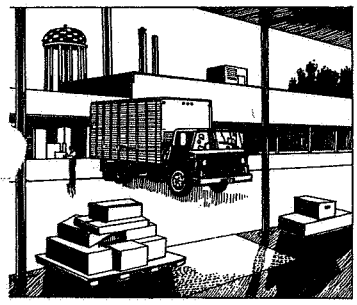


CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued March 1978

January 1978

BW-78-1

Sales—January 1978 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences, but not for price changes, were $56.1 billion, down 2 percent from the previous month, but 11 percent above January 1977. Adjusted November-through-January total sales were up 6 percent from the August-through-October period and were 12 percent above the total sales for the comparable months a year ago.

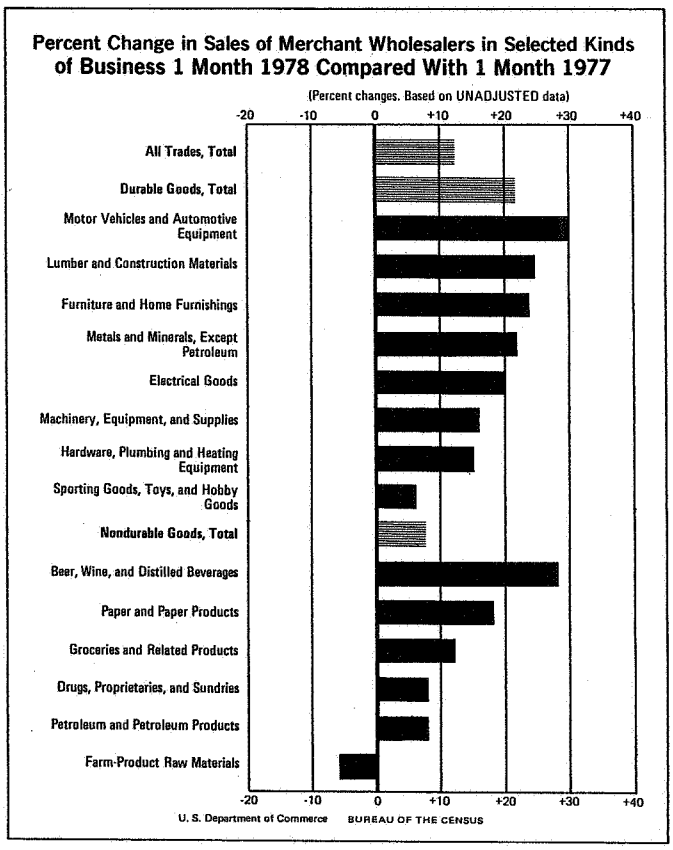
After adjustment, January sales in the durable goods trades were down 3 percent from the previous month, but were 18 percent above January 1977. Nondurable goods sales were down 1 percent from December 1977, but were 5 percent above the same month a year ago.

Based on adjusted data, most trade groups showed decreases from their previous month sales levels with the most substantial decrease shown in sporting goods, toys, and hobby goods (-13%). The largest increase was reported in miscellaneous durable goods; and beer, wine, and distilled beverages both up (7%). Compared with sales of a year ago, all trade groups showed increases, with the exception of farm-product raw materials, and miscellaneous nondurable goods both down (-7%). The sharper increases were reported in miscellaneous durable goods (29%), and motor vehicles and automotive parts and supplies (25%).

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variations, but not for price changes, were valued at $68.7 billion at the end of January, up 1 percent from last month, and 11 percent above the same month a year ago. Durable goods stocks were virtually unchanged from the previous month, but were 14 percent above January 1977. Nondurable goods stocks were up 3 percent from December 1977, and were 4 percent above stocks on hand a year ago.

Based on adjusted data, comparisons with previous month inventory levels showed mixed results with 9 trade groups showing gains, 3 indicating declines, and 4 with no change. The largest increase was reported in miscellaneous nondurable goods (6%). The largest decrease was noted in sporting goods, toys, and hobby goods (-7%). Compared with year-ago inventories, most trade groups reported increases with the most substantial increase reported in lumber and construction materials (27%). The largest decline was shown in farm-product raw materials (-6%).

Stock-Sales Ratios—The January stock-sales ratio for merchant wholesalers, based on seasonally-adjusted data, was 122, up 3 points from the previous month, but 1 point below the year-ago ratio. The stock-sales ratio for durable goods was 173, up 5 points from December, but 5 points below the January 1977 ratio. The ratio for nondurable goods was 80, up 3 points from last month, and 1 point below the year-ago ratio.



An advance release of the January 1978 data was issued on March 13, 1978.

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.

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Table 1. Estimated Monthly Sales of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978	1977											Total 12 mos 1977
		Jan.[P]	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
	Merchant wholesalers', total	52,262	46,352	47,683	56,383	53,357	54,633	55,794	51,290	55,597	54,505	54,251	56,034	56,224	642,104
	Total (excluding farm-product raw materials)	46,523	40,266	41,918	49,806	47,066	47,931	49,990	45,838	50,659	49,544	49,132	49,762	50,139	572,052
50	Durable goods, total	22,977	18,895	20,013	24,008	23,356	24,159	25,292	22,915	25,998	25,461	25,369	25,340	24,797	285,605
501	Motor vehicles and automotive parts and supplies	4,699	3,605	3,716	4,598	4,663	4,866	4,795	4,463	4,762	4,554	4,605	4,721	4,698	54,046
5013,4	Automotive parts and supplies, tires and tubes	2,468	2,015	2,052	2,363	2,415	2,482	2,597	2,395	2,657	2,538	2,661	2,651	2,551	29,377
5013	Automotive parts and supplies	2,105	1,722	1,782	2,013	2,018	2,111	2,221	2,027	2,229	2,089	2,227	2,220	2,167	24,826
502	Furniture and home furnishings	896	729	763	911	860	891	968	816	972	998	1,048	1,045	1,025	11,026
5021	Furniture--household and office[1]	316	220	216	269	262	272	291	251	310	308	320	340	350	3,409
5023	Home furnishings	580	509	547	642	598	619	677	565	662	689	728	705	676	7,617
503	Lumber and other construction materials	1,859	1,504	1,624	2,068	2,043	2,222	2,343	2,271	2,657	2,553	2,476	2,334	2,086	26,181
5031	Lumber, plywood, and millwork	1,262	1,072	1,119	1,389	1,343	1,513	1,571	1,511	1,792	1,681	1,637	1,540	1,389	17,557
5039	Construction materials, n.e.c.	597	432	505	679	700	709	772	760	866	872	839	794	697	8,625
505	Metals and minerals, except petroleum.	2,516	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	2,731	2,709	2,437	2,592	2,423	29,000
5051 pt.	Ferrous metals service centers and offices	1,977	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	2,039	2,083	1,845	1,869	1,774	21,437
506	Electrical goods	2,552	2,127	2,196	2,552	2,469	2,391	2,761	2,647	2,821	2,846	2,998	2,973	2,964	31,745
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,257	1,048	1,130	1,241	1,183	1,222	1,390	1,324	1,456	1,369	1,436	1,436	1,379	15,614
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,295	1,079	1,066	1,311	1,286	1,169	1,371	1,323	1,365	1,477	1,562	1,537	1,585	16,131
5064	Electrical appliances, TV and radio sets	774	689	689	836	831	731	940	914	919	979	1,011	989	1,003	10,531
507	Hardware, plumbing, heating equipment, and supplies	1,748	1,515	1,544	1,817	1,838	1,925	2,017	1,898	2,068	1,961	2,027	1,974	1,820	22,404
5072	Hardware	694	616	612	758	769	721	740	700	790	750	750	768	676	8,650
5074	Plumbing and heating equipment and supplies (hydronics)	697	590	635	708	747	824	852	799	842	802	846	791	753	9,189
508	Machinery, equipment, and supplies	6,351	5,494	6,009	7,126	6,806	7,034	7,349	6,465	7,380	7,217	7,163	6,941	7,019	82,003
5082	Construction and mining machinery and equipment	874	712	875	1,042	1,022	1,044	1,059	876	971	1,002	1,006	1,025	1,006	11,640
5084,5	Industrial machinery, equipment, and supplies	2,590	2,251	2,463	2,652	2,376	2,520	2,821	2,494	2,891	2,771	2,750	2,858	2,861	31,7
5086	Professional equipment, supplies	702	640	667	779	747	779	840	757	846	805	808	773	805	9,2
5093	Scrap and waste materials	758	668	764	844	895	869	903	679	802	810	807	812	779	9,632
51	Nondurable goods, total	29,285	27,457	27,670	32,375	30,001	30,474	30,502	28,375	29,599	29,044	28,882	30,694	31,427	356,498
	Total (excluding farm-product raw materials)	23,546	21,371	21,905	25,798	23,710	23,772	24,698	22,923	24,661	24,084	23,763	24,422	25,342	286,448
511	Paper and paper products	1,337	1,134	1,194	1,327	1,222	1,261	1,348	1,208	1,388	1,366	1,341	1,335	1,358	15,482
5111,3	Printing, writing, industrial, and personal service paper	947	861	906	1,011	959	991	1,054	935	1,060	1,032	1,007	988	995	11,799
512	Drugs, drug proprietaries, and druggists' sundries	910	842	832	964	891	897	907	848	952	948	939	926	922	10,868
5122	Drugs, drug proprietaries, and druggists' sundries	910	842	832	964	891	897	907	848	952	948	939	926	922	10,868
5122 pt.	General-line drugs	448	399	379	428	397	415	410	388	459	455	438	452	444	5,064
513	Apparel, piece goods, and notions[2]	1,613	1,332	1,404	1,667	1,446	1,510	1,589	1,521	1,938	1,815	1,919	1,837	1,617	19,595
514	Groceries and related products	9,296	8,286	8,029	9,559	9,094	9,359	9,414	9,132	9,716	9,433	9,289	9,591	9,798	110,766
5141	Groceries, general-line	3,424	3,192	3,034	3,545	3,278	3,387	3,412	3,347	3,493	3,396	3,360	3,579	3,587	40,610
5144	Poultry and poultry products	403	402	434	419	400	438	448	412	456	432	419	458	454	5,172
5145	Confectionery	151	124	129	167	147	150	150	146	171	172	183	194	188	1,921
5147	Meats and meat products	1,419	1,279	1,248	1,508	1,404	1,469	1,513	1,444	1,591	1,486	1,498	1,525	1,510	17,475
5148	Fresh fruits and vegetables	851	696	674	834	858	849	852	834	877	810	836	886	889	9,895
515	Farm-product raw materials	5,739	6,086	5,765	6,577	6,291	6,702	5,804	5,452	4,938	4,960	5,119	6,272	6,085	70,051
5153	Grain	4,515	4,957	4,761	5,430	5,344	5,589	4,830	4,580	4,011	4,005	4,069	4,968	4,730	57,274
517	Petroleum and petroleum products	4,213	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	3,752	3,612	3,839	3,983	4,355	47,421
5171	Petroleum bulk stations and terminals	2,398	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	2,160	2,103	2,195	2,266	2,523	27,286
518	Beer, wine, and distilled alcoholic beverages	1,718	1,337	1,504	1,929	1,842	1,978	2,233	1,951	2,108	2,018	1,884	2,143	2,444	23,371
5181	Beer and ale	828	645	707	850	902	1,043	1,126	1,010	1,093	1,012	888	938	1,020	11,234
5182	Wines and distilled alcoholic beverages[3]	890	692	797	1,079	940	935	1,107	941	1,014	1,005	995	1,204	1,424	12,133
519	Miscellaneous nondurable goods	3,692	3,862	4,088	4,851	4,463	4,398	4,186	3,539	3,822	4,055	3,722	3,749	4,028	48,762
5194	Tobacco and tobacco products	700	664	669	751	717	743	787	734	780	751	748	705	819	8,868

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

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

[1]The furniture-household and office group is subject to a sampling variability of 9 percent for January 1978.

[2]The apparel, piece goods, and notions group is subject to a sampling variability of 10 percent for January 1978.

[3]The wines and distilled alcoholic beverages group is subject to a sampling variability of 9 percent for January 1978.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978	1977											
		Jan.P	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	69,260	62,910	63,985	65,097	65,042	64,088	64,117	63,666	64,105	65,291	66,530	68,082	68,555
	Total (excluding farm-product raw materials)	63,839	57,077	58,209	59,355	59,475	59,833	60,612	60,642	61,074	61,963	62,324	62,939	63,245
50	Durable goods, total	44,005	38,455	39,362	39,965	40,168	40,763	41,593	41,738	42,142	42,484	42,627	43,252	43,676
501	Motor vehicles and automotive parts and supplies	7,496	6,754	6,929	6,853	6,796	6,963	6,932	6,864	6,831	6,842	7,089	7,376	7,424
5013,4	Automotive parts and supplies, tires and tubes	4,641	3,822	3,995	4,070	4,061	4,219	4,333	4,304	4,512	4,496	4,438	4,669	4,607
5013	Automotive parts and supplies	3,784	3,188	3,372	3,396	3,338	3,481	3,616	3,534	3,712	3,663	3,639	3,912	3,790
502	Furniture and home furnishings	1,586	1,336	1,337	1,356	1,349	1,392	1,407	1,409	1,451	1,493	1,455	1,444	1,512
5023	Home furnishings	1,140	955	969	987	960	988	1,022	1,026	1,069	1,085	1,057	1,054	1,099
503	Lumber and other construction materials	2,699	2,115	2,191	2,399	2,323	2,340	2,309	2,353	2,429	2,510	2,489	2,513	2,602
5031	Lumber, plywood, and millwork	1,732	1,433	1,492	1,639	1,548	1,578	1,559	1,588	1,632	1,659	1,629	1,643	1,671
505	Metals and minerals, except petroleum	4,489	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	4,519	4,434	4,277	4,444	4,459
5051 pt.	Ferrous metals service centers and offices	3,518	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	3,692	3,689	3,511	3,514	3,568
506	Electrical goods	4,612	3,884	3,946	4,074	4,209	4,334	4,406	4,392	4,580	4,599	4,591	4,611	4,653
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,112	1,779	1,909	1,876	1,916	2,006	2,084	1,987	2,088	2,069	2,025	2,100	2,121
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,499	2,105	2,037	2,197	2,293	2,328	2,322	2,405	2,493	2,530	2,566	2,511	2,533
507	Hardware, plumbing, heating equipment, and supplies	3,612	3,223	3,277	3,443	3,679	3,599	3,639	3,704	3,582	3,578	3,621	3,608	3,620
5072	Hardware	1,373	1,141	1,177	1,254	1,183	1,237	1,256	1,286	1,282	1,296	1,319	1,320	1,358
5074	Plumbing and heating equipment and supplies (hydronics)	1,531	1,415	1,438	1,493	1,763	1,588	1,619	1,669	1,588	1,579	1,566	1,562	1,555
508	Machinery, equipment, and supplies	15,416	13,227	13,703	13,861	13,717	14,007	14,574	14,417	14,513	14,706	14,631	15,026	15,307
5082	Construction and mining machinery and equipment	3,207	2,508	2,609	2,713	2,701	2,727	2,864	2,865	2,928	3,110	3,083	3,202	3,261
5084,5	Industrial machinery, equipment, and supplies	4,819	4,305	4,357	4,279	4,180	4,395	4,621	4,478	4,447	4,503	4,534	4,555	4,742
51	Nondurable goods, total	25,255	24,455	24,624	25,131	24,874	23,324	22,523	21,928	21,963	22,807	23,903	24,830	24,879
	Total (excluding farm-product raw materials)	19,834	18,621	18,847	19,390	19,307	19,069	19,018	18,904	18,932	19,479	19,697	19,687	19,569
511	Paper and paper products	1,319	1,191	1,217	1,236	1,265	1,301	1,322	1,297	1,276	1,301	1,304	1,309	1,301
5111,3	Printing, writing, industrial, and personal service paper	881	830	829	841	877	900	905	887	877	880	878	865	873
512	Drugs, drug proprietaries, and druggists' sundries	1,267	1,161	1,194	1,255	1,261	1,223	1,268	1,285	1,297	1,320	1,373	1,337	1,303
514	Groceries and related products	5,468	5,003	5,205	5,340	5,353	5,349	5,307	5,283	5,283	5,448	5,507	5,465	5,540
5141	Groceries, general-line	2,377	2,115	2,257	2,336	2,387	2,382	2,371	2,268	2,265	2,363	2,446	2,441	2,473
517	Petroleum and petroleum products	2,018	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	1,959	2,064	2,023	2,053	2,042
518	Beer, wine, and distilled alcoholic beverages	1,925	1,807	1,853	1,952	2,015	2,094	2,114	2,074	1,977	2,048	2,121	2,075	1,809
5181	Beer and ale	641	544	555	614	679	726	709	675	660	673	658	632	581
5182	Wines and distilled alcoholic beverages	1,284	1,263	1,298	1,338	1,336	1,368	1,405	1,399	1,317	1,375	1,462	1,443	1,228

See footnotes below table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978	1977											
		Jan.P	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	133	136	134	115	122	117	115	124	115	120	123	122	122
	Total (excluding farm-product raw materials)	137	142	139	119	126	125	121	132	121	125	127	126	126
50	Durable goods, total	192	204	197	166	172	169	164	182	162	167	168	171	176
501	Motor vehicles and automotive parts and supplies	160	187	186	149	146	143	145	154	143	150	154	156	158
5013,4	Automotive parts and supplies, tires and tubes	188	190	195	172	168	170	167	180	170	177	167	176	181
5013	Automotive parts and supplies	180	185	189	169	165	165	163	174	167	175	163	176	175
502	Furniture and home furnishings	177	183	175	149	157	156	145	173	149	150	139	138	147
5023	Home furnishings	197	188	177	154	161	160	151	182	162	157	145	150	163
503	Lumber and other construction materials	145	141	135	116	114	105	99	104	91	98	101	108	125
5031	Lumber, plywood, and millwork	137	134	133	118	115	104	99	105	91	99	100	107	120
505	Metals and minerals, except petroleum	178	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	165	164	176	171	184
5051 pt.	Ferrous metals service centers and offices	178	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	181	177	190	188	201
506	Electrical goods	181	183	180	160	170	181	160	166	162	162	153	155	157
5063	Electrical apparatus and equipment, wiring supplies and construction materials	168	170	169	151	162	164	150	150	143	151	141	146	154
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	193	195	191	168	178	199	169	182	183	171	164	163	160
507	Hardware, plumbing, heating equipment, and supplies	207	213	212	189	200	187	180	195	173	182	179	183	199
5072	Hardware	198	185	192	165	154	172	170	184	162	173	176	172	201
5074	Plumbing and heating equipment and supplies (hydronics)	220	240	226	211	236	193	190	209	189	197	185	197	206
508	Machinery, equipment, and supplies	243	241	228	195	202	199	198	223	197	204	204	216	218
5082	Construction and mining machinery and equipment	367	352	298	260	264	261	270	327	302	310	306	312	324
5084,5	Industrial machinery, equipment, and supplies	186	191	177	161	176	174	164	180	154	163	165	159	166
51	Nondurable goods, total	86	89	89	78	83	77	74	77	74	79	83	81	79
	Total (excluding farm-product raw materials)	84	87	86	75	81	80	77	82	77	81	83	81	77
511	Paper and paper products	99	105	102	93	104	103	98	107	92	95	97	98	96
5111,3	Printing, writing, industrial, and personal service paper	93	96	92	83	91	91	86	95	83	85	87	88	88
512	Drugs, drug proprietaries, and druggists' sundries	139	138	144	130	141	136	140	152	136	139	146	144	141
514	Groceries and related products	59	60	65	56	59	57	56	58	54	58	59	57	57
5141	Groceries, general-line	69	66	74	66	73	70	69	68	65	70	73	68	69
517	Petroleum and petroleum products	48	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	52	57	53	52	47
518	Beer, wine, and distilled alcoholic beverages	112	135	123	101	109	106	95	106	94	102	113	97	74
5181	Beer and ale	77	84	78	72	75	70	63	67	60	66	74	67	57
5182	Wines and distilled alcoholic beverages	144	183	163	124	142	146	127	149	130	137	147	120	86

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

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

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978	1977										
		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	56,149	50,678	51,857	52,672	53,385	53,866	53,735	53,495	53,208	53,307	53,639	55,558	57,266
	Total (excluding farm-product raw materials)	50,775	44,889	45,841	46,839	46,891	47,260	47,157	47,334	48,037	48,018	48,630	49,887	51,663
50	Durable goods, total	25,700	21,785	22,625	22,621	22,941	23,275	23,419	23,620	24,390	24,150	24,997	25,601	26,488
501	Motor vehicles and automotive parts and supplies	5,020	4,018	4,162	4,201	4,304	4,528	4,473	4,439	4,497	4,504	4,889	4,969	5,220
502	Furniture and home furnishings	1,059	882	853	874	879	901	907	900	914	934	950	957	1,082
503	Lumber and other construction materials	2,278	1,919	2,009	2,045	2,048	2,057	2,090	2,171	2,283	2,349	2,418	2,320	2,443
505	Metals and minerals, except petroleum	2,547	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	2,540	2,580	2,539	2,605	2,669
506	Electrical goods	2,855	2,423	2,480	2,508	2,544	2,491	2,547	2,686	2,664	2,731	2,818	2,918	2,917
507	Hardware, plumbing, heating equipment, and supplies	1,953	1,734	1,766	1,795	1,850	1,871	1,863	1,909	1,902	1,834	1,916	1,958	2,024
508	Machinery, equipment, and supplies	7,209	6,358	6,751	6,618	6,626	6,740	6,753	6,756	7,130	6,726	6,988	7,268	7,396
51	Nondurable goods, total	30,449	28,893	29,232	30,051	30,444	30,591	30,316	29,875	28,818	29,157	28,642	29,957	30,778
	Total (excluding farm-product raw materials)	25,075	23,104	23,216	24,218	23,950	23,985	23,738	23,714	23,647	23,852	23,633	24,286	25,175
511	Paper and paper products	1,404	1,209	1,295	1,272	1,285	1,308	1,294	1,242	1,282	1,305	1,294	1,294	1,419
512	Drugs, drug proprietaries, and druggists' sundries	927	894	898	917	902	919	919	914	916	908	867	913	932
513	Apparel, piece goods, and notions	1,767	1,485	1,484	1,566	1,519	1,585	1,580	1,600	1,687	1,668	1,821	1,740	1,856
514	Groceries and related products	9,785	8,797	8,828	9,206	9,228	9,225	8,825	9,210	9,218	9,367	9,280	9,620	9,947
515	Farm-product raw materials[1]	5,374	5,789	6,016	5,833	6,494	6,606	6,578	6,161	5,171	5,305	5,009	5,671	5,603
517	Petroleum and petroleum products	4,366	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	3,682	3,712	3,749	3,928	4,124
518	Beer, wine, and distilled alcoholic beverages	2,183	1,763	1,861	1,903	1,957	1,921	1,963	1,988	1,970	2,012	1,907	2,026	2,035
519	Miscellaneous nondurable goods	3,791	4,061	4,019	4,153	4,276	4,335	4,151	4,015	3,973	4,071	3,901	3,901	3,992
	Inventories ADJUSTED for seasonal variations													
	Merchant wholesalers, total	68,674	62,123	63,062	64,300	65,301	64,838	64,947	64,210	65,095	66,119	66,209	67,047	67,998
	Total (excluding farm-product raw materials)	64,164	57,316	57,988	58,829	59,280	59,575	60,207	60,647	61,521	62,413	62,347	62,835	63,712
50	Durable goods, total	44,407	38,819	39,264	39,527	39,809	40,224	40,876	41,404	42,396	42,896	43,014	43,642	44,368
501	Motor vehicles and automotive parts and supplies	7,393	6,664	6,743	6,708	6,705	6,804	6,867	6,937	7,071	6,989	7,248	7,534	7,394
502	Furniture and home furnishings	1,596	1,350	1,345	1,356	1,352	1,392	1,388	1,395	1,432	1,480	1,461	1,438	1,541
503	Lumber and other construction materials	2,751	2,159	2,228	2,334	2,263	2,219	2,241	2,288	2,415	2,566	2,612	2,607	2,680
505	Metals and minerals, except petroleum	4,471	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	4,461	4,520	4,418	4,484	4,397
506	Electrical goods	4,745	3,990	4,041	4,108	4,237	4,310	4,326	4,347	4,521	4,581	4,519	4,547	4,710
507	Hardware, plumbing, heating equipment, and supplies	3,693	3,287	3,322	3,387	3,567	3,503	3,598	3,669	3,533	3,636	3,684	3,667	3,709
508	Machinery, equipment, and supplies	15,540	13,353	13,547	13,609	13,629	13,847	14,253	14,410	14,824	14,840	14,690	15,086	15,651
51	Nondurable goods, total	24,267	23,304	23,798	24,773	25,492	24,614	24,071	22,806	22,699	23,223	23,195	23,405	23,630
	Total (excluding farm-product raw materials)	19,757	18,497	18,724	19,302	19,471	19,351	19,331	19,243	19,125	19,517	19,333	19,193	19,344
511	Paper and paper products	1,336	1,202	1,228	1,252	1,260	1,304	1,297	1,302	1,265	1,300	1,300	1,312	1,289
512	Drugs, drug proprietaries, and druggists' sundries	1,316	1,204	1,221	1,254	1,243	1,247	1,263	1,295	1,296	1,289	1,315	1,319	1,317
514	Groceries and related products	5,490	5,006	5,156	5,212	5,356	5,433	5,396	5,389	5,385	5,497	5,436	5,311	5,480
517	Petroleum and petroleum products	1,924	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	1,973	2,028	1,894	1,944	1,958
518	Beer, wine, and distilled alcoholic beverages	1,993	1,864	1,892	2,011	2,038	2,058	2,051	2,104	2,026	2,036	1,971	1,969	1,898
	Stock-sales ratios based on ADJUSTED data													
	Merchant wholesalers, total	122	123	122	122	122	120	121	120	122	124	123	121	119
	Total (excluding farm-product raw materials)	126	128	126	126	126	126	128	128	128	130	128	126	123
50	Durable goods, total	173	178	174	175	174	173	175	175	174	178	172	170	168
501	Motor vehicles and automotive parts and supplies	147	166	162	160	156	150	154	156	157	155	148	152	142
502	Furniture and home furnishings	151	153	158	155	154	154	153	155	157	158	154	150	142
503	Lumber and other construction materials	121	113	111	114	110	108	107	105	106	109	108	112	110
505	Metals and minerals, except petroleum	176	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	176	175	174	172	165
506	Electrical goods	166	165	163	164	167	173	170	162	170	168	160	156	161
507	Hardware, plumbing, heating equipment, and supplies	189	190	188	189	193	187	193	192	186	198	192	187	183
508	Machinery, equipment, and supplies	216	210	201	206	206	205	211	213	208	221	210	208	212
51	Nondurable goods, total	80	81	81	82	84	80	79	76	79	80	81	78	77
	Total (excluding farm-product raw materials)	79	80	81	80	81	81	81	81	81	82	82	79	77
511	Paper and paper products	95	99	95	98	98	100	100	105	99	100	100	101	91
512	Drugs, drug proprietaries, and druggists' sundries	142	135	136	137	138	136	137	142	141	142	152	144	141
514	Groceries and related products	56	57	58	57	58	59	61	59	58	59	59	55	55
517	Petroleum and petroleum products	44	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	54	55	51	49	47
518	Beer, wine, and distilled alcoholic beverages	91	106	102	106	104	107	104	106	103	101	103	97	93

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

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

[1] 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. 1977-Jan. 1978 from--			
	Aug. 1977-Oct. 1977 (3 months ago)	May 1977-July 1977 (6 months ago)	Feb. 1977-Apr. 1977 (9 months ago)	Nov. 1976-Jan. 1977 (12 months ago)
Merchant wholesalers, total.....	+6	+5	+7	+12
Durable goods, total.....	+6	+11	+14	+20
Nondurable goods, total.....	+5	0	+2	+6

Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers: 1972-1978

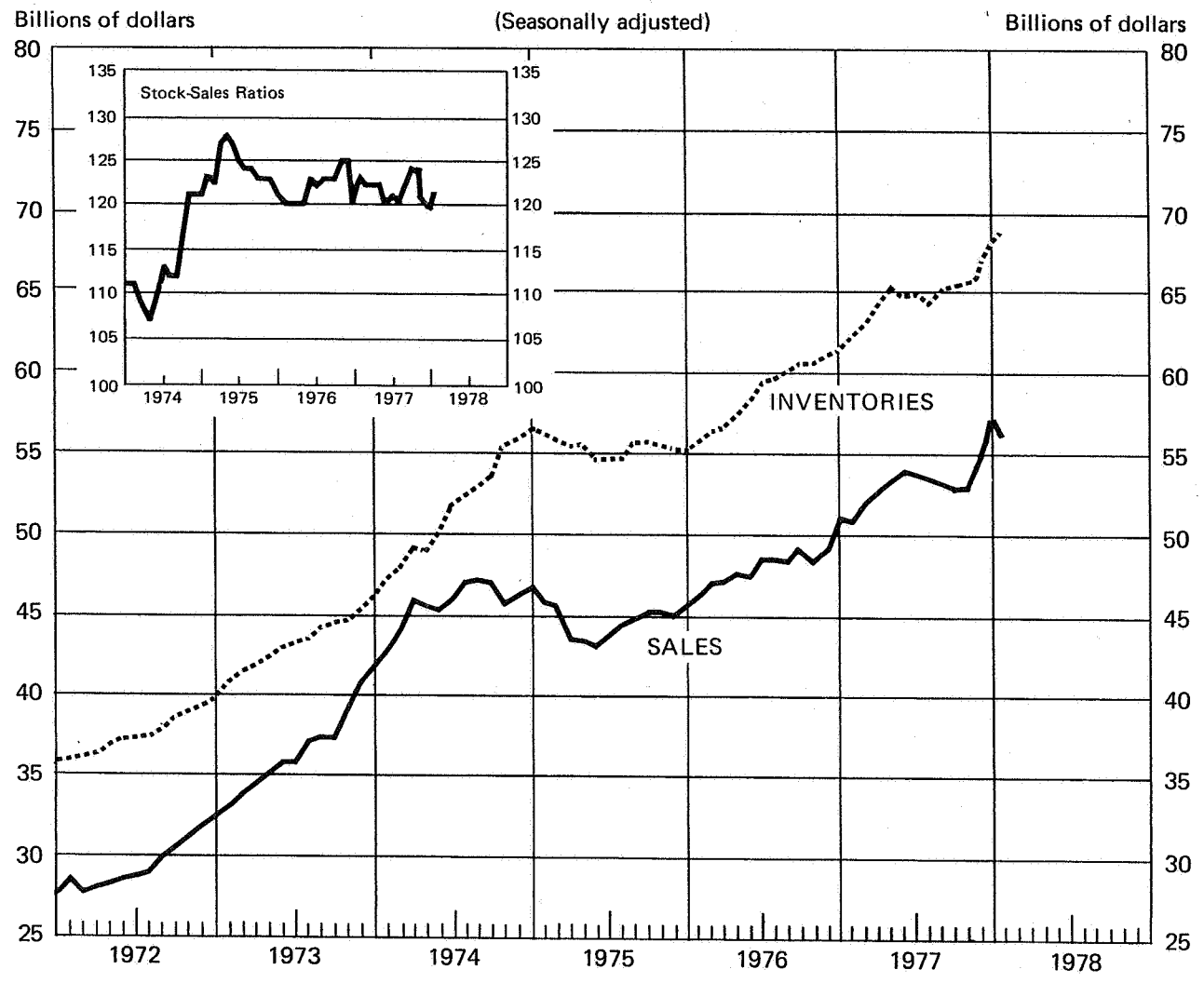


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: January 1978

1972 SIC code	Kind of business	Unadjusted				Adjusted[1]			
		Sales		Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		January 1978 from--		January 1978 from--		January 1978 from--		January 1978 from--	
		December 1977	January 1977	December 1977	January 1977	December 1977	January 1977	December 1977	January 1977
	Merchant wholesalers, total	-7	+13	+1	+10	-2	+11	+1	+11
	Total (excluding farm-product raw materials)	-7	+16	+1	+12	-2	+13	+1	+12
50	Durable goods, total	-7	+22	+1	+14	-3	+18	0	+14
501	Motor vehicles and automotive parts and supplies	0	+30	+1	+11	-4	+25	0	+11
5012	Automobiles and other motor vehicles	+4	+40	+1	-3	-	-	-	-
5013, 4	Automotive parts and supplies, tires and tubes	-3	+22	+1	+21	-	-	-	-
5013	Automotive parts and supplies	-3	+22	0	+19	-	-	-	-
502	Furniture and home furnishings	-13	+23	+5	+19	-2	+20	+4	+18
5021	Furniture--household and office	-10	+44	+8	+17	-	-	-	-
5021 pt.	Household furniture	-14	+33	+10	+7	-	-	-	-
5021 pt.	Office furniture	-7	+49	+7	+25	-	-	-	-
5023	Home furnishings	-14	+14	+4	+19	-	-	-	-
503	Lumber and other construction materials	-11	+24	+4	+28	-7	+19	+3	+27
5031	Lumber, plywood, and millwork	-9	+18	+4	+21	-	-	-	-
5039	Construction materials, n.e.c.	-14	+38	+4	+42	-	-	-	-
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	-30	+6	+1	+11	-13	+7	-7	+11
505	Metals and minerals, except petroleum	+4	+22	+1	+9	-5	+16	+2	+9
5051 pt.	Ferrous metals service centers and offices	+11	+31	-1	+6	-	-	-	-
5051 pt.	Nonferrous metals service centers and offices	-15	+9	+8	+27	-	-	-	-
506	Electrical goods	-14	+20	-1	+19	-2	+18	+1	+19
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-9	+20	0	+19	-	-	-	-
5064, 5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-18	+20	-1	+19	-	-	-	-
5064	Electrical appliances, TV and radio sets	-23	+12	0	+15	-	-	-	-
507	Hardware, plumbing, heating equipment, and supplies	-4	+15	0	+12	-4	+13	0	+12
5072	Hardware	+3	+13	+1	+20	-	-	-	-
5074	Plumbing and heating equipment and supplies (hydronics)	-8	+18	-2	+8	-	-	-	-
5075	Warm air heating and air conditioning equipment and supplies	-8	+12	0	+10	-	-	-	-
508	Machinery, equipment, and supplies	-10	+16	+1	+17	-3	+13	-1	+16
5081	Commercial machines and equipment	-2	+39	-4	+4	-	-	-	-
5082	Construction and mining machinery and equipment	-13	+23	-2	+28	-	-	-	-
5083	Farm and garden machinery and equipment	-12	+8	+2	+20	-	-	-	-
5084, 5	Industrial machinery, equipment, and supplