096
	Total (excluding farm-product raw materials)	34,288	33,323	35,433	35,263	36,367	32,991	32,030	31,182	33,342	31,784	34,221	34,643	33,670	174,674	149,924
511	Paper and paper products	1,837	1,774	1,799	1,783	1,744	1,692	1,651	1,585	1,777	1,599	1,821	1,699	1,639	8,937	7,950
5111,3	Printing, writing, industrial, and personal service paper	1,330	1,290	1,354	1,327	1,320	1,272	1,252	1,192	1,327	1,202	1,368	1,269	1,218	6,621	5,960
5111	Printing and writing paper	665	668	665	666	654	619	609	594	648	584	685	623	601	3,318	2,964
5113	Industrial and personal service paper	665	622	688	661	666	653	642	599	679	618	683	646	617	3,302	2,996
512	Drugs, drug proprietaries, and druggists' sundries	1,112	1,045	1,113	1,106	1,136	1,102	1,039	1,066	1,099	1,030	1,178	1,092	1,054	5,511	5,079
5122	Drugs, drug proprietaries, and druggists' sundries	1,112	1,045	1,113	1,106	1,136	1,102	1,039	1,066	1,099	1,030	1,178	1,092	1,054	5,511	5,079
5122 pt.	General-line drugs	466	460	494	472	480	509	455	443	477	443	487	448	456	2,371	2,337
513	Apparel, piece goods, and notions[4]	2,444	2,412	2,520	2,430	2,218	2,127	2,102	2,389	2,629	2,563	2,704	2,468	2,032	12,024	10,650
514	Groceries and related products	11,892	11,244	12,057	12,270	12,680	11,988	11,721	11,500	11,835	11,122	12,140	11,919	11,673	60,143	56,726
5141	Groceries, general-line	4,395	4,190	4,537	4,571	4,713	4,241	4,247	4,245	4,429	4,137	4,597	4,511	4,289	22,406	20,025
5144	Poultry and poultry products	555	531	559	576	573	592	544	563	569	530	561	603	589	2,795	2,712
5145	Confectionery	198	187	209	209	213	212	199	192	214	214	275	243	207	1,016	978
5147	Meats and meat products	1,867	1,741	1,799	1,770	1,826	2,076	1,908	1,872	1,959	1,770	1,925	1,768	1,811	9,003	10,253
5148	Fresh fruits and vegetables	997	1,005	1,117	1,213	1,281	1,202	1,242	1,063	1,030	917	997	1,024	1,002	5,612	5,472
515	Farm-product raw materials	9,237	8,474	8,995	8,823	8,891	8,100	7,884	8,605	8,177	7,813	9,664	9,725	9,211	44,421	37,172
5153	Grain	7,590	6,939	7,537	7,425	7,469	6,766	6,730	7,516	7,090	6,594	8,328	8,347	7,630	36,961	30,438
517	Petroleum and petroleum products	8,219	8,001	7,858	7,714	7,842	6,078	5,851	5,863	6,355	6,354	7,171	7,602	7,677	39,365	26,427
5171	Petroleum bulk stations and terminals	4,510	4,339	4,236	4,043	4,098	3,306	3,170	3,121	3,504	3,456	3,960	4,050	4,193	21,227	14,683
518	Beer, wine, and distilled alcoholic beverages	2,242	2,254	2,436	2,629	2,778	2,726	2,704	2,636	2,844	2,387	2,733	2,821	2,882	12,340	11,641
5181	Beer and ale	1,087	1,156	1,207	1,346	1,546	1,513	1,523	1,507	1,590	1,229	1,299	1,267	1,230	6,342	5,946
5182	Wine and distilled alcoholic beverages[5]	1,155	1,098	1,230	1,283	1,232	1,214	1,181	1,129	1,254	1,158	1,435	1,554	1,652	5,998	5,694
519	Miscellaneous nondurable goods	5,299	5,393	6,479	6,178	6,695	6,001	5,801	5,105	5,468	5,570	5,296	5,643	5,238	30,045	25,847
5194	Tobacco and tobacco products	835	771	815	864	914	891	863	881	896	795	902	861	843	4,200	4,162

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.

[p]Preliminary estimates. See p. 15, Sample Design and Estimation Procedures. (S) Does not publication standards because of extreme variability.

[1]The home furnishing group is subject to a sampling variability of 8 percent for May 1980.
[2]The electrical appliances, TV and radio sets group is subject to a sampling variability of 10 percent for May 1980.
[3]The construction and mining machinery and equipment group is subject to a sampling variability of 8 percent for May 1980.
[4]The apparel, piece goods, and notions group is subject to a sampling variability of 11 percent for May 1980.
[5]The wine and distilled alcoholic beverages group is subject to a sampling variability of 8 percent for May 1980.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980					1979							
		Jan.	Feb.	Mar.	Apr.	May[p]	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	91,477	92,854	93,745	93,479	92,737	85,199	84,942	86,829	86,890	87,061	88,839	89,632	89,997
	Total (excluding farm-product raw materials)	83,618	85,076	86,658	87,474	87,510	80,246	79,964	81,487	81,570	81,563	82,485	82,184	82,382
50	Durable goods, total	57,268	58,463	59,460	60,458	60,798	55,566	55,523	56,602	56,803	56,361	56,620	56,241	56,470
501	Motor vehicles and automotive parts and supplies	9,893	10,167	10,109	10,420	10,581	9,631	9,207	9,672	9,446	9,240	9,546	9,652	9,723
5013,4	Automotive parts and supplies, tires and tubes	6,182	6,130	6,107	6,197	6,278	5,970	5,753	6,051	6,117	5,933	6,025	6,084	6,030
5013	Automotive parts and supplies	5,191	5,124	5,068	5,146	5,221	5,035	4,818	5,082	5,188	5,018	5,121	5,208	5,074
502	Furniture and home furnishings	1,807	1,816	1,906	1,940	1,949	1,815	1,903	1,847	1,839	1,861	1,909	1,796	1,794
5023	Home furnishings	1,265	1,271	1,330	1,366	1,364	1,309	1,361	1,347	1,339	1,328	1,381	1,291	1,247
503	Lumber and other construction materials	3,378	3,423	3,595	3,507	3,404	3,468	3,496	3,526	3,442	3,382	3,383	3,335	3,353
5031	Lumber, plywood, and millwork	2,103	2,169	2,220	2,191	2,116	2,244	2,204	2,220	2,204	2,129	2,149	2,112	2,090
505	Metals and minerals, except petroleum	6,497	(S)	(S)	(S)	(S)	5,528	5,582	5,763	6,319	6,139	6,376	6,363	6,307
5051 pt.	Ferrous metals service centers and offices	4,852	4,766	4,853	4,728	4,859	4,455	4,586	4,655	4,947	4,953	4,794	4,891	4,897
5051 pt.	Ferrous metals service centers	3,893	3,851	3,981	3,811	3,936	3,506	3,643	3,665	3,956	4,010	3,843	3,999	4,019
506	Electrical goods	6,092	6,140	6,083	6,313	6,439	5,976	6,040	6,223	6,254	6,061	6,082	6,098	5,931
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,894	3,051	2,983	3,038	3,070	2,946	2,838	2,840	2,841	2,771	2,785	2,945	2,820
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3,199	3,089	3,101	3,275	3,369	3,030	3,202	3,383	3,274	3,290	3,296	3,153	3,112
507	Hardware, plumbing, heating equipment, and supplies	4,692	4,883	4,984	5,086	4,910	4,590	4,631	4,628	4,535	4,488	4,537	4,456	4,575
5072	Hardware	1,806	1,888	1,945	1,925	1,872	1,622	1,643	1,659	1,657	1,692	1,698	1,692	1,758
5074	Plumbing and heating equipment and supplies (hydronics)	1,836	1,904	1,944	2,058	1,970	1,848	1,896	1,902	1,828	1,783	1,823	1,777	1,804
508	Machinery, equipment, and supplies	19,475	20,476	21,056	21,072	20,950	19,370	19,465	19,576	19,778	19,974	19,555	19,461	19,554
5082	Construction and mining machinery and equipment	4,038	4,279	4,326	4,367	4,375	4,430	4,512	4,488	4,504	4,573	4,339	4,288	4,182
5084,5	Industrial machinery, equipment, and supplies	6,375	6,588	6,922	6,817	6,763	6,073	6,006	5,979	6,092	6,201	6,251	6,163	6,354
51	Nondurable goods, total	34,209	34,390	34,285	33,021	31,939	29,633	29,419	30,227	30,087	30,700	32,219	33,391	33,527
	Total (excluding farm-product raw materials)	26,350	26,615	27,196	27,016	26,712	24,680	24,441	24,885	24,767	25,202	25,865	25,943	25,912
511	Paper and paper products	1,670	1,694	1,740	1,768	1,776	1,542	1,616	1,608	1,604	1,663	1,597	1,657	1,695
5111,3	Printing, writing, industrial, and personal service paper	1,137	1,144	1,185	1,201	1,207	1,050	1,090	1,079	1,055	1,109	1,082	1,090	1,141
5111	Printing and writing paper	473	479	498	499	502	431	447	442	427	440	439	444	474
5113	Industrial and personal service paper[1]	664	665	687	702	704	619	644	637	629	669	644	645	667
512	Drugs, drug proprietaries, and druggists' sundries	1,560	1,539	1,595	1,601	1,573	1,563	1,567	1,609	1,570	1,670	1,678	1,580	1,573
514	Groceries and related products	6,775	6,877	7,101	7,010	6,972	6,644	6,686	6,674	6,633	6,793	6,982	6,933	6,984
5141	Groceries, general-line	2,884	2,952	3,054	3,019	2,996	2,785	2,802	2,899	2,857	2,911	3,046	3,044	2,957
517	Petroleum and petroleum products	3,298	3,424	3,343	3,288	3,402	2,401	2,263	2,492	2,618	2,874	2,918	3,062	3,135
518	Beer, wine, and distilled alcoholic beverages	2,742	2,652	2,853	2,943	2,908	2,760	2,732	2,693	2,539	2,538	2,781	2,770	2,597
5181	Beer and ale[2]	916	917	1,109	1,162	1,136	1,089	1,072	1,030	923	903	934	922	879
5182	Wines and distilled alcoholic beverages	1,825	1,735	1,743	1,781	1,771	1,671	1,660	1,663	1,616	1,634	1,847	1,848	1,718

See footnotes at end of table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980					1979							
		Jan.	Feb.	Mar.	Apr.	May[p]	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	119	123	116	118	117	111	114	118	111	119	109	113	119
	Total (excluding farm-product raw materials)	123	126	121	124	125	117	120	125	116	125	114	118	124
50	Durable goods, total	171	172	164	171	180	156	161	168	153	168	149	162	174
501	Motor vehicles and automotive parts and supplies	154	154	149	148	159	137	145	155	139	164	141	150	158
5013,4	Automotive parts and supplies, tires and tubes	196	198	184	185	199	169	173	196	172	193	170	184	203
5013	Automotive parts and supplies	192	191	179	178	193	170	175	195	172	192	172	185	202
502	Furniture and home furnishings	145	153	146	144	147	150	161	165	148	156	137	142	158
5023	Home furnishings	169	173	165	162	162	171	178	187	169	171	148	155	177
503	Lumber and other construction materials	131	142	139	135	130	103	102	103	92	103	93	111	132
5031	Lumber, plywood, and millwork	123	134	131	134	129	99	98	99	88	101	92	111	132
505	Metals and minerals, except petroleum	149	(S)	(S)	(S)	(S)	141	153	151	151	162	152	157	158
5051 pt.	Ferrous metals service centers and offices	162	167	155	170	193	151	166	162	162	177	161	172	178
5051 pt.	Ferrous metals service centers	177	187	175	181	215	162	177	179	179	203	174	188	204
506	Electrical goods	163	157	155	170	175	160	160	168	150	151	138	154	157
5063	Electrical apparatus and equipment, wiring supplies and construction meterials	157	150	150	158	166	142	141	143	132	133	129	150	147
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	168	165	160	183	184	181	180	197	163	170	148	158	167
507	Hardware, plumbing, heating equipment, and supplies	190	217	205	220	213	177	188	183	169	187	162	185	209
5072	Hardware	193	213	209	215	216	166	187	186	165	193	166	185	210
5074	Plumbing and heating equipment and supplies (hydronics)	177	204	194	219	212	185	196	188	176	176	156	179	196
508	Machinery, equipment, and supplies	219	220	209	207	210	192	200	212	196	213	190	209	217
5082	Construction and mining machinery and equipment	422	390	358	368	353	328	358	357	330	361	328	375	411
5084,5	Industrial machinery, equipment, and supplies	162	162	164	158	161	152	152	165	151	171	153	153	161
51	Nondurable goods, total	79	82	77	75	71	72	74	76	72	78	73	75	78
	Total (excluding farm-product raw materials)	77	80	77	77	73	75	76	80	74	79	76	75	77
511	Paper and paper products	91	96	97	99	102	91	98	101	90	104	88	98	103
5111,3	Printing, writing, industrial, and personal service paper	85	89	88	90	91	83	87	90	79	92	79	86	94
5111	Printing and writing paper	71	72	75	75	77	70	73	74	66	75	64	71	79
5113	Industrial and personal service paper	100	107	100	106	106	95	100	106	93	108	94	100	108
512	Drugs, drug proprietaries, and druggists' sundries	140	147	143	145	138	142	151	151	143	162	142	145	149
514	Groceries and related products	57	61	59	57	55	55	57	58	56	61	58	58	60
5141	Groceries, general-line	66	70	67	66	64	66	66	68	64	70	66	67	69
517	Petroleum and petroleum products	40	43	43	43	43	40	39	43	41	45	41	40	41
518	Beer, wine, and distilled alcoholic beverages	122	118	117	112	105	101	101	102	89	106	102	98	90
5181	Beer and ale	84	79	92	86	74	72	70	68	58	74	72	73	71
5182	Wines and distilled alcoholic beverages	158	158	142	139	144	138	141	147	129	141	129	119	104

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.

[p]Preliminary estime. See p. 15, Sample Design and Estimation Procedures. (S) Does not meet publication standards because of extreme variability.

[1]The industrial and personal service paper group is subject to a sampling variability of 11 percent for May 1980.
[2]The beer, and ale group is subject to a sampling variability of 9 percent for May 1980.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980					1979							
		Jan.	Feb.	Mar.	Apr.	May[p]	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Sales ADJUSTED for seasonal variations and trading-day differences												
	Merchant wholesalers, total	81,178	79,689	79,042	76,670	76,182	72,338	72,629	74,778	75,588	76,495	77,489	78,407	78,947
	Total (excluding farm-product raw materials)	72,060	70,862	70,659	68,071	67,583	64,550	64,657	66,015	66,729	67,586	68,363	69,427	69,800
50	Durable goods, total	36,848	36,838	35,903	33,305	32,352	33,177	33,078	34,103	34,509	34,079	35,267	35,171	35,407
501	Motor vehicles and automotive parts and supplies	6,745	6,984	6,543	6,169	6,171	6,250	6,143	6,160	6,500	6,183	6,737	6,835	6,865
502	Furniture and home furnishings	1,352	1,273	1,307	1,320	1,323	1,180	1,156	1,205	1,193	1,182	1,201	1,183	1,213
503	Lumber and other construction materials	3,188	2,870	2,761	2,570	2,470	3,096	3,131	3,200	3,198	3,182	3,152	2,976	3,009
505	Metals and minerals, except petroleum	4,485	(S)	(S)	(S)	(S)	3,630	3,598	3,979	3,850	3,683	4,079	4,194	4,469
506	Electrical goods	4,115	4,267	4,040	3,696	3,681	3,649	3,676	3,731	3,913	4,069	3,931	3,869	3,819
507	Hardware, plumbing, heating equipment, and supplies	2,675	2,531	2,556	2,229	2,188	2,391	2,362	2,418	2,466	2,428	2,506	2,444	2,438
508	Machinery, equipment, and supplies	9,791	10,188	9,841	9,637	9,286	9,223	9,281	9,488	9,613	9,451	9,633	9,612	9,716
51	Nondurable goods, total	44,330	42,851	43,139	43,365	43,830	39,161	39,551	40,675	41,079	42,416	42,222	43,236	43,540
	Total (excluding farm-product raw materials)	35,212	34,024	34,756	34,766	35,231	31,373	31,579	31,912	32,220	33,507	33,096	34,256	34,393
511	Paper and paper products	1,844	1,827	1,794	1,783	1,720	1,627	1,627	1,648	1,664	1,652	1,678	1,711	1,725
512	Drugs, drug proprietaries, and druggists' sundries	1,105	1,100	1,109	1,073	1,159	1,080	1,076	1,084	1,061	1,060	1,067	1,077	1,092
513	Apparel, piece goods, and notions	2,570	2,582	2,490	2,485	2,256	2,067	2,220	2,494	2,274	2,441	2,372	2,413	2,320
514	Groceries and related products	12,049	11,861	11,985	12,041	12,111	11,309	11,480	11,546	11,402	11,634	11,684	11,883	12,084
515	Farm-product raw materials[1]	9,118	8,827	8,383	8,599	8,599	7,788	7,972	8,763	8,859	8,909	9,126	8,980	9,147
517	Petroleum and petroleum products	8,122	7,422	7,637	7,888	7,953	6,139	6,020	5,940	6,355	6,959	7,142	7,331	7,497
518	Beer, wine, and distilled alcoholic beverages	2,724	2,633	2,586	2,629	2,697	2,548	2,476	2,597	2,621	2,556	2,620	2,649	2,582
519	Miscellaneous nondurable goods	5,480	5,303	5,971	5,752	6,131	5,441	5,567	5,555	5,626	5,976	5,426	5,794	5,502
		Inventories ADJUSTED for seasonal variations												
	Merchant wholesalers, total	91,085	91,508	91,708	92,736	92,376	84,904	85,406	87,662	88,474	88,499	89,146	89,324	89,920
	Total (excluding farm-product raw materials)	84,486	84,884	85,645	87,049	86,588	79,388	79,394	81,026	81,636	81,736	82,689	82,870	83,372
50	Durable goods, total	58,146	58,293	58,937	60,080	59,925	54,772	54,591	55,861	56,529	56,479	57,242	57,129	57,463
501	Motor vehicles and automotive parts and supplies	9,756	9,564	9,921	10,378	10,414	9,479	9,244	9,740	9,708	9,595	9,731	9,759	9,762
502	Furniture and home furnishings	1,829	1,832	1,914	1,948	1,928	1,795	1,851	1,836	1,824	1,828	1,911	1,812	1,844
503	Lumber and other construction materials	3,450	3,454	3,487	3,411	3,302	3,364	3,417	3,453	3,445	3,420	3,459	3,470	3,443
505	Metals and minerals, except petroleum	6,609	(S)	(S)	(S)	(S)	5,452	5,532	5,617	6,053	6,060	6,546	6,434	6,397
506	Electrical goods	6,306	6,369	6,157	6,351	6,351	5,893	5,898	6,125	6,125	5,977	6,034	6,074	5,985
507	Hardware, plumbing, heating equipment, and supplies	4,832	4,952	4,891	4,803	4,749	4,439	4,492	4,520	4,540	4,584	4,611	4,647	4,761
508	Machinery, equipment, and supplies	19,752	20,354	20,724	20,988	20,681	19,121	19,102	19,498	19,818	19,994	19,833	19,777	19,791
51	Nondurable goods, total	32,939	33,215	32,771	32,656	32,451	30,132	30,815	31,801	31,945	32,020	31,904	32,195	32,457
	Total (excluding farm-product raw materials)	26,340	26,591	26,708	26,969	26,663	24,616	24,803	25,165	25,107	25,257	25,447	25,741	25,909
511	Paper and paper products	1,720	1,727	1,751	1,752	1,769	1,537	1,575	1,610	1,615	1,645	1,587	1,655	1,680
512	Drugs, drug proprietaries, and druggists' sundries	1,640	1,598	1,593	1,588	1,592	1,582	1,558	1,607	1,565	1,607	1,594	1,567	1,599
514	Groceries and related products	6,871	6,884	6,969	6,968	7,000	6,671	6,760	6,783	6,775	6,800	6,818	6,871	6,908
517	Petroleum and petroleum products	3,230	3,480	3,346	3,483	3,457	2,440	2,426	2,574	2,590	2,753	2,795	2,936	3,041
518	Beer, wine, and distilled alcoholic beverages	2,839	2,809	2,870	2,897	2,821	2,677	2,655	2,664	2,609	2,553	2,626	2,648	2,769
		Stock-sales ratios based on ADJUSTED data												
	Merchant wholesalers, total	112	115	116	121	121	117	118	117	117	116	115	114	114
	Total (excluding farm-product raw materials)	117	120	121	128	128	123	123	123	122	121	121	119	119
50	Durable goods, total	158	158	164	180	185	165	165	164	164	166	162	162	162
501	Motor vehicles and automotive parts and supplies	145	137	152	168	169	152	150	158	149	155	144	143	142
502	Furniture and home furnishings	135	144	146	148	146	152	160	152	153	155	159	153	152
503	Lumber and other construction materials	108	120	126	133	134	109	109	108	108	107	110	117	114
505	Metals and minerals, except petroleum	147	(S)	(S)	(S)	(S)	150	154	141	157	165	160	153	143
506	Electrical goods	153	149	152	172	173	161	160	164	157	147	153	157	157
507	Hardware, plumbing, heating equipment, and supplies	181	196	191	215	217	186	190	187	184	189	184	190	195
508	Machinery, equipment, and supplies	202	200	211	218	223	207	206	206	206	212	206	206	204
51	Nondurable goods, total	74	78	76	75	74	77	78	78	78	75	76	74	75
	Total (excluding farm-product raw materials)	75	78	77	78	76	78	79	79	78	75	77	75	75
511	Paper and paper products	93	95	98	98	103	94	97	98	97	100	95	97	97
512	Drugs, drug proprietaries, and druggists' sundries	148	145	144	148	137	146	145	148	148	152	149	145	146
514	Groceries and related products	57	58	58	58	58	59	59	59	59	58	58	58	57
517	Petroleum and petroleum products	40	47	44	44	43	40	40	43	41	40	39	40	41
518	Beer, wine, and distilled alcoholic beverages	104	107	111	110	105	105	107	103	100	100	100	100	107

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.

[p]Preliminary estimates. See p. 15, Sample Design and Estimation Procedures. (S) Does not meet publication standards because of extreme variability.

[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. 1980-May 1980 from--			
	Dec. 1979-Feb. 1980 (3 months ago)	Sept. 1979-Nov. 1979 (6 months ago)	June 1979-Aug. 1979 (9 months ago)	Mar. 1979-May 1979 (12 months ago)
Merchant wholesalers, total.....	-3	0	+4	+9
Durable goods, total.....	-7	-3	0	+2
Nondurable goods, total..	0	+2	+7	+14

Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers: 1974-1980

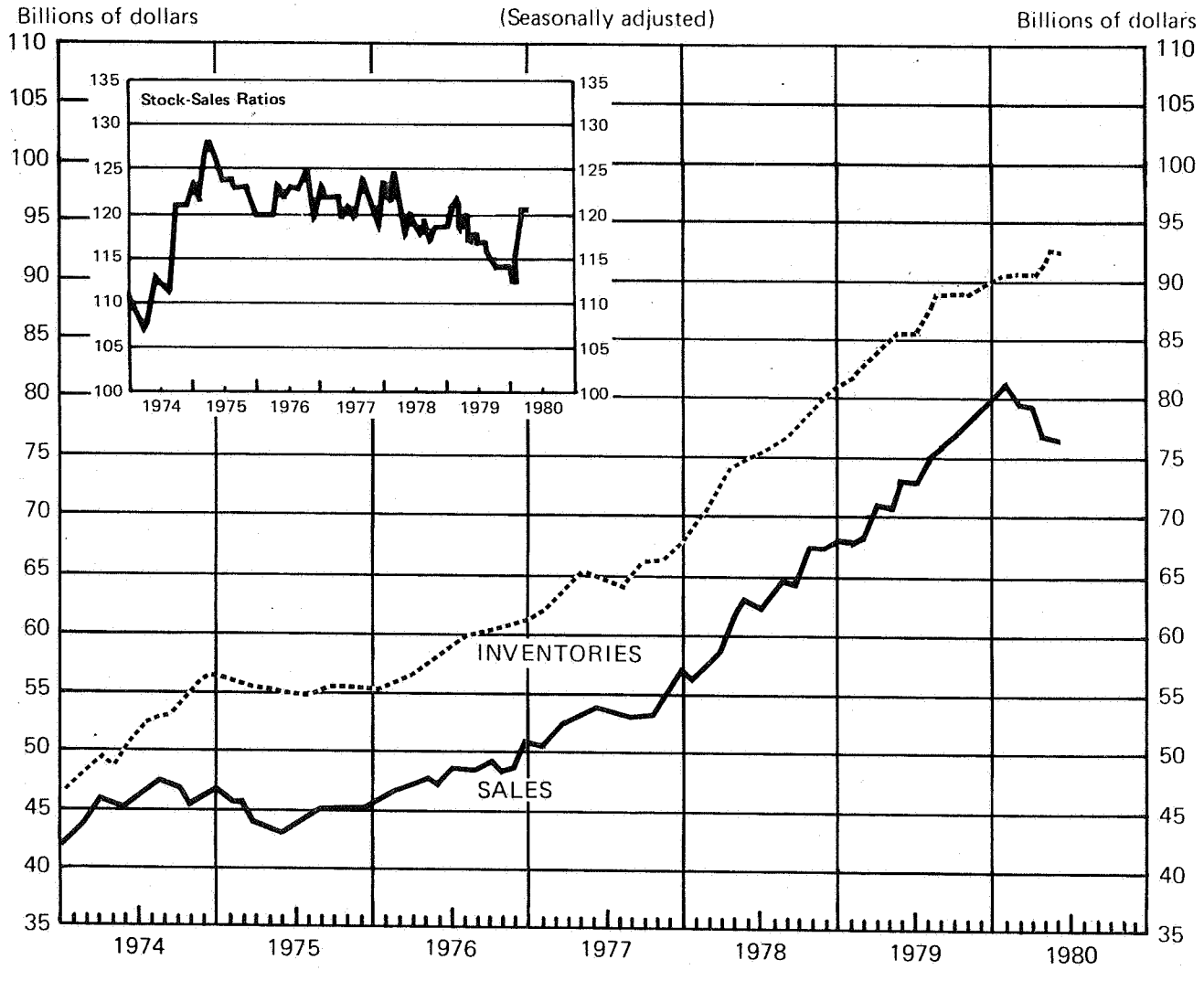


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: May 1980

1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		May 1980 from April 1980	May 1980 from May 1979	5 months 1980 from 5 months 1979	May 1980 from April 1980	May 1980 from May 1979	May 1980 from April 1980	May 1980 from May 1979	May 1980 from April 1980	May 1980 from May 1979
	Merchant wholesalers, total	0	+3	+13	-1	+9	-1	+5	0	+9
	Total (excluding farm-product raw materials)	-1	+2	+12	0	+9	-1	+5	-1	+9
50	Durable goods, total	-4	-5	+8	+1	+9	-3	-2	0	+9
501	Motor vehicles and automotive parts and supplies	-5	-5	+5	+2	+10	0	-1	0	+10
5012	Automobiles and other motor vehicles	-5	+1	+13	+2	+18	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	-6	-11	-3	+1	+5	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	-6	-9	0	+1	+4	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	-2	+9	+16	0	+7	0	+12	-1	+7
5021	Furniture--household and office	-4	+7	+23	+2	+16	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	-4	+12	+21	+2	+16	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	-3	+5	+23	+2	+16	(*)	(*)	(*)	(*)
5023	Home furnishings	0	+10	+12	0	+4	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	+1	-22	-8	-3	-2	-4	-20	-3	-2
5031	Lumber, plywood, and millwork	0	-28	-14	-3	-6	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c.	+3	-9	+3	-2	+5	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	-4	-1	+11	+1	+10	+3	+4	+1	+10
505	Metals and minerals, except petroleum	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
5051 pt.	Ferrous metals service centers and offices	-9	-12	+9	+3	+9	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	-13	-15	+10	+3	+12	(*)	(*)	(*)	(*)
5051 pt.	Nonferrous metals service centers and offices	(S)	(S)	(S)	(S)	(S)	(*)	(*)	(*)	(*)
506	Electrical goods	-1	-2	+14	+2	+8	0	+1	0	+8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-4	-11	+10	+1	+4	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+2	+10	+18	+3	+11	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	-2	0	+10	+1	+3	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	0	-11	+3	-3	+7	-2	-8	-1	+7
5072	Hardware	-3	-11	+6	-3	+15	(*)	(*)	(*)	(*)
5074	Plumbing and heating equipment and supplies (hydronics)	-1	-7	+5	-4	+7	(*)	(*)	(*)	(*)
5075	Warm air heating and air conditioning equipment and supplies	+8	-17	-7	-3	-10	(*)	(*)	(*)	(*)
508	Machinery, equipment, and supplies	-2	-1	+8	-1	+8	-4	+1	-1	+8
5081	Commercial machines and equipment	-6	+4	+12	-2	-2	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	+5	-8	-1	0	-1	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	-8	-17	+3	-1	+15	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	-2	+5	+13	-1	+11	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	+2	+5	+5	-2	-2	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	-8	-5	+14	-4	-7	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	-6	-6	+7	-4	-12	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	-11	-2	+25	-2	+8	(*)	(*)	(*)	(*)
51	Nondurable goods, total	+3	+10	+17	-3	+8	+1	+12	-1	+8
	Total (excluding farm-product raw materials)	+3	+10	+17	-1	+8	+1	+12	-1	+8
511	Paper and paper products	-2	+3	+12	0	+15	-4	+6	+1	+15
5111,3	Printing, writing, industrial, and personal service paper	0	+4	+11	0	+15	(*)	(*)	(*)	(*)
5111	Printing, and writing paper	-2	+6	+12	+1	+17	(*)	(*)	(*)	(*)
5113	Industrial and personal service paper	+1	+2	+10	0	+14	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	+3	+3	+9	-2	+1	+8	+7	0	+1
5122	Drugs, drug proprietaries, and druggists' sundries	+3	+3	+9	-2	+1	(*)	(*)	(*)	(*)
5122 pt.	General-line drugs	+2	-6	+1	-3	-6	(*)	(*)	(*)	(*)
514	Groceries and related products	+3	+6	+6	-1	+5	+1	+7	0	+5
5141	Groceries, general-line	+3	+11	+12	-1	+8	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	+6	+12	+10	-1	+7	(*)	(*)	(*)	(*)
5141 pt.	Retailer cooperatives	+2	+14	+14	0	+7	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	+2	+9	+12	-1	+8	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	+4	+11	+12	0	+11	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	-1	-3	+3	-8	-7	(*)	(*)	(*)	(*)
5145	Confectionery	+2	0	+4	-2	0	(*)	(*)	(*)	(*)
5147	Meats and meat products	+3	(S)	(S)	-1	(S)	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	+6	+7	+3	+4	+1	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	+1	+10	+20	-13	+6	0	+10	+2	+5
5152	Cotton	-12	+11	+25	-17	+22	(*)	(*)	(*)	(*)
5153	Grain	+1	+10	+21	-14	+3	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	+2	+29	+50	+3	+42	+1	+30	-1	+42
5171	Petroleum bulk stations and terminals	+1	+24	+45	0	+43	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	+6	+2	+6	-1	+5	+3	+6	-3	+5
5181	Beer and ale	+15	+2	+7	-2	+4	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	-4	+2	+5	-1	+6	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	+8	+12	+16	-5	+4	+7	+13	-2	+3
5191	Farm supplies	+1	+10	+21	-11	+6	(*)	(*)	(*)	(*)
5194	Tobacco and tobacco products	+6	+3	+1	+1	+10	(*)	(*)	(*)	(*)
5198	Paints, varnishes, and supplies	0	+8	+16	+1	(S)	(*)	(*)	(*)	(*)
5199 pt.	Books, periodicals, newspapers	0	(S)	(S)	+3	(S)	(*)	(*)	(*)	(*)

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

[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.

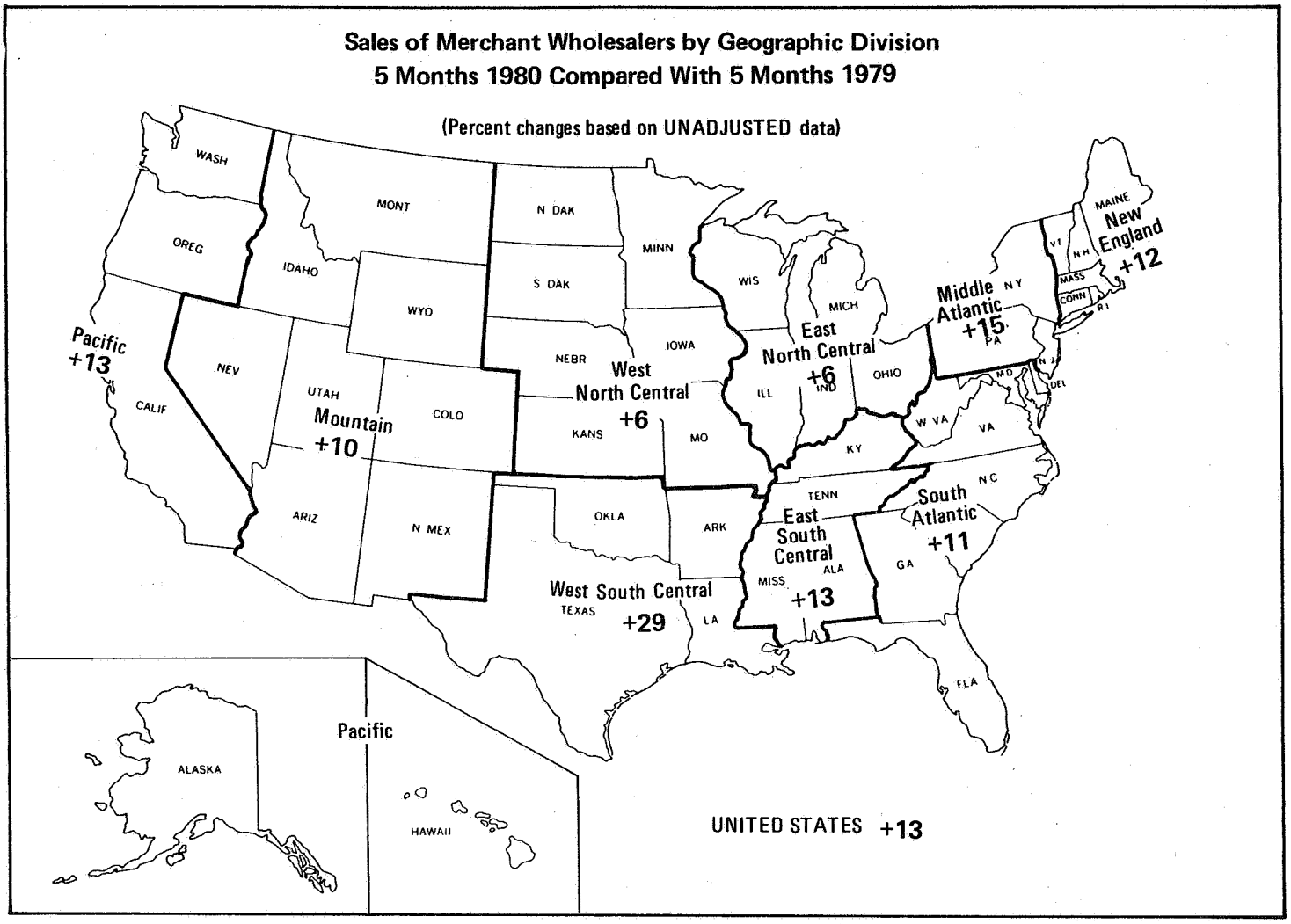


Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1980 and 1979

(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]	1980					1979								Total 5 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.	Apr.	May[p]	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1980	1979	Range[2]	Median
		1979																
	Merchant wholesalers, total	77,104	75,746	80,597	79,388	79,093	76,814	74,361	73,537	78,567	73,213	81,820	79,079	75,396	391,931	347,360	1.4-1.7	1.5
	New England	4,140	4,001	4,309	3,895	3,967	3,915	3,782	3,572	3,981	3,741	4,167	4,126	3,930	20,311	18,084	4-6	5
	Middle Atlantic	17,749	17,129	18,978	17,246	16,972	16,416	16,288	16,256	17,786	17,136	18,350	18,319	17,391	88,073	76,624	3-4	4
	East North Central	12,357	11,872	12,336	12,684	12,607	13,356	12,661	12,182	12,979	11,735	13,552	12,864	11,693	61,857	58,603	2-3	2
	West North Central	7,772	7,458	7,739	8,299	8,373	8,614	8,005	8,385	8,510	7,921	9,106	8,491	7,874	39,646	37,238	2-3	3
	South Atlantic	8,344	8,137	8,698	8,761	8,614	8,401	8,014	7,720	8,067	7,558	8,391	7,972	7,988	42,554	38,303	2-3	2
	East South Central	3,510	3,583	3,683	3,812	3,835	3,557	3,372	3,292	3,534	3,261	3,791	3,505	3,443	18,423	16,285	3-4	4
	West South Central	9,307	9,426	9,861	9,795	9,865	8,443	8,314	8,248	8,755	8,434	9,347	9,351	9,222	48,254	37,252	4-6	5
	Mountain	2,705	2,703	3,091	2,904	2,794	2,786	2,851	2,704	2,830	2,760	2,851	2,743	2,834	14,198	12,940	4-6	6
	Pacific	11,221	11,438	11,902	11,993	12,060	11,325	11,077	11,178	12,125	10,668	12,264	11,710	11,021	58,615	52,032	2-3	3
50	Durable goods, total	33,579	33,949	36,170	35,302	33,835	35,723	34,447	33,705	37,048	33,616	37,935	34,711	32,515	172,836	160,264	1.6-2.6	1.8
	Middle Atlantic	7,389	7,347	8,003	7,580	7,013	7,191	6,961	6,769	7,538	6,989	8,083	7,477	6,697	37,332	32,785	6-8	6
	East North Central	5,486	5,572	5,711	5,747	5,350	6,467	6,023	5,801	6,440	5,833	6,439	5,869	5,248	27,866	28,182	3-4	3
	West North Central	2,663	2,663	2,734	2,663	2,564	3,009	2,778	2,873	3,209	2,900	3,171	2,851	2,682	13,287	12,838	5-7	5
	South Atlantic	3,991	3,815	4,267	4,350	4,144	4,269	4,172	4,074	4,173	3,796	4,374	3,934	3,868	20,567	19,352	2-4	3
	West South Central	3,747	3,940	4,175	4,153	4,124	3,863	3,900	3,702	3,970	3,662	4,174	3,870	3,701	20,138	17,236	4-5	4
	Mountain	1,205	1,185	1,362	1,347	1,286	1,355	1,358	1,322	1,356	1,280	1,384	1,202	1,225	6,385	6,190	7-9	8
	Pacific	6,100	6,438	6,748	6,475	6,382	6,433	6,265	6,388	7,143	6,069	6,993	6,576	6,049	32,143	29,463	4-5	4
51	Nondurable goods, total	43,525	41,797	44,427	44,086	45,258	41,091	39,914	39,787	41,519	39,597	43,885	44,368	42,881	219,095	187,096	1.6-2.0	1.8
	New England	2,579	2,498	2,649	2,421	2,563	2,377	2,343	2,225	2,453	2,252	2,542	2,635	2,485	12,710	11,143	6-7	6
	Middle Atlantic	10,360	9,782	10,975	9,665	9,959	9,226	9,327	9,487	10,247	10,147	10,267	10,842	10,393	50,741	43,839	3-4	4
	East North Central	6,872	6,301	6,626	6,937	7,256	6,888	6,638	6,380	6,539	5,902	7,113	6,994	6,445	33,991	30,421	3-4	4
	West North Central	5,109	4,795	5,004	5,636	5,815	5,606	5,227	5,512	5,301	5,021	5,935	5,640	5,192	26,359	24,399	3-4	4
	South Atlantic	4,353	4,322	4,431	4,410	4,470	4,132	3,842	3,646	3,894	3,762	4,017	4,038	4,119	21,987	18,952	3-5	4
	East South Central	2,071	2,095	2,174	2,298	2,268	1,959	1,820	1,817	1,844	1,664	2,100	2,064	2,146	10,907	9,008	3-5	4
	West South Central	5,560	5,486	5,686	5,643	5,741	4,580	4,414	4,546	4,785	4,771	5,173	5,481	5,520	28,116	20,016	6-10	8
	Pacific	5,121	5,000	5,154	5,519	5,678	4,893	4,812	4,790	4,982	4,599	5,270	5,134	4,972	26,472	22,569	4-5	5

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

[p]Preliminary estimate. See p. 15, 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 the period September 1979 thru February 1980.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: May 1980

(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 1980 from April 1980 (A)	Sales: May 1980 from May 1979 (B)	Sales: 5 months 1980 from 5 months 1979 (C)	Inventories: May 1980 from April 1980 (D)	Inventories: May 1980 from May 1979 (E)	Sampling errors of the ratio corresponding to the percent change in columns[2]-- A	B	D	E
	Merchant wholesalers, total	0	+3	+13	-1	+9	0.7	1.2	0.3	0.9
	New England	+2	+1	+12	-2	+11	2.1	4.8	0.9	4.2
	Middle Atlantic	-2	+3	+15	+1	+14	1.7	3.2	0.8	2.6
	East North Central	-1	-6	+6	-2	+4	1.3	2.5	0.5	2.4
	West North Central	+1	-3	+6	-5	+2	1.4	2.4	0.8	2.2
	South Atlantic	-2	+3	+11	-1	+11	1.1	2.4	0.6	2.0
	East South Central	+1	+8	+13	-4	+5	2.3	3.4	0.9	2.8
	West South Central	+1	+17	+30	-1	+9	2.0	4.5	0.8	2.5
	Mountain	-4	0	+10	-1	+3	2.1	3.4	1.1	3.4
	Pacific	+1	+6	+13	-3	+9	1.0	2.4	0.6	2.2
50	Durable goods, total	-4	-5	+8	+1	+9	0.9	2.3	0.4	1.1
	New England	-5	-9	+10	-5	+9	4.3	10.7	1.1	6.0
	Middle Atlantic	-7	-2	+14	+1	+16	2.1	6.3	1.0	3.5
	East North Central	-7	-17	-1	-1	+4	1.6	3.1	0.6	3.2
	West North Central	-4	-15	+3	-1	+3	2.3	5.0	1.1	2.7
	South Atlantic	-5	-3	+6	0	+13	1.5	3.7	0.8	2.8
	East South Central	+3	-2	+3	0	+2	4.2	6.0	1.4	4.5
	West South Central	-1	+7	+17	0	+8	3.0	5.1	0.8	3.3
	Mountain	-4	-5	+3	-1	+2	3.2	6.1	1.3	4.7
	Pacific	-1	-1	+9	-2	+7	1.6	3.4	0.8	2.8
51	Nondurable goods, total	+3	+10	+17	-3	+8	0.8	1.3	0.5	1.2
	New England	+6	+8	+14	+2	+13	1.9	3.8	1.2	4.5
	Middle Atlantic	+3	+8	+16	0	+9	2.0	3.1	0.8	3.6
	East North Central	+5	+5	+12	-4	+3	2.1	2.8	1.0	3.3
	West North Central	+3	+4	+8	-9	0	1.9	2.7	1.2	3.1
	South Atlantic	+1	+8	+16	-2	+7	1.8	2.9	1.1	3.0
	East South Central	-1	+16	+21	-9	+10	1.6	3.6	1.8	3.1
	West South Central	+2	+25	+40	-3	+12	2.6	6.3	1.6	4.5
	Mountain	-3	+5	+16	-3	+3	2.0	5.2	1.7	5.3
	Pacific	+3	+16	+17	-3	+14	1.7	2.9	1.0	3.4
5013,4	Automotive parts and supplies, tires and tubes	-6	-11	-3	+1	+5	2	4	1	3
	New England	(S)	(S)	+9	+4	+33	(*)	(*)	3	14
	Middle Atlantic	-4	-6	-7	-2	+9	4	8	1	7
	East North Central	-5	-26	-13	-2	-6	3	8	1	5
	West North Central	-12	-33	-14	-2	-15	3	13	2	11
	South Atlantic	-8	-9	-6	-1	+8	4	10	2	8
	East South Central	-14	-17	-2	-3	+7	3	12	3	12
	West South Central	+3	+6	+7	+3	+10	3	10	2	10
	Mountain	-4	(S)	-14	+5	(S)	6	(*)	3	(*)
	Pacific	-8	0	+9	+2	+10	3	6	2	12
502	Furniture and home furnishings	-2	+9	+16	0	+7	3	4	1	3
	Middle Atlantic	+4	+19	+17	+1	0	6	10	1	8
	East North Central	-12	-2	+14	-4	-17	6	13	2	8
	West North Central	-10	(S)	+25	0	+38	6	(*)	3	10
	West South Central	+2	+3	+9	-3	+2	4	10	2	10
	Pacific	-2	+7	+18	-1	+23	6	12	2	10
503	Lumber and other construction materials	+1	-22	-8	-3	-2	2	3	1	3
	New England	(S)	-13	-2	-11	+15	(*)	14	3	12
	Middle Atlantic	0	-16	-5	-1	-5	6	11	2	12
	East North Central	-1	-34	-13	-4	-14	4	8	2	9
	West North Central	+7	-22	-9	0	+17	7	11	4	12
	South Atlantic	0	-8	+4	-2	+3	4	9	2	8
	East South Central	+3	-28	-19	-6	-11	7	13	2	12
	West South Central	+1	-4	+14	-1	+2	5	13	2	10
	Pacific	+2	-26	-18	-8	-8	4	9	2	9
5051 pt.	Ferrous metals service centers	-13	-15	+10	+3	+12	3	4	1	3
	New England	-10	(S)	+3	0	(S)	7	(*)	6	(*)
	Middle Atlantic	-15	-6	+19	+2	+21	6	9	2	12
	East North Central	-14	-29	-2	+2	+5	5	7	1	6
	West North Central	-6	-27	-8	-1	+13	5	10	2	9
	South Atlantic	-6	(S)	-1	-1	(S)	5	(*)	2	(*)
	East South Central	-15	-13	+12	+5	-3	3	11	2	14
	West South Central	-9	+10	+27	+4	+12	4	10	2	9
	Mountain	-17	(S)	(S)	+1	(S)	3	(*)	3	(*)
	Pacific	-19	(S)	+19	+3	(S)	5	(*)	4	(*)
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-4	-11	+10	+1	+4	3	4	1	3
	New England	+9	-3	+1	+2	+5	4	12	2	12
	Middle Atlantic	-6	-4	+10	+3	+14	4	11	2	7
	East North Central	-1	-3	+16	-3	+12	3	8	2	7
	West North Central	-10	-18	-6	+7	+12	5	12	3	12
	South Atlantic	+2	+5	+19	-4	-1	3	8	2	8
	East South Central	(S)	(S)	-16	-2	-15	(*)	(*)	3	14
	West South Central	-27	(S)	+19	0	(S)	7	(*)	3	(*)
	Mountain	+10	-8	+1	0	-1	4	14	2	11
	Pacific	+2	-6	+10	-1	-11	4	10	2	6

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 1980—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: May 1980 from April 1980	Sales: May 1980 from May 1979	Sales: 5 months 1980 from 5 months 1979	Inventories: May 1980 from April 1980	Inventories: May 1980 from May 1979	Sampling errors of the ratio corresponding to the percent change in column[2]--			
		A	B	C	D	E	A	B	D	E
5064, 5	Electrical appliances, TV and ratio sets, and electronic parts and equipment	+2	+10	+18	+3	+11	2	4	1	4
	Middle Atlantic	+1	+24	+21	-1	+1	4	9	2	10
	East North Central	+7	+13	+19	+8	+20	5	10	2	13
	West North Central	-6	(S)	+39	+1	(S)	5	(*)	2	(*)
	South Atlantic	+8	+10	+11	+2	+6	4	12	2	7
	West South Central	+2	+15	+40	+2	+24	4	13	2	12
	Mountain	(S)	(S)	-15	-2	+17	(*)	(*)	3	13
	Pacific	+1	+3	+14	+2	+22	7	11	3	9
5072	Hardware	-3	-11	+6	-3	+15	2	3	1	3
	New England	-2	-14	+5	+2	+3	4	13	3	14
	Middle Atlantic	-2	-15	+7	-2	+3	3	9	2	11
	East North Central	+4	-15	+6	-7	(S)	4	9	4	10
	West North Central	-8	-12	+8	-4	+11	4	7	2	6
	South Atlantic	-7	-8	+5	-4	+13	3	8	2	10
	East South Central	-2	+8	+13	+8	(S)	4	10	2	9
	Pacific	-4	-4	+10	-7	+7	3	10	2	11
5074	Plumbing and heating equipment and supplies (hydronics)	-1	-7	+5	-4	+7	2	5	1	9
	Middle Atlantic	-4	-1	+10	-5	(S)	6	14	3	(*)
	East North Central	+14	-10	-9	-9	(S)	7	14	2	(*)
	South Atlantic	-8	-9	+2	-5	+9	3	11	2	9
	Mountain	-9	(S)	+14	-9	+40	4	(*)	2	14
	Pacific	-2	-11	+7	-8	+7	4	14	2	11
5084, 5	Industrial machinery, equipment, and supplies	-2	+5	+13	-1	+11	2	5	1	3
	Middle Atlantic	-7	0	+9	-1	+17	5	9	2	7
	East North Central	-13	-13	+4	+1	+17	4	6	1	6
	West South Central	+1	(S)	+25	+1	+8	4	(*)	1	6
	Pacific	+5	+10	+12	-3	-1	3	8	2	8
512	Drugs, drug proprietaries, and druggists' sundries	+3	+3	+9	-2	+1	2	3	1	4
	New England	+2	+20	+16	-2	(S)	3	12	3	14
	Middle Atlantic	+9	+7	+11	+2	-10	4	8	2	7
	East North Central	+4	+14	+8	-2	+7	4	8	2	8
	West North Central	+1	-13	+10	-2	-12	5	12	2	9
	South Atlantic	-1	-6	+4	-5	+5	2	10	2	8
	East South Central	+2	+13	+6	0	+6	2	9	2	10
	West South Central	+2	+8	+19	-1	+13	2	12	2	14
	Mountain	-4	+4	+16	-1	+4	1	7	1	6
	Pacific	0	-7	+2	-5	(S)	2	13	1	(*)
5141	Groceries, general-line	+3	+11	+12	-1	+8	1	2	0	2
	New England	+6	+16	+9	+2	+10	2	6	2	7
	Middle Atlantic	+1	+8	+8	-2	+1	1	3	1	7
	East North Central	-1	+9	+14	-2	+5	1	4	1	5
	West North Central	+6	+16	+10	0	-1	2	5	2	7
	South Atlantic	+5	+7	+11	-2	+2	2	5	1	4
	West South Central	+5	+11	+14	0	+18	2	7	2	6
	Mountain	+4	+18	+16	-3	+14	2	6	2	9
	Pacific	+4	+14	+12	+1	+13	0	3	1	3
5142,3,6,9	Specialty-line groceries	+4	+11	+12	0	+11	1	3	1	4
	Middle Atlantic	+1	+17	+16	+5	+7	2	5	2	7
	East North Central	+9	+11	+1	-10	+8	3	6	1	6
	West North Central	+7	+14	+16	-7	+9	3	5	1	6
	South Atlantic	-2	-8	+4	-6	-10	4	13	2	13
	East South Central	-1	-10	-15	+3	+20	4	12	2	13
5148	Fresh fruits and vegetables	+6	+7	+3	+4	+1	2	3	2	7
	Middle Atlantic	+5	-6	-8	-2	0	3	9	5	14
	East North Central	+17	0	-2	-1	+4	3	8	3	10
	West North Central	+5	-17	-15	+3	(S)	4	14	3	(*)
	West South Central	+15	+30	+11	+7	(S)	7	13	3	(*)
	Pacific	+1	+22	+16	+1	+6	6	9	2	10
5194	Tobacco and tobacco products	+6	+3	+1	+1	+10	1	4	1	5
	New England	+10	+2	+1	+4	(S)	3	14	3	(*)
	Middle Atlantic	+9	-2	-7	+2	(S)	4	14	3	(*)
	East North Central	+3	+5	-1	0	+7	2	10	2	11
	West North Central	+12	(S)	+26	+1	(S)	6	(*)	6	(*)
	South Atlantic	+4	-31	-26	0	-27	4	14	3	12
	East South Central	0	(S)	+4	0	(S)	3	(*)	4	(*)
	West South Central	+7	(S)	+19	-3	-14	3	(*)	4	11
	Mountain	+39	(S)	+17	+12	(S)	3	(*)	5	(*)
	Pacific	0	+11	+15	+1	+19	2	10	3	12

Note: Data at the United States level are generally more relisble 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, B, D and E are based on medians or measurements on data for September 1979 through February 1980.

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

(Coefficients of variation in percent)

1972 SIC code	Kind of business	SALES						INVENTORIES					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Median sampling error of the ratio of:		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Median sampling error of the ratio of:	
		Range	Median	Range	Median	Two consecutive months	Same month a year ago	Range	Median	Range	Median	Two consecutive months	Same month a year ago
	Merchant wholesalers, total	1.4-1.8	1.6	1.4-1.6	1.5	0.6	1.0	1.3-1.5	1.4	1.2-1.4	1.4	0.3	0.9
	Total (excluding farm-product raw materials)	1.4-1.9	1.6	1.3-1.6	1.4	0.6	1.1	1.4-1.7	1.5	1.2-1.5	1.5	0.3	0.9
50	Durable goods, total	1.5-3.2	2.0	1.4-2.4	1.6	1.0	1.7	1.0-1.5	1.4	1.0-1.4	1.3	0.4	1.1
501	Motor vehicles and automotive parts and supplies	3.6-4.6	3.9	3.2-4.4	3.6	1.7	2.8	2.2-3.5	3.0	2.6-3.5	2.7	0.8	2.6
5012	Automobiles and other motor vehicles	(*)	(*)	(*)	(*)	2.8	5.4	(*)	(*)	(*)	(*)	1.8	5.5
5013,4	Automotive parts and supplies, tires and tubes	3.3-4.7	4.0	3.0-4.9	3.6	1.7	3.1	3.0-4.1	3.7	2.8-3.9	3.4	1.2	3.0
5013	Automotive parts and supplies	3.8-5.9	4.7	3.6-5.9	4.2	2.1	3.8	3.8-5.0	4.5	3.5-4.6	4.2	1.3	3.2
502	Furniture and home furnishings	4.7-7.0	5.7	4.3-6.1	5.1	2.9	4.0	4.0-4.6	4.2	3.9-4.5	4.2	0.9	3.3
5021	Furniture--household and office	4.9-6.5	6.0	4.3-7.1	6.0	4.1	5.7	(*)	(*)	(*)	(*)	1.5	5.1
5021 pt.	Household furniture	(*)	(*)	(*)	(*)	6.2	11.2	(*)	(*)	(*)	(*)	1.5	8.7
5021 pt.	Office furniture	(*)	(*)	(*)	(*)	4.9	6.5	(*)	(*)	(*)	(*)	1.9	5.2
5023	Home furnishings	6.7-9.2	7.6	5.5-8.1	6.6	3.3	5.1	5.0-6.3	5.6	5.0-6.1	5.7	1.1	4.5
503	Lumber and other construction materials	4.2-5.8	4.8	4.4-5.4	4.7	2.3	3.5	5.0-6.7	5.6	5.0-6.6	5.9	0.9	2.9
5031	Lumber, plywood, and millwork	5.7-7.7	6.3	5.1-6.6	5.9	3.3	4.5	7.0-9.0	7.9	7.2-8.6	8.1	1.2	3.6
5039	Construction materials, n.e.c.	5.0-6.9	6.0	5.1-6.5	5.7	3.1	5.9	(*)	(*)	(*)	(*)	1.1	4.8
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(*)	(*)	(*)	(*)	3.5	5.1	(*)	(*)	(*)	(*)	1.6	4.6
505	Metals and minerals, except petroleum	4.3-16.8	8.7	5.1-14.4	8.2	2.4	5.4	6.2-9.3	7.6	5.7-10.2	8.1	1.2	5.2
5051 pt.	Ferrous metals service centers and offices	4.3-6.2	5.2	3.9-6.5	4.6	2.5	3.3	3.9-4.7	4.3	4.0-4.5	4.2	0.8	3.0
5051 pt.	Ferrous metals service centers	4.8-7.1	5.1	4.9-5.2	5.1	2.8	3.6	2.8-5.5	4.6	3.1-4.8	4.0	0.9	3.4
5051 pt.	Nonferrous metals service centers and offices	(*)	(*)	(*)	(*)	4.1	23.3	(*)	(*)	(*)	(*)	5.2	22.5
506	Electrical goods	3.8-5.0	4.1	3.3-4.6	3.6	2.3	3.0	3.2-4.8	3.5	3.3-4.6	3.5	0.7	2.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	3.7-6.7	4.5	3.3-6.9	4.1	3.1	4.5	3.2-5.1	3.5	3.2-4.5	3.3	0.8	2.9
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	5.2-7.4	6.0	5.0-6.6	5.6	2.8	4.4	3.9-6.9	4.4	3.8-6.5	4.7	1.2	4.1
5064	Electrical appliances, TV and radio sets	4.9-8.2	6.4	5.1-6.7	5.5	2.8	4.3	(*)	(*)	(*)	(*)	1.3	5.0
507	Hardware, plumbing, heating equipment, and supplies	3.1-4.5	3.5	2.9-3.7	3.3	1.6	2.3	2.8-4.2	3.6	2.9-4.2	3.5	0.8	3.8
5072	Hardware	2.6-3.8	3.6	2.8-3.9	3.2	1.6	2.9	4.7-6.3	5.6	4.5-6.1	5.7	1.3	3.5
5074	Plumbing and heating equipment and supplies (hydronics)	5.4-7.7	6.4	5.1-6.6	5.9	2.9	5.4	5.0-6.0	5.4	4.7-5.6	5.3	1.3	8.6
5075	Warm air heating and air conditioning equipment and supplies	(*)	(*)	(*)	(*)	4.1	5.7	(*)	(*)	(*)	(*)	1.2	5.1
508	Machinery, equipment, and supplies	2.9-4.5	3.3	2.6-3.2	2.8	1.8	3.3	1.8-2.4	2.2	1.8-2.3	2.1	0.4	1.8
5081	Commercial machines and equipment	(*)	(*)	(*)	(*)	4.4	6.6	(*)	(*)	(*)	(*)	1.5	5.7
5082	Construction and mining machinery and equipment	4.8-6.6	5.4	4.1-5.1	4.5	3.9	5.4	3.8-5.3	4.2	3.9-4.9	4.1	1.1	4.1
5083	Farm and garden machinery and equipment	(*)	(*)	(*)	(*)	6.0	9.8	(*)	(*)	(*)	(*)	1.4	4.7
5084,5	Industrial machinery, equipment, and supplies	3.2-4.1	3.3	2.4-3.4	2.8	2.5	4.9	3.2-4.2	3.8	3.1-3.8	3.5	0.6	2.5
5086	Professional equipment and supplies	(*)	(*)	(*)	(*)	2.7	4.7	(*)	(*)	(*)	(*)	1.1	5.2
5093	Scrap and waste materials	4.2-5.4	5.1	4.2-5.3	4.7	2.2	3.9	(*)	(*)	(*)	(*)	1.3	3.2
5093 pt.	Iron and steel scrap	(*)	(*)	(*)	(*)	2.2	5.0	(*)	(*)	(*)	(*)	1.5	4.3
5093 pt.	Waste materials	(*)	(*)	(*)	(*)	3.9	6.9	(*)	(*)	(*)	(*)	2.2	5.4
51	Nondurable goods, total	1.8-2.1	1.9	1.6-2.0	1.9	0.8	1.2	2.6-3.0	2.8	2.6-2.8	2.7	0.5	1.3
	Total (excluding farm-product raw materials)	1.9-2.4	2.1	1.7-2.3	2.0	0.9	1.4	3.3-3.6	3.5	3.2-3.5	3.3	0.4	1.4
5111	Paper and paper products	4.6-7.7	5.2	4.5-6.9	4.9	1.5	3.0	4.6-7.3	6.3	4.6-7.1	5.9	0.8	3.4
5111,3	Printing, writing, industrial, and personal service paper	3.0-5.1	3.3	3.0-4.6	3.2	1.1	2.3	5.0-6.9	6.4	4.9-6.9	6.3	0.8	3.1
5111	Printing and writing paper	2.6-3.9	2.8	2.4-3.4	2.7	1.3	2.7	3.9-4.9	4.3	3.7-4.8	4.2	0.7	3.2
5113	Industrial and personal service paper	4.4-7.7	5.0	4.4-6.8	4.5	1.9	4.8	7.3-11.4	9.9	6.9-11.2	9.7	1.3	4.2
512	Drugs, drug proprietaries, and druggists' sundries	2.3-3.1	2.7	2.2-2.9	2.7	1.5	3.1	3.6-5.1	4.4	4.0-5.1	4.6	1.4	4.0
5122	Drugs, drug proprietaries, and druggists' sundries	2.3-3.1	2.7	2.2-2.9	2.7	1.5	3.1	(*)	(*)	(*)	(*)	1.4	4.0
5122 pt.	General-line drugs	6.0-6.9	6.6	6.0-6.9	6.6	1.1	4.1	(*)	(*)	(*)	(*)	0.9	6.6
513	Apparel, piece goods, and notions	12.0-15.7	13.2	10.9-14.6	13.4	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
514	Groceries and related products	1.7-2.4	2.2	1.8-2.3	2.1	0.5	1.3	1.6-2.2	1.8	1.6-2.0	1.8	0.4	1.6
5141	Groceries, general-line	2.6-3.4	3.3	2.8-3.3	3.1	0.6	1.7	1.9-2.8	2.2	1.7-2.7	1.9	0.5	1.7
5141 pt.	Voluntary groups	(*)	(*)	(*)	(*)	0.7	2.1	(*)	(*)	(*)	(*)	0.7	2.8
5141 pt.	Retailer cooperatives	(*)	(*)	(*)	(*)	0.6	1.8	(*)	(*)	(*)	(*)	0.6	2.3
5141 pt.	Other general-lines	(*)	(*)	(*)	(*)	1.3	2.8	(*)	(*)	(*)	(*)	1.0	3.7
5142,3,6,9	Specialty-line groceries	(*)	(*)	(*)	(*)	1.2	3.3	(*)	(*)	(*)	(*)	1.0	3.6
5144	Poultry and poultry products	5.6-7.2	6.5	5.4-7.2	6.7	1.8	3.2	(*)	(*)	(*)	(*)	1.5	5.2
5145	Confectionery	5.1-12.9	6.7	4.8-9.5	6.6	2.7	5.5	(*)	(*)	(*)	(*)	1.7	4.0
5147	Meats and meat products	5.6-7.0	6.8	5.4-6.9	6.5	1.5	4.2	(*)	(*)	(*)	(*)	1.4	6.3
5148	Fresh fruits and vegetables	4.0-5.7	4.4	3.5-5.0	4.7	2.3	3.2	(*)	(*)	(*)	(*)	2.6	6.2
515	Farm-product raw materials	2.6-5.2	3.0	2.1-4.6	3.4	2.3	2.9	(*)	(*)	(*)	(*)	1.5	4.0
5152	Cotton	(*)	(*)	(*)	(*)	6.9	10.2	(*)	(*)	(*)	(*)	1.0	2.5
5153	Grain	3.2-5.9	3.8	2.6-5.3	3.9	2.5	3.3	(*)	(*)	(*)	(*)	1.7	5.0
517	Petroleum and petroleum products	5.1-7.8	7.1	4.9-8.0	6.2	2.0	4.1	5.6-6.5	5.8	5.1-6.1	5.6	1.7	3.3
5171	Petroleum bulk stations and terminals	3.5-5.1	4.0	3.1-4.2	3.9	1.7	3.7	(*)	(*)	(*)	(*)	2.1	3.9
518	Beer, wine, and distilled alcoholic beverages	4.5-5.9	4.9	4.3-5.5	4.9	1.2	3.0	3.8-5.0	4.2	3.9-5.0	4.3	1.4	3.2
5181	Beer and ale	5.2-6.1	5.8	5.4-6.2	5.7	1.4	3.5	7.9-10.2	8.1	7.7-9.9	8.8	2.7	4.7
5182	Wines and distilled alcoholic beverages	5.1-7.2	5.7	5.1-6.9	5.7	1.9	4.1	3.4-5.0	4.4	3.7-4.6	4.0	1.3	4.5
519	Miscellaneous nondurable goods	2.5-4.9	3.9	2.5-3.9	3.4	1.9	3.2	(*)	(*)	(*)	(*)	0.9	2.7
5191	Farm supplies	(*)	(*)	(*)	(*)	4.4	5.7	(*)	(*)	(*)	(*)	1.6	4.5
5194	Tobacco and tobacco products	5.6-6.7	6.1	5.3-6.8	5.8	1.3	3.9	(*)	(*)	(*)	(*)	1.3	4.7
5198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.4	6.8	(*)	(*)	(*)	(*)	1.1	5.8
5199 pt.	Books, periodicals, newspapers	(*)	(*)	(*)	(*)	6.6	17.4	(*)	(*)	(*)	(*)	1.4	14.4

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 August 1979 through January 1980.

* 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 1979-December 1980

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	94.6	91.5	104.4	100.2	106.1	101.7	98.6	104.3	95.7	105.3	101.1	96.0
	Total (excluding farm-product raw materials)	93.4	91.2	104.0	100.1	106.4	102.6	98.8	105.9	96.8	105.4	99.9	95.0
50	Durable goods, total	91.6	89.2	103.2	101.6	107.4	103.5	99.6	107.5	97.7	107.7	98.7	92.4
501	Motor vehicles and automotive parts and supplies	93.4	90.7	106.9	109.1	112.2	103.6	101.6	104.8	91.3	100.7	94.4	89.9
502	Furniture and home furnishings	88.6	89.3	102.8	98.2	102.9	102.5	93.0	104.2	101.2	115.7	106.8	93.5
503	Lumber and other construction materials	81.7	79.4	98.6	97.5	108.3	108.9	106.6	117.6	102.9	114.9	100.7	84.5
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	81.7	85.0	101.4	99.9	103.6	99.9	96.0	107.0	105.9	113.9	104.7	100.8
505	Metals and minerals, except petroleum	97.1	92.7	103.1	102.3	107.8	101.3	96.1	109.0	100.1	102.9	96.9	89.2
506	Electrical goods	90.5	88.7	100.1	97.3	102.6	103.0	99.5	106.4	98.6	111.8	102.4	99.1
507	Hardware, plumbing, heating equipment, and supplies	91.9	86.2	97.4	100.6	108.4	104.2	104.4	108.6	98.8	111.5	98.8	89.9
508	Machinery, equipment, and supplies	89.8	88.3	106.4	102.7	109.1	105.0	97.2	105.2	99.4	107.1	97.0	92.9
509	Miscellaneous durable goods	87.9	89.9	109.2	100.0	101.5	104.3	92.9	108.5	98.5	109.0	104.2	93.1
51	Nondurable goods, total	98.1	92.4	105.7	99.6	105.3	100.4	97.9	101.5	93.9	102.7	102.5	99.4
	Total (excluding farm-product raw materials)	96.7	92.9	104.8	99.6	105.3	101.4	98.1	104.3	95.2	102.6	101.4	97.1
511	Paper and paper products	99.5	93.0	104.5	95.1	104.0	101.5	96.2	106.8	96.8	108.5	99.3	95.0
512	Drugs, drug proprietaries, and druggists' sundries	99.3	91.7	103.8	98.9	102.0	96.6	98.3	103.6	97.2	110.4	101.4	96.5
513	Apparel, piece goods, and notions	93.5	91.9	103.7	92.8	102.9	94.7	95.8	115.6	105.0	114.0	102.3	87.6
514	Groceries and related products	98.0	91.3	104.1	98.8	106.0	102.1	99.6	103.8	95.6	103.9	100.3	96.6
515	Farm-product raw materials[1]	103.0	92.5	110.2	99.3	104.0	98.9	98.2	92.3	87.7	105.9	108.3	100.7
516	Chemicals and allied products	93.9	88.1	102.1	99.4	109.9	104.3	99.0	109.7	94.3	106.4	100.1	92.7
517	Petroleum and petroleum products	100.9	102.3	105.2	98.1	99.0	97.2	98.7	100.0	91.3	100.4	103.7	102.4
518	Beer, wine, and distilled alcoholic beverages	81.5	81.6	98.8	95.2	107.0	109.2	101.5	108.5	93.4	104.3	106.5	111.6
519	Miscellaneous nondurable goods	96.2	97.2	112.6	106.4	110.3	104.2	91.9	97.2	93.2	97.6	97.4	95.2
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.4	101.3	102.4	101.4	100.1	99.3	98.8	97.9	98.3	99.8	100.4	100.1
	Total (excluding farm-product raw materials)	98.9	100.1	101.4	100.9	100.9	100.8	100.4	99.6	99.4	99.8	99.4	98.9
50	Durable goods, total	98.4	100.1	100.9	100.9	101.4	101.9	101.1	100.3	99.4	98.9	98.6	98.6
501	Motor vehicles and automotive parts and supplies	101.4	105.9	101.9	100.4	101.6	99.6	99.3	97.3	96.3	98.1	98.9	99.6
502	Furniture and home furnishings	98.8	99.1	99.6	99.6	101.1	102.8	100.6	100.8	101.8	99.9	99.1	97.3
503	Lumber and other construction materials	98.1	99.1	103.1	102.8	103.1	102.3	102.1	99.9	98.9	97.8	96.1	97.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	95.8	99.8	100.9	102.6	102.4	106.4	105.8	101.1	101.8	100.8	93.3	89.8
505	Metals and minerals, except petroleum	98.4	97.8	99.8	99.1	101.4	100.9	102.6	104.4	101.3	97.4	98.9	98.6
506	Electrical goods	96.6	96.4	98.8	99.4	101.4	102.4	101.6	102.1	101.4	100.8	100.4	99.1
507	Hardware, plumbing, heating equipment, and supplies	97.1	98.4	101.9	105.6	103.4	103.1	102.4	99.9	97.9	98.4	95.9	96.1
508	Machinery, equipment, and supplies	98.6	100.6	101.6	100.4	101.3	101.9	100.4	99.8	99.9	98.6	98.4	98.8
509	Miscellaneous durable goods	97.6	98.1	96.6	97.9	97.1	100.4	102.9	102.3	102.6	103.3	102.3	99.4
51	Nondurable goods, total	103.8	103.1	104.8	101.1	97.8	95.4	94.6	94.4	96.3	101.3	104.1	103.4
	Total (excluding farm-product raw materials)	100.1	99.9	101.9	100.9	99.8	98.6	98.6	98.1	99.6	101.6	101.1	100.1
511	Paper and paper products	97.3	98.1	99.4	100.9	100.3	102.6	99.9	99.3	101.1	100.6	100.1	100.9
512	Drugs, drug proprietaries, and druggists' sundries	95.3	96.3	100.1	100.8	98.8	100.6	100.1	100.3	103.9	105.3	100.8	98.4
513	Apparel, piece goods, and notions	101.1	100.6	97.9	98.9	101.4	100.6	101.4	101.1	98.9	99.1	98.8	100.4
514	Groceries and related products	98.6	99.9	101.9	100.6	99.6	98.9	98.4	97.9	99.9	102.4	100.9	101.1
515	Farm-product raw materials[1]	119.1	117.2	116.2	104.9	89.8	82.8	80.5	77.8	81.3	98.4	115.4	116.3
516	Chemicals and allied products	98.1	100.8	101.4	101.3	103.4	102.1	102.8	99.6	100.4	96.6	96.3	97.3
517	Petroleum and petroleum products	102.4	98.6	99.6	94.4	98.4	93.3	96.8	101.1	104.4	104.4	104.3	103.1
518	Beer, wine, and distilled alcoholic beverages	96.6	94.6	99.3	101.4	103.1	102.9	101.1	97.3	99.4	105.9	104.6	93.8
519	Miscellaneous nondurable goods	104.6	105.6	108.3	102.6	99.1	93.3	95.4	95.9	96.1	99.1	99.3	100.6

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1979-December 1980—Continued

1972 SIC code	Kind of business	1980											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov,	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	95.4	95.2	101.1	103.3	103.3	101.6	101.9	98.6	100.6	105.8	95.5	100.8
	Total (excluding farm-product raw materials)	94.1	95.2	100.4	103.9	103.6	101.8	102.3	100.3	101.5	106.0	94.8	100.3
50	Durable goods, total	92.3	92.7	99.8	105.0	104.2	103.4	103.2	101.3	103.6	107.7	93.0	97.9
501	Motor vehicles and automotive parts and supplies	95.2	94.3	103.6	114.2	108.1	102.7	104.2	101.3	95.1	100.4	90.7	94.7
502	Furniture and home furnishings	89.5	93.2	99.8	101.8	100.0	101.9	96.5	98.9	104.5	117.2	101.9	98.3
503	Lumber and other construction materials	81.0	83.9	94.0	101.1	106.2	107.1	109.4	110.4	112.2	115.0	92.5	90.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	80.2	86.3	101.3	106.6	99.2	97.7	101.2	101.7	109.7	110.5	104.8	107.0
505	Metals and minerals, except petroleum	96.9	97.4	101.3	107.0	101.9	102.5	98.8	103.2	105.2	102.7	92.3	95.8
506	Electrical goods	91.0	91.5	97.3	100.6	100.0	102.6	103.4	100.5	103.9	111.4	97.5	104.1
507	Hardware, plumbing, heating equipment, and supplies	92.2	88.9	95.3	103.7	105.2	104.6	107.7	102.9	104.0	110.7	94.3	94.6
508	Machinery, equipment, and supplies	90.7	91.5	102.2	105.8	107.2	104.1	101.4	98.8	104.7	108.1	91.1	97.5
509	Miscellaneous durable goods	89.3	94.3	104.4	102.6	99.5	103.8	95.3	102.3	106.6	109.8	95.4	98.3
51	Nondurable goods, total	98.8	96.0	102.4	102.8	102.9	100.1	101.4	96.3	98.3	103.3	97.1	104.3
	Total (excluding farm-product raw materials)	97.7	97.0	101.1	102.5	103.0	100.9	101.5	98.6	99.8	103.7	95.4	102.0
511	Paper and paper products	99.6	97.1	100.3	100.0	101.4	99.2	100.9	99.7	102.7	108.5	93.3	101.7
512	Drugs, drug proprietaries, and druggists' sundries	100.6	95.0	100.4	103.1	98.0	96.7	101.8	98.1	103.5	109.9	95.7	102.5
513	Apparel, piece goods, and notions	95.1	93.4	101.2	97.8	98.3	94.1	101.9	108.6	108.1	113.6	99.6	92.4
514	Groceries and related products	98.7	94.8	100.6	101.9	104.7	100.2	103.4	99.0	99.5	104.5	95.8	100.6
515	Farm-product raw materials[1]	101.3	96.0	107.3	102.6	103.4	97.2	100.8	88.6	92.9	104.2	103.6	105.4
516	Chemicals and allied products	94.3	92.6	98.8	103.4	105.8	104.4	102.0	103.6	99.6	106.8	94.2	99.2
517	Petroleum and petroleum products	101.2	107.8	102.9	97.8	98.6	97.9	97.9	97.6	95.4	100.9	98.6	105.5
518	Beer, wine, and distilled alcoholic beverages	82.3	85.6	94.2	100.0	103.0	108.2	106.8	100.0	99.6	105.8	98.3	120.1
519	Miscellaneous nondurable goods	96.7	101.7	108.5	107.4	109.2	104.9	94.0	92.1	98.3	99.0	90.9	98.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.3	101.3	102.4	101.6	100.1	99.4	98.8	97.9	98.3	99.6	100.4	100.1
	Total (excluding farm-product raw materials)	98.9	100.1	101.4	100.9	100.9	100.9	100.4	99.6	99.4	99.8	99.3	98.9
50	Durable goods, total	98.4	100.1	101.1	100.8	101.4	101.9	101.1	100.3	99.4	98.9	98.6	98.6
501	Motor vehicles and automotive parts and supplies	101.4	106.3	101.9	100.4	101.6	99.6	99.3	97.4	96.1	98.1	98.9	99.6
502	Furniture and home furnishings	98.8	99.1	99.6	99.6	101.1	102.9	100.6	100.6	101.9	99.9	99.1	97.3
503	Lumber and other construction materials	97.9	99.1	103.1	102.8	103.1	102.3	102.1	99.8	98.9	97.9	96.1	97.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	95.6	99.6	101.1	102.9	102.3	106.4	105.9	101.1	101.9	100.8	93.3	89.8
505	Metals and minerals, except petroleum	98.3	97.8	99.6	98.9	101.6	100.9	102.6	104.6	101.3	97.3	98.9	98.4
506	Electrical goods	96.6	96.4	98.8	99.4	101.4	102.4	101.6	102.1	101.4	100.8	100.4	99.1
507	Hardware, plumbing, heating equipment, and supplies	97.1	98.6	101.9	105.9	103.4	103.1	102.4	99.9	97.8	98.3	95.8	96.1
508	Machinery, equipment, and supplies	98.6	100.6	101.6	100.4	101.3	101.9	100.4	99.9	100.1	98.6	98.4	98.8
509	Miscellaneous durable goods	97.6	98.1	96.6	97.8	97.1	100.3	102.9	102.1	102.8	103.1	102.1	99.3
51	Nondurable goods, total	103.8	103.1	104.9	101.3	98.1	95.6	94.6	94.3	96.3	101.1	103.9	103.4
	Total (excluding farm-product raw materials)	100.1	99.8	102.1	101.1	99.9	98.6	98.6	98.1	99.6	101.6	100.9	100.1
511	Paper and paper products	97.1	98.1	99.4	100.9	100.4	102.6	99.9	99.1	101.1	100.6	100.1	100.9
512	Drugs, drug proprietaries, and druggists' sundries	95.1	96.3	100.1	100.8	98.8	100.6	100.1	100.3	104.1	105.3	100.6	98.4
513	Apparel, piece goods, and notions	101.1	100.8	97.9	98.9	101.4	100.8	101.4	101.1	98.9	99.1	98.8	100.4
514	Groceries and related products	98.6	99.9	101.9	100.6	99.6	99.1	98.4	97.9	100.1	102.4	100.9	101.1
515	Farm-product raw materials[1]	119.1	117.4	116.9	105.6	90.3	82.8	80.3	77.4	80.8	98.1	115.4	116.4
516	Chemicals and allied products	98.1	100.9	101.4	101.3	103.4	102.1	102.8	99.6	100.4	96.6	96.3	97.3
517	Petroleum and petroleum products	102.1	98.4	99.9	94.4	98.4	93.3	96.8	101.1	104.4	104.3	104.3	102.9
518	Beer, wine, and distilled alcoholic beverages	96.6	94.4	99.4	101.6	103.1	102.9	101.3	97.3	99.4	105.9	104.6	93.8
519	Miscellaneous nondurable goods	104.8	105.6	108.6	102.8	99.4	93.1	95.4	95.8	95.9	99.3	99.1	100.4

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.

[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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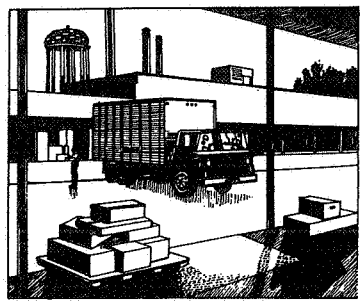
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued August 1980

June 1980

BW-80-6

Sales. June 1980 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences but not for price changes, were $76.7 billion, virtually unchanged from the previous month but up 6 percent from June 1979. Adjusted April-through-June total sales were down 4 percent from the January-through-March period but were 7 percent above the total sales for the comparable months a year ago.

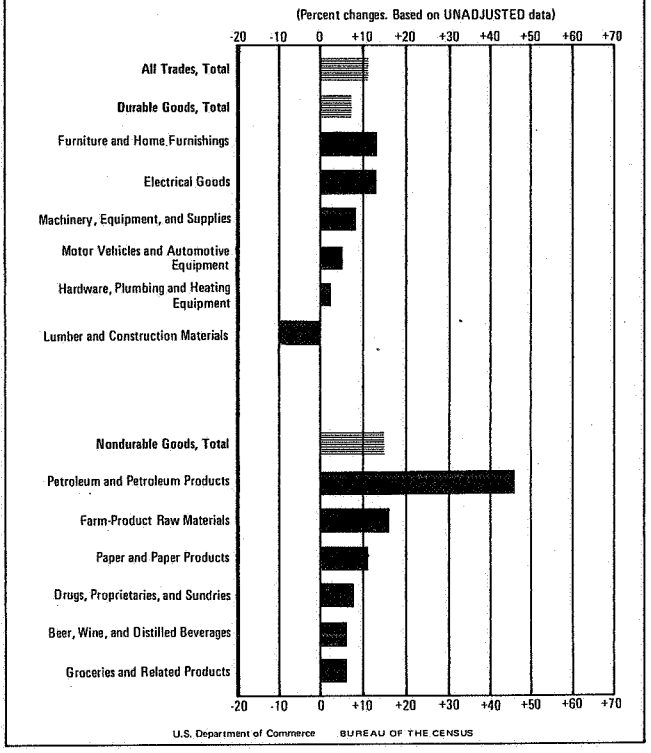
After adjustment, June sales in the durable goods trades were up 3 percent from the previous month and up 2 percent from the same month a year ago. Nondurable goods sales were down 2 percent from May but were 8 percent above June 1979. Total monthly sales in the durable goods group during the April-through-June period were down 9 percent from the prior three months but were 1 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were virtually unchanged from the January-through-March period but were 12 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 seven trade groups showing gains, six indicating declines, and one with no change. The largest increase was reported in lumber and construction materials (9%). The largest decrease was reported in farm-product raw materials (-8%). Compared with sales of a year ago, most trade groups showed increases with the sharpest one reported in petroleum and petroleum products (27%). The largest year-to-year decrease was shown in lumber and construction materials and sporting goods, toys, and hobby goods—both down 15 percent.

Inventories. Total inventories of merchant wholesalers after adjustment for seasonal variations but not for price changes were valued at $94.3 billion at the end of June—up 1 percent from the previous month and up 10 percent from the year-ago level. Durable and nondurable goods stocks were up 1 percent from May and were up 13 and 6 percent, respectively, from their June 1979 levels.

Based on adjusted data, comparisons with previous month inventory levels showed mixed results with seven trade groups showing increases, five indicating declines, and two with no change. The largest increase was reported in petroleum and petroleum products (8%). Compared with year-ago inventories, most trade groups showed increases with the largest one reported in petroleum and petroleum products (55%).

Percent Change in Sales of Merchant Wholesalers in Selected Kinds of Business
6 Months 1980 Compared With 6 Months 1979



Stock-Sales Ratios. The June stock-sales ratio for merchant wholesalers, based on seasonally adjusted data, was 123, up 1 point from May and up 5 points from June 1979. The stock-sales ratio for durable goods was 182, down 4 points from last month, but up 17 points from the year-ago ratio. The ratio for nondurable goods was 76, up 2 points from May, but down 2 points from the year-ago ratio.

An advance release of June 1980 data was issued August 5, 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) 763-7794/763-7007.

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Table 1. Estimated Monthly Sales of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980						1979							Total 6 months	
		Jan.	Feb.	Mar.	Apr.	May	June[p]	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1980	1979
	Merchant wholesalers, total	77,104	75,746	80,597	79,388	79,449	77,889	74,361	73,537	78,567	73,213	81,820	79,079	75,396	470,175	421,722
	Total (excluding farm-product raw materials)	67,867	67,271	71,603	70,565	70,520	70,160	66,477	64,932	70,390	65,400	72,156	69,354	66,185	417,988	376,666
50	Durable goods, total	33,579	33,949	36,170	35,302	34,214	35,014	34,447	33,750	37,048	33,616	37,935	34,711	32,515	208,228	194,711
501	Motor vehicles and automotive parts and supplies	6,421	6,586	6,779	7,045	6,722	6,802	6,364	6,259	6,812	5,645	6,784	6,452	6,172	40,356	38,395
5013,4	Automotive parts and supplies, tires and tubes	3,160	3,093	3,317	3,356	3,285	3,424	3,318	3,091	3,552	3,081	3,538	3,298	2,972	19,634	19,864
5013	Automotive parts and supplies	2,704	2,685	2,831	2,889	2,823	2,913	2,759	2,600	3,014	2,617	2,978	2,817	2,515	16,845	16,631
502	Furniture and home furnishings	1,210	1,186	1,304	1,344	1,256	1,237	1,185	1,121	1,243	1,196	1,390	1,263	1,134	7,536	6,689
5021	Furniture--household and office	496	452	496	503	474	464	422	399	449	419	458	430	430	2,851	2,375
5023	Home furnishings	747	734	808	841	782	773	763	722	794	778	931	832	704	4,685	4,314
503	Lumber and other construction materials	2,582	2,408	2,595	2,598	2,608	2,855	3,410	3,411	3,761	3,274	3,622	2,997	2,543	15,645	17,390
5031	Lumber, plywood, and millwork	1,708	1,622	1,696	1,638	1,637	1,833	2,250	2,250	2,515	2,102	2,346	1,899	1,586	10,134	11,849
5039	Construction materials, n.e.c.	873	785	899	960	971	1,022	1,160	1,161	1,246	1,172	1,276	1,098	957	5,510	5,542
5051 pt.	Ferrous metals service centers and offices	2,992	2,852	3,136	2,773	2,666	2,658	2,759	2,865	3,062	2,806	2,974	2,836	2,743	16,825	15,545
5051 pt.	Ferrous metals service centers	2,197	2,064	2,271	2,110	1,960	1,979	2,056	2,046	2,211	1,974	2,208	2,122	1,964	12,582	11,538
506	Electrical goods	3,745	3,904	3,931	3,718	3,749	4,053	3,786	3,712	4,163	4,012	4,395	3,962	3,785	23,101	20,456
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,840	2,032	1,992	1,925	1,961	2,113	2,006	1,991	2,153	2,079	2,165	1,962	1,916	11,876	10,773
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,905	1,872	1,939	1,793	1,788	1,940	1,779	1,700	2,011	1,933	2,230	2,000	1,869	11,237	9,684
5064	Electrical appliances, TV and radio sets[1]	1,040	985	1,054	950	936	1,063	1,064	986	1,116	1,083	1,250	1,154	1,052	6,028	5,592
507	Hardware, plumbing, heating equipment, and supplies	2,466	2,250	2,436	2,311	2,317	2,401	2,461	2,524	2,678	2,399	2,794	2,415	2,192	14,180	13,873
5072	Hardware	936	885	932	896	886	927	877	892	1,003	877	1,024	916	838	5,462	5,118
5074	Plumbing and heating equipment and supplies (hydronics)	1,037	934	1,003	938	913	912	966	1,015	1,038	1,011	1,167	992	920	5,737	5,575
508	Machinery, equipment, and supplies	8,880	9,322	10,058	10,196	10,107	10,330	9,745	9,222	10,113	9,394	10,317	9,324	9,026	58,893	54,447
5082	Construction and mining machinery and equipment	958	1,098	1,208	1,185	1,271	1,241	1,260	1,258	1,366	1,268	1,323	1,144	1,019	6,961	6,983
5084,5	Industrial machinery, equipment, and supplies	3,924	4,061	4,208	4,310	4,342	4,385	3,964	3,613	4,039	3,634	4,078	4,020	3,936	25,231	22,376
5086	Professional equipment, supplies[2]	982	970	1,014	1,083	1,094	1,145	996	996	1,092	972	1,121	948	939	6,289	5,891
5093	Scrap and waste materials	1,489	1,571	1,685	1,581	1,486	1,290	1,468	1,395	1,534	1,328	1,456	1,428	1,382	9,102	8,296
51	Nondurable goods, total	43,525	41,797	44,427	44,086	45,235	42,875	39,914	39,787	41,519	39,597	43,885	44,368	42,881	261,948	227,010
	Total (excluding farm-product raw materials)	34,288	33,323	35,433	35,263	36,307	35,147	32,030	31,182	33,342	31,784	34,221	34,643	33,670	209,761	181,954
511	Paper and paper products	1,837	1,774	1,799	1,783	1,762	1,731	1,651	1,585	1,777	1,599	1,821	1,699	1,639	10,685	9,601
5111,3	Printing, writing, industrial, and personal service paper	1,330	1,290	1,354	1,327	1,317	1,284	1,252	1,192	1,327	1,202	1,368	1,269	1,218	7,901	7,212
5111	Printing and writing paper	665	668	665	666	647	617	609	594	648	584	685	623	601	3,928	3,573
5113	Industrial and personal service paper	665	622	688	661	670	668	642	599	679	618	683	646	617	3,973	3,638
512	Drugs, drug proprietaries, and druggists' sundries	1,112	1,045	1,113	1,106	1,117	1,133	1,039	1,066	1,099	1,030	1,178	1,092	1,054	6,625	6,118
5122	Drugs, drug proprietaries, and druggists' sundries	1,112	1,045	1,113	1,106	1,117	1,133	1,039	1,066	1,099	1,030	1,178	1,092	1,054	6,625	6,118
5122 pt.	General-line drugs	466	460	494	472	485	478	455	443	477	443	487	448	456	2,854	2,811
513	Apparel, piece goods, and notions[3]	2,444	2,412	2,520	2,430	2,145	2,412	2,102	2,389	2,629	2,563	2,704	2,468	2,032	14,363	12,752
514	Groceries and related products	11,892	11,244	12,057	12,270	12,606	12,247	11,721	11,500	11,835	11,122	12,140	11,919	11,673	72,316	68,447
5141	Groceries, general-line	4,395	4,190	4,537	4,571	4,740	4,559	4,247	4,245	4,429	4,137	4,597	4,511	4,289	26,993	24,272
5144	Poultry and poultry products	555	531	559	576	569	570	544	563	569	530	561	603	589	3,361	3,256
5145	Confectionery	198	187	209	209	210	212	199	192	214	214	275	243	207	1,224	1,177
5147	Meats and meat products	1,867	1,741	1,799	1,770	1,799	1,740	1,908	1,872	1,959	1,770	1,925	1,768	1,811	10,715	12,160
5148	Fresh fruits and vegetables	997	1,005	1,117	1,213	1,299	1,308	1,242	1,063	1,030	917	997	1,024	1,002	6,938	6,714
515	Farm-product raw materials	9,237	8,474	8,995	8,823	8,928	7,730	7,884	8,605	8,177	7,813	9,664	9,725	9,211	52,187	45,056
5153	Grain	7,590	6,939	7,537	7,425	7,524	6,370	6,730	7,516	7,090	6,594	8,328	8,347	7,630	43,386	37,216
517	Petroleum and petroleum products	8,219	8,001	7,858	7,714	7,990	7,462	5,851	5,863	6,355	6,354	7,171	7,602	7,677	47,246	32,278
5171	Petroleum bulk stations and terminals	4,510	4,339	4,236	4,043	4,109	3,895	3,170	3,121	3,504	3,456	3,960	4,050	4,193	25,132	17,852
518	Beer, wine, and distilled alcoholic beverages	2,242	2,254	2,436	2,629	2,787	2,872	2,704	2,636	2,844	2,387	2,733	2,821	2,882	15,221	14,345
5181	Beer and ale	1,087	1,156	1,207	1,346	1,557	1,615	1,523	1,507	1,590	1,229	1,299	1,267	1,230	7,969	7,470
5182	Wine and distilled alcoholic beverages[4]	1,155	1,098	1,230	1,283	1,230	1,257	1,181	1,129	1,254	1,158	1,435	1,554	1,652	7,253	6,875
519	Miscellaneous nondurable goods	5,299	5,393	6,479	6,178	6,622	5,958	5,801	5,105	5,468	5,570	5,296	5,643	5,238	35,930	31,648
5194	Tobacco and tobacco products	835	771	815	864	883	874	863	881	896	795	902	861	843	5,042	5,025

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.

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

[1]The electrical appliances, TV and radio sets group is subject to a sampling variability of 8 percent for June 1980.
[2]The professional equipment, supplies group is subject to a sampling variability of 8 percent for June 1980.
[3]The apparel, piece goods, and notions group is subject to a sampling variability of 11 percent for June 1980.
[4]The wine and distilled alcoholic beverages group is subject to a sampling variability of 8 percent for June 1980.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980						1979						
		Jan.	Feb.	Mar.	Apr.	May	June[P]	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	91,477	92,854	93,745	93,479	93,522	93,815	84,942	86,829	86,890	87,061	88,839	89,632	89,997
	Total (excluding farm-product raw materials)	83,618	85,076	86,658	87,474	88,304	88,967	79,964	81,487	81,570	81,563	82,485	82,184	82,382
50	Durable goods, total	57,268	58,463	59,460	60,458	61,715	62,541	55,523	56,602	56,803	56,361	56,620	56,241	56,470
501	Motor vehicles and automotive parts and supplies	9,893	10,167	10,109	10,420	10,540	10,624	9,207	9,672	9,446	9,240	9,546	9,652	9,723
5013,4	Automotive parts and supplies, tires and tubes	6,182	6,130	6,107	6,197	6,363	6,340	5,753	6,051	6,117	5,933	6,025	6,084	6,030
5013	Automotive parts and supplies	5,191	5,124	5,068	5,146	5,307	5,240	4,818	5,082	5,188	5,018	5,121	5,208	5,074
502	Furniture and home furnishings	1,807	1,816	1,906	1,940	1,888	1,870	1,903	1,847	1,839	1,861	1,909	1,796	1,794
5023	Home furnishings	1,265	1,271	1,330	1,366	1,322	1,306	1,361	1,347	1,339	1,328	1,381	1,291	1,247
503	Lumber and other construction materials	3,378	3,423	3,595	3,507	3,434	3,435	3,496	3,526	3,442	3,382	3,383	3,335	3,353
5031	Lumber, plywood, and millwork[1]	2,103	2,169	2,220	2,191	2,168	2,146	2,204	2,220	2,204	2,129	2,149	2,112	2,090
5051 pt.	Ferrous metals service centers and offices	4,852	4,766	4,853	4,728	5,155	5,239	4,586	4,655	4,947	4,953	4,794	4,891	4,897
5051 pt.	Ferrous metals service centers	3,893	3,851	3,981	3,811	4,205	4,337	3,643	3,665	3,956	4,010	3,843	3,999	4,019
506	Electrical goods	6,092	6,140	6,083	6,313	6,506	6,496	6,040	6,223	6,254	6,061	6,082	6,098	5,931
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,894	3,051	2,983	3,038	3,154	3,153	2,838	2,840	2,841	2,771	2,785	2,945	2,820
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3,199	3,089	3,101	3,275	3,352	3,343	3,202	3,383	3,274	3,290	3,296	3,153	3,112
507	Hardware, plumbing, heating equipment, and supplies	4,692	4,883	4,984	5,086	4,955	4,891	4,631	4,628	4,535	4,488	4,537	4,456	4,575
5072	Hardware	1,806	1,888	1,945	1,925	1,873	1,811	1,643	1,659	1,657	1,692	1,698	1,692	1,758
5074	Plumbing and heating equipment and supplies (hydronics)	1,836	1,904	1,944	2,058	2,019	2,031	1,896	1,902	1,828	1,783	1,823	1,777	1,804
508	Machinery, equipment, and supplies	19,475	20,476	21,056	21,072	21,533	21,824	19,465	19,576	19,778	19,974	19,555	19,461	19,554
5082	Construction and mining machinery and equipment	4,038	4,279	4,326	4,367	4,503	4,550	4,512	4,488	4,504	4,573	4,339	4,288	4,182
5084,5	Industrial machinery, equipment, and supplies	6,375	6,588	6,922	6,817	6,905	6,913	6,006	5,979	6,092	6,201	6,251	6,163	6,354
51	Nondurable goods, total	34,209	34,390	34,285	33,021	31,807	31,274	29,419	30,227	30,087	30,700	32,219	33,391	33,527
	Total (excluding farm-product raw materials)	26,350	26,615	27,196	27,016	26,589	26,426	24,441	24,885	24,767	25,202	25,865	25,943	25,912
511	Paper and paper products	1,670	1,694	1,740	1,768	1,777	1,770	1,616	1,608	1,604	1,663	1,597	1,657	1,695
5111,3	Printing, writing, industrial, and personal service paper	1,137	1,144	1,185	1,201	1,196	1,203	1,090	1,079	1,055	1,109	1,082	1,090	1,141
5111	Printing and writing paper	473	479	498	499	492	502	447	442	427	440	439	444	474
5113	Industrial and personal service paper[2]	664	665	687	702	704	701	644	637	629	669	644	645	667
512	Drugs, drug proprietaries, and druggists' sundries	1,560	1,539	1,595	1,601	1,578	1,584	1,567	1,609	1,570	1,670	1,678	1,580	1,573
514	Groceries and related products	6,775	6,877	7,101	7,010	6,809	6,812	6,686	6,674	6,633	6,793	6,982	6,933	6,984
5141	Groceries, general-line	2,884	2,952	3,054	3,019	2,938	2,907	2,802	2,899	2,857	2,911	3,046	3,044	2,957
517	Petroleum and petroleum products	3,298	3,424	3,343	3,288	3,449	3,518	2,263	2,492	2,618	2,874	2,918	3,062	3,135
518	Beer, wine, and distilled alcoholic beverages	2,742	2,652	2,853	2,943	2,893	2,896	2,732	2,693	2,539	2,538	2,781	2,770	2,597
5181	Beer and ale[3]	916	917	1,109	1,162	1,140	1,133	1,072	1,030	923	903	934	922	879
5182	Wines and distilled alcoholic beverages	1,825	1,735	1,743	1,781	1,753	1,763	1,660	1,663	1,616	1,634	1,847	1,848	1,718

See footnotes at end of table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980						1979						
		Jan.	Feb.	Mar.	Apr.	May	June[P]	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	119	123	116	118	118	120	114	118	111	119	109	113	119
	Total (excluding farm-product raw materials)	123	126	121	124	125	127	120	125	116	125	114	118	124
50	Durable goods, total	171	172	164	171	180	179	161	168	153	168	149	162	174
501	Motor vehicles and automotive parts and supplies	154	154	149	148	157	156	145	155	139	164	141	150	158
5013,4	Automotive parts and supplies, tires and tubes	196	198	184	185	194	185	173	196	172	193	170	184	203
5013	Automotive parts and supplies	192	191	179	178	188	180	175	195	172	192	172	185	202
502	Furniture and home furnishings	145	153	146	144	150	151	161	165	148	156	137	142	158
5023	Home furnishings	169	173	165	162	169	169	178	187	169	171	148	155	177
503	Lumber and other construction materials	131	142	139	135	132	120	102	103	92	103	93	111	132
5031	Lumber, plywood, and millwork	123	134	131	134	132	117	98	99	88	101	92	111	132
5051 pt.	Ferrous metals service centers and offices	162	167	155	170	193	197	166	162	162	177	161	172	178
5051 pt.	Ferrous metals service centers	177	187	175	181	215	219	177	179	179	203	174	188	204
506	Electrical goods	163	157	155	170	174	160	160	168	150	151	138	154	157
5063	Electrical apparatus and equipment, wiring supplies and construction meterials	157	150	150	158	161	149	141	143	132	133	129	150	147
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	168	165	160	183	187	172	180	197	163	170	148	158	167
507	Hardware, plumbing, heating equipment, and supplies	190	217	205	220	214	204	188	183	169	187	162	185	209
5072	Hardware	193	213	209	215	211	195	187	186	165	193	166	185	210
5074	Plumbing and heating equipment and supplies (hydronics)	177	204	194	219	221	223	196	188	176	176	156	179	196
508	Machinery, equipment, and supplies	219	220	209	207	213	211	200	212	196	213	190	209	217
5082	Construction and mining machinery and equipment	422	390	358	368	354	367	358	357	330	361	328	375	411
5084,5	Industrial machinery, equipment, and supplies	162	162	164	158	159	157	152	165	151	171	153	153	161
51	Nondurable goods, total	79	82	77	75	70	73	74	76	72	78	73	75	78
	Total (excluding farm-product raw materials)	77	80	77	77	73	75	76	80	74	79	76	75	77
511	Paper and paper products	91	96	97	99	101	102	98	101	90	104	88	98	103
5111,3	Printing, writing, industrial, and personal service paper	85	89	88	90	91	94	87	90	79	92	79	86	94
5111	Printing and writing paper	71	72	75	75	76	81	73	74	66	75	64	71	79
5113	Industrial and personal service paper	100	107	100	106	105	105	100	106	93	108	94	100	108
512	Drugs, drug proprietaries, and druggists' sundries	140	147	143	145	141	140	151	151	143	162	142	145	149
514	Groceries and related products	57	61	59	57	54	56	57	58	56	61	58	58	60
5141	Groceries, general-line	66	70	67	66	62	64	66	68	64	70	66	67	69
517	Petroleum and petroleum products	40	43	43	43	43	47	39	43	41	45	41	40	41
518	Beer, wine, and distilled alcoholic beverages	122	118	117	112	104	101	101	102	89	106	102	98	90
5181	Beer and ale	84	79	92	86	73	70	70	68	58	74	72	73	71
5182	Wines and distilled alcoholic beverages	158	158	142	139	143	140	141	147	129	141	129	119	104

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.

[P]Preliminary estime. 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 1980.
[2]The industrial and personal service paper group is subject to a sampling variability of 11 percent for June 1980.
[3]The beer, and ale group is subject to a sampling variability of 8 percent for June 1980.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980						1979						
		Jan.	Feb.	Mar.	Apr.	May	June[P]	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Sales ADJUSTED for seasonal variations and trading-day differences												
	Merchant wholesalers, total	81,178	79,689	79,042	76,670	76,529	76,719	72,629	74,778	75,588	76,495	77,489	78,407	78,947
	Total (excluding farm-product raw materials)	72,060	70,862	70,659	68,071	67,895	68,766	64,657	66,015	66,729	67,586	68,363	69,427	69,800
50	Durable goods, total	36,848	36,838	35,903	33,305	32,714	33,833	33,078	34,103	34,509	34,079	35,267	35,171	35,407
501	Motor vehicles and automotive parts and supplies	6,745	6,984	6,543	6,169	6,218	6,623	6,143	6,160	6,500	6,183	6,737	6,835	6,865
502	Furniture and home furnishings	1,352	1,273	1,307	1,320	1,256	1,214	1,156	1,205	1,193	1,182	1,201	1,183	1,213
503	Lumber and other construction materials	3,188	2,870	2,761	2,570	2,456	2,666	3,131	3,200	3,198	3,182	3,152	2,976	3,009
506	Electrical goods	4,115	4,267	4,040	3,696	3,749	3,950	3,676	3,731	3,913	4,069	3,931	3,869	3,819
507	Hardware, plumbing, heating equipment, and supplies	2,675	2,531	2,556	2,229	2,202	2,295	2,362	2,418	2,466	2,428	2,506	2,444	2,438
508	Machinery, equipment, and supplies	9,791	10,188	9,841	9,637	9,428	9,923	9,281	9,488	9,613	9,451	9,633	9,612	9,716
51	Nondurable goods, total	44,330	42,851	43,139	43,365	43,815	42,886	39,551	40,675	41,079	42,416	42,222	43,236	43,540
	Total (excluding farm-product raw materials)	35,212	34,024	34,756	34,766	35,181	34,933	31,579	31,912	32,220	33,507	33,096	34,256	34,393
511	Paper and paper products	1,844	1,827	1,794	1,783	1,738	1,745	1,627	1,648	1,664	1,652	1,678	1,711	1,725
512	Drugs, drug proprietaries, and druggists' sundries	1,105	1,100	1,109	1,073	1,140	1,172	1,076	1,084	1,061	1,060	1,067	1,077	1,092
513	Apparel, piece goods, and notions	2,570	2,582	2,490	2,485	2,182	2,563	2,220	2,494	2,274	2,441	2,372	2,413	2,320
514	Groceries and related products	12,049	11,861	11,985	12,041	12,040	12,223	11,480	11,546	11,402	11,634	11,684	11,883	12,084
515	Farm-product raw materials[1]	9,118	8,827	8,383	8,599	8,634	7,953	7,972	8,763	8,859	8,909	9,126	8,980	9,147
517	Petroleum and petroleum products	8,122	7,422	7,637	7,888	8,103	7,622	6,020	5,940	6,355	6,959	7,142	7,331	7,497
518	Beer, wine, and distilled alcoholic beverages	2,724	2,633	2,586	2,629	2,706	2,654	2,476	2,597	2,621	2,556	2,620	2,649	2,582
519	Miscellaneous nondurable goods	5,480	5,303	5,971	5,752	6,064	5,680	5,567	5,555	5,626	5,976	5,426	5,794	5,502
		Inventories ADJUSTED for seasonal variations												
	Merchant wholesalers, total	91,085	91,508	91,708	92,736	93,147	94,311	85,406	87,662	88,474	88,499	89,146	89,324	89,920
	Total (excluding farm-product raw materials)	84,486	84,884	85,645	87,049	87,368	88,455	79,394	81,026	81,636	81,736	82,689	82,870	83,372
50	Durable goods, total	58,146	58,293	58,937	60,080	60,828	61,526	54,591	55,861	56,529	56,479	57,242	57,129	57,463
501	Motor vehicles and automotive parts and supplies	9,756	9,564	9,921	10,378	10,374	10,667	9,244	9,740	9,708	9,595	9,731	9,759	9,762
502	Furniture and home furnishings	1,829	1,832	1,914	1,948	1,867	1,817	1,851	1,836	1,824	1,828	1,911	1,812	1,844
503	Lumber and other construction materials	3,450	3,454	3,487	3,411	3,331	3,358	3,417	3,453	3,445	3,420	3,459	3,470	3,443
506	Electrical goods	6,306	6,369	6,157	6,351	6,416	6,344	5,898	6,125	6,125	5,977	6,034	6,074	5,985
507	Hardware, plumbing, heating equipment, and supplies	4,832	4,952	4,891	4,803	4,792	4,744	4,492	4,520	4,540	4,584	4,611	4,647	4,761
508	Machinery, equipment, and supplies	19,752	20,354	20,724	20,988	21,257	21,417	19,102	19,498	19,818	19,994	19,833	19,777	19,791
51	Nondurable goods, total	32,939	33,215	32,771	32,656	32,319	32,785	30,815	31,801	31,945	32,020	31,904	32,195	32,457
	Total (excluding farm-product raw materials)	26,340	26,591	26,708	26,969	26,540	26,929	24,803	25,165	25,107	25,257	25,447	25,741	25,909
511	Paper and paper products	1,720	1,727	1,751	1,752	1,770	1,725	1,575	1,610	1,615	1,645	1,587	1,655	1,680
512	Drugs, drug proprietaries, and druggists' sundries	1,640	1,598	1,593	1,588	1,597	1,575	1,558	1,607	1,565	1,607	1,594	1,567	1,599
514	Groceries and related products	6,871	6,884	6,969	6,968	6,836	6,874	6,760	6,783	6,775	6,800	6,818	6,871	6,908
517	Petroleum and petroleum products	3,230	3,480	3,346	3,483	3,505	3,771	2,426	2,574	2,590	2,753	2,795	2,936	3,041
518	Beer, wine, and distilled alcoholic beverages	2,839	2,809	2,870	2,897	2,806	2,814	2,655	2,664	2,609	2,553	2,626	2,648	2,769
		Stock-sales ratios based on ADJUSTED data												
	Merchant wholesalers, total	112	115	116	121	122	123	118	117	117	116	115	114	114
	Total (excluding farm-product raw materials)	117	120	121	128	129	129	123	123	122	121	121	119	119
50	Durable goods, total	158	158	164	180	186	182	165	164	164	166	162	162	162
501	Motor vehicles and automotive parts and supplies	145	137	152	168	167	161	150	158	149	155	144	143	142
502	Furniture and home furnishings	135	144	146	148	149	150	160	152	153	155	159	153	152
503	Lumber and other construction materials	108	120	126	133	136	126	109	108	108	107	110	117	114
506	Electrical goods	153	149	152	172	171	161	160	164	157	147	153	157	157
507	Hardware, plumbing, heating equipment, and supplies	181	196	191	215	218	207	190	187	184	189	184	190	193
508	Machinery, equipment, and supplies	202	200	211	218	225	216	206	206	206	212	206	206	204
51	Nondurable goods, total	74	78	76	75	74	76	78	78	78	75	76	74	75
	Total (excluding farm-product raw materials)	75	78	77	78	75	77	79	79	78	75	77	75	75
511	Paper and paper products	93	95	98	98	102	99	97	98	97	100	95	97	97
512	Drugs, drug proprietaries, and druggists' sundries	148	145	144	148	140	134	145	148	148	152	149	145	146
514	Groceries and related products	57	58	58	58	57	56	59	59	59	58	58	58	57
517	Petroleum and petroleum products	40	47	44	44	43	49	40	43	41	40	39	40	41
518	Beer, wine, and distilled alcoholic beverages	104	107	111	110	104	106	107	103	100	100	100	100	107

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.

[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. 1980-June 1980 from--			
	Jan. 1980-Mar. 1980 (3 months ago)	Oct. 1979-Dec. 1979 (6 months ago)	July 1979-Sept. 1979 (9 months ago)	Apr. 1979-June 1979 (12 months ago)
Merchant wholesalers, total.....	-4	-2	+1	+7
Durable goods, total.....	-9	-6	-3	+1
Nondurable goods, total..	0	+1	+5	+12

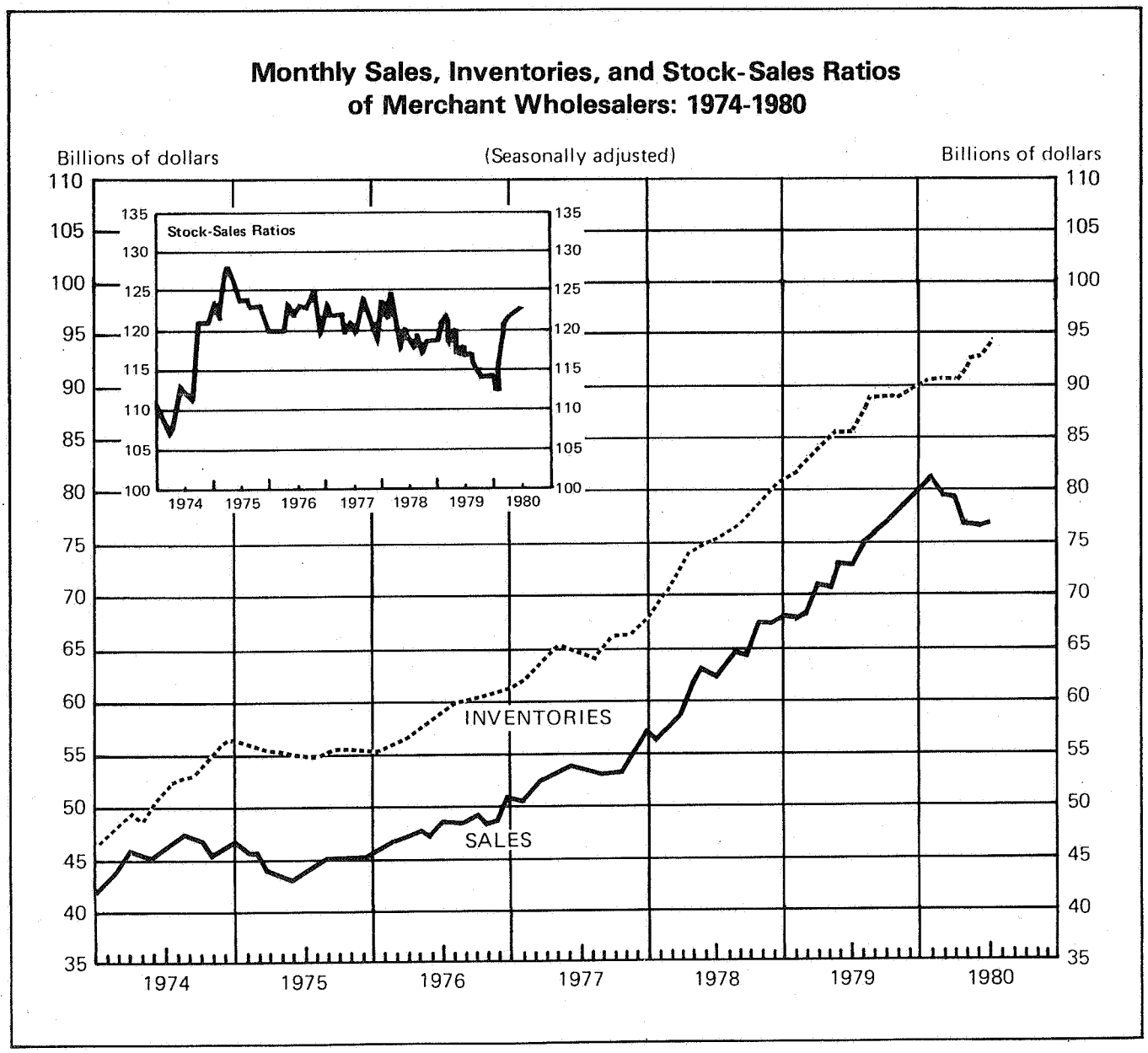


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: June 1980

1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		June 1980 from May 1980	June 1980 from June 1979	6 months 1980 from 6 months 1979	June 1980 from May 1980	June 1980 from June 1979	June 1980 from May 1980	June 1980 from June 1979	June 1980 from May 1980	June 1980 from June 1979
	Merchant wholesalers, total	-2	+5	+11	0	+11	0	+6	+1	+10
	Total (excluding farm-product raw materials)	-1	+6	+11	+1	+11	+1	+6	+1	+11
50	Durable goods, total	+2	+2	+7	+1	+13	+3	+2	+1	+13
501	Motor vehicles and automotive parts and supplies	+1	+7	+5	+1	+15	+7	+8	+3	+15
5012	Automobiles and other motor vehicles	-2	+11	+12	+3	+24	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	+4	+3	-1	0	+10	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	+3	+6	+1	-1	+9	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	-2	+4	+13	-1	-2	-3	+5	-3	-2
5021	Furniture--household and office	-2	+10	+20	0	+4	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	-18	-3	+16	-2	+5	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	+5	+16	+22	+1	+3	(*)	(*)	(*)	(*)
5023	Home furnishings	-1	+1	+9	-1	-4	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	+9	-16	-10	0	-2	+9	-15	+1	-2
5031	Lumber, plywood, and millwork	+12	-19	-14	-1	-3	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c.	+5	-12	-1	+2	0	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	-8	-17	+5	+4	+9	-7	-15	0	+8
5051 pt.	Ferrous metals service centers and offices	0	-4	+8	+2	+14	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	+1	-4	+9	+3	+19	(*)	(*)	(*)	(*)
506	Electrical goods	+8	+7	+13	0	+8	+5	+7	-1	+8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+8	+5	+10	0	+11	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+8	+9	+16	0	+4	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	+14	0	+8	0	0	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	+4	-2	+2	-1	+6	+4	-3	-1	+6
5072	Hardware	+5	+6	+7	-3	+10	(*)	(*)	(*)	(*)
5074	Plumbing and heating equipment and supplies (hydronics)	0	-6	+3	+1	r+7	(*)	(*)	(*)	(*)
5075	Warm air heating and air conditioning equipment and supplies	+9	-7	-6	-1	-6	(*)	(*)	(*)	(*)
508	Machinery, equipment, and supplies	+2	+6	+8	+1	+12	+5	+7	+1	+12
5081	Commercial machines and equipment	+6	+12	+12	+1	+1	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	-2	-2	0	+1	+1	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	+3	-9	0	+2	+19	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	+1	+11	+13	0	+15	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	+5	+15	+7	+3	+9	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	-13	-12	+10	+2	-1	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	-14	-16	+3	-1	-7	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	-12	-7	+20	+8	+13	(*)	(*)	(*)	(*)
51	Nondurable goods, total	-5	+7	+15	-2	+7	-2	+8	+1	+6
	Total (excluding farm-product raw materials)	-3	+10	+15	-1	+8	-1	+11	+1	+9
511	Paper and paper products	-2	+5	+11	0	+10	0	+7	-3	+10
5111,3	Printing, writing, industrial, and personal service paper	-2	+3	+10	+1	+10	(*)	(*)	(*)	(*)
5111	Printing, and writing paper	-5	+1	+10	+2	+12	(*)	(*)	(*)	(*)
5113	Industrial and personal service paper	0	+4	+9	0	+9	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	+1	+9	+8	0	+1	+3	+9	-1	+1
5122	Drugs, drug proprietaries, and druggists' sundries	+1	+9	+8	0	+1	(*)	(*)	(*)	(*)
5122 pt.	General-line drugs	-1	+5	+2	+2	+2	(*)	(*)	(*)	(*)
514	Groceries and related products	-3	+4	+6	0	+2	+2	+6	+1	+2
5141	Groceries, general-line	-4	+7	+11	-1	+4	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	-4	+7	+9	0	+7	(*)	(*)	(*)	(*)
5141 pt.	Retailer cooperatives	-3	+11	+14	+1	+6	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	-5	+5	+10	-4	0	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	-3	+8	+11	+1	+4	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	0	+5	+3	+4	+9	(*)	(*)	(*)	(*)
5145	Confectionery	+1	+7	+4	-6	-5	(*)	(*)	(*)	(*)
5147	Meats and meat products	-3	-9	-12	0	-13	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	+1	+5	+3	+1	+4	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	-13	-3	+16	-7	0	-8	0	+1	-3
5152	Cotton	-5	+14	+23	-26	+14	(*)	(*)	(*)	(*)
5153	Grain	-15	-6	+17	-1	-1	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	-7	+28	+46	+2	+55	-6	+27	+8	+55
5171	Petroleum bulk stations and terminals	-5	+23	+41	+4	+58	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	+3	+6	+6	0	+6	-2	+7	0	+6
5181	Beer and ale	+4	+6	+7	-1	+6	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	+2	+6	+5	+1	+6	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	-10	+3	+14	-4	+8	-6	+2	+2	+8
5191	Farm supplies	-24	+3	+19	-7	+18	(*)	(*)	(*)	(*)
5194	Tobacco and tobacco products	-1	+1	0	-2	+5	(*)	(*)	(*)	(*)
5198	Paints, varnishes, and supplies	+2	+10	+14	+2	+9	(*)	(*)	(*)	(*)
5199 pt.	Books, periodicals, newspapers	+1	-11	-7	+1	+28	(*)	(*)	(*)	(*)

*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.

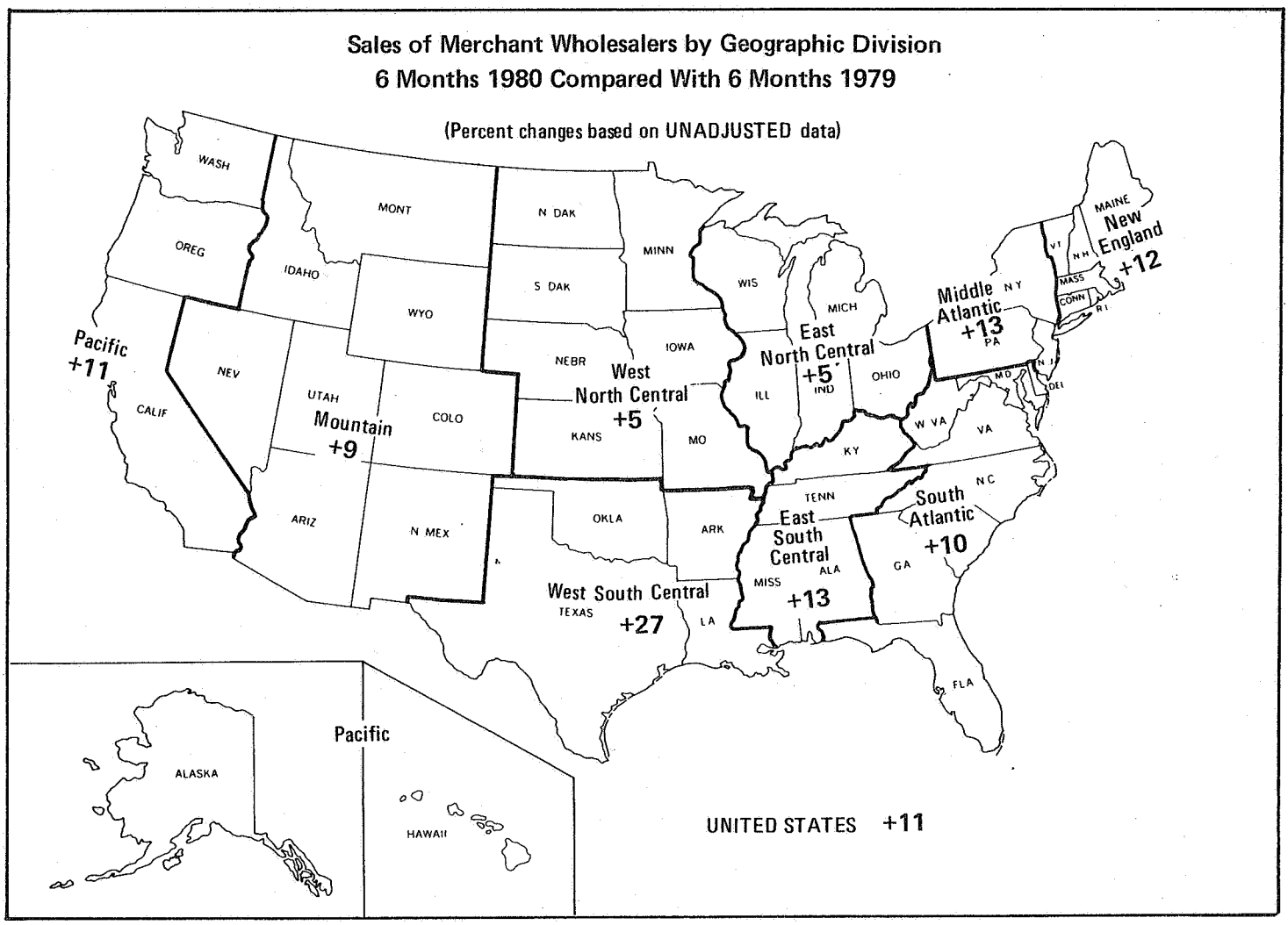


Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1980 and 1979

(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]	1980						1979							Total 6 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.	Apr.	May	June[P]	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1980	1979	Range[2]	Median
		1979																
	Merchant wholesalers, total	77,104	75,746	80,597	79,388	79,449	77,889	74,361	73,537	78,567	73,213	81,820	79,079	75,396	470,175	421,722	1.4-1.7	1.5
	New England	4,140	4,001	4,309	3,895	4,067	4,133	3,782	3,572	3,981	3,741	4,167	4,126	3,930	24,545	21,865	4-6	5
	Middle Atlantic	17,749	17,129	18,978	17,246	16,961	16,940	16,288	16,256	17,786	17,136	18,350	18,319	17,391	105,002	92,912	3-4	4
	East North Central	12,357	11,872	12,336	12,684	12,964	12,443	12,661	12,182	12,979	11,735	13,552	12,864	11,693	74,657	71,263	2-3	2
	West North Central	7,772	7,458	7,739	8,299	8,480	8,438	8,014	7,720	8,067	7,558	8,391	7,972	7,988	50,858	46,317	2-3	2
	South Atlantic	8,344	8,137	8,698	8,761	8,813	8,726	8,372	8,292	8,534	8,261	8,791	8,505	8,443	51,479	49,657	2-3	3
	East South Central	3,510	3,583	3,683	3,812	3,813	3,726	3,372	3,292	3,534	3,261	3,791	3,505	3,443	22,126	19,657	3-4	4
	West South Central	9,307	9,426	9,861	9,795	9,914	9,658	8,314	8,248	8,755	8,434	9,347	9,351	9,222	57,962	45,565	4-6	5
	Mountain	2,705	2,703	3,091	2,904	2,886	2,928	2,851	2,704	2,830	2,760	2,851	2,743	2,834	17,218	15,791	4-6	6
	Pacific	11,221	11,438	11,902	11,993	11,952	11,761	11,077	11,178	12,125	10,668	12,264	11,710	11,021	70,268	63,109	2-3	3
50	Durable goods, total	33,579	33,949	36,170	35,302	34,214	35,014	34,447	33,705	37,048	33,616	37,935	34,711	32,515	208,228	194,711	1.6-2.6	1.8
	Middle Atlantic	7,389	7,347	8,003	7,580	7,124	7,234	6,961	6,769	7,538	6,989	8,083	7,477	6,697	44,677	39,746	6-8	6
	East North Central	5,486	5,572	5,711	5,747	5,536	5,477	6,023	5,801	6,440	5,833	6,439	5,869	5,248	33,528	34,204	3-4	3
	West North Central	2,663	2,663	2,734	2,663	2,633	2,675	2,778	2,873	3,209	2,900	3,171	2,851	2,682	16,031	15,616	5-7	5
	South Atlantic	3,991	3,815	4,267	4,350	4,023	4,195	4,172	4,074	4,173	3,796	4,374	3,934	3,868	24,641	23,524	2-4	3
	West South Central	3,747	3,940	4,175	4,153	4,146	4,276	3,900	3,702	3,970	3,662	4,174	3,870	3,701	24,437	21,136	4-5	4
	Mountain	1,205	1,185	1,362	1,347	1,228	1,278	1,358	1,322	1,356	1,280	1,384	1,202	1,225	7,605	7,549	7-9	8
	Pacific	6,100	6,438	6,748	6,475	6,523	6,732	6,265	6,388	7,143	6,069	6,993	6,576	6,049	39,017	35,728	4-5	4
51	Nondurable goods, total	43,525	41,797	44,427	44,086	45,235	42,875	39,914	39,787	41,519	39,597	43,885	44,368	42,881	261,948	227,010	1.6-2.0	1.8
	New England	2,579	2,498	2,649	2,421	2,654	2,621	2,343	2,225	2,453	2,252	2,542	2,635	2,485	15,422	13,486	6-7	6
	Middle Atlantic	10,360	9,782	10,975	9,665	9,837	9,707	9,327	9,487	10,247	10,147	10,267	10,842	10,393	60,325	53,165	3-4	4
	East North Central	6,872	6,301	6,626	6,937	7,428	6,966	6,638	6,380	6,539	5,902	7,113	6,994	6,445	41,129	37,059	3-4	4
	West North Central	5,109	4,795	5,004	5,636	5,777	5,189	5,227	5,512	5,301	5,021	5,935	5,640	5,192	31,510	29,626	3-4	4
	South Atlantic	4,353	4,322	4,431	4,410	4,457	4,243	3,842	3,646	3,894	3,762	4,017	4,038	4,119	26,217	22,853	3-5	4
	East South Central	2,071	2,095	2,174	2,298	2,227	2,091	1,820	1,817	1,844	1,664	2,100	2,064	2,146	12,956	10,828	3-5	4
	West South Central	5,560	5,486	5,686	5,643	5,768	5,382	4,414	4,546	4,785	4,771	5,173	5,481	5,520	33,524	24,429	6-10	8
	Pacific	5,121	5,000	5,154	5,519	5,429	5,028	4,812	4,790	4,982	4,599	5,270	5,134	4,972	31,251	27,381	4-5	5

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

[P]Preliminary estimate. See p. 15, 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 the period September 1979 thru February 1980.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: June 1980

(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: June 1980 from May 1980	Sales: June 1980 from June 1979	Sales: 6 months 1980 from 6 months 1979	Inventories: June 1980 from May 1980	Inventories: June 1980 from June 1979	Sampling errors of the ratio corresponding to the percent change in columns[2]--			
		A	B	C	D	E	A	B	D	E
	Merchant wholesalers, total	-2	+5	+11	0	+11	0.7	1.2	0.3	0.9
	New England	+2	+9	+12	+2	+15	2.1	4.8	0.9	4.2
	Middle Atlantic	0	+4	+13	+3	+16	1.7	3.2	0.8	2.6
	East North Central	-4	-2	+5	0	+8	1.3	2.5	0.5	2.4
	West North Central	-6	-2	+5	0	+10	1.4	2.4	0.8	2.2
	South Atlantic	0	+5	+10	-1	+8	1.1	2.4	0.6	2.0
	East South Central	-2	+10	+13	-5	-1	2.3	3.4	0.9	2.8
	West South Central	-3	+16	+27	+2	+10	2.0	4.5	0.8	2.5
	Mountain	+1	+3	+9	-1	+2	2.1	3.4	1.1	3.4
	Pacific	-2	+6	+11	-1	+13	1.0	2.4	0.6	2.2
50	Durable goods, total	+2	+2	+7	+1	+13	0.9	2.3	0.4	1.1
	New England	+7	+5	+9	+1	+12	4.3	10.7	1.1	6.0
	Middle Atlantic	+2	+4	+12	+4	+23	2.1	6.3	1.0	3.5
	East North Central	-1	-9	-2	0	+9	1.6	3.1	0.6	3.2
	West North Central	+2	-4	+3	+2	+19	2.3	5.0	1.1	2.7
	South Atlantic	+4	+1	+5	-1	+7	1.5	3.7	0.8	2.8
	East South Central	+3	+5	+4	0	-1	4.2	6.0	1.4	4.5
	West South Central	+3	+10	+16	+3	+11	3.0	5.1	0.8	3.3
	Mountain	+4	-6	+1	0	+3	3.2	6.1	1.3	4.7
	Pacific	+3	+7	+9	+1	+15	1.6	3.4	0.8	2.8
51	Nondurable goods, total	-5	+7	+15	-2	+7	0.8	1.3	0.5	1.2
	New England	-1	+12	+14	+4	+19	1.9	3.8	1.2	4.5
	Middle Atlantic	-1	+4	+13	+1	+6	2.0	3.1	0.8	3.6
	East North Central	-6	+5	+11	-1	+7	2.1	2.8	1.0	3.3
	West North Central	-10	-1	+6	-2	0	1.9	2.7	1.2	3.1
	South Atlantic	-5	+10	+15	-1	+12	1.8	2.9	1.1	3.0
	East South Central	-6	+15	+20	-13	-2	1.6	3.6	1.8	3.1
	West South Central	-7	+22	+37	-1	+9	2.6	6.3	1.6	4.5
	Mountain	0	+11	+17	-3	0	2.0	5.2	1.7	5.9
	Pacific	-7	+4	+14	-4	+9	1.7	2.9	1.0	3.4
5013,4	Automotive parts and supplies, tires and tubes	+4	+3	-1	0	+10	2	4	1	3
	New England	(S)	(S)	+8	-3	+18	(*)	(*)	3	14
	Middle Atlantic	-4	+3	-4	+1	+18	4	8	1	7
	East North Central	+3	-8	-11	-1	+5	3	8	1	5
	West North Central	+2	-10	-11	-1	-3	3	13	2	11
	South Atlantic	+14	+13	-2	-3	+3	4	10	2	8
	East South Central	+5	-14	-3	+2	-5	3	12	3	12
	West South Central	-5	-5	+4	-5	+3	3	10	2	10
	Mountain	+7	(S)	-16	-5	(S)	6	(*)	3	(*)
	Pacific	+10	+22	+12	+4	+42	3	6	2	12
502	Furniture and home furnishings	-2	+4	+13	-1	-2	3	4	1	3
	Middle Atlantic	-6	+14	+16	-1	-4	6	10	1	8
	East North Central	-5	-9	+9	-2	-15	6	13	2	8
	West North Central	-7	(S)	+15	-2	+9	6	(*)	3	10
	West South Central	-3	+22	+12	+2	+16	4	10	2	10
	Pacific	+3	-6	+11	-4	-1	6	12	2	10
503	Lumber and other construction materials	+9	-16	-10	0	-2	2	3	1	3
	New England	(S)	-2	-2	+6	+11	(*)	14	3	12
	Middle Atlantic	+19	-9	-7	+1	-4	6	11	2	12
	East North Central	+13	-20	-13	-3	-8	4	3	2	9
	West North Central	+7	-23	-12	-1	+12	7	11	4	12
	South Atlantic	+8	+9	+5	-2	+7	4	9	2	8
	East South Central	+12	-21	-20	-5	-14	7	13	2	12
	West South Central	-4	-13	+8	+4	+4	5	13	2	10
	Pacific	+8	-26	-19	+4	-5	4	9	2	9
5051 pt.	Ferrous metals service centers	+1	-4	+9	+3	+19	3	4	1	3
	New England	-10	(S)	-4	-3	(S)	7	(*)	6	(*)
	Middle Atlantic	-2	-7	+15	+1	+13	6	9	2	12
	East North Central	+3	-12	-2	+1	+15	5	7	1	6
	West North Central	+6	-19	-10	0	+12	5	10	2	9
	South Atlantic	-3	(S)	-4	-1	(S)	5	(*)	2	(*)
	East South Central	-6	-13	+9	-3	+3	3	11	2	14
	West South Central	-4	+29	+29	+18	+34	4	10	2	9
	Mountain	-4	(S)	+51	+2	(S)	3	(*)	3	(*)
	Pacific	+14	(S)	+26	+5	(S)	5	(*)	4	(*)
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+8	+5	+10	0	+11	3	4	1	3
	New England	-8	-6	-1	-2	+3	4	12	2	12
	Middle Atlantic	+1	-8	+7	0	+21	4	11	2	7
	East North Central	+3	-2	+13	+1	+10	3	8	2	7
	West North Central	+7	+8	-4	0	+35	5	12	3	12
	South Atlantic	-3	+9	+18	-3	+2	3	8	2	8
	East South Central	(S)	(S)	-9	-5	-15	(*)	(*)	3	14
	West South Central	+39	(S)	+23	+7	(S)	7	(*)	3	(*)
	Mountain	+9	+26	+6	+6	+28	4	14	2	11
	Pacific	+2	+20	+13	-2	0	4	10	2	6

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 1980—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 column[2]--			
		Sales			Inventories					
		June 1980 from May 1980	June 1980 from June 1979	6 months 1980 from 6 months 1979	June 1980 from May 1980	June 1980 from June 1979				
		A	B	C[1]	D	E	A	B	D	E
5064, 5	Electrical appliances, TV and ratio sets, and electronic parts and equipment	+8	+9	+16	0	+4	2	4	1	4
	Middle Atlantic	+4	+14	+19	0	-3	4	9	2	10
	East North Central	+3	+17	+17	-1	+17	5	10	2	13
	West North Central	-48	(S)	-22	+6	(S)	5	(*)	2	(*)
	South Atlantic	+9	-1	+8	+5	+2	4	12	2	7
	West South Central	+4	+5	+32	0	+9	4	13	2	12
	Mountain	(S)	(S)	-18	-1	-13	(*)	(*)	3	13
	Pacific	+9	-7	+10	-3	+5	7	11	3	9
5072	Hardware	+5	+6	+7	-3	+10	2	3	1	3
	New England	+11	+27	+10	0	+27	4	13	3	14
	Middle Atlantic	-8	-15	+4	-6	-2	3	9	2	11
	East North Central	+12	+24	+9	-4	+23	4	9	4	10
	West North Central	+1	+15	+10	-8	+11	4	7	2	6
	South Atlantic	+7	-8	+2	-5	-2	3	8	2	10
	East South Central	0	-2	+9	-5	+6	4	10	2	9
	Pacific	+4	-2	+7	+2	+9	3	10	2	11
5074	Plumbing and heating equipment and supplies (hydronics)	0	-6	+3	+1	r+7	2	5	1	9
	Middle Atlantic	-1	-6	+7	+2	(S)	6	14	3	(*)
	East North Central	+3	+11	-6	0	(S)	7	14	2	(*)
	South Atlantic	-2	-13	-1	-1	+8	3	11	2	9
	Mountain	+9	(S)	+12	+1	+21	4	(*)	2	14
	Pacific	-4	-19	+2	-2	-2	4	14	2	11
5084, 5	Industrial machinery, equipment, and supplies	+1	+11	+13	0	+15	2	5	1	3
	Middle Atlantic	+6	-4	+7	-1	+13	5	9	2	7
	East North Central	-4	-4	+4	+1	+31	4	6	1	6
	West South Central	+3	(S)	+26	+2	+19	4	(*)	1	6
	Pacific	0	+21	+15	-1	+7	3	8	2	8
512	Drugs, drug proprietaries, and druggists' sundries	+1	+9	+8	0	+1	2	3	1	4
	New England	0	-3	+11	-1	+6	3	12	3	14
	Middle Atlantic	+3	+19	+11	0	-12	4	9	2	7
	East North Central	-4	+7	+6	+1	-8	4	8	2	8
	West North Central	-3	-3	+8	-1	-5	5	12	2	9
	South Atlantic	+13	+15	+6	+1	+12	2	10	2	8
	East South Central	0	+24	+8	+3	+16	2	9	2	10
	West South Central	0	+29	+22	0	+36	2	12	2	14
	Mountain	0	+11	+16	+2	+10	1	7	1	6
	Pacific	-2	-9	0	-1	(S)	2	13	1	(*)
5141	Groceries, general-line	-4	+7	+11	-1	+4	1	2	0	2
	New England	-5	-1	+6	-2	+1	2	6	2	7
	Middle Atlantic	-5	-5	+5	+1	-7	1	3	1	7
	East North Central	-2	+15	+15	-1	+5	1	4	1	5
	West North Central	-5	+8	+9	-4	-3	2	5	2	7
	South Atlantic	-4	+13	+12	+2	+8	2	5	1	4
	West South Central	-6	+10	+13	-3	+9	2	7	2	6
	Mountain	-5	+7	+16	+3	+6	2	6	2	9
	Pacific	-2	+5	+11	-1	+12	0	3	1	3
5142,3,6,9	Specialty-line groceries	-3	+8	+11	+1	+4	1	3	1	4
	Middle Atlantic	-3	+4	+13	+4	0	2	5	2	7
	East North Central	-5	+13	+2	+1	+3	3	6	1	6
	West North Central	-10	+13	+16	-5	-8	3	5	1	6
	South Atlantic	-4	-12	0	+2	-6	4	13	2	13
	East South Central	-9	-17	-17	+2	+7	4	12	2	13
5148	Fresh fruits and vegetables	+1	+5	+3	+1	+4	2	3	2	7
	Middle Atlantic	-3	-7	-7	0	-7	3	9	5	14
	East North Central	0	-2	-2	-2	-2	3	8	3	10
	West North Central	+16	-13	-14	-1	(S)	4	14	3	(*)
	West South Central	-7	+19	+12	-2	(S)	7	13	3	(*)
	Pacific	+1	+10	+15	0	+7	6	9	2	10
5194	Tobacco and tobacco products	-1	+1	0	-2	+5	1	4	1	5
	New England	-2	-6	-3	-3	(S)	3	14	3	(*)
	Middle Atlantic	-1	+5	-5	0	(S)	4	14	3	(*)
	East North Central	+1	-10	-4	-1	-14	2	10	2	11
	West North Central	-6	(S)	+19	+4	(S)	6	(*)	6	(*)
	South Atlantic	-1	-10	-21	-4	-10	4	14	3	12
	East South Central	-6	(S)	-2	-3	(S)	3	(*)	4	(*)
	West South Central	-3	(S)	+23	+13	+33	3	(*)	4	11
	Mountain	-5	(S)	+16	-15	(S)	3	(*)	5	(*)
	Pacific	+5	+20	+15	-16	-12	2	10	3	12

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, B, D and E are based on medians or measurements on data for September 1979 through February 1980.

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

(Coefficients of variation in percent)

1972 SIC code	Kind of business	SALES						INVENTORIES					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Median sampling error of the ratio of:		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Median sampling error of the ratio of:	
		Range	Median	Range	Median	Two consecutive months	Same month a year ago	Range	Median	Range	Median	Two consecutive months	Same month a year ago
	Merchant wholesalers, total	1.4-1.8	1.6	1.4-1.6	1.5	0.6	1.0	1.3-1.5	1.4	1.2-1.4	1.4	0.3	0.9
	Total (excluding farm-product raw materials)	1.4-1.9	1.6	1.3-1.6	1.4	0.6	1.1	1.4-1.7	1.5	1.2-1.5	1.5	0.3	0.9
50	Durable goods, total	1.5-3.2	2.0	1.4-2.4	1.6	1.0	1.7	1.0-1.5	1.4	1.0-1.4	1.3	0.4	1.1
501	Motor vehicles and automotive parts and supplies	3.6-4.6	3.9	3.2-4.4	3.6	1.7	2.8	2.2-3.5	3.0	2.6-3.5	2.7	0.8	2.6
5012	Automobiles and other motor vehicles	(*)	(*)	(*)	(*)	2.8	5.4	(*)	(*)	(*)	(*)	1.8	5.5
5013,4	Automotive parts and supplies, tires and tubes	3.3-4.7	4.0	3.0-4.9	3.6	1.7	3.1	3.0-4.1	3.7	2.8-3.9	3.4	1.2	3.0
5013	Automotive parts and supplies	3.8-5.9	4.7	3.6-5.9	4.2	2.1	3.8	3.8-5.0	4.5	3.5-4.6	4.2	1.3	3.2
502	Furniture and home furnishings	4.7-7.0	5.7	4.3-6.1	5.1	2.9	4.0	4.0-4.6	4.2	3.9-4.5	4.2	0.9	3.3
5021	Furniture--household and office	4.9-6.5	6.0	4.3-7.1	6.0	4.1	5.7	(*)	(*)	(*)	(*)	1.5	5.1
5021 pt.	Household furniture	(*)	(*)	(*)	(*)	6.2	11.2	(*)	(*)	(*)	(*)	1.5	8.7
5021 pt.	Office furniture	(*)	(*)	(*)	(*)	4.9	6.5	(*)	(*)	(*)	(*)	1.9	5.2
5023	Home furnishings	6.7-9.2	7.6	5.5-8.1	6.6	3.3	5.1	5.0-6.3	5.6	5.0-6.1	5.7	1.1	4.5
503	Lumber and other construction materials	4.2-5.8	4.8	4.4-5.4	4.7	2.3	3.5	5.0-6.7	5.6	5.0-6.6	5.9	0.9	2.9
5031	Lumber, plywood, and millwork	5.7-7.7	6.3	5.1-6.6	5.9	3.3	4.5	7.0-9.0	7.9	7.2-8.6	8.1	1.2	3.6
5039	Construction materials, n.e.c.	5.0-6.9	6.0	5.1-6.5	5.7	3.1	5.9	(*)	(*)	(*)	(*)	1.1	4.8
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(*)	(*)	(*)	(*)	3.5	5.1	(*)	(*)	(*)	(*)	1.6	4.6
505	Metals and minerals, except petroleum	4.3-16.8	8.7	5.1-14.4	8.2	2.4	5.4	6.2-9.3	7.6	5.7-10.2	8.1	1.2	5.2
5051 pt.	Ferrous metals service centers and offices	4.3-6.2	5.2	3.9-6.5	4.6	2.5	3.3	3.9-4.7	4.3	4.0-4.5	4.2	0.8	3.0
5051 pt.	Ferrous metals service centers	4.8-7.1	5.1	4.9-5.2	5.1	2.8	3.6	2.8-5.5	4.6	3.1-4.8	4.0	0.9	3.4
5051 pt.	Nonferrous metals service centers and offices	(*)	(*)	(*)	(*)	4.1	23.3	(*)	(*)	(*)	(*)	5.2	22.5
506	Electrical goods	3.8-5.0	4.1	3.3-4.6	3.6	2.3	3.0	3.2-4.8	3.5	3.3-4.6	3.5	0.7	2.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	3.7-6.7	4.5	3.3-6.9	4.1	3.1	4.5	3.2-5.1	3.5	3.2-4.5	3.3	0.8	2.9
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	5.2-7.4	6.0	5.0-6.6	5.6	2.8	4.4	3.9-6.9	4.4	3.8-6.5	4.7	1.2	4.1
5064	Electrical appliances, TV and radio sets	4.9-8.2	6.4	5.1-6.7	5.5	2.8	4.3	(*)	(*)	(*)	(*)	1.3	5.0
507	Hardware, plumbing, heating equipment, and supplies	3.1-4.5	3.5	2.9-3.7	3.3	1.6	2.3	2.8-4.2	3.6	2.9-4.2	3.5	0.8	3.8
5072	Hardware	2.6-3.8	3.6	2.8-3.9	3.2	1.6	2.9	4.7-6.3	5.6	4.5-6.1	5.7	1.3	3.5
5074	Plumbing and heating equipment and supplies (hydronics)	5.4-7.7	6.4	5.1-6.6	5.9	2.9	5.4	5.0-6.0	5.4	4.7-5.6	5.3	1.3	3.6
5075	Warm air heating and air conditioning equipment and supplies	(*)	(*)	(*)	(*)	4.1	5.7	(*)	(*)	(*)	(*)	1.2	5.1
508	Machinery, equipment, and supplies	2.9-4.5	3.3	2.6-3.2	2.8	1.8	3.3	1.8-2.4	2.2	1.8-2.3	2.1	0.4	1.8
5081	Commercial machines and equipment	(*)	(*)	(*)	(*)	4.4	6.6	(*)	(*)	(*)	(*)	1.5	5.7
5082	Construction and mining machinery and equipment	4.8-6.6	5.4	4.1-5.1	4.5	3.9	5.4	3.8-5.3	4.2	3.9-4.9	4.1	1.1	4.1
5083	Farm and garden machinery and equipment	(*)	(*)	(*)	(*)	6.0	9.8	(*)	(*)	(*)	(*)	1.4	4.7
5084,5	Industrial machinery, equipment, and supplies	3.2-4.1	3.3	2.4-3.4	2.8	2.5	4.9	3.2-4.2	3.8	3.1-3.8	3.5	0.6	2.5
5086	Professional equipment and supplies	(*)	(*)	(*)	(*)	2.7	4.7	(*)	(*)	(*)	(*)	1.1	5.2
5093	Scrap and waste materials	4.2-5.4	5.1	4.2-5.3	4.7	2.2	3.9	(*)	(*)	(*)	(*)	1.3	3.2
5093 pt.	Iron and steel scrap	(*)	(*)	(*)	(*)	2.2	5.0	(*)	(*)	(*)	(*)	1.5	4.3
5093 pt.	Waste materials	(*)	(*)	(*)	(*)	3.9	6.9	(*)	(*)	(*)	(*)	2.2	5.4
51	Nondurable goods, total	1.8-2.1	1.9	1.6-2.0	1.9	0.8	1.2	2.6-3.0	2.8	2.6-2.8	2.7	0.5	1.3
	Total (excluding farm-product raw materials)	1.9-2.4	2.1	1.7-2.3	2.0	0.9	1.4	3.3-3.6	3.5	3.2-3.5	3.3	0.4	1.4
5111	Paper and paper products	4.6-7.7	5.2	4.5-6.9	4.9	1.5	3.0	4.6-7.3	6.3	4.6-7.1	5.9	0.8	3.4
5111,3	Printing, writing, industrial, and personal service paper	3.0-5.1	3.3	3.0-4.6	3.2	1.1	2.3	5.0-6.9	6.4	4.9-6.9	6.3	0.8	3.1
5111	Printing and writing paper	2.6-3.9	2.8	2.4-3.4	2.7	1.3	2.7	3.9-4.9	4.3	3.7-4.8	4.2	0.7	3.2
5113	Industrial and personal service paper	4.4-7.7	5.0	4.4-6.8	4.5	1.9	4.8	7.3-11.4	9.9	6.9-11.2	9.7	1.3	4.2
512	Drugs, drug proprietaries, and druggists' sundries	2.3-3.1	2.7	2.2-2.9	2.7	1.5	3.1	3.6-5.1	4.4	4.0-5.1	4.6	1.4	4.0
5122	Drugs, drug proprietaries, and druggists' sundries	2.3-3.1	2.7	2.2-2.9	2.7	1.5	3.1	(*)	(*)	(*)	(*)	1.4	4.0
5122 pt.	General-line drugs	6.0-6.9	6.6	6.0-6.9	6.6	1.1	4.1	(*)	(*)	(*)	(*)	0.9	6.6
513	Apparel, piece goods, and notions	12.0-15.7	13.2	10.9-14.6	13.4	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
514	Groceries and related products	1.7-2.4	2.2	1.8-2.3	2.1	0.5	1.3	1.6-2.2	1.8	1.6-2.0	1.8	0.4	1.6
5141	Groceries, general-line	2.6-3.4	3.3	2.8-3.3	3.1	0.6	1.7	1.9-2.8	2.2	1.7-2.7	1.9	0.5	1.7
5141 pt.	Voluntary groups	(*)	(*)	(*)	(*)	0.7	2.1	(*)	(*)	(*)	(*)	0.7	2.8
5141 pt.	Retailer cooperatives	(*)	(*)	(*)	(*)	0.6	1.8	(*)	(*)	(*)	(*)	0.6	2.3
5141 pt.	Other general-lines	(*)	(*)	(*)	(*)	1.3	2.8	(*)	(*)	(*)	(*)	1.0	3.7
5142,3,6,9	Specialty-line groceries	(*)	(*)	(*)	(*)	1.2	3.3	(*)	(*)	(*)	(*)	1.0	3.6
5144	Poultry and poultry products	5.6-7.2	6.5	5.4-7.2	6.7	1.8	3.2	(*)	(*)	(*)	(*)	1.5	5.2
5145	Confectionery	5.1-12.9	6.7	4.8-9.5	6.6	2.7	5.5	(*)	(*)	(*)	(*)	1.7	4.0
5147	Meats and meat products	5.6-7.0	6.8	5.4-6.9	6.5	1.5	4.2	(*)	(*)	(*)	(*)	1.4	6.3
5148	Fresh fruits and vegetables	4.0-5.7	4.4	3.5-5.0	4.7	2.3	3.2	(*)	(*)	(*)	(*)	2.6	6.2
515	Farm-product raw materials	2.6-5.2	3.0	2.1-4.6	3.4	2.3	2.9	(*)	(*)	(*)	(*)	1.5	4.0
5152	Cotton	(*)	(*)	(*)	(*)	6.9	10.2	(*)	(*)	(*)	(*)	1.0	2.5
5153	Grain	3.2-5.9	3.8	2.6-5.3	3.9	2.5	3.3	(*)	(*)	(*)	(*)	1.7	5.0
517	Petroleum and petroleum products	5.1-7.8	7.1	4.9-8.0	6.2	2.0	4.1	5.6-6.5	5.8	5.1-6.1	5.6	1.7	3.3
5171	Petroleum bulk stations and terminals	3.5-5.1	4.0	3.1-4.2	3.9	1.7	3.7	(*)	(*)	(*)	(*)	2.1	3.9
518	Beer, wine, and distilled alcoholic beverages	4.5-5.9	4.9	4.3-5.5	4.9	1.2	3.0	3.8-5.0	4.2	3.9-5.0	4.3	1.4	3.2
5181	Beer and ale	5.2-6.1	5.8	5.4-6.2	5.7	1.4	3.5	7.9-10.2	8.1	7.7-9.9	8.8	2.7	4.7
5182	Wines and distilled alcoholic beverages	5.1-7.2	5.7	5.1-6.9	5.7	1.9	4.1	3.4-5.0	4.4	3.7-4.6	4.0	1.3	4.5
519	Miscellaneous nondurable goods	2.5-4.9	3.9	2.5-3.9	3.4	1.9	3.2	(*)	(*)	(*)	(*)	0.9	2.7
5191	Farm supplies	(*)	(*)	(*)	(*)	4.4	5.7	(*)	(*)	(*)	(*)	1.6	4.5
5194	Tobacco and tobacco products	5.6-6.7	6.1	5.2-6.8	5.8	1.3	3.9	(*)	(*)	(*)	(*)	1.3	4.7
5198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.4	6.8	(*)	(*)	(*)	(*)	1.1	5.8
5199 pt.	Books, periodicals, newspapers	(*)	(*)	(*)	(*)	6.6	17.4	(*)	(*)	(*)	(*)	1.4	14.4

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 August 1979 through January 1980.

* 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 1979-December 1980

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	94.6	91.5	104.4	100.2	106.1	101.7	98.6	104.3	95.7	105.3	101.1	96.0
	Total (excluding farm-product raw materials)	93.4	91.2	104.0	100.1	106.4	102.6	98.8	105.9	96.8	105.4	99.9	95.0
50	Durable goods, total	91.6	89.2	103.2	101.6	107.4	103.5	99.6	107.5	97.7	107.7	98.7	92.4
501	Motor vehicles and automotive parts and supplies	93.4	90.7	106.9	109.1	112.2	103.6	101.6	104.8	91.3	100.7	94.4	89.9
502	Furniture and home furnishings	88.6	89.3	102.8	98.2	102.9	102.5	93.0	104.2	101.2	115.7	106.8	93.5
503	Lumber and other construction materials	81.7	79.4	98.6	97.5	108.3	108.9	106.6	117.6	102.9	114.9	100.7	84.5
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	81.7	85.0	101.4	99.9	103.6	99.9	96.0	107.0	105.9	113.9	104.7	100.8
505	Metals and minerals, except petroleum	97.1	92.7	103.1	102.3	107.8	101.3	96.1	109.0	100.1	102.9	96.9	89.2
506	Electrical goods	90.5	88.7	100.1	97.3	102.6	103.0	99.5	106.4	98.6	111.8	102.4	99.1
507	Hardware, plumbing, heating equipment, and supplies	91.9	86.2	97.4	100.6	108.4	104.2	104.4	108.6	98.8	111.5	98.8	89.9
508	Machinery, equipment, and supplies	89.8	88.3	106.4	102.7	109.1	105.0	97.2	105.2	99.4	107.1	97.0	92.9
509	Miscellaneous durable goods	87.9	89.9	109.2	100.0	101.5	104.3	92.9	108.5	98.5	109.0	104.2	93.1
51	Nondurable goods, total	98.1	92.4	105.7	99.6	105.3	100.4	97.9	101.5	93.9	102.7	102.5	99.4
	Total (excluding farm-product raw materials)	96.7	92.9	104.8	99.6	105.3	101.4	98.1	104.3	95.2	102.6	101.4	97.1
511	Paper and paper products	99.5	93.0	104.5	95.1	104.0	101.5	96.2	106.8	96.8	108.5	99.3	95.0
512	Drugs, drug proprietaries, and druggists' sundries	99.3	91.7	103.8	98.9	102.0	96.6	98.3	103.6	97.2	110.4	101.4	96.5
513	Apparel, piece goods, and notions	93.5	91.9	103.7	92.8	102.9	94.7	95.8	115.6	105.0	114.0	102.3	87.6
514	Groceries and related products	98.0	91.3	104.1	98.8	106.0	102.1	99.6	103.8	95.6	103.9	100.3	96.6
515	Farm-product raw materials[1]	103.0	92.5	110.2	99.3	104.0	98.9	98.2	92.3	87.7	105.9	108.3	100.7
516	Chemicals and allied products	93.9	88.1	102.1	99.4	109.9	104.3	99.0	109.7	94.3	106.4	100.1	92.7
517	Petroleum and petroleum products	100.9	102.3	105.2	98.1	99.0	97.2	98.7	100.0	91.3	100.4	103.7	102.4
518	Beer, wine, and distilled alcoholic beverages	81.5	81.6	98.8	95.2	107.0	109.2	101.5	108.5	93.4	104.3	106.5	111.6
519	Miscellaneous nondurable goods	96.2	97.2	112.6	106.4	110.3	104.2	91.9	97.2	93.2	97.6	97.4	95.2
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.4	101.3	102.4	101.4	100.1	99.3	98.8	97.9	98.3	99.8	100.4	100.1
	Total (excluding farm-product raw materials)	98.9	100.1	101.4	100.9	100.9	100.8	100.4	99.6	99.4	99.8	99.4	98.9
50	Durable goods, total	98.4	100.1	100.9	100.9	101.4	101.9	101.1	100.3	99.4	98.9	98.6	98.6
501	Motor vehicles and automotive parts and supplies	101.4	105.9	101.9	100.4	101.6	99.6	99.3	97.3	96.3	98.1	98.9	99.6
502	Furniture and home furnishings	98.8	99.1	99.6	99.6	101.1	102.8	100.6	100.8	101.8	99.9	99.1	97.3
503	Lumber and other construction materials	98.1	99.1	103.1	102.8	103.1	102.3	102.1	99.9	98.9	97.8	96.1	97.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	95.8	99.8	100.9	102.6	102.4	106.4	105.8	101.1	101.8	100.8	93.3	89.8
505	Metals and minerals, except petroleum	98.4	97.8	99.8	99.1	101.4	100.9	102.6	104.4	101.3	97.4	98.9	98.6
506	Electrical goods	96.6	96.4	98.8	99.4	101.4	102.4	101.6	102.1	101.4	100.8	100.4	99.1
507	Hardware, plumbing, heating equipment, and supplies	97.1	98.4	101.9	105.6	103.4	103.1	102.4	99.9	97.9	98.4	95.9	96.1
508	Machinery, equipment, and supplies	98.6	100.6	101.6	100.4	101.3	101.9	100.4	99.8	99.9	98.6	98.4	98.8
509	Miscellaneous durable goods	97.6	98.1	96.6	97.9	97.1	100.4	102.9	102.3	102.6	103.3	102.3	99.4
51	Nondurable goods, total	103.8	103.1	104.8	101.1	97.8	95.4	94.6	94.4	96.3	101.3	104.1	103.4
	Total (excluding farm-product raw materials)	100.1	99.9	101.9	100.9	99.8	98.6	98.6	98.1	99.6	101.6	101.1	100.1
511	Paper and paper products	97.3	98.1	99.4	100.9	100.3	102.6	99.9	99.3	101.1	100.6	100.1	100.9
512	Drugs, drug proprietaries, and druggists' sundries	95.3	96.3	100.1	100.8	98.8	100.6	100.1	100.3	103.9	105.3	100.8	98.4
513	Apparel, piece goods, and notions	101.1	100.6	97.9	98.9	101.4	100.6	101.4	101.1	98.9	99.1	98.8	100.4
514	Groceries and related products	98.6	99.9	101.9	100.6	99.6	98.9	98.4	97.9	99.9	102.4	100.9	101.1
515	Farm-product raw materials[1]	119.1	117.2	116.2	104.9	89.8	82.8	80.5	77.8	81.3	98.4	115.4	116.3
516	Chemicals and allied products	98.1	100.8	101.4	101.3	103.4	102.1	102.8	99.6	100.4	96.6	96.3	97.3
517	Petroleum and petroleum products	102.4	98.6	99.6	94.4	98.4	93.3	96.8	101.1	104.4	104.4	104.3	103.1
518	Beer, wine, and distilled alcoholic beverages	96.6	94.6	99.3	101.4	103.1	102.9	101.1	97.3	99.4	105.9	104.6	93.8
519	Miscellaneous nondurable goods	104.6	105.6	108.3	102.6	99.1	93.3	95.4	95.9	96.1	99.1	99.3	100.6

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1979-December 1980—Continued

1972 SIC code	Kind of business	1980											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	95.4	95.2	101.1	103.3	103.3	101.6	101.9	98.6	100.6	105.8	95.5	100.8
	Total (excluding farm-product raw materials)	94.1	95.2	100.4	103.9	103.6	101.8	102.3	100.3	101.5	106.0	94.8	100.3
50	Durable goods, total	92.3	92.7	99.8	105.0	104.2	103.4	103.2	101.3	103.6	107.7	93.0	97.9
501	Motor vehicles and automotive parts and supplies	95.2	94.3	103.6	114.2	108.1	102.7	104.2	101.3	95.1	100.4	90.7	94.7
502	Furniture and home furnishings	89.5	93.2	99.8	101.8	100.0	101.9	96.5	98.9	104.5	117.2	101.9	98.3
503	Lumber and other construction materials	81.0	83.9	94.0	101.1	106.2	107.1	109.4	110.4	112.2	115.0	92.5	90.7
504	recreational, photographic, and hobby goods, toys and supplies	80.2	86.3	101.3	106.6	99.2	97.7	101.2	101.7	109.7	110.5	104.8	107.0
505	Metals and minerals, except petroleum	96.9	97.4	101.3	107.0	101.9	102.5	98.8	103.2	105.2	102.7	92.3	95.8
506	Electrical goods	91.0	91.5	97.3	100.6	100.0	102.6	103.4	100.5	103.9	111.4	97.5	104.1
507	Hardware, plumbing, heating equipment, and supplies	92.2	88.9	95.3	103.7	105.2	104.6	107.7	102.9	104.0	110.7	94.3	94.6
508	Machinery, equipment, and supplies	90.7	91.5	102.2	105.8	107.2	104.1	101.4	98.8	104.7	108.1	91.1	97.5
509	Miscellaneous durable goods	89.3	94.3	104.4	102.6	99.5	103.8	95.3	102.3	106.6	109.8	95.4	98.3
51	Nondurable goods, total	98.8	96.0	102.4	102.8	102.9	100.1	101.4	96.3	98.3	103.3	97.1	104.3
	Total (excluding farm-product raw materials)	97.7	97.0	101.1	102.5	103.0	100.9	101.5	98.6	99.8	103.7	95.4	102.0
511	Paper and paper products	99.6	97.1	100.3	100.0	101.4	99.2	100.9	99.7	102.7	108.5	93.3	101.7
512	Drugs, drug proprietaries, and druggists' sundries	100.6	95.0	100.4	103.1	98.0	96.7	101.8	98.1	103.5	109.9	95.7	102.5
513	Apparel, piece goods, and notions	95.1	93.4	101.2	97.8	98.3	94.1	101.9	108.6	108.1	113.6	99.6	92.4
514	Groceries and related products	98.7	94.8	100.6	101.9	104.7	100.2	103.4	99.0	99.5	104.5	95.8	100.6
515	Farm-product raw materials[1]	101.3	96.0	107.3	102.6	103.4	97.2	100.8	88.6	92.9	104.2	103.6	105.4
516	Chemicals and allied products	94.3	92.6	98.8	103.4	105.8	104.4	102.0	103.6	99.6	106.8	94.2	99.2
517	Petroleum and petroleum products	101.2	107.8	102.9	97.8	98.6	97.9	97.9	97.6	95.4	100.9	98.6	105.5
518	Beer, wine, and distilled alcoholic beverages	82.3	85.6	94.2	100.0	103.0	108.2	106.8	100.0	99.6	105.8	98.3	120.1
519	Miscellaneous nondurable goods	96.7	101.7	108.5	107.4	109.2	104.9	94.0	92.1	98.3	99.0	90.9	98.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.3	101.3	102.4	101.6	100.1	99.4	98.8	97.9	98.3	99.6	100.4	100.1
	Total (excluding farm-product raw materials)	98.9	100.1	101.4	100.9	100.9	100.9	100.4	99.6	99.4	99.8	99.3	98.9
50	Durable goods, total	98.4	100.1	101.1	100.8	101.4	101.9	101.1	100.3	99.4	98.9	98.6	98.6
501	Motor vehicles and automotive parts and supplies	101.4	106.3	101.9	100.4	101.6	99.6	99.3	97.4	96.1	98.1	98.9	99.6
502	Furniture and home furnishings	98.8	99.1	99.6	99.6	101.1	102.9	100.6	100.6	101.9	99.9	99.1	97.3
503	Lumber and other construction materials	97.9	99.1	103.1	102.8	103.1	102.3	102.1	99.8	98.9	97.9	96.1	97.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	95.6	99.6	101.1	102.9	102.3	106.4	105.9	101.1	101.9	100.8	93.3	89.8
505	Metals and minerals, except petroleum	98.3	97.8	99.6	98.9	101.6	100.9	102.6	104.6	101.3	97.3	98.9	98.4
506	Electrical goods	96.6	96.4	98.8	99.4	101.4	102.4	101.6	102.1	101.4	100.8	100.4	99.1
507	Hardware, plumbing, heating equipment, and supplies	97.1	98.6	101.9	105.9	103.4	103.1	102.4	99.9	97.8	98.3	95.8	96.1
508	Machinery, equipment, and supplies	98.6	100.6	101.6	100.4	101.3	101.9	100.4	99.9	100.1	98.6	98.4	98.8
509	Miscellaneous durable goods	97.6	98.1	96.6	97.8	97.1	100.3	102.9	102.1	102.8	103.1	102.1	99.3
51	Nondurable goods, total	103.8	103.1	104.9	101.3	98.1	95.6	94.6	94.3	96.3	101.1	103.9	103.4
	Total (excluding farm-product raw materials)	100.1	99.8	102.1	101.1	99.9	98.6	98.6	98.1	99.6	101.6	100.9	100.1
511	Paper and paper products	97.1	98.1	99.4	100.9	100.4	102.6	99.9	99.1	101.1	100.6	100.1	100.9
512	Drugs, drug proprietaries, and druggists' sundries	95.1	96.3	100.1	100.8	98.8	100.6	100.1	100.3	104.1	105.3	100.6	98.4
513	Apparel, piece goods, and notions	101.1	100.8	97.9	98.9	101.4	100.8	101.4	101.1	98.9	99.1	98.8	100.4
514	Groceries and related products	98.6	99.9	101.9	100.6	99.6	99.1	98.4	97.9	100.1	102.4	100.9	101.1
515	Farm-product raw materials[1]	119.1	117.4	116.9	105.6	90.3	82.8	80.3	77.4	80.8	98.1	115.4	116.4
516	Chemicals and allied products	98.1	100.9	101.4	101.3	103.4	102.1	102.8	99.6	100.4	96.6	96.3	97.3
517	Petroleum and petroleum products	102.1	98.4	99.9	94.4	98.4	93.3	96.8	101.1	104.4	104.3	104.3	102.9
518	Beer, wine, and distilled alcoholic beverages	96.6	94.4	99.4	101.6	103.1	102.9	101.3	97.3	99.4	105.9	104.6	93.8
519	Miscellaneous nondurable goods	104.8	105.6	108.6	102.8	99.4	93.1	95.4	95.8	95.9	99.3	99.1	100.4

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.

[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.

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

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.

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.

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

I/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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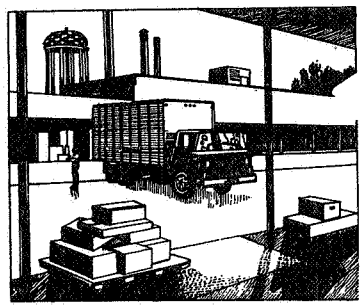
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued September 1980

July 1980

BW-80-7

Sales. July 1980 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences but not for price changes, were $78.9 billion—up 3 percent from the previous month and up 5 percent from July 1979. Adjusted May-through-July total sales were down 1 percent from the February-through-April period but were 6 percent above the total sales for the comparable months a year ago.

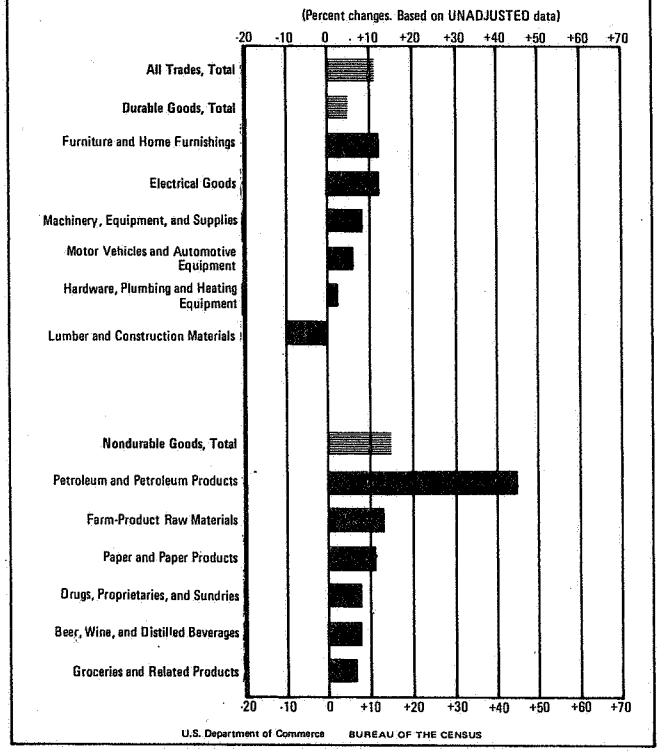
Seasonally adjusted sales in the durable goods trades showed slight variation when compared to the previous month and year-ago levels. Nondurable goods sales were up 4 percent from June and were 11 percent above July 1979. Total monthly sales in the durable goods group during the May-through-July period were down 6 percent from the prior 3 months but were virtually unchanged from the comparable period a year ago. Three-month total sales for the nondurable goods group were up 2 percent from the February-through-April period and were 11 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 largest increase in sporting goods, toys, and hobby goods (20%). Compared with sales of a year ago, most trade groups showed increases, with the sharpest increase reported in petroleum and petroleum products (41%). The largest year-to-year decrease was shown in lumber and construction materials (-14%).

Inventories. Total inventories of merchant wholesalers after adjustment for seasonal variations but not for price changes were valued at $95.1 billion at the end of July—up 2 percent from the previous month and up 8 percent from the year-ago level. Durable goods stocks were up 1 percent from June and were up 9 percent from July 1979. Nondurable goods stocks were up 3 percent from the previous month and were 8 percent above the year-ago level.

Based on adjusted data, comparisons with previous month inventory levels showed mixed results with eight trade groups showing gains, four indicating declines, and two showing no change. The largest increase was reported in farm-product raw materials (16%). Compared with year-ago inventories, most trade groups showed increases, with the largest increase reported in petroleum and petroleum products (47%).

Percent Change in Sales of Merchant Wholesalers in Selected Kinds of Business
7 Months 1980 Compared With 7 Months 1979



Stock-Sales Ratios. The July stock-sales ratio for merchant wholesalers, based on seasonally adjusted data, was 121—down 1 point from June and up 4 points from July 1979. The stock-sales ratio for durable goods was 180—down 1 point from last month but up 16 points from the year-ago ratio. The ratio for nondurable goods was 76—down 1 point from June and down 2 points from the July 1979 ratio.

An advance release of July 1980 data was issued September 5, 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) 763-7794/763-7007.

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Table 1. Estimated Monthly Sales of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980							1979						Total 7 months	
		Jan.	Feb.	Mar.	Apr.	May	June	July[p]	July	Aug.	Sept.	Oct.	Nov.	Dec.	1980	1979
	Merchant wholesalers, total	r76,840	r75,366	r80,099	r79,090	r79,293	77,790	79,961	73,537	78,567	r73,100	r81,648	r78,881	r75,156	548,442	495,259
	Total (excluding farm-product raw materials)	r67,603	r66,891	r71,105	r70,267	r70,364	69,908	71,526	64,932	70,390	r65,287	r71,984	r69,156	r65,945	487,666	441,599
50	Durable goods, total	r33,315	r33,569	r35,672	r35,004	r34,058	34,610	34,597	33,750	37,048	r33,503	r37,763	r34,513	r32,275	240,826	228,463
501	Motor vehicles and automotive parts and supplies	6,421	6,586	6,779	7,045	6,722	6,766	6,813	6,259	6,812	5,645	6,784	6,452	6,172	47,132	44,654
5013,4	Automotive parts and supplies, tires and tubes	3,160	3,093	3,317	3,356	3,285	3,418	3,415	3,091	3,552	3,081	3,538	3,298	2,972	23,043	22,954
5013	Automotive parts and supplies	2,704	2,685	2,831	2,889	2,823	2,902	2,877	2,600	3,014	2,617	2,978	2,817	2,515	19,712	19,231
502	Furniture and home furnishings	1,210	1,186	1,304	1,344	1,256	1,246	1,197	1,121	1,243	1,196	1,390	1,263	1,134	8,743	7,810
5021	Furniture--household and office	496	452	496	503	474	476	476	399	449	419	458	430	430	3,339	2,774
5023	Home furnishings	747	734	808	841	782	770	722	722	794	778	931	832	704	5,404	5,035
503	Lumber and other construction materials	2,582	2,408	2,595	2,598	2,608	2,897	3,011	3,411	3,761	3,274	3,622	2,997	2,543	18,698	20,801
5031	Lumber, plywood, and millwork	1,708	1,622	1,696	1,638	1,637	1,804	1,853	2,250	2,515	2,102	2,346	1,899	1,586	11,957	14,098
5039	Construction materials, n.e.c.	873	785	899	960	971	1,094	1,158	1,161	1,246	1,172	1,276	1,098	957	6,741	6,703
5051 pt.	Ferrous metals service centers and offices	2,992	2,852	3,136	2,773	2,666	2,634	2,388	2,865	3,062	2,806	2,974	2,836	2,743	19,189	18,304
5051 pt.	Ferrous metals service centers	2,197	2,064	2,271	2,110	1,960	1,984	1,808	2,046	2,211	1,974	2,208	2,122	1,964	14,394	13,584
506	Electrical goods	3,745	3,904	3,931	3,718	3,749	4,016	4,067	3,712	4,163	4,012	4,395	3,962	3,785	27,131	24,169
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,840	2,032	1,992	1,925	1,961	2,091	2,060	1,991	2,153	2,079	2,165	1,962	1,916	13,914	12,764
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,905	1,872	1,939	1,793	1,788	1,925	2,007	1,700	2,011	1,933	2,230	2,000	1,869	13,229	11,405
5064	Electrical appliances, TV and radio sets	1,040	985	1,054	950	936	1,065	1,171	986	1,116	1,083	1,250	1,154	1,052	7,201	6,578
507	Hardware, plumbing, heating equipment, and supplies	2,466	2,250	2,436	2,311	2,317	2,427	2,485	2,524	2,678	2,399	2,794	2,415	2,192	16,691	16,397
5072	Hardware	936	885	932	896	886	934	891	892	1,003	877	1,024	916	838	6,360	6,010
5074	Plumbing and heating equipment and supplies (hydronics)	1,037	934	1,003	938	913	931	947	1,015	1,038	1,011	1,167	992	920	6,704	6,590
508	Machinery, equipment, and supplies	8,880	9,322	10,058	10,196	10,107	10,226	10,205	9,222	10,113	9,394	10,317	9,324	9,026	68,994	63,669
5082	Construction and mining machinery and equipment[3]	958	1,098	1,208	1,185	1,271	1,198	1,238	1,258	1,366	1,268	1,323	1,144	1,019	8,156	8,241
5084,5	Industrial machinery, equipment, and supplies	3,924	4,061	4,208	4,310	4,342	4,339	4,235	3,613	4,039	3,634	4,078	4,020	3,936	29,419	25,990
5086	Professional equipment, supplies	982	970	1,014	1,083	1,094	1,113	1,110	996	1,092	972	1,121	948	939	7,367	6,887
5093	Scrap and waste materials	1,489	1,571	1,685	1,581	1,486	1,255	1,083	1,395	1,534	1,328	1,456	1,428	1,382	10,150	9,692
51	Nondurable goods, total	43,525	41,797	44,427	44,086	45,235	43,180	45,364	39,787	41,519	39,597	43,885	44,368	42,881	307,617	266,797
	Total (excluding farm-product raw materials)	34,288	33,323	35,433	35,263	36,307	35,297	36,929	31,182	33,342	31,784	34,221	34,643	33,670	246,840	213,136
511	Paper and paper products	1,837	1,774	1,799	1,783	1,762	1,732	1,724	1,585	1,777	1,599	1,821	1,699	1,639	12,410	11,186
5111,3	Printing, writing, industrial, and personal service paper	1,330	1,290	1,354	1,327	1,317	1,306	1,260	1,192	1,327	1,202	1,368	1,269	1,218	9,183	8,404
5111	Printing and writing paper	665	668	665	666	647	629	554	594	648	584	685	623	601	4,494	4,167
5113	Industrial and personal service paper.[1]	665	622	688	661	670	677	706	599	679	618	683	646	617	4,689	4,237
512	Drugs, drug proprietaries, and druggists' sundries	1,112	1,045	1,113	1,106	1,117	1,122	1,197	1,066	1,099	1,030	1,178	1,092	1,054	7,811	7,184
5122	Drugs, drug proprietaries, and druggists' sundries	1,112	1,045	1,113	1,106	1,117	1,122	1,197	1,066	1,099	1,030	1,178	1,092	1,054	7,811	7,184
5122 pt.	General-line drugs	466	460	494	472	485	478	519	443	477	443	487	448	456	3,374	3,269
513	Apparel, piece goods, and notions[2]	2,444	2,412	2,520	2,430	2,145	2,342	2,622	2,389	2,629	2,563	2,704	2,468	2,032	16,915	15,141
514	Groceries and related products	11,892	11,244	12,057	12,270	12,606	12,402	13,344	11,500	11,835	11,122	12,140	11,919	11,673	85,815	79,947
5141	Groceries, general-line	4,395	4,190	4,537	4,571	4,740	4,582	4,947	4,245	4,429	4,137	4,597	4,511	4,289	31,962	28,517
5144	Poultry and poultry products[3]	555	531	559	576	569	563	611	563	569	530	561	603	589	3,965	3,819
5145	Confectionery	198	187	209	209	210	216	222	192	214	214	275	243	207	1,450	1,369
5147	Meats and meat products	1,867	1,741	1,799	1,770	1,799	1,752	1,926	1,872	1,959	1,770	1,925	1,768	1,811	12,653	14,033
5148	Fresh fruits and vegetables	997	1,005	1,117	1,213	1,299	1,293	1,309	1,063	1,030	917	997	1,024	1,002	8,232	7,777
515	Farm-product raw materials	9,237	8,474	8,995	8,823	8,928	7,884	8,435	8,605	8,177	7,813	9,664	9,725	9,211	60,776	53,661
5153	Grain	7,590	6,939	7,537	7,425	7,524	6,512	7,135	7,516	7,090	6,594	8,328	8,347	7,630	50,663	44,731
517	Petroleum and petroleum products[4]	8,219	8,001	7,858	7,714	7,990	7,490	8,215	5,863	6,355	6,354	7,171	7,602	7,677	55,489	38,140
5171	Petroleum bulk stations and terminals	4,510	4,339	4,236	4,043	4,109	3,818	4,040	3,121	3,504	3,456	3,960	4,050	4,193	29,196	20,974
518	Beer, wine, and distilled alcoholic beverages	2,242	2,254	2,436	2,629	2,787	2,864	3,123	2,636	2,844	2,387	2,733	2,821	2,882	18,336	16,981
5181	Beer and ale	1,087	1,156	1,207	1,346	1,557	1,597	1,707	1,507	1,590	1,229	1,299	1,267	1,230	9,657	8,976
5182	Wine and distilled alcoholic beverages[5]	1,155	1,098	1,230	1,283	1,230	1,267	1,416	1,129	1,254	1,158	1,435	1,554	1,652	8,679	8,004
519	Miscellaneous nondurable goods	5,299	5,393	6,479	6,178	6,622	6,037	5,604	5,105	5,468	5,570	5,296	5,643	5,238	41,613	36,753
5194	Tobacco and tobacco products	835	771	815	864	883	880	959	881	896	795	902	861	843	6,007	5,906

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.

[p]Preliminary estimates. See p. 15, Sample Design and Estimation Procedures. [r]Revised.

[1]The industrial and personal service paper kind of business is subject to a sampling variability of 9 percent for July 1980.
[2]The apparel, piece goods, and notions group is subject to a sampling variability of 15 percent for July 1980.
[3]The poultry and poultry products kind of business is subject to a sampling variability of 8 percent for July 1980.
[4]The petroleum and petroleum products group is subject to a sampling variability of 8 percent for July 1980.
[5]The wine and distilled alcoholic beverages kind of business is subject to a sampling variability of 9 percent for July 1980.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980							1979					
		Jan.	Feb.	Mar.	Apr.	May	June	July[p]	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	r91,088	r92,692	r93,535	r93,125	r92,927	93,112	94,084	86,829	r86,688	r86,932	r88,520	r89,397	r89,757
	Total (excluding farm-product raw materials)	r83,229	r84,914	r86,448	r87,120	r87,709	88,197	88,576	81,487	r81,368	r81,434	r82,166	r81,949	r82,142
50	Durable goods, total	r56,879	r58,301	r59,250	r60,104	r61,120	61,493	61,577	56,602	r56,601	r56,232	r56,301	r56,006	r56,230
501	Motor vehicles and automotive parts and supplies	9,893	10,167	10,109	10,420	10,540	10,567	10,609	9,672	9,446	9,240	9,546	9,652	9,723
5013,4	Automotive parts and supplies, tires and tubes	6,182	6,130	6,107	6,197	6,363	6,287	6,217	6,051	6,117	5,933	6,025	6,084	6,030
5013	Automotive parts and supplies	5,191	5,124	5,068	5,146	5,307	5,182	5,223	5,082	5,188	5,018	5,121	5,208	5,074
502	Furniture and home furnishings	1,807	1,816	1,906	1,940	1,888	1,941	1,959	1,847	1,839	1,861	1,909	1,796	1,794
5023	Home furnishings	1,265	1,271	1,330	1,366	1,322	1,338	1,348	1,347	1,339	1,328	1,381	1,291	1,247
503	Lumber and other construction materials	3,378	3,423	3,595	3,507	3,434	3,394	3,324	3,526	3,442	3,382	3,383	3,335	3,353
5031	Lumber, plywood, and millwork[1]	2,103	2,169	2,220	2,191	2,168	2,065	2,008	2,220	2,204	2,129	2,149	2,112	2,090
5051 pt.	Ferrous metals service centers and offices	4,852	4,766	4,853	4,728	5,155	5,111	5,031	4,655	4,947	4,953	4,794	4,891	4,897
5051 pt.	Ferrous metals service centers	3,893	3,851	3,981	3,811	4,205	4,221	4,156	3,665	3,956	4,010	3,843	3,999	4,019
506	Electrical goods	6,092	6,140	6,083	6,313	6,506	6,498	6,606	6,223	6,254	6,061	6,082	6,098	5,931
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,894	3,051	2,983	3,038	3,154	3,051	3,099	2,840	2,841	2,771	2,785	2,945	2,820
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3,199	3,089	3,101	3,275	3,352	3,446	3,507	3,383	3,274	3,290	3,296	3,153	3,112
507	Hardware, plumbing, heating equipment, and supplies	4,692	4,883	4,984	5,086	4,955	4,878	4,753	4,628	4,535	4,488	4,537	4,456	4,575
5072	Hardware	1,806	1,888	1,945	1,925	1,873	1,851	1,873	1,659	1,657	1,692	1,698	1,692	1,758
5074	Plumbing and heating equipment and supplies (hydronics)	1,836	1,904	1,944	2,058	2,019	1,964	1,893	1,902	1,828	1,783	1,823	1,777	1,804
508	Machinery, equipment, and supplies	19,475	20,476	21,056	21,072	21,533	21,819	21,970	19,576	19,778	19,974	19,555	19,461	19,554
5082	Construction and mining machinery and equipment	4,038	4,279	4,326	4,367	4,503	4,505	4,507	4,488	4,504	4,573	4,339	4,288	4,182
5084,5	Industrial machinery, equipment, and supplies	6,375	6,588	6,922	6,817	6,905	6,943	7,108	5,979	6,092	6,201	6,251	6,163	6,354
51	Nondurable goods, total	34,209	34,390	34,285	33,021	31,807	31,619	32,507	30,227	30,087	30,700	32,219	33,391	33,527
	Total (excluding farm-product raw materials)	26,350	26,615	27,196	27,016	26,589	26,704	26,998	24,885	24,767	25,202	25,865	25,943	25,912
511	Paper and paper products	1,670	1,694	1,740	1,768	1,777	1,803	1,768	1,608	1,604	1,663	1,597	1,657	1,695
5111,3	Printing, writing, industrial, and personal service paper[2]	1,137	1,144	1,185	1,201	1,196	1,242	1,216	1,079	1,055	1,109	1,082	1,090	1,141
5111	Printing and writing paper	473	479	498	499	492	516	493	442	427	440	439	444	474
5113	Industrial and personal service paper[3]	664	665	687	702	704	725	722	637	629	669	644	645	667
512	Drugs, drug proprietaries, and druggists' sundries	1,560	1,539	1,595	1,601	1,578	1,566	1,614	1,609	1,570	1,670	1,678	1,580	1,573
514	Groceries and related products	6,775	6,877	7,101	7,010	6,809	7,010	6,902	6,674	6,633	6,793	6,982	6,933	6,984
5141	Groceries, general-line	2,884	2,952	3,054	3,019	2,938	2,953	3,021	2,899	2,857	2,911	3,046	3,044	2,957
517	Petroleum and petroleum products	3,298	3,424	3,343	3,288	3,449	3,593	3,666	2,492	2,618	2,874	2,918	3,062	3,135
518	Beer, wine, and distilled alcoholic beverages	2,742	2,652	2,853	2,943	2,893	2,916	2,886	2,693	2,539	2,538	2,781	2,770	2,597
5181	Beer and ale[4]	916	917	1,109	1,162	1,140	1,137	1,099	1,030	923	903	934	922	879
5182	Wines and distilled alcoholic beverages	1,825	1,735	1,743	1,781	1,753	1,778	1,787	1,663	1,616	1,634	1,847	1,848	1,718

See footnotes at end of table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980							1979					
		Jan.	Feb.	Mar.	Apr.	May	June	July[p]	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	119	123	r117	118	r117	120	119	118	r110	119	r108	113	119
	Total (excluding farm-product raw materials)	123	r127	r122	124	125	126	124	125	116	125	114	118	r125
50	Durable goods, total	171	r174	r166	r172	r179	178	178	168	153	168	149	162	174
501	Motor vehicles and automotive parts and supplies	154	154	149	148	157	156	156	155	139	164	141	150	158
5013,4	Automotive parts and supplies, tires and tubes	196	198	184	185	194	184	186	196	172	193	170	184	203
5013	Automotive parts and supplies	192	191	179	178	188	179	182	195	172	192	172	185	202
502	Furniture and home furnishings	145	153	146	144	150	156	164	165	148	156	137	142	158
5023	Home furnishings	169	173	165	162	169	174	187	187	169	171	148	155	177
503	Lumber and other construction materials	131	142	139	135	132	117	110	103	92	103	93	111	132
5031	Lumber, plywood, and millwork	123	134	131	134	132	114	108	99	88	101	92	111	132
5051 pt.	Ferrous metals service centers and offices	162	167	155	170	193	194	211	162	162	177	161	172	178
5051 pt.	Ferrous metals service centers	177	187	175	181	215	213	230	179	179	203	174	188	204
506	Electrical goods	163	157	155	170	174	162	162	168	150	151	138	154	157
5063	Electrical apparatus and equipment, wiring supplies and construction meterials	157	150	150	158	161	146	150	143	132	133	129	150	147
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	168	165	160	183	187	179	175	197	163	170	148	158	167
507	Hardware, plumbing, heating equipment, and supplies	190	217	205	220	214	201	191	183	169	187	162	185	209
5072	Hardware	193	213	209	215	211	198	210	186	165	193	166	185	210
5074	Plumbing and heating equipment and supplies (hydronics)	177	204	194	219	221	211	200	188	176	176	156	179	196
508	Machinery, equipment, and supplies	219	220	209	207	213	213	215	212	196	213	190	209	217
5082	Construction and mining machinery and equipment	422	390	358	368	354	376	364	357	330	361	328	375	411
5084,5	Industrial machinery, equipment, and supplies	162	162	164	158	159	160	168	165	151	171	153	153	161
51	Nondurable goods, total	79	82	77	75	70	73	72	76	72	78	73	75	78
	Total (excluding farm-product raw materials)	77	80	77	77	73	76	73	80	74	79	76	75	77
511	Paper and paper products	91	96	97	99	101	104	103	101	90	104	88	98	103
5111,3	Printing, writing, industrial, and personal service paper	85	89	88	90	91	95	96	90	79	92	79	86	94
5111	Printing and writing paper	71	72	75	75	76	82	89	74	66	75	64	71	79
5113	Industrial and personal service paper	100	107	100	106	105	107	102	106	93	108	94	100	108
512	Drugs, drug proprietaries, and druggists' sundries	140	147	143	145	141	140	135	151	143	162	142	145	149
514	Groceries and related products	57	61	59	57	54	57	52	58	56	61	58	58	60
5141	Groceries, general-line	66	70	67	66	62	64	61	68	64	70	66	67	69
517	Petroleum and petroleum products	40	43	43	43	43	48	45	43	41	45	41	40	41
518	Beer, wine, and distilled alcoholic beverages	122	118	117	112	104	102	92	102	89	106	102	98	90
5181	Beer and ale	84	79	92	86	73	71	64	68	58	74	72	73	71
5182	Wines and distilled alcoholic beverages	158	158	142	139	143	140	126	147	129	141	129	119	104

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.

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

[1]The lumber, plywood, and millwork kind of business is subject to a sampling variability of 9 percent for July 1980.
[2]The printing, writing, industrial, and personal service paper kinds of business are subject to a sampling variability of 8 percent for July 1980.
[3]The industrial and personal service paper kind of business is subject to a sampling variability of 13 percent for July 1980.
[4]The beer and ale kind of business is subject to a sampling variability of 10 percent for July 1980.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1980 and 1979

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

1972 SIC code	Kind of business	1980							1979					
		Jan.	Feb.	Mar.	Apr.	May	June	July[P]	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Sales ADJUSTED for seasonal variations and trading-day differences													
	Merchant wholesalers, total	r80,906	r79,299	r78,550	r76,391	r76,376	76,629	78,884	74,778	75,588	r76,382	r77,322	r78,203	r78,678
	Total (excluding farm-product raw materials)	r71,788	r70,472	r70,167	r67,792	r67,742	68,518	70,516	66,015	66,729	r67,473	r68,196	r69,223	r69,531
50	Durable goods, total	r36,576	r36,448	r35,411	r33,026	r32,561	33,441	33,798	34,103	34,509	r33,966	r35,100	r34,967	r35,138
501	Motor vehicles and automotive parts and supplies	6,745	6,984	6,543	6,169	6,218	6,588	6,538	6,160	6,500	6,183	6,737	6,835	6,865
502	Furniture and home furnishings	1,352	1,273	1,307	1,320	1,256	1,223	1,240	1,205	1,193	1,182	1,201	1,183	1,213
503	Lumber and other construction materials	3,188	2,870	2,761	2,570	2,456	2,705	2,752	3,200	3,198	3,182	3,152	2,976	3,009
506	Electrical goods	4,115	4,267	4,040	3,696	3,749	3,914	3,933	3,731	3,913	4,069	3,931	3,869	3,819
507	Hardware, plumbing, heating equipment, and supplies	2,675	2,531	2,556	2,229	2,202	2,320	2,307	2,418	2,466	2,428	2,506	2,444	2,438
508	Machinery, equipment, and supplies	9,791	10,188	9,841	9,637	9,428	9,823	10,064	9,488	9,613	9,451	9,633	9,612	9,716
51	Nondurable goods, total	44,330	42,851	43,139	43,365	43,815	43,188	45,086	40,675	41,079	42,416	42,222	43,236	43,540
	Total (excluding farm-product raw materials)	35,212	34,024	34,756	34,766	35,181	35,077	36,718	31,912	32,220	33,507	33,096	34,256	34,393
511	Paper and paper products	1,844	1,827	1,794	1,783	1,738	1,746	1,709	1,648	1,664	1,652	1,678	1,711	1,725
512	Drugs, drug proprietaries, and druggists' sundries	1,105	1,100	1,109	1,073	1,140	1,160	1,176	1,084	1,061	1,060	1,067	1,077	1,092
513	Apparel, piece goods, and notions	2,570	2,582	2,490	2,485	2,182	2,489	2,573	2,494	2,274	2,441	2,372	2,413	2,320
514	Groceries and related products	12,049	11,861	11,985	12,041	12,040	12,377	12,905	11,546	11,402	11,634	11,684	11,883	12,084
515	Farm-product raw materials[1]	9,118	8,827	8,383	8,599	8,634	8,111	8,368	8,763	8,859	8,909	9,126	8,980	9,147
517	Petroleum and petroleum products	8,122	7,422	7,637	7,888	8,103	7,651	8,391	5,940	6,355	6,959	7,142	7,331	7,497
518	Beer, wine, and distilled alcoholic beverages	2,724	2,633	2,586	2,629	2,706	2,647	2,924	2,597	2,621	2,556	2,620	2,649	2,582
519	Miscellaneous nondurable goods	5,480	5,303	5,971	5,752	6,064	5,755	5,962	5,555	5,626	5,976	5,426	5,794	5,502
	Inventories ADJUSTED for seasonal variations													
	Merchant wholesalers, total	r90,690	r91,342	r91,497	r92,378	r92,562	93,633	95,094	87,662	r88,280	r88,372	r88,819	r89,086	r89,676
	Total (excluding farm-product raw materials)	r84,091	r84,718	r85,434	r86,691	r86,783	87,698	88,235	81,026	r81,442	r81,609	r82,362	r82,632	r83,128
50	Durable goods, total	r57,751	r58,127	r58,726	r59,722	r60,243	60,483	60,873	55,861	r56,335	r56,352	r56,915	r56,891	r57,219
501	Motor vehicles and automotive parts and supplies	9,756	9,564	9,921	10,378	10,374	10,609	10,684	9,740	9,708	9,595	9,731	9,759	9,762
502	Furniture and home furnishings	1,829	1,832	1,914	1,948	1,867	1,886	1,947	1,836	1,824	1,828	1,911	1,812	1,844
503	Lumber and other construction materials	3,450	3,454	3,487	3,411	3,331	3,318	3,256	3,453	3,445	3,420	3,459	3,470	3,443
506	Electrical goods	6,306	6,369	6,157	6,351	6,416	6,346	6,502	6,125	6,125	5,977	6,034	6,074	5,985
507	Hardware, plumbing, heating equipment, and supplies	4,832	4,952	4,891	4,803	4,792	4,731	4,642	4,520	4,540	4,584	4,611	4,647	4,761
508	Machinery, equipment, and supplies	19,752	20,354	20,724	20,988	21,257	21,412	21,882	19,498	19,818	19,994	19,833	19,777	19,791
51	Nondurable goods, total	32,939	33,215	32,771	32,656	32,319	33,150	34,221	31,801	31,945	32,020	31,904	32,195	32,457
	Total (excluding farm-product raw materials)	26,340	26,591	26,708	26,969	26,540	27,215	27,362	25,165	25,107	25,257	25,447	25,741	25,909
511	Paper and paper products	1,720	1,727	1,751	1,752	1,770	1,757	1,770	1,610	1,615	1,645	1,587	1,655	1,680
512	Drugs, drug proprietaries, and druggists' sundries	1,640	1,598	1,593	1,588	1,597	1,557	1,612	1,607	1,565	1,607	1,594	1,567	1,599
514	Groceries and related products	6,871	6,884	6,969	6,968	6,836	7,074	7,014	6,783	6,775	6,800	6,818	6,871	6,908
517	Petroleum and petroleum products	3,230	3,480	3,346	3,483	3,505	3,851	3,787	2,574	2,590	2,753	2,795	2,936	3,041
518	Beer, wine, and distilled alcoholic beverages	2,839	2,809	2,870	2,897	2,806	2,834	2,849	2,664	2,609	2,553	2,626	2,648	2,769
	Stock-sales ratios based on ADJUSTED data													
	Merchant wholesalers, total	112	115	116	121	r121	122	121	117	117	116	115	114	114
	Total (excluding farm-product raw materials)	117	120	r122	128	r128	128	125	123	122	121	121	119	r120
50	Durable goods, total	158	r159	r166	r181	r185	181	180	164	r163	166	162	r163	r163
501	Motor vehicles and automotive parts and supplies	145	137	152	168	167	161	163	158	149	155	144	143	142
502	Furniture and home furnishings	135	144	146	148	149	154	157	152	153	155	159	153	152
503	Lumber and other construction materials	108	120	126	133	136	123	118	108	108	107	110	117	114
506	Electrical goods	153	149	152	172	171	162	165	164	157	147	153	157	157
507	Hardware, plumbing, heating and supplies	181	196	191	215	218	204	201	187	184	189	184	190	195
508	Machinery, equipment, and supplies	202	200	211	218	225	218	217	206	206	212	206	206	204
51	Nondurable goods, total	74	78	76	75	74	77	76	78	78	75	76	74	75
	Total (excluding farm-product raw materials)	75	78	77	78	75	78	75	79	78	75	77	75	75
511	Paper and paper products	93	95	98	98	102	101	104	98	97	100	95	97	97
512	Drugs, drug proprietaries, and druggists' sundries	148	145	144	148	140	134	137	148	148	152	149	145	146
514	Groceries and related products	57	58	58	58	57	57	54	59	59	58	58	58	57
517	Petroleum and petroleum products	40	47	44	44	43	50	45	43	41	40	39	40	41
518	Beer, wine, and distilled alcoholic beverages	104	107	111	110	104	107	97	103	100	100	100	100	107

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.

[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, May 1980-July 1980 from--			
	Feb. 1980-Apr. 1980 (3 months ago)	Nov. 1979-Jan. 1980 (6 months ago)	Aug. 1979-Oct. 1979 (9 months ago)	May 1979-July 1979 (12 months ago)
Merchant wholesalers, total	-1	-3	+1	+6
Durable goods, total	-6	-7	-4	0
Nondurable goods, total	+2	+1	+5	+11

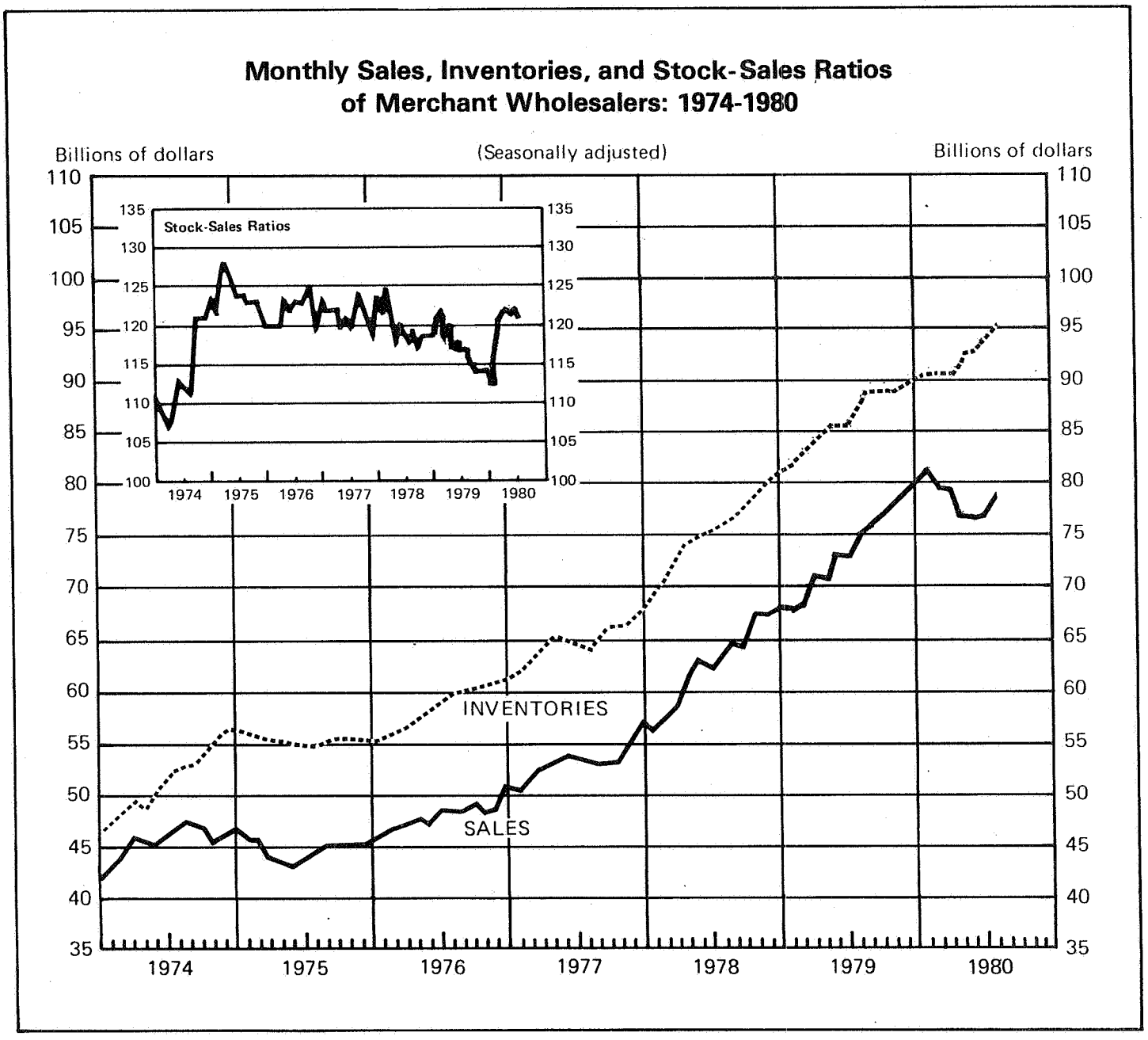


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: July 1980

1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		July 1980 from June 1980	July 1980 from July 1979	7 months 1980 from 7 months 1979	July 1980 from June 1980	July 1980 from July 1979	July 1980 from June 1980	July 1980 from July 1979	July 1980 from June 1980	July 1980 from July 1979
	Merchant wholesalers, total	+3	+9	+11	+1	+8	+3	+5	+2	+8
	Total (excluding farm-product raw materials)	+2	+10	+10	0	r+8	+3	+7	+1	+9
50	Durable goods, total	0	+3	+5	0	+9	+1	-1	+1	+9
501	Motor vehicles and automotive parts and supplies	+1	+9	+6	0	+10	-1	+6	+1	+10
5012	Automobiles and other motor vehicles	+1	+7	+11	+3	+21	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	0	+10	0	-1	+3	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	-1	+11	+2	+1	+3	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	-4	+7	+12	+1	+6	+1	+3	+3	+6
5021	Furniture--household and office	0	+19	+20	+1	+22	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	+4	+1	+15	+1	+13	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	-2	+28	+23	+1	+29	(*)	(*)	(*)	(*)
5023	Home furnishings	-6	0	+7	+1	0	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	+4	-12	-10	-2	-6	+2	-14	-2	-6
5031	Lumber, plywood, and millwork	+3	-18	-15	-3	-10	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c.	+6	0	+1	-1	+1	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies[3]	(S)	-5	+4	0	+10	+20	-10	0	+10
5051 pt.	Ferrous metals service centers and offices	-9	-17	+5	-2	+8	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	-9	-12	+6	-2	+13	(*)	(*)	(*)	(*)
506	Electrical goods	+1	+10	+12	+2	+6	0	+5	+2	+6
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-2	+3	+9	+2	+9	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+4	+17	+16	+2	+4	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	+10	+19	+9	+3	-1	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	+2	-2	+2	-3	+3	-1	-5	-2	+3
5072	Hardware	-5	0	+6	+1	+13	(*)	(*)	(*)	(*)
5074	Plumbing and heating equipment and supplies (hydronics)	+2	-7	+2	-4	0	(*)	(*)	(*)	(*)
5075	Warm air heating and air conditioning equipment and supplies	+18	+9	-4	-8	-11	(*)	(*)	(*)	(*)
508	Machinery, equipment, and supplies	0	+11	+8	+1	+12	+2	+6	+2	+12
5081	Commercial machines and equipment	+8	+24	+14	+2	+11	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	+3	-2	-1	0	0	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	-3	-6	0	-2	+16	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	-2	+17	+13	+2	+19	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	0	+11	+7	+4	+6	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	-14	-22	+5	0	-3	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	-13	-25	-1	+2	-4	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	-15	-19	+14	-3	-1	(*)	(*)	(*)	(*)
51	Nondurable goods, total	+5	+14	+15	+3	+8	+4	+11	+3	+8
	Total (excluding farm-product raw materials)	+5	+18	+16	+1	+8	+5	+15	+1	+9
511	Paper and paper products	-1	+9	+11	-2	+10	-2	+4	+1	+10
5111,3	Printing, writing, industrial, and personal service paper	-4	+6	+9	-2	+13	(*)	(*)	(*)	(*)
5111	Printing, and writing paper	-12	-7	+8	-4	+12	(*)	(*)	(*)	(*)
5113	Industrial and personal service paper	+4	+18	+11	0	+13	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	+7	+12	r+9	+3	0	+1	+8	+4	0
5122	Drugs, drug proprietaries, and druggists' sundries	+7	+12	+9	+3	0	(*)	(*)	(*)	(*)
5122 pt.	General-line drugs	+9	+17	+3	+2	+6	(*)	(*)	(*)	(*)
514	Groceries and related products	+8	+16	+7	-2	+3	+4	+12	-1	+3
5141	Groceries, general-line	+8	+17	+12	+2	+4	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	+9	+17	+10	+2	+4	(*)	(*)	(*)	(*)
5141 pt.	Retailer cooperatives	+8	+16	+14	+1	+6	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	+8	+17	+12	+3	+3	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	+8	+21	+13	-7	+6	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	+8	+9	+4	+11	+19	(*)	(*)	(*)	(*)
5145	Confectionery	+3	+16	+6	-1	-3	(*)	(*)	(*)	(*)
5147	Meats and meat products	+10	+3	(S)	+3	-11	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	+1	+23	+6	-5	+8	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	+7	-2	+13	+12	+3	+3	-5	+16	+3
5152	Cotton	-9	+33	+25	-22	+17	(*)	(*)	(*)	(*)
5153	Grain	+10	-5	+13	+22	0	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	+10	+40	+45	+2	+47	+10	+41	-2	+47
5171	Petroleum bulk stations and terminals	+3	+29	+39	+5	+52	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	+9	+18	+8	-1	+7	+10	+13	+1	+7
5181	Beer and ale	+7	+13	+8	-3	+7	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	+12	+25	+8	0	+7	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	-7	+10	+13	+3	+6	+4	+7	0	+6
5191	Farm supplies	-8	+22	+19	+3	+13	(*)	(*)	(*)	(*)
5194	Tobacco and tobacco products	+9	+9	+2	+1	0	(*)	(*)	(*)	(*)
5198	Paints, varnishes, and supplies	+2	+7	+13	+1	+1	(*)	(*)	(*)	(*)
5199 pt.	Books, periodicals, newspapers	-3	(S)	(S)	0	+16	(*)	(*)	(*)	(*)

*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.

[3]The sporting goods, toys, and hobby goods kinds of business are subject to a sampling variability of 18 percent for July 1980.

rRevised.

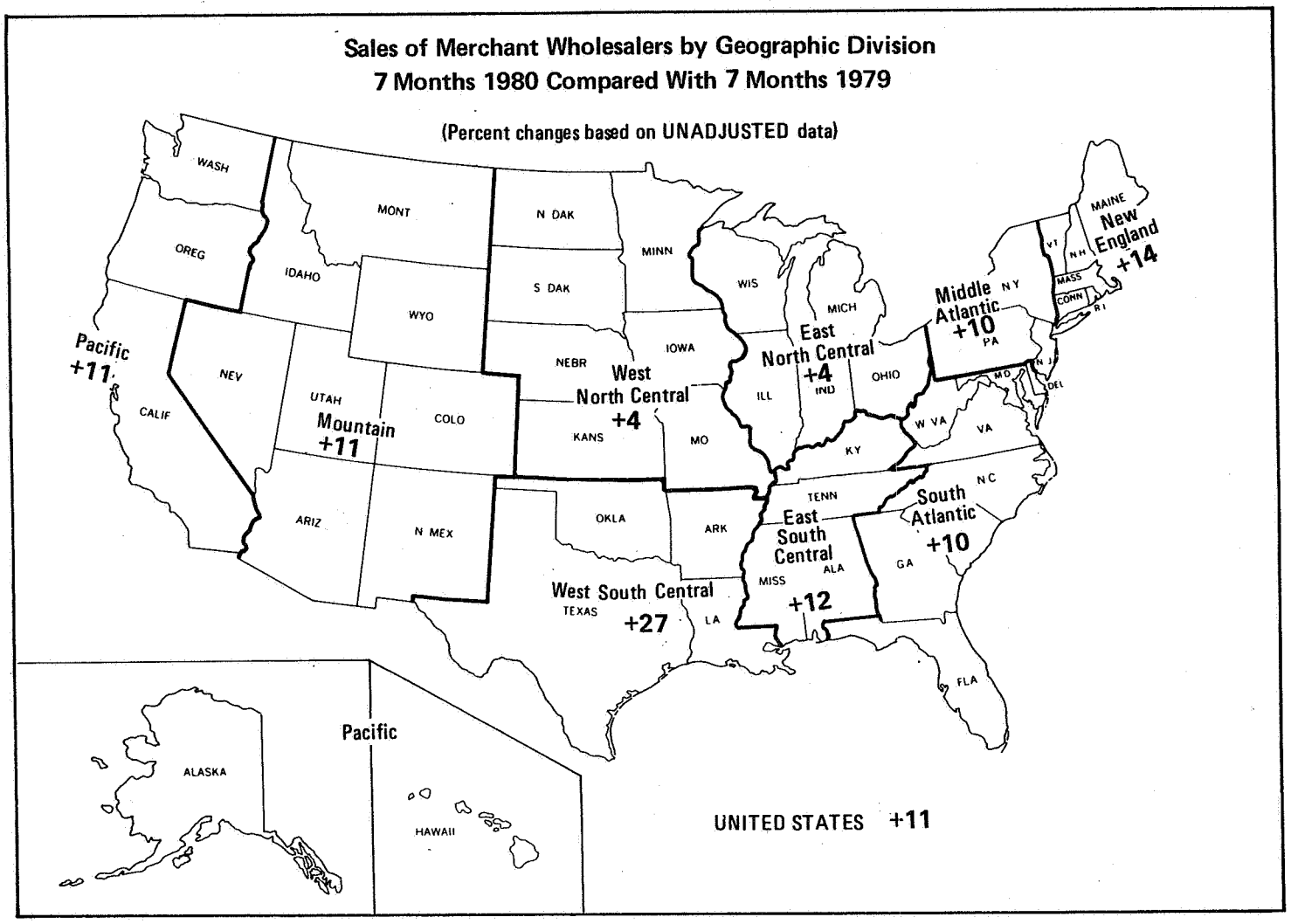


Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1980 and 1979

(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]	1980							1979						Total 7 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.	Apr.	May	June	July[p]	July	Aug.	Sept.	Oct.	Nov.	Dec.	1980	1979	Range[2]	Median
		1979																
	Merchant wholesalers, total	r76,840	r75,366	r80,099	r79,090	r79,293	77,790	79,961	73,537	78,567	r73,100	r81,648	r78,881	r75,156	548,442	495,259	1.4-1.7	1.5
	New England	4,140	4,001	4,309	3,895	4,067	4,129	4,420	3,572	3,981	3,741	4,167	4,126	3,930	28,961	25,437	4-6	5
	Middle Atlantic	r17,485	r16,749	r18,480	r16,948	r16,805	16,752	17,221	16,256	17,786	r17,023	r18,178	r18,121	r17,151	120,439	109,168	3-4	4
	East North Central	12,357	11,872	12,336	12,684	12,964	12,218	12,331	12,182	12,979	11,735	13,552	12,864	11,693	86,763	83,445	2-3	2
	West North Central	7,772	7,458	7,739	8,299	8,410	7,826	8,205	8,385	8,510	7,921	9,106	8,491	7,874	55,708	53,628	2-3	3
	South Atlantic	8,344	8,137	8,698	8,761	8,480	8,601	8,465	7,720	8,067	7,558	8,391	7,972	7,988	59,486	54,037	2-3	2
	East South Central	3,510	3,583	3,683	3,812	3,813	3,658	3,611	3,292	3,534	3,261	3,791	3,505	3,443	25,669	22,949	3-4	4
	West South Central	9,307	9,426	9,861	9,795	9,914	9,744	10,492	8,248	8,755	8,434	9,347	9,351	9,222	68,540	53,813	4-6	5
	Mountain	2,705	2,703	3,091	2,904	2,886	3,087	3,199	2,704	2,830	2,760	2,851	2,743	2,834	20,576	18,496	4-6	6
	Pacific	11,221	11,438	11,902	11,993	11,952	11,776	12,017	11,178	12,125	10,668	12,264	11,710	11,021	82,301	74,286	2-3	3
50	Durable goods, total	r33,315	r33,569	r35,672	r35,004	r34,058	34,610	34,597	33,750	37,048	r33,503	r37,763	r34,513	r32,275	240,826	228,463	1.6-2.6	1.8
	Middle Atlantic	r7,125	r6,967	r7,505	r7,282	r6,968	7,001	6,984	6,769	7,538	r6,876	r7,911	r7,279	r6,457	49,831	46,516	6-8	6
	East North Central	5,486	5,572	5,711	5,747	5,536	5,347	5,124	5,801	6,440	5,833	6,439	5,869	5,248	38,521	40,006	3-4	3
	West North Central	2,663	2,663	2,734	2,663	2,633	2,592	2,679	2,873	3,209	2,900	3,171	2,851	2,682	18,627	18,490	5-7	5
	South Atlantic	3,991	3,815	4,267	4,350	4,023	4,310	4,195	4,074	4,173	3,796	4,374	3,934	3,868	28,951	27,597	2-4	3
	West South Central	3,747	3,940	4,175	4,153	4,146	4,265	4,421	3,702	3,970	3,662	4,174	3,870	3,701	28,846	24,838	4-5	4
	Mountain	1,205	1,185	1,362	1,347	1,228	1,344	1,327	1,322	1,356	1,280	1,384	1,202	1,225	8,998	8,871	7-9	8
	Pacific	6,100	6,438	6,748	6,475	6,523	6,647	6,596	6,388	7,143	6,069	6,993	6,576	6,049	45,527	42,116	4-5	4
51	Nondurable goods, total	43,525	41,797	44,427	44,086	45,235	43,180	45,364	39,787	41,519	39,597	43,885	44,368	42,881	307,617	266,797	1.6-2.0	1.8
	New England	2,579	2,498	2,649	2,421	2,654	2,623	2,766	2,225	2,453	2,252	2,542	2,635	2,485	18,190	15,711	6-7	6
	Middle Atlantic	10,360	9,782	10,975	9,665	9,837	9,752	10,237	9,487	10,247	10,147	10,267	10,842	10,393	70,608	62,652	3-4	4
	East North Central	6,872	6,301	6,626	6,937	7,428	6,874	7,207	6,380	6,539	5,902	7,113	6,994	6,445	48,241	43,439	3-4	4
	West North Central	5,109	4,795	5,004	5,636	5,777	5,234	5,526	5,512	5,301	5,021	5,935	5,640	5,192	37,081	35,138	3-4	4
	South Atlantic	4,353	4,322	4,431	4,410	4,457	4,291	4,270	3,646	3,894	3,762	4,017	4,038	4,119	30,535	26,439	3-5	4
	East South Central	2,071	2,095	2,174	2,298	2,227	2,058	1,993	1,817	1,844	1,664	2,100	2,064	2,146	14,916	12,645	3-5	4
	West South Central	5,560	5,486	5,686	5,643	5,768	5,479	6,072	4,546	4,785	4,771	5,173	5,481	5,520	39,694	28,976	6-10	8
	Pacific	5,121	5,000	5,154	5,519	5,429	5,130	5,422	4,790	4,982	4,599	5,270	5,134	4,972	36,774	32,170	4-5	5

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

[p]Preliminary estimate. See p. 15, Sample Design and Estimation Procedure. [r]Revised.

[1]See map on page 7.
[2]The range of sampling error of the estimate is based on data for the period September 1979 thru February 1980.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: July 1980

(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 1980 from June 1980	Sales: July 1980 from July 1979	Sales: 7 months 1980 from 7 months 1979	Inventories: July 1980 from June 1980	Inventories: July 1980 from July 1979	Sampling errors of the ratio corresponding to the percent change in columns[2]--			
		A	B	C	D	E	A	B	D	E
	Merchant wholesalers, total	+3	+9	+11	+1	+8	0.7	1.2	0.3	0.9
	New England	+7	+24	+14	+2	+16	2.1	4.8	0.9	4.2
	Middle Atlantic	+3	+6	+10	+2	+11	1.7	3.2	0.8	2.6
	East North Central	+1	+1	+4	0	+4	1.3	2.5	0.5	2.4
	West North Central	+5	-2	+4	+3	+3	1.4	2.4	0.8	2.2
	South Atlantic	-2	+10	+10	0	+9	1.1	2.4	0.6	2.0
	East South Central	-1	+10	+12	-3	-3	2.3	3.4	0.9	2.8
	West South Central	+8	+27	+27	0	+6	2.0	4.5	0.8	2.5
	Mountain	+4	+18	+11	-1	+16	2.1	3.4	1.1	3.4
	Pacific	+2	+8	+11	-1	+11	1.0	2.4	0.6	2.2
50	Durable goods, total	0	+3	+5	0	+9	0.9	2.3	0.4	1.1
	New England	+10	+23	+11	+3	+11	4.3	10.7	1.1	6.0
	Middle Atlantic	0	+3	+7	+1	+12	2.1	6.3	1.0	3.5
	East North Central	-4	-12	-4	-2	+2	1.6	3.1	0.6	3.2
	West North Central	+3	-7	+1	-2	+7	2.3	5.0	1.1	2.7
	South Atlantic	-3	+3	+5	+1	+8	1.5	3.7	0.8	2.8
	East South Central	+1	+10	+4	-2	+1	4.2	6.0	1.4	4.5
	West South Central	+4	+19	+16	-1	+7	3.0	5.1	0.8	3.3
	Mountain	-1	0	+1	-2	+13	3.2	6.1	1.3	4.7
	Pacific	-1	+3	+8	-1	+11	1.6	3.4	0.8	2.8
51	Nondurable goods, total	+5	+14	+15	+3	+8	0.8	1.3	0.5	1.2
	New England	+5	+24	+16	+2	+21	1.9	3.8	1.2	4.5
	Middle Atlantic	+5	+8	+13	+3	+10	2.0	3.1	0.8	3.6
	East North Central	+5	+13	+11	+5	+9	2.1	2.8	1.0	3.3
	West North Central	+6	0	+6	+10	-3	1.9	2.7	1.2	3.1
	South Atlantic	0	+17	+15	-1	+11	1.8	2.9	1.1	3.0
	East South Central	-3	+10	+18	-5	-10	1.6	3.6	1.8	3.1
	West South Central	+11	+34	+37	+3	+5	2.6	6.3	1.6	4.5
	Mountain	+7	+35	+20	+3	+24	2.0	5.2	1.7	5.8
	Pacific	+6	+13	+14	-1	+11	1.7	2.9	1.0	3.4
5013,4	Automotive parts and supplies, tires and tubes	0	+10	0	-1	+3	2	4	1	3
	New England	(S)	(S)	+7	0	-24	(*)	(*)	3	14
	Middle Atlantic	+6	(S)	-1	+1	+19	4	8	1	7
	East North Central	-1	+4	-9	-1	+4	3	8	1	5
	West North Central	-2	-2	-10	-1	+3	3	13	2	11
	South Atlantic	-4	+6	-1	0	+1	4	10	2	8
	East South Central	+3	+22	+1	+3	+11	3	12	3	12
	West South Central	0	+10	+5	-5	-16	3	10	2	10
	Mountain	+7	(S)	-13	+5	(S)	6	(*)	3	(*)
	Pacific	-3	+17	+12	-6	+11	3	6	2	12
502	Furniture and home furnishings	-4	+7	+12	+1	+6	3	4	1	3
	Middle Atlantic	-5	+9	+14	+2	0	6	10	1	8
	East North Central	-16	-11	+7	-5	-4	6	13	2	8
	West North Central	+4	(S)	+15	-1	+12	6	(*)	3	10
	West South Central	-12	-4	-9	-1	+3	4	10	2	10
	Pacific	+4	+2	+11	0	+1	6	12	2	10
503	Lumber and other construction materials	+4	-12	-10	-2	-6	2	3	1	3
	New England	(S)	+3	-2	-2	+27	(*)	14	3	12
	Middle Atlantic	+9	-1	-5	0	-9	6	11	2	12
	East North Central	+3	-16	-15	-5	-8	4	3	2	9
	West North Central	-5	-32	-15	-3	-10	7	11	4	12
	South Atlantic	-3	-8	+2	-4	-11	4	9	2	8
	East South Central	+26	-8	-19	-6	-18	7	13	2	12
	West South Central	+3	+8	+11	+2	-2	5	13	2	10
	Pacific	+7	-14	-18	-1	-1	4	9	2	9
5051 pt.	Ferrous metals service centers	-9	-12	+6	-2	+13	3	4	1	3
	New England	-7	(S)	-3	+7	(S)	7	(*)	6	(*)
	Middle Atlantic	-13	-8	+12	-1	+13	6	9	2	12
	East North Central	-10	-24	-7	-2	+3	5	7	1	6
	West North Central	-1	-20	-11	-8	-1	5	10	2	9
	South Atlantic	+2	(S)	-2	-1	(S)	5	(*)	2	(*)
	East South Central	-12	-18	+6	+1	+10	3	11	2	14
	West South Central	-2	+4	+24	-3	+28	4	10	2	9
	Mountain	+3	(S)	+46	-1	(S)	3	(*)	3	(*)
	Pacific	-14	(S)	+19	-6	(S)	5	(*)	4	(*)
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-2	+3	+9	+2	+9	3	4	1	3
	New England	-3	-26	-5	0	-2	4	12	2	12
	Middle Atlantic	+4	+6	+7	+8	+24	4	11	2	7
	East North Central	-5	-3	+11	+2	+14	3	8	2	7
	West North Central	-5	-22	-9	-4	-6	5	12	3	12
	South Atlantic	+2	+17	+18	-1	+10	3	8	2	8
	East South Central	(S)	(S)	-8	+3	+3	(*)	(*)	3	14
	West South Central	+13	(S)	+24	-1	(S)	7	(*)	3	(*)
	Mountain	-6	+19	+7	0	+22	4	14	2	11
	Pacific	-16	-9	+9	-3	0	4	10	2	6

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 1980—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 column[2]--			
		Sales			Inventories					
		July 1980 from June 1980	July 1980 from July 1979	7 months 1980 from 7 months 1979	July 1980 from June 1980	July 1980 from July 1979				
		A	B	C[1]	D	E	A	B	D	E
5064, 5	Electrical appliances, TV and ratio sets, and electronic parts and equipment	+4	+17	+16	+2	+4	2	4	1	4
	Middle Atlantic	+13	+28	+20	-2	-6	4	9	2	10
	East North Central	+2	+4	+15	+1	+7	5	10	2	13
	West North Central	-5	(S)	+38	-2	(S)	5	(*)	2	(*)
	South Atlantic	0	+3	+7	+2	+3	4	12	2	7
	West South Central	0	+15	+31	0	+20	4	13	2	12
	Mountain	(S)	(S)	-13	+4	+18	(*)	(*)	3	13
	Pacific	-7	+5	+9	+6	+4	7	11	3	9
5072	Hardware	-5	0	+6	+1	+13	2	3	1	3
	New England	-6	-9	+4	-4	-12	4	13	3	14
	Middle Atlantic	-2	-7	+3	+6	+11	3	9	2	11
	East North Central	-18	-17	+4	0	+8	4	9	4	10
	West North Central	-1	-9	+7	-1	-2	4	7	2	6
	South Atlantic	+1	+8	+5	+2	+17	3	8	2	10
	East South Central	-1	-1	+8	-4	0	4	10	2	9
	Pacific	+6	(S)	+11	0	(S)	3	10	2	11
5074	Plumbing and heating equipment and supplies (hydronics)	+2	-7	+2	-4	0	2	5	1	9
	Middle Atlantic	+2	+5	+7	-1	(S)	6	14	3	(*)
	East North Central	-7	-25	-11	-6	(S)	7	14	2	(*)
	South Atlantic	-3	-13	-2	-5	-7	3	11	2	9
	Mountain	-6	(S)	+16	-4	+47	4	(*)	2	14
	Pacific	+2	-22	-2	-3	+4	4	14	2	11
5084, 5	Industrial machinery, equipment, and supplies	-2	+17	+13	+2	+19	2	5	1	3
	Middle Atlantic	-9	0	+7	+5	+19	5	9	2	7
	East North Central	-12	-11	+1	-1	+15	4	6	1	6
	West South Central	+14	(S)	+29	-2	+14	4	(*)	1	6
	Pacific	-4	+21	+15	+3	+18	3	8	2	8
512	Drugs, drug proprietaries, and druggists' sundries	+7	+12	r+9	+3	0	2	3	1	4
	New England	+1	+7	+11	+7	+7	3	12	3	14
	Middle Atlantic	+3	+13	+11	+6	-15	4	8	2	7
	East North Central	+9	+17	+9	+8	+4	4	8	2	8
	West North Central	+11	+6	+7	0	+1	5	12	2	9
	South Atlantic	+6	+14	+6	-2	+7	2	10	2	8
	East South Central	+13	-4	+3	-3	-19	2	9	2	10
	West South Central	+2	+11	+19	+1	+11	2	12	2	14
	Mountain	+7	+9	+14	+1	+5	1	7	1	6
	Pacific	+10	+23	+5	+3	(S)	2	13	1	(*)
5141	Groceries, general-line	+8	+17	+12	+2	+4	1	2	0	2
	New England	-11	+15	+7	0	+2	2	6	2	7
	Middle Atlantic	+10	+12	+7	+3	-1	1	3	1	7
	East North Central	+7	+18	+16	+3	+8	1	4	1	5
	West North Central	+4	+13	+10	0	-10	2	5	2	7
	South Atlantic	+9	+24	+13	0	+4	2	5	1	4
	West South Central	+7	+4	+11	+5	+1	2	7	2	6
	Mountain	+9	(S)	+22	+3	(S)	2	6	2	9
	Pacific	+8	+14	+11	+1	+9	0	3	1	3
5142,3,6,9	Specialty-line groceries	+8	+21	+13	-7	+6	1	3	1	4
	Middle Atlantic	+16	+28	+16	-16	+11	2	5	2	7
	East North Central	+2	+4	+2	+3	-4	3	6	1	6
	West North Central	+6	+16	+16	-3	-8	3	5	1	6
	South Atlantic	-8	+10	+3	-7	-14	4	13	2	13
	East South Central	+8	-9	-15	-8	(S)	4	12	2	13
5148	Fresh fruits and vegetables	+1	+23	+6	-5	+8	2	3	2	7
	Middle Atlantic	+14	+12	-4	+5	+19	3	9	5	14
	East North Central	+3	+6	-1	0	+3	3	8	3	10
	West North Central	+2	+16	-8	-10	(S)	4	14	3	(*)
	West South Central	0	+24	+12	-1	(S)	7	13	3	(*)
	Pacific	+1	+31	+18	-3	+18	6	9	2	10
5194	Tobacco and tobacco products	+9	+9	+2	+1	0	1	4	1	5
	New England	+33	+4	-2	+6	(S)	3	14	3	(*)
	Middle Atlantic	+11	+16	-3	-3	(S)	4	14	3	(*)
	East North Central	+4	+6	-2	+1	-3	2	10	2	11
	West North Central	+20	(S)	+19	+11	(S)	6	(*)	6	(*)
	South Atlantic	+7	-3	-20	+1	-13	4	14	3	12
	East South Central	+5	(S)	+1	+3	(S)	3	(*)	4	(*)
	West South Central	+3	(S)	+13	-2	-11	3	(*)	4	11
	Mountain	+2	(S)	+15	-6	(S)	3	(*)	5	(*)
	Pacific	+6	+25	+17	+3	-15	2	10	3	12

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, B, D and E are based on medians or measurements on data for September 1979 through February 1980.

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

(Coefficients of variation in percent)

1972 SIC code	Kind of business	SALES						INVENTORIES					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Median sampling error of the ratio of:		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Median sampling error of the ratio of:	
		Range	Median	Range	Median	Two consecutive months	Same month a year ago	Range	Median	Range	Median	Two consecutive months	Same month a year ago
	Merchant wholesalers, total	1.4-1.8	1.6	1.4-1.6	1.5	0.6	1.0	1.3-1.5	1.4	1.2-1.4	1.4	0.3	0.9
	Total (excluding farm-product raw materials)	1.4-1.9	1.6	1.3-1.6	1.4	0.6	1.1	1.4-1.7	1.5	1.2-1.5	1.5	0.3	0.9
50	Durable goods, total	1.5-3.2	2.0	1.4-2.4	1.6	1.0	1.7	1.0-1.5	1.4	1.0-1.4	1.3	0.4	1.1
501	Motor vehicles and automotive parts and supplies	3.6-4.6	3.9	3.2-4.4	3.6	1.7	2.8	2.2-3.5	3.0	2.6-3.5	2.7	0.8	2.6
5012	Automobiles and other motor vehicles	(*)	(*)	(*)	(*)	2.8	5.4	(*)	(*)	(*)	(*)	1.8	5.5
5013,4	Automotive parts and supplies, tires and tubes	3.3-4.7	4.0	3.0-4.9	3.6	1.7	3.1	3.0-4.1	3.7	2.8-3.9	3.4	1.2	3.0
5013	Automotive parts and supplies	3.8-5.9	4.7	3.6-5.9	4.2	2.1	3.8	3.8-5.0	4.5	3.5-4.6	4.2	1.3	3.2
502	Furniture and home furnishings	4.7-7.0	5.7	4.3-6.1	5.1	2.9	4.0	4.0-4.6	4.2	3.9-4.5	4.2	0.9	3.3
5021	Furniture--household and office	4.9-6.5	6.0	4.3-7.1	6.0	4.1	5.7	(*)	(*)	(*)	(*)	1.5	5.1
5021 pt.	Household furniture	(*)	(*)	(*)	(*)	6.2	11.2	(*)	(*)	(*)	(*)	1.5	8.7
5021 pt.	Office furniture	(*)	(*)	(*)	(*)	4.9	6.5	(*)	(*)	(*)	(*)	1.9	5.2
5023	Home furnishings	6.7-9.2	7.6	5.5-8.1	6.6	3.3	5.1	5.0-6.3	5.6	5.0-6.1	5.7	1.1	4.5
503	Lumber and other construction materials	4.2-5.8	4.8	4.4-5.4	4.7	2.3	3.5	5.0-6.7	5.6	5.0-6.6	5.9	0.9	2.9
5031	Lumber, plywood, and millwork	5.7-7.7	6.3	5.1-6.6	5.9	3.3	4.5	7.0-9.0	7.9	7.2-8.6	8.1	1.2	3.6
5039	Construction materials, n.e.c.	5.0-6.9	6.0	5.1-6.5	5.7	3.1	5.9	(*)	(*)	(*)	(*)	1.1	4.8
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(*)	(*)	(*)	(*)	3.5	5.1	(*)	(*)	(*)	(*)	1.6	4.6
505	Metals and minerals, except petroleum	4.3-16.8	8.7	5.1-14.4	8.2	2.4	5.4	6.2-9.3	7.6	5.7-10.2	8.1	1.2	5.2
5051 pt.	Ferrous metals service centers and offices	4.3-6.2	5.2	3.9-6.5	4.6	2.5	3.3	3.9-4.7	4.3	4.0-4.5	4.2	0.8	3.0
5051 pt.	Ferrous metals service centers	4.8-7.1	5.1	4.9-5.2	5.1	2.8	3.6	2.8-5.5	4.6	3.1-4.8	4.0	0.9	3.4
5051 pt.	Nonferrous metals service centers and offices	(*)	(*)	(*)	(*)	4.1	23.3	(*)	(*)	(*)	(*)	5.2	22.5
506	Electrical goods	3.8-5.0	4.1	3.3-4.6	3.6	2.3	3.0	3.2-4.8	3.5	3.3-4.6	3.5	0.7	2.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	3.7-6.7	4.5	3.3-6.9	4.1	3.1	4.5	3.2-5.1	3.5	3.2-4.5	3.3	0.8	2.9
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	5.2-7.4	6.0	5.0-6.6	5.6	2.8	4.4	3.9-6.9	4.4	3.8-6.5	4.7	1.2	4.1
5064	Electrical appliances, TV and radio sets	4.9-8.2	6.4	5.1-6.7	5.5	2.8	4.3	(*)	(*)	(*)	(*)	1.3	5.0
507	Hardware, plumbing, heating equipment, and supplies	3.1-4.5	3.5	2.9-3.7	3.3	1.6	2.3	2.8-4.2	3.6	2.9-4.2	3.5	0.8	3.8
5072	Hardware	2.6-3.8	3.6	2.8-3.9	3.2	1.6	2.9	4.7-6.3	5.6	4.5-6.1	5.7	1.3	3.5
5074	Plumbing and heating equipment and supplies (hydronics)	5.4-7.7	6.4	5.1-6.6	5.9	2.9	5.4	5.0-6.0	5.4	4.7-5.6	5.3	1.3	8.6
5075	Warm air heating and air conditioning equipment and supplies	(*)	(*)	(*)	(*)	4.1	5.7	(*)	(*)	(*)	(*)	1.2	5.1
508	Machinery, equipment, and supplies	2.9-4.5	3.3	2.6-3.2	2.8	1.8	3.3	1.8-2.4	2.2	1.8-2.3	2.1	0.4	1.8
5081	Commercial machines and equipment	(*)	(*)	(*)	(*)	4.4	6.6	(*)	(*)	(*)	(*)	1.5	5.7
5082	Construction and mining machinery and equipment	4.8-6.6	5.4	4.1-5.1	4.5	3.9	5.4	3.8-5.3	4.2	3.9-4.9	4.1	1.1	4.1
5083	Farm and garden machinery and equipment	(*)	(*)	(*)	(*)	6.0	9.8	(*)	(*)	(*)	(*)	1.4	4.7
5084,5	Industrial machinery, equipment, and supplies	3.2-4.1	3.3	2.4-3.4	2.8	2.5	4.9	3.2-4.2	3.8	3.1-3.8	3.5	0.6	2.5
5086	Professional equipment and supplies	(*)	(*)	(*)	(*)	2.7	4.7	(*)	(*)	(*)	(*)	1.1	5.2
5093	Scrap and waste materials	4.2-5.4	5.1	4.2-5.3	4.7	2.2	3.9	(*)	(*)	(*)	(*)	1.3	3.2
5093 pt.	Iron and steel scrap	(*)	(*)	(*)	(*)	2.2	5.0	(*)	(*)	(*)	(*)	1.5	4.3
5093 pt.	Waste materials	(*)	(*)	(*)	(*)	3.9	6.9	(*)	(*)	(*)	(*)	2.2	5.4
51	Nondurable goods, total	1.8-2.1	1.9	1.6-2.0	1.9	0.8	1.2	2.6-3.0	2.8	2.6-2.8	2.7	0.5	1.3
	Total (excluding farm-product raw materials)	1.9-2.4	2.1	1.7-2.3	2.0	0.9	1.4	3.3-3.6	3.5	3.2-3.5	3.3	0.4	1.4
5111	Paper and paper products	4.6-7.7	5.2	4.5-6.9	4.9	1.5	3.0	4.6-7.3	6.3	4.6-7.1	5.9	0.8	3.4
5111,3	Printing, writing, industrial, and personal service paper	3.0-5.1	3.3	3.0-4.6	3.2	1.1	2.3	5.0-6.9	6.4	4.9-6.9	6.3	0.8	3.1
5111	Printing and writing paper	2.6-3.9	2.8	2.4-3.4	2.7	1.3	2.7	3.9-4.9	4.3	3.7-4.8	4.2	0.7	3.2
5113	Industrial and personal service paper	4.4-7.7	5.0	4.4-6.8	4.5	1.9	4.8	7.3-11.4	9.9	6.9-11.2	9.7	1.3	4.2
512	Drugs, drug proprietaries, and druggists' sundries	2.3-3.1	2.7	2.2-2.9	2.7	1.5	3.1	3.6-5.1	4.4	4.0-5.1	4.6	1.4	4.0
5122	Drugs, drug proprietaries, and druggists' sundries	2.3-3.1	2.7	2.2-2.9	2.7	1.5	3.1	(*)	(*)	(*)	(*)	1.4	4.0
5122 pt.	General-line drugs	6.0-6.9	6.6	6.0-6.9	6.6	1.1	4.1	(*)	(*)	(*)	(*)	0.9	6.6
513	Apparel, piece goods, and notions	12.0-15.7	13.2	10.9-14.6	13.4	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
514	Groceries and related products	1.7-2.4	2.2	1.8-2.3	2.1	0.5	1.3	1.6-2.2	1.8	1.6-2.0	1.8	0.4	1.6
5141	Groceries, general-line	2.6-3.4	3.3	2.8-3.3	3.1	0.6	1.7	1.9-2.8	2.2	1.7-2.7	1.9	0.5	1.7
5141 pt.	Voluntary groups	(*)	(*)	(*)	(*)	0.7	2.1	(*)	(*)	(*)	(*)	0.7	2.8
5141 pt.	Retailer cooperatives	(*)	(*)	(*)	(*)	0.6	1.8	(*)	(*)	(*)	(*)	0.6	2.3
5141 pt.	Other general-lines	(*)	(*)	(*)	(*)	1.3	2.8	(*)	(*)	(*)	(*)	1.0	3.7
5142,3,6,9	Specialty-line groceries	(*)	(*)	(*)	(*)	1.2	3.3	(*)	(*)	(*)	(*)	1.0	3.6
5144	Poultry and poultry products	5.6-7.2	6.5	5.4-7.2	6.7	1.8	3.2	(*)	(*)	(*)	(*)	1.5	5.2
5145	Confectionery	5.1-12.9	6.7	4.8-9.5	6.6	2.7	5.5	(*)	(*)	(*)	(*)	1.7	4.0
5147	Meats and meat products	5.6-7.0	6.8	5.4-6.9	6.5	1.5	4.2	(*)	(*)	(*)	(*)	1.4	6.3
5148	Fresh fruits and vegetables	4.0-5.7	4.4	3.5-5.0	4.7	2.3	3.2	(*)	(*)	(*)	(*)	2.6	6.2
515	Farm-product raw materials	2.6-5.2	3.0	2.1-4.6	3.4	2.3	2.9	(*)	(*)	(*)	(*)	1.5	4.0
5152	Cotton	(*)	(*)	(*)	(*)	6.9	10.2	(*)	(*)	(*)	(*)	1.0	2.5
5153	Grain	3.2-5.9	3.8	2.6-5.3	3.9	2.5	3.3	(*)	(*)	(*)	(*)	1.7	5.0
517	Petroleum and petroleum products	5.1-7.8	7.1	4.9-8.0	6.2	2.0	4.1	5.6-6.5	5.8	5.1-6.1	5.6	1.7	3.3
5171	Petroleum bulk stations and terminals	3.5-5.1	4.0	3.1-4.2	3.9	1.7	3.7	(*)	(*)	(*)	(*)	2.1	3.9
518	Beer, wine, and distilled alcoholic beverages	4.5-5.9	4.9	4.3-5.5	4.9	1.2	3.0	3.8-5.0	4.2	3.9-5.0	4.3	1.4	3.2
5181	Beer and ale	5.2-6.1	5.8	5.4-6.2	5.7	1.4	3.5	7.9-10.2	8.1	7.7-9.9	8.8	2.7	4.7
5182	Wines and distilled alcoholic beverages	5.1-7.2	5.7	5.1-6.9	5.7	1.9	4.1	3.4-5.0	4.4	3.7-4.6	4.0	1.3	4.5
519	Miscellaneous nondurable goods	2.5-4.9	3.9	2.5-3.9	3.4	1.9	3.2	(*)	(*)	(*)	(*)	0.9	2.7
5191	Farm supplies	(*)	(*)	(*)	(*)	4.4	5.7	(*)	(*)	(*)	(*)	1.6	4.5
5194	Tobacco and tobacco products	5.6-6.7	6.1	5.3-6.8	5.8	1.3	3.9	(*)	(*)	(*)	(*)	1.3	4.7
5198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.4	6.8	(*)	(*)	(*)	(*)	1.1	5.8
5199 pt.	Books, periodicals, newspapers	(*)	(*)	(*)	(*)	6.6	17.4	(*)	(*)	(*)	(*)	1.4	14.4

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 August 1979 through January 1980.

* 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 1979-December 1980

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	94.6	91.5	104.4	100.2	106.1	101.7	98.6	104.3	95.7	105.3	101.1	96.0
	Total (excluding farm-product raw materials)	93.4	91.2	104.0	100.1	106.4	102.6	98.8	105.9	96.8	105.4	99.9	95.0
50	Durable goods, total	91.6	89.2	103.2	101.6	107.4	103.5	99.6	107.5	97.7	107.7	98.7	92.4
501	Motor vehicles and automotive parts and supplies	93.4	90.7	106.9	109.1	112.2	103.6	101.6	104.8	91.3	100.7	94.4	89.9
502	Furniture and home furnishings	88.6	89.3	102.8	98.2	102.9	102.5	93.0	104.2	101.2	115.7	106.8	93.5
503	Lumber and other construction materials	81.7	79.4	98.6	97.5	108.3	108.9	106.6	117.6	102.9	114.9	100.7	84.5
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	81.7	85.0	101.4	99.9	103.6	99.9	96.0	107.0	105.9	113.9	104.7	100.8
505	Metals and minerals, except petroleum	97.1	92.7	103.1	102.3	107.8	101.3	96.1	109.0	100.1	102.9	96.9	89.2
506	Electrical goods	90.5	88.7	100.1	97.3	102.6	103.0	99.5	106.4	98.6	111.8	102.4	99.1
507	Hardware, plumbing, heating equipment, and supplies	91.9	86.2	97.4	100.6	108.4	104.2	104.4	108.6	98.8	111.5	98.8	89.9
508	Machinery, equipment, and supplies	89.8	88.3	106.4	102.7	109.1	105.0	97.2	105.2	99.4	107.1	97.0	92.9
509	Miscellaneous durable goods	87.9	89.9	109.2	100.0	101.5	104.3	92.9	108.5	98.5	109.0	104.2	93.1
51	Nondurable goods, total	98.1	92.4	105.7	99.6	105.3	100.4	97.9	101.5	93.9	102.7	102.5	99.4
	Total (excluding farm-product raw materials)	96.7	92.9	104.8	99.6	105.3	101.4	98.1	104.3	95.2	102.6	101.4	97.1
511	Paper and paper products	99.5	93.0	104.5	95.1	104.0	101.5	96.2	106.8	96.8	108.5	99.3	95.0
512	Drugs, drug proprietaries, and druggists' sundries	99.3	91.7	103.8	98.9	102.0	96.6	98.3	103.6	97.2	110.4	101.4	96.5
513	Apparel, piece goods, and notions	93.5	91.9	103.7	92.8	102.9	94.7	95.8	115.6	105.0	114.0	102.3	87.6
514	Groceries and related products	98.0	91.3	104.1	98.8	106.0	102.1	99.6	103.8	95.6	103.9	100.3	96.6
515	Farm-product raw materials[1]	103.0	92.5	110.2	99.3	104.0	98.9	98.2	92.3	87.7	105.9	108.3	100.7
516	Chemicals and allied products	93.9	88.1	102.1	99.4	109.9	104.3	99.0	109.7	94.3	106.4	100.1	92.7
517	Petroleum and petroleum products	100.9	102.3	105.2	98.1	99.0	97.2	98.7	100.0	91.3	100.4	103.7	102.4
518	Beer, wine, and distilled alcoholic beverages	81.5	81.6	98.8	95.2	107.0	109.2	101.5	108.5	93.4	104.3	106.5	111.6
519	Miscellaneous nondurable goods	96.2	97.2	112.6	106.4	110.3	104.2	91.9	97.2	93.2	97.6	97.4	95.2
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.4	101.3	102.4	101.4	100.1	99.3	98.8	97.9	98.3	99.8	100.4	100.1
	Total (excluding farm-product raw materials)	98.9	100.1	101.4	100.9	100.9	100.8	100.4	99.6	99.4	99.8	99.4	98.9
50	Durable goods, total	98.4	100.1	100.9	100.9	101.4	101.9	101.1	100.3	99.4	98.9	98.6	98.6
501	Motor vehicles and automotive parts and supplies	101.4	105.9	101.9	100.4	101.6	99.6	99.3	97.3	96.3	98.1	98.9	99.6
502	Furniture and home furnishings	98.8	99.1	99.6	99.6	101.1	102.8	100.6	100.8	101.8	99.9	99.1	97.3
503	Lumber and other construction materials	98.1	99.1	103.1	102.8	103.1	102.3	102.1	99.9	98.9	97.8	96.1	97.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	95.8	99.8	100.9	102.6	102.4	106.4	105.8	101.1	101.8	100.8	93.3	89.8
505	Metals and minerals, except petroleum	98.4	97.8	99.8	99.1	101.4	100.9	102.6	104.4	101.3	97.4	98.9	98.6
506	Electrical goods	96.6	96.4	98.8	99.4	101.4	102.4	101.6	102.1	101.4	100.8	100.4	99.1
507	Hardware, plumbing, heating equipment, and supplies	97.1	98.4	101.9	105.6	103.4	103.1	102.4	99.9	97.9	98.4	95.9	96.1
508	Machinery, equipment, and supplies	98.6	100.6	101.6	100.4	101.3	101.9	100.4	99.8	99.9	98.6	98.4	98.8
509	Miscellaneous durable goods	97.6	98.1	96.6	97.9	97.1	100.4	102.9	102.3	102.6	103.3	102.3	99.4
51	Nondurable goods, total	103.8	103.1	104.8	101.1	97.8	95.4	94.6	94.4	96.3	101.3	104.1	103.4
	Total (excluding farm-product raw materials)	100.1	99.9	101.9	100.9	99.8	98.6	98.6	98.1	99.6	101.6	101.1	100.1
511	Paper and paper products	97.3	98.1	99.4	100.9	100.3	102.6	99.9	99.3	101.1	100.6	100.1	100.9
512	Drugs, drug proprietaries, and druggists' sundries	95.3	96.3	100.1	100.8	98.8	100.6	100.1	100.3	103.9	105.3	100.8	98.4
513	Apparel, piece goods, and notions	101.1	100.6	97.9	98.9	101.4	100.6	101.4	101.1	98.9	99.1	98.8	100.4
514	Groceries and related products	98.6	99.9	101.9	100.6	99.6	98.9	98.4	97.9	99.9	102.4	100.9	101.1
515	Farm-product raw materials[1]	119.1	117.2	116.2	104.9	89.8	82.8	80.5	77.8	81.3	98.4	115.4	116.3
516	Chemicals and allied products	98.1	100.8	101.4	101.3	103.4	102.1	102.8	99.6	100.4	96.6	96.3	97.3
517	Petroleum and petroleum products	102.4	98.6	99.6	94.4	98.4	93.3	96.8	101.1	104.4	104.4	104.3	103.1
518	Beer, wine, and distilled alcoholic beverages	96.6	94.6	99.3	101.4	103.1	102.9	101.1	97.3	99.4	105.9	104.6	93.8
519	Miscellaneous nondurable goods	104.6	105.6	108.3	102.6	99.1	93.3	95.4	95.9	96.1	99.1	99.3	100.6

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1979-December 1980—Continued

1972 SIC code	Kind of business	1980											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	95.4	95.2	101.1	103.3	103.3	101.6	101.9	98.6	100.6	105.8	95.5	100.8
	Total (excluding farm-product raw materials)	94.1	95.2	100.4	103.9	103.6	101.8	102.3	100.3	101.5	106.0	94.8	100.3
50	Durable goods, total	92.3	92.7	99.8	105.0	104.2	103.4	103.2	101.3	103.6	107.7	93.0	97.9
501	Motor vehicles and automotive parts and supplies	95.2	94.3	103.6	114.2	108.1	102.7	104.2	101.3	95.1	100.4	90.7	94.7
502	Furniture and home furnishings	89.5	93.2	99.8	101.8	100.0	101.9	96.5	98.9	104.5	117.2	101.9	98.3
503	Lumber and other construction materials	81.0	83.9	94.0	101.1	106.2	107.1	109.4	110.4	112.2	115.0	92.5	90.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	80.2	86.3	101.3	106.6	99.2	97.7	101.2	101.7	109.7	110.5	104.8	107.0
505	Metals and minerals, except petroleum	96.9	97.4	101.3	107.0	101.9	102.5	98.8	103.2	105.2	102.7	92.3	95.8
506	Electrical goods	91.0	91.5	97.3	100.6	100.0	102.6	103.4	100.5	103.9	111.4	97.5	104.1
507	Hardware, plumbing, heating equipment, and supplies	92.2	88.9	95.3	103.7	105.2	104.6	107.7	102.9	104.0	110.7	94.3	94.6
508	Machinery, equipment, and supplies	90.7	91.5	102.2	105.8	107.2	104.1	101.4	98.8	104.7	108.1	91.1	97.5
509	Miscellaneous durable goods	89.3	94.3	104.4	102.6	99.5	103.8	95.3	102.3	106.6	109.8	95.4	98.3
51	Nondurable goods, total	98.8	96.0	102.4	102.8	102.9	100.1	101.4	96.3	98.3	103.3	97.1	104.3
	Total (excluding farm-product raw materials)	97.7	97.0	101.1	102.5	103.0	100.9	101.5	98.6	99.8	103.7	95.4	102.0
511	Paper and paper products	99.6	97.1	100.3	100.0	101.4	99.2	100.9	99.7	102.7	108.5	93.3	101.7
512	Drugs, drug proprietaries, and druggists' sundries	100.6	95.0	100.4	103.1	98.0	96.7	101.8	98.1	103.5	109.9	95.7	102.5
513	Apparel, piece goods, and notions	95.1	93.4	101.2	97.8	98.3	94.1	101.9	108.6	108.1	113.6	99.6	92.4
514	Groceries and related products	98.7	94.8	100.6	101.9	104.7	100.2	103.4	99.0	99.5	104.5	95.8	100.6
515	Farm-product raw materials[1]	101.3	96.0	107.3	102.6	103.4	97.2	100.8	88.6	92.9	104.2	103.6	105.4
516	Chemicals and allied products	94.3	92.6	98.8	103.4	105.8	104.4	102.0	103.6	99.6	106.8	94.2	99.2
517	Petroleum and petroleum products	101.2	107.8	102.9	97.8	98.6	97.9	97.9	97.6	95.4	100.9	98.6	105.5
518	Beer, wine, and distilled alcoholic beverages	82.3	85.6	94.2	100.0	103.0	108.2	106.8	100.0	99.6	105.8	98.3	120.1
519	Miscellaneous nondurable goods	96.7	101.7	108.5	107.4	109.2	104.9	94.0	92.1	98.3	99.0	90.9	98.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	100.3	101.3	102.4	101.6	100.1	99.4	98.8	97.9	98.3	99.6	100.4	100.1
	Total (excluding farm-product raw materials)	98.9	100.1	101.4	100.9	100.9	100.9	100.4	99.6	99.4	99.8	99.3	98.9
50	Durable goods, total	98.4	100.1	101.1	100.8	101.4	101.9	101.1	100.3	99.4	98.9	98.6	98.6
501	Motor vehicles and automotive parts and supplies	101.4	106.3	101.9	100.4	101.6	99.6	99.3	97.4	96.1	98.1	98.9	99.6
502	Furniture and home furnishings	98.8	99.1	99.6	99.6	101.1	102.9	100.6	100.6	101.9	99.9	99.1	97.3
503	Lumber and other construction materials	97.9	99.1	103.1	102.8	103.1	102.3	102.1	99.8	98.9	97.9	96.1	97.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	95.6	99.6	101.1	102.9	102.3	106.4	105.9	101.1	101.9	100.8	93.3	89.8
505	Metals and minerals, except petroleum	98.3	97.8	99.6	98.9	101.6	100.9	102.6	104.6	101.3	97.3	98.9	98.4
506	Electrical goods	96.6	96.4	98.8	99.4	101.4	102.4	101.6	102.1	101.4	100.8	100.4	99.1
507	Hardware, plumbing, heating equipment, and supplies	97.1	98.6	101.9	105.9	103.4	103.1	102.4	99.9	97.8	98.3	95.8	96.1
508	Machinery, equipment, and supplies	98.6	100.6	101.6	100.4	101.3	101.9	100.4	99.9	100.1	98.6	98.4	98.8
509	Miscellaneous durable goods	97.6	98.1	96.6	97.8	97.1	100.3	102.9	102.1	102.8	103.1	102.1	99.3
51	Nondurable goods, total	103.8	103.1	104.9	101.3	98.1	95.6	94.6	94.3	96.3	101.1	103.9	103.4
	Total (excluding farm-product raw materials)	100.1	99.8	102.1	101.1	99.9	98.6	98.6	98.1	99.6	101.6	100.9	100.1
511	Paper and paper products	97.1	98.1	99.4	100.9	100.4	102.6	99.9	99.1	101.1	100.6	100.1	100.9
512	Drugs, drug proprietaries, and druggists' sundries	95.1	96.3	100.1	100.8	98.8	100.6	100.1	100.3	104.1	105.3	100.6	98.4
513	Apparel, piece goods, and notions	101.1	100.8	97.9	98.9	101.4	100.8	101.4	101.1	98.9	99.1	98.8	100.4
514	Groceries and related products	98.6	99.9	101.9	100.6	99.6	99.1	98.4	97.9	100.1	102.4	100.9	101.1
515	Farm-product raw materials[1]	119.1	117.4	116.9	105.6	90.3	82.8	80.3	77.4	80.8	98.1	115.4	116.4
516	Chemicals and allied products	98.1	100.9	101.4	101.3	103.4	102.1	102.8	99.6	100.4	96.6	96.3	97.3
517	Petroleum and petroleum products	102.1	98.4	99.9	94.4	98.4	93.3	96.8	101.1	104.4	104.3	104.3	102.9
518	Beer, wine, and distilled alcoholic beverages	96.6	94.4	99.4	101.6	103.1	102.9	101.3	97.3	99.4	105.9	104.6	93.8
519	Miscellaneous nondurable goods	104.8	105.6	108.6	102.8	99.4	93.1	95.4	95.8	95.9	99.3	99.1	100.4

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.

[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.

$\overline{I/C}$ 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 (SIC5137)[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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Questions concerning this report may be directed
to: Mr. Ronald Piencykoski (301) 763-7794/7007

CB-80-178

MONTHLY WHOLESALE TRADE REPORT: AUGUST 1980

SALES The Bureau of the Census, U.S. Department of Commerce, announced today that August sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were $82.2 billion. August sales were up 2 percent from July and were 9 percent above the same month a year ago.

Seasonally adjusted August sales in the durable goods trades showed slight variation when compared to the previous month and year-ago levels. Nondurable goods sales were up 5 percent from July, and were 17 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 $96.6 billion at the end of August, up 2 percent from the previous month and 9 percent above the year-ago level. Durable goods stocks were up 2 percent from July, and were 9 percent above August 1979. Nondurable goods stocks were up 2 percent from July, and were 10 percent above the previous year level.

STOCK-SALES RATIO The August stock-sales ratio for merchant wholesalers, based on adjusted data, was 118, virtually unchanged from July, but 1 point above the previous year ratio.

Table 1. SALES, INVENTORIES, AND STOCK-SALES RATIOS OF MERCHANT WHOLESALERS: AUGUST 1980

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

Kind of business	Unadjusted			Adjusted[1]		
	Aug.[2] 1980	July 1980	Aug. 1979	Aug.[2] 1980	July 1980	Aug. 1979
SALES						
Merchant wholesalers, total	80,976	81,256	78,567	82,192	80,189	75,588
Durable goods, total	34,475	34,882	37,048	33,988	34,083	34,509
Nondurable goods, total	46,501	46,374	41,519	48,204	46,106	41,079
INVENTORIES						
Merchant wholesalers, total	94,689	93,612	86,688	96,585	94,619	88,280
Durable goods, total	61,820	61,053	56,601	61,596	60,349	56,335
Nondurable goods, total	32,869	32,559	30,087	34,989	34,270	31,945
STOCK-SALES RATIO						
Merchant wholesalers, total	117	115	110	118	118	117
Durable goods, total	179	175	153	181	177	163
Nondurable goods, total	71	70	72	73	74	78

[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 between 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: AUGUST 1980

1972 SIC code	Kind of business	Sales					Inventories (end-of-month)				Stock-sales ratios (percent)	
		Dollars (millions)		Percent change			Dollars (millions)		Percent change			
		Aug.[1] 1980	July 1980	Aug. 1980 from July 1980	Aug. 1980 from Aug. 1979	8 months 1980 from 8 months 1979	Aug.[1] 1980	July 1980	Aug. 1980 from July 1980	Aug. 1980 from Aug. 1979	Aug.[1] 1980	July 1980
		Data are NOT ADJUSTED for seasonal variation or trading-day differences										
	Merchant wholesalers, total	80,976	81,256	0	+3	+10	94,689	93,612	+1	+9	117	115
	Total (excluding farm-product raw materials)	72,279	72,801	-1	+2	+10	88,771	88,115	+1	+9	123	121
50	Durable goods, total	34,475	34,882	-1	-7	+4	61,820	61,053	+1	+9	179	175
501	Motor vehicles and automotive parts and supplies	6,973	6,903	+1	+2	+5	10,673	10,561	+1	+13	150	153
5013	Automotive parts and supplies	2,875	2,907	-1	-5	+2	5,394	5,159	+5	+4	188	177
502	Furniture and home furnishings	1,279	1,210	+6	+3	+11	1,994	1,987	0	+8	156	164
503	Lumber and other construction materials	2,848	2,983	-5	-24	-12	3,399	3,289	+3	-1	119	110
5051 pt.	Ferrous metals service centers and offices	2,372	2,391	-1	-20	+1	4,905	4,823	+2	-1	207	202
5051 pt.	Ferrous metals service centers	1,792	1,802	-1	-19	+2	3,980	3,925	+1	+1	221	218
506	Electrical goods	3,946	4,159	-5	-5	+10	6,710	6,632	+1	+7	170	159
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2,008	2,084	-4	-7	+7	3,131	3,078	+2	+10	156	148
507	Hardware, plumbing, heating equipment, and supplies	2,502	2,575	-3	-7	+1	4,863	4,804	+1	+7	194	187
5074	Plumbing and heating equipment and supplies (hydronics)	1,041	1,009	+3	0	+2	1,958	1,976	-1	+7	188	196
508	Machinery, equipment, and supplies	10,110	10,072	0	-1	+7	21,596	21,501	0	+9	210	214
51	Nondurable goods, total	46,501	46,374	0	+12	+15	32,869	32,559	+1	+9	71	70
	Total (excluding farm-product raw materials)	37,804	37,919	0	+13	+16	26,951	27,062	0	+9	71	71
511	Paper and paper products	1,815	1,803	+1	+2	+10	1,717	1,767	-3	+7	95	98
5111, 3	Printing, writing, industrial, and personal service paper	1,334	1,327	+1	+1	+9	1,175	1,201	-2	+11	88	91
512	Drugs, drug proprietaries, and druggists' sundries	1,176	1,180	0	+7	+8	1,601	1,589	+1	+2	136	135
514	Groceries and related products	12,995	13,408	-3	+10	+8	6,838	6,888	-1	+3	53	51
5141	Groceries, general-line	4,830	4,984	-3	+9	+12	3,036	3,032	0	+5	63	61
517	Petroleum and petroleum products	9,012	8,910	+1	+42	+47	3,760	3,710	+1	+44	42	42
518	Beer, wine, and distilled alcoholic beverages	2,963	3,144	-6	+4	+8	2,890	2,913	-1	+14	98	93
		Data are ADJUSTED for seasonal variation and, in the case of sales, for trading-day differences										
	Merchant wholesalers, total	82,192	80,189	+2	+9		96,585	94,619	+2	+9	118	118
	Total (excluding farm-product raw materials)	72,376	71,801	+1	+8		88,939	87,773	+1	+9	123	122
50	Durable goods, total	33,988	34,083	0	-2		61,596	60,349	+2	+9	181	177
501	Motor vehicles and automotive parts and supplies	6,884	6,625	+4	+6		10,958	10,635	+3	+13	159	161
502	Furniture and home furnishings	1,293	1,254	+3	+8		1,982	1,975	0	+9	153	157
503	Lumber and other construction materials	2,580	2,727	-5	-19		3,406	3,221	+6	-1	132	118
506	Electrical goods	3,926	4,022	-2	0		6,572	6,528	+1	+7	167	162
507	Hardware, plumbing, heating equipment and supplies	2,431	2,391	+2	-1		4,868	4,691	+4	+7	200	196
508	Machinery, equipment, and supplies	10,233	9,933	+3	+6		21,618	21,415	+1	+9	211	216
51	Nondurable goods, total	48,204	46,106	+5	+17		34,989	34,270	+2	+10	73	74
	Total (excluding farm-product raw materials)	38,388	37,718	+2	+19		27,343	27,424	0	+9	71	73
511	Paper and paper products	1,820	1,787	+2	+9		1,733	1,769	-2	+7	95	99
512	Drugs, drug proprietaries, and druggists' sundries	1,199	1,159	+3	+13		1,596	1,587	+1	+2	133	137
514	Groceries and related products	13,126	12,967	+1	+15		6,985	7,000	0	+3	53	54
517	Petroleum and petroleum products	9,234	9,101	+1	+45		3,719	3,833	-3	+44	40	42
518	Beer, wine, and distilled alcoholic beverages	2,963	2,944	+1	+13		2,970	2,876	+3	+14	100	98

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.

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MONTHLY WHOLESALE TRADE REPORT: SEPTEMBER 1980

SALES The Bureau of the Census, U.S. Department of Commerce, announced today that September sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were $85.9 billion. September sales were up 4 percent from August and were 12 percent above the same month a year ago.

Seasonally adjusted September sales in the durable goods trades were up 5 percent from the previous month and were 7 percent above September 1979. Nondurable goods sales were up 3 percent from August and were 17 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 $97.2 billion at the end of September, virtually unchanged from the previous month but were 10 percent above the year-ago level. Durable and nondurable goods stocks were at about the same level as August but were up 10 and 11 percent, respectively, from the year-ago levels.

STOCK-SALES RATIO The September stock-sales ratio for merchant wholesalers, based on adjusted data was 113, 5 points below the August ratio, and 3 points below the previous year ratio.

Table 1. SALES, INVENTORIES, AND STOCK-SALES RATIOS OF MERCHANT WHOLESALERS: SEPTEMBER 1980

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

Kind of business	Unadjusted			Adjusted[1]		
	Sept.[2] 1980	Aug. 1980	Sept. 1979	Sept.[2] 1980	Aug. 1980	Sept. 1979
SALES						
Merchant wholesalers, total	86,184	81,397	73,100	85,939	82,606	r76,480
Durable goods, total	37,722	35,091	33,503	36,435	34,597	r34,064
Nondurable goods, total	48,462	46,306	39,597	49,504	48,009	42,416
INVENTORIES						
Merchant wholesalers, total	95,476	95,215	86,932	97,186	97,111	88,372
Durable goods, total	61,599	62,119	56,232	61,780	61,880	56,352
Nondurable goods, total	33,877	33,096	30,700	35,406	35,231	32,020
STOCK-SALES RATIO						
Merchant wholesalers, total	111	117	119	113	118	116
Durable goods, total	163	177	168	170	179	r165
Nondurable goods, total	70	71	78	72	73	75

[1]Adjusted for seasonal variations and, in the case of sales, also for trading-day differences. [2]Preliminary estimates. Detail may not add to totals due to rounding and minor revisions. rRevised

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: SEPTEMBER 1980

1972 SIC code	Kind of business	Sales					Inventories (end-of-month)				Stock-sales ratios (percent)	
		Dollars (millions)		Percent change			Dollars (millions)		Percent change			
		Sept.[1] 1980	Aug. 1980	Sept. 1980 from Aug. 1980	Sept. 1980 from Sept. 1979	9 months 1980 from 9 months 1979	Sept.[1] 1980	Aug. 1980	Sept. 1980 from Aug. 1980	Sept. 1980 from Sept. 1979	Sept.[1] 1980	Aug. 1980
		Data are NOT ADJUSTED for seasonal variation or trading-day differences										
	Merchant wholesalers, total	86,184	81,397	+6	+18	+11	95,476	95,215	0	+10	111	117
	Total (excluding farm-product raw materials)	76,884	72,689	+6	+18	+11	89,144	89,248	0	+9	116	123
50	Durable goods, total	37,722	35,091	+8	+12	+5	61,599	62,119	-1	+10	163	177
501	Motor vehicles and automotive parts and supplies	6,905	7,068	-2	+22	+7	10,282	10,525	-2	+11	149	149
5013	Automotive parts and supplies	3,096	3,007	+3	+18	+4	5,354	5,339	0	+7	173	178
502	Furniture and home furnishings	1,298	1,251	+4	+8	+10	1,953	1,933	+1	+5	150	155
503	Lumber and other construction materials	3,050	2,865	+6	-7	-12	3,300	3,401	-3	-2	108	119
5051 pt.	Ferrous metals service centers and offices	2,778	2,533	+10	+1	+2	5,113	5,135	0	+3	184	203
5051 pt.	Ferrous metals service centers	2,085	1,914	+9	+6	+3	4,155	4,197	-1	+4	199	219
506	Electrical goods	4,527	4,049	+12	+13	+11	6,823	6,712	+2	+13	151	166
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2,387	2,048	+17	+15	+8	3,233	3,152	+3	+17	135	154
507	Hardware, plumbing, heating equipment, and supplies	2,581	2,477	+4	+8	+2	4,734	4,786	-1	+5	183	193
5074	Plumbing and heating equipment and supplies (hydronics)	1,087	998	+9	+7	+2	1,887	1,914	-1	+6	174	192
508	Machinery, equipment, and supplies	11,222	10,343	+8	+19	+9	21,812	21,919	0	+9	194	212
51	Nondurable goods, total	48,462	46,306	+5	+22	+16	33,877	33,096	+2	+10	70	71
	Total (excluding farm-product raw materials)	39,162	37,598	+4	+23	+17	27,545	27,129	+2	+9	70	72
511	Paper and paper products	1,903	1,814	+5	+19	+11	1,762	1,736	+2	+6	93	96
5111, 3	Printing, writing, industrial, and personal service paper	1,390	1,319	+5	+16	+9	1,184	1,168	+1	+7	85	89
512	Drugs, drug proprietaries, and druggists' sundries	1,253	1,161	+8	+22	+10	1,714	1,614	+6	+3	137	139
514	Groceries and related products	12,939	12,847	+1	+16	+9	6,864	6,781	+1	+1	53	53
5141	Groceries, general-line	4,735	4,777	-1	+14	+12	3,054	2,981	+2	+5	64	62
517	Petroleum and petroleum products	9,641	9,071	+6	+52	+47	3,918	3,797	+4	+36	41	42
518	Beer, wine, and distilled alcoholic beverages	2,798	2,961	-6	+17	+9	2,973	2,887	+3	+17	106	98
		Data are ADJUSTED for seasonal variation and, in the case of sales, for trading-day differences										
	Merchant wholesalers, total	85,939	82,606	+4	+12		97,186	97,111	0	+10	113	118
	Total (excluding farm-product raw materials)	75,928	72,778	+4	+12		89,349	89,402	0	+9	118	123
50	Durable goods, total	36,435	34,597	+5	+7		61,780	61,880	0	+10	170	179
501	Motor vehicles and automotive parts and supplies	7,261	6,977	+4	+17		10,699	10,806	-1	+12	147	155
502	Furniture and home furnishings	1,242	1,265	-2	+5		1,917	1,921	0	+5	154	152
503	Lumber and other construction materials	2,718	2,595	+5	-15		3,337	3,408	-2	-2	123	131
506	Electrical goods	4,357	4,029	+8	+7		6,729	6,574	+2	+13	154	163
507	Hardware, plumbing, heating equipment and supplies	2,482	2,407	+3	+2		4,840	4,791	+1	+6	195	199
508	Machinery, equipment, and supplies	10,718	10,469	+2	+13		21,790	21,941	-1	+9	203	210
51	Nondurable goods, total	49,504	48,009	+3	+17		35,406	35,231	0	+11	72	73
	Total (excluding farm-product raw materials)	39,493	38,181	+3	+18		27,569	27,522	0	+9	70	72
511	Paper and paper products	1,853	1,819	+2	+12		1,743	1,752	-1	+6	94	96
512	Drugs, drug proprietaries, and druggists' sundries	1,211	1,183	+2	+14		1,646	1,609	+2	+2	136	136
514	Groceries and related products	13,004	12,977	0	+12		6,857	6,926	-1	+1	53	53
517	Petroleum and petroleum products	10,106	9,294	+9	+45		3,753	3,756	0	+36	37	40
518	Beer, wine, and distilled alcoholic beverages	2,809	2,961	-5	+10		2,991	2,967	+1	+17	106	100

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.

UNITED STATES DEPARTMENT OF
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NEWS
WASHINGTON, D.C. 20230

BUREAU OF
THE
CENSUS

FOR WIRE TRANSMISSION 3:00 P.M. EST, TUESDAY, DECEMBER 9, 1980 CB-80-213

Questions concerning this report may be directed
to: Mr. Ronald Piencykoski (301) 763-7794/7007

MONTHLY WHOLESALE TRADE REPORT: OCTOBER 1980

SALES The Bureau of the Census, U.S. Department of Commerce, announced today that October sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were $88.1 billion. October sales were up 3 percent from September and were 14 percent above the same month a year ago.

Seasonally adjusted October sales in the durable goods trades were up 4 percent from the previous month and were 6 percent above October 1979. Nondurable goods sales were up 2 percent from September, and were 20 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 $99.7 billion at the end of October, up 2 percent from the previous month and 12 percent above the year-ago level. Durable goods stocks were up 1 percent from September, and were 10 percent above October 1979. Nondurable goods stocks were up 2 percent from September, and were 16 percent above the previous year level.

STOCK-SALES RATIO The October stock-sales ratio for merchant wholesalers, based on adjusted data, was 113, 2 points below both the previous month and year ago ratios.

NOTE: For the sampling errors associated with these data and the use of sampling errors in determining reliability of the estimates please see Appendix A in the Monthly Wholesale Trade Report.

Table 1. SALES, INVENTORIES, AND STOCK-SALES RATIOS OF MERCHANT WHOLESALERS: OCTOBER 1980

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

Kind of business	Unadjusted			Adjusted[1]		
	Oct[2] 1980	Sept. 1980	Oct. 1979	Oct.[2] 1980	Sept. 1980	Oct. 1979
SALES						
Merchant wholesalers, total	92,872	85,715	81,648	88,080	85,470	77,322
Durable goods, total	40,088	37,173	37,763	37,280	35,880	35,100
Nondurable goods, total	52,784	48,542	43,885	50,800	49,590	42,222
INVENTORIES						
Merchant wholesalers, total	99,335	96,302	88,520	99,661	98,111	88,819
Durable goods, total	61,898	61,553	56,301	62,575	61,738	56,915
Nondurable goods, total	37,437	34,749	32,219	37,086	36,373	31,904
STOCK-SALES RATIO						
Merchant wholesalers, total	107	112	108	113	115	115
Durable goods, total	154	166	149	168	172	162
Nondurable goods, total	71	72	73	73	73	76

[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 between 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.

USCOMM-DC

Table 2. SALES, INVENTORIES, PERCENT CHANGES AND STOCK-SALES RATIOS OF MERCHANT WHOLESALERS BY KIND OF BUSINESS, FOR THE UNITED STATES: OCTOBER 1980

1972 SIC code	Kind of business	Sales					Inventories (end-of-month)				Stock-sales ratios (percent)	
		Dollars (millions)		Percent change			Dollars (millions)		Percent change			
		Oct.[1] 1980	Sept. 1980	Oct. 1980 from Sept. 1980	Oct. 1980 from Oct. 1979	10 months 1980 from 10 months 1979	Oct.[1] 1980	Sept. 1980	Oct. 1980 from Sept. 1980	Oct. 1980 from Oct. 1979	Oct.[1] 1980	Sept. 1980
		Data are NOT ADJUSTED for seasonal variation or trading-day differences										
	Merchant wholesalers, total	92,872	85,715	+8	+14	+11	99,335	96,302	+3	+12	107	112
	Total (excluding farm-product raw materials)	81,771	76,320	+7	+13	+11	90,827	89,555	+1	+10	111	117
50	Durable goods, total	40,088	37,173	+8	+6	+5	61,898	61,553	+1	+10	154	166
501	Motor vehicles and automotive parts and supplies	7,719	6,580	+17	+14	+7	10,615	10,365	+2	+11	138	158
5013	Automotive parts and supplies	3,471	3,052	+14	+17	+5	5,383	5,357	0	+5	155	176
502	Furniture and home furnishings	1,551	1,331	+17	+12	+11	2,027	2,031	0	+6	131	153
503	Lumber and other construction materials	3,354	3,071	+9	-7	-11	3,190	3,240	-2	-6	95	105
5051 pt.	Ferrous metals service centers and offices	3,029	2,821	+7	+4	+2	5,061	5,063	0	+6	167	179
5051 pt.	Ferrous metals service centers	2,312	2,106	+10	+5	+4	4,052	4,108	-1	+5	175	195
506	Electrical goods	4,611	4,488	+3	+5	+10	6,844	6,699	+2	+13	148	149
5063	Electrical apparatus and equipment, wiring supplies, and construction materials[2]	2,462	2,374	+4	+14	+9	3,181	3,154	+1	+14	129	133
507	Hardware, plumbing, heating equipment, and supplies	2,775	2,569	+8	-1	+1	4,755	4,743	0	+5	171	185
5074	Plumbing and heating equipment and supplies (hydronics)	1,179	1,076	+10	+1	+2	1,835	1,838	0	+1	156	171
508	Machinery, equipment, and supplies	11,333	11,036	+3	+10	+9	21,908	21,879	0	+12	193	198
51	Nondurable goods, total	52,784	48,542	+9	+20	+16	37,437	34,749	+8	+16	71	72
	Total (excluding farm-product raw materials)	41,683	39,147	+6	+22	+17	28,929	28,002	+3	+12	69	72
511	Paper and paper products	2,046	1,919	+7	+12	+12	1,814	1,775	+2	+14	89	93
5111, 3	Printing, writing, industrial, and personal service paper[3]	1,499	1,407	+7	+10	+9	1,243	1,209	+3	+15	83	86
512	Drugs, drug proprietaries, and druggists' sundries	1,354	1,261	+7	+15	+10	1,771	1,705	+4	+6	131	135
514	Groceries and related products	14,181	13,131	+8	+17	+10	7,740	7,251	+7	+11	55	55
5141	Groceries, general-line	5,186	4,738	+9	+13	+12	3,460	3,198	+8	+14	67	68
517	Petroleum and petroleum products	10,520	9,530	+10	+47	+47	4,178	3,983	+5	+43	40	42
518	Beer, wine, and distilled alcoholic beverages	3,062	2,770	+11	+12	+9	3,160	3,008	+5	+14	103	109
		Data are ADJUSTED for seasonal variation and, in the case of sales, for trading-day differences										
	Merchant wholesalers, total	88,080	85,470	+3	+14		99,661	98,111	+2	+12	113	115
	Total (excluding farm-product raw materials)	77,426	75,357	+3	+14		90,988	89,761	+1	+10	118	119
50	Durable goods, total	37,280	35,880	+4	+6		62,575	61,738	+1	+10	168	172
501	Motor vehicles and automotive parts and supplies	7,688	6,919	+11	+14		10,821	10,786	0	+11	141	156
502	Furniture and home furnishings	1,323	1,274	+4	+10		2,029	1,993	+2	+6	153	156
503	Lumber and other construction materials	2,917	2,737	+7	-7		3,258	3,276	-1	-6	112	120
506	Electrical goods	4,139	4,320	-4	+5		6,790	6,607	+3	+13	164	153
507	Hardware, plumbing, heating equipment and supplies	2,507	2,470	+1	0		4,837	4,850	0	+5	193	196
508	Machinery, equipment, and supplies	10,484	10,541	-1	+9		22,219	21,857	+2	+12	212	207
51	Nondurable goods, total	50,800	49,590	+2	+20		37,086	36,373	+2	+16	73	73
	Total (excluding farm-product raw materials)	40,146	39,477	+2	+21		28,413	28,023	+1	+12	71	71
511	Paper and paper products	1,886	1,869	+1	+12		1,803	1,756	+3	+14	96	94
512	Drugs, drug proprietaries, and druggists' sundries	1,232	1,218	+1	+15		1,682	1,638	+3	+6	137	134
514	Groceries and related products	13,570	13,197	+3	+16		7,559	7,244	+4	+11	56	55
517	Petroleum and petroleum products	10,426	9,990	+4	+46		4,006	3,815	+5	+43	38	38
518	Beer, wine, and distilled alcoholic beverages	2,894	2,781	+4	+10		2,984	3,026	-1	+14	103	109

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 electrical apparatus and equipment, wiring supplies, and construction materials kind of business is subject to a sampling variability of 10 percent for sales for October 1980.

[3]The printing, writing, industrial, and personal service paper group is subject to a sampling variability of 8 percent for inventories for October 1980.

UNITED STATES DEPARTMENT OF
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WASHINGTON, D.C. 20230

BUREAU OF
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For release 3:00 P.M. EST, Friday, January 9, 1981
Questions concerning this report may be directed
to: Mr. Ronald Piencykoski (301) 763-7794/7007

CB 81-1

MONTHLY WHOLESALE TRADE REPORT: NOVEMBER 1980

SALES The Bureau of the Census, U. S. Department of Commerce, announced today that November sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were $88.8 billion. November sales were virtually unchanged from October but were 14 percent above the same month a year ago.

Seasonally adjusted November sales in the durable goods trades were up 1 percent from the previous month and were 8 percent above November 1979. Nondurable goods sales were at about the same level as October, but were 18 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 $99.9 billion at the end of November, up 1 percent from the previous month and 12 percent above the year-ago level. Durable goods stocks were up 2 percent from the previous month, and were 11 percent above November 1979. Nondurable goods stocks were down 1 percent from October, but were 14 percent above the previous year level.

STOCK-SALES RATIO The November stock-sales ratio for merchant wholesalers, based on adjusted data, was 112, virtually unchanged from the October ratio, but 2 points below the previous year ratio.

NOTE: For the sampling errors associated with these data and the use of sampling errors in determining reliability of the estimates please see Appendix A in the Monthly Wholesale Trade Report.

Table 1. SALES, INVENTORIES, AND STOCK-SALES RATIOS OF MERCHANT WHOLESALERS: NOVEMBER 1980

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

Kind of business	Unadjusted			Adjusted[1]		
	Nov.[2] 1980	Oct. 1980	Nov. 1979	Nov.[2] 1980	Oct. 1980	Nov. 1979
SALES						
Merchant wholesalers, total	85,050	93,336	78,881	88,821	88,532	78,203
Durable goods, total	35,361	40,200	34,513	37,873	37,387	34,967
Nondurable goods, total	49,689	53,136	44,368	50,948	51,145	43,236
INVENTORIES						
Merchant wholesalers, total	100,369	98,969	89,397	99,879	99,275	89,086
Durable goods, total	62,125	61,346	56,006	63,092	62,005	56,891
Nondurable goods, total	38,244	37,623	33,391	36,787	37,270	32,195
STOCK-SALES RATIO						
Merchant wholesalers, total	118	106	113	112	112	114
Durable goods, total	176	153	162	167	166	163
Nondurable goods, total	77	71	75	72	73	74

[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 between 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.

USCOMM-DC

Table 2. SALES, INVENTORIES, PERCENT CHANGES AND STOCK-SALES RATIOS OF MERCHANT WHOLESALERS BY KIND OF BUSINESS, FOR THE UNITED STATES: NOVEMBER 1980

1972 SIC code	Kind of business	Sales					Inventories (end-of-month)				Stock-sales ratios (percent)	
		Dollars (millions)		Percent change			Dollars (millions)		Percent change			
		Nov.[1] 1980	Oct. 1980	Nov. 1980 from Oct. 1980	Nov. 1980 from Nov. 1979	11 months 1980 from 11 months 1979	Nov.[1] 1980	Oct. 1980	Nov. 1980 from Oct. 1980	Nov. 1980 from Nov. 1979	Nov.[1] 1980	Oct. 1980
		Data are NOT ADJUSTED for seasonal variation or trading-day differences										
	Merchant wholesalers, total	85,050	93,336	-9	+8	+11	100,369	98,969	+1	+12	118	106
	Total (excluding farm-product raw materials)	75,036	82,264	-9	+8	+11	91,369	90,386	+1	+11	122	110
50	Durable goods, total	35,361	40,200	-12	+2	+5	62,125	61,346	+1	+11	176	153
501	Motor vehicles and automotive parts and supplies	6,632	7,727	-14	+3	+7	10,767	10,535	+2	+12	162	136
5013	Automotive parts and supplies	2,927	3,416	-14	+4	+5	5,399	5,271	+2	+4	184	154
502	Furniture and home furnishings	1,376	1,526	-10	+9	+10	2,019	2,008	+1	+12	147	132
503	Lumber and other construction materials	2,853	3,338	-15	-5	-11	3,398	3,192	+6	+2	119	96
5051 pt.	Ferrous metals service centers and offices	2,629	3,034	-13	-6	+2	4,984	4,846	+3	+2	190	160
5051 pt.	Ferrous metals service centers	1,987	2,295	-13	-6	+3	3,985	3,873	+3	0	201	169
506	Electrical goods	4,461	4,586	-3	+13	+10	6,657	6,766	-2	+9	149	148
5063	Electrical apparatus and equipment, wiring supplies, and construction materials[2]	2,361	2,396	-1	+20	+9	3,104	3,153	-2	+5	131	132
507	Hardware, plumbing, heating equipment, and supplies	2,516	2,828	-11	+4	+2	4,834	4,809	+1	+8	192	170
5074	Plumbing and heating equipment and supplies (hydronics)	1,100	1,228	-10	+11	+3	1,891	1,892	0	+6	172	154
508	Machinery, equipment, and supplies	9,792	11,337	-14	+5	+8	21,898	21,530	+2	+13	224	190
51	Nondurable goods, total	49,689	53,136	-6	+12	+16	38,244	37,623	+2	+15	77	71
	Total (excluding farm-product raw materials)	39,675	42,064	-6	+15	+17	29,244	29,040	+1	+13	74	69
511	Paper and paper products	1,880	2,053	-8	+11	+11	1,818	1,798	+1	+10	97	88
5111, 3	Printing, writing, industrial, and personal service paper	1,368	1,501	-9	+8	+9	1,238	1,222	+1	+14	90	81
512	Drugs, drug proprietaries, and druggists' sundries	1,239	1,408	-12	+13	+11	1,759	1,851	-5	+11	142	131
514	Groceries and related products	13,126	14,077	-7	+10	+10	7,757	7,696	+1	+12	59	55
5141	Groceries, general-line	4,900	5,196	-6	+9	+12	3,407	3,452	-1	+12	70	66
517	Petroleum and petroleum products	11,352	10,717	+6	+49	+48	4,209	4,149	+1	+37	37	39
518	Beer, wine, and distilled alcoholic beverages	2,803	3,067	-9	-1	+8	3,256	3,192	+2	+18	116	104
		Data are ADJUSTED for seasonal variation and, in the case of sales, for trading-day differences										
	Merchant wholesalers, total	88,821	88,532	0	+14		99,879	99,275	+1	+12	112	112
	Total (excluding farm-product raw materials)	79,155	77,906	+2	+14		92,080	90,526	+2	+11	116	116
50	Durable goods, total	37,873	37,387	+1	+8		63,092	62,005	+2	+11	167	166
501	Motor vehicles and automotive parts and supplies	7,312	7,696	-5	+7		10,887	10,739	+1	+12	149	140
502	Furniture and home furnishings	1,350	1,302	+4	+14		2,037	2,010	+1	+12	151	154
503	Lumber and other construction materials	3,084	2,903	+6	+4		3,536	3,260	+8	+2	115	112
506	Electrical goods	4,575	4,117	+11	+18		6,630	6,712	-1	+9	145	163
507	Hardware, plumbing, heating equipment and supplies	2,668	2,555	+4	+9		5,046	4,892	+3	+9	189	191
508	Machinery, equipment, and supplies	10,749	10,488	+2	+12		22,254	21,836	+2	+13	207	208
51	Nondurable goods, total	50,948	51,145	0	+18		36,787	37,270	-1	+14	72	73
	Total (excluding farm-product raw materials)	41,282	40,519	+2	+21		28,988	28,521	+2	+13	70	70
511	Paper and paper products	2,015	1,892	+7	+18		1,816	1,787	+2	+10	90	94
512	Drugs, drug proprietaries, and druggists' sundries	1,295	1,281	+1	+20		1,749	1,758	-1	+12	135	137
514	Groceries and related products	13,701	13,471	+2	+15		7,688	7,516	+2	+12	56	56
517	Petroleum and petroleum products	11,513	10,621	+8	+57		4,035	3,978	+1	+37	35	37
518	Beer, wine, and distilled alcoholic beverages	2,851	2,899	-2	+8		3,113	3,014	+3	+18	109	104

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 electrical apparatus and equipment, wiring supplies, and construction materials kind of business is subject to a sampling variability of 8 percent for dollar volume sales for November 1980. The percent change between November 1980 and October 1980 for sales is subject to a sampling variability of 6 percent.

UNITED STATES DEPARTMENT OF
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BUREAU OF
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FOR WIRE TRANSMISSION 2:30 P.M. EST, FEBRUARY 6, 1981

CB-81-24

Questions concerning this report may be directed
to: Mr. Ronald Piencykoski (301) 763-3916/3917

MONTHLY WHOLESALE TRADE REPORT: DECEMBER 1980

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 $91.3 billion. December sales were up 2 percent from November and were 16 percent above the same month a year ago.

Seasonally adjusted December sales in the durable goods trades increased 2 percent from the previous month and were 11 percent above December 1979. Nondurable goods sales were up 3 percent from November, and increased 20 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 $99.5 billion at the end of December, virtually unchanged from the previous month but 11 percent above the year-ago level. Durable goods stocks were up 1 percent from November, and were 11 percent above December 1979. Nondurable goods stocks decreased 3 percent from November, but were 11 percent above the previous year level.

STOCK-SALES RATIO The December stock-sales ratio for merchant wholesalers, based on adjusted data, was 109, 3 points below the November ratio, and 5 points below the previous year ratio.

Table 1. SALES, INVENTORIES, AND STOCK-SALES RATIOS OF MERCHANT WHOLESALERS: DECEMBER 1980

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

Kind of business	Unadjusted			Adjusted[1]		
	Dec.[2] 1980	Nov. 1980	Dec. 1979	Dec.[2] 1980	Nov. 1980	Dec. 1979
SALES						
Merchant wholesalers, total	91,843	85,336	75,156	91,333	89,136	78,678
Durable goods, total	37,854	35,722	32,275	38,980	38,271	35,138
Nondurable goods, total	53,989	49,614	42,881	52,353	50,865	43,540
INVENTORIES						
Merchant wholesalers, total	99,648	100,464	89,757	99,541	99,956	89,676
Durable goods, total	62,522	62,049	56,230	63,607	63,015	57,219
Nondurable goods, total	37,126	38,415	33,527	35,934	36,941	32,457
STOCK-SALES RATIO						
Merchant wholesalers, total	108	118	119	109	112	114
Durable goods, total	165	174	174	163	165	163
Nondurable goods, total	69	77	78	69	73	75

[1]Adjusted for seasonal variations and, in the case of sales, also for trading-day differences. [2]Preliminary estimates. Detail may not add to totals due to rounding and minor revisions.
NOTE: For the sampling errors associated with these data and the use of sampling errors in determining reliability of the estimates please see Appendix A in the Monthly Wholesale Trade Report.

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.

Table 2. SALES, INVENTORIES, PERCENT CHANGES AND STOCK-SALES RATIOS OF MERCHANT WHOLESALERS BY KIND OF BUSINESS, FOR THE UNITED STATES: DECEMBER 1980

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] 1980	Nov. 1980	Dec. 1980 from Nov. 1980	Dec. 1980 from Dec. 1979	12 months 1980 from 12 months 1979	Dec.[1] 1980	Nov. 1980	Dec. 1980 from Nov. 1980	Dec. 1980 from Dec. 1979	Dec.[1] 1980	Nov. 1980
		Data are NOT ADJUSTED for seasonal variation or trading-day differences										
	Merchant wholesalers, total	91,843	85,336	+8	+22	+12	99,648	100,464	-1	+11	108	118
	Total (excluding farm-product raw materials)	80,534	75,173	+7	+22	+12	91,190	91,311	0	+11	113	121
50	Durable goods, total	37,854	35,722	+6	+16	+6	62,522	62,049	+1	+11	165	174
501	Motor vehicles and automotive parts and supplies	7,149	6,706	+7	+16	+8	10,782	10,575	+2	+11	151	158
5013	Automotive parts and supplies	3,095	2,991	+3	+23	+6	5,327	5,357	-1	+5	172	179
502	Furniture and home furnishings	1,346	1,352	0	+17	+11	1,910	1,952	-2	+6	142	144
503	Lumber and other construction materials	2,727	2,846	-4	+7	-9	3,260	3,347	-3	-3	120	118
5051 pt.	Ferrous metals service centers and offices	3,093	2,738	+13	+16	+3	5,497	5,181	+6	+12	178	189
5051 pt.	Ferrous metals service centers	2,288	2,092	+9	+16	+4	4,412	4,187	+5	+10	193	200
506	Electrical goods	4,639	4,515	+3	+23	+11	6,604	6,611	0	+11	142	146
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2,430	2,370	+3	+27	+11	3,185	3,138	+2	+13	131	132
507	Hardware, plumbing, heating equipment, and supplies	2,392	2,486	-4	+9	+2	4,802	4,706	+2	+5	201	189
5074	Plumbing and heating equipment and supplies (hydronics)	993	1,051	-5	+8	+3	1,881	1,841	+2	+4	189	175
508	Machinery, equipment, and supplies	11,073	9,953	+11	+23	+10	22,250	22,141	0	+14	201	222
51	Nondurable goods, total	53,989	49,614	+9	+26	+17	37,126	38,415	-3	+11	69	77
	Total (excluding farm-product raw materials)	42,680	39,451	+8	+27	+18	28,668	29,262	-2	+11	67	74
511	Paper and paper products	1,988	1,861	+7	+21	+12	1,870	1,847	+1	+10	94	99
5111, 3	Printing, writing, industrial, and personal service paper[2]	1,453	1,336	+9	+19	+10	1,233	1,235	0	+8	85	92
512	Drugs, drug proprietaries, and druggists' sundries	1,361	1,220	+12	+29	+12	1,726	1,766	-2	+10	127	145
514	Groceries and related products	13,651	12,979	+5	+17	+10	7,654	7,688	0	+10	56	59
5141	Groceries, general-line	5,038	4,854	+4	+17	+12	3,230	3,350	-4	+9	64	69
517	Petroleum and petroleum products	12,023	11,268	+7	+57	+48	4,093	4,194	-2	+31	34	37
518	Beer, wine, and distilled alcoholic beverages	3,358	2,821	+19	+17	+9	2,803	3,214	-13	+8	83	114
		Data are ADJUSTED for seasonal variation and, in the case of sales, for trading-day differences										
	Merchant wholesalers, total	91,333	89,136	+2	+16		99,541	99,956	0	+11	109	112
	Total (excluding farm-product raw materials)	80,603	79,326	+2	+16		92,275	92,024	0	+11	114	116
50	Durable goods, total	38,980	38,271	+2	+11		63,607	63,015	+1	+11	163	165
501	Motor vehicles and automotive parts and supplies	7,549	7,394	+2	+10		10,825	10,693	+1	+11	143	145
502	Furniture and home furnishings	1,369	1,327	+3	+13		1,963	1,970	0	+6	143	148
503	Lumber and other construction materials	3,007	3,077	-2	0		3,347	3,483	-4	-3	111	113
506	Electrical goods	4,456	4,631	-4	+17		6,664	6,585	+1	+11	150	142
507	Hardware, plumbing, heating equipment and supplies	2,529	2,636	-4	+4		4,997	4,912	+2	+5	198	186
508	Machinery, equipment, and supplies	11,357	10,925	+4	+17		22,520	22,501	0	+14	198	206
51	Nondurable goods, total	52,353	50,865	+3	+20		35,934	36,941	-3	+11	69	73
	Total (excluding farm-product raw materials)	41,623	41,055	+1	+21		28,668	29,009	-1	+11	69	71
511	Paper and paper products	1,955	1,995	-2	+13		1,853	1,845	0	+10	95	92
512	Drugs, drug proprietaries, and druggists' sundries	1,328	1,275	+4	+22		1,754	1,755	0	+10	132	138
514	Groceries and related products	13,570	13,548	0	+12		7,571	7,619	-1	+10	56	56
517	Petroleum and petroleum products	11,396	11,428	0	+52		3,978	4,021	-1	+31	35	35
518	Beer, wine, and distilled alcoholic beverages	2,796	2,870	-3	+8		2,988	3,073	-3	+8	107	107

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 printing, writing, industrial, and personal service paper kind of business is subject to a sampling variability of 8 percent for dollar volume inventory for December 1980.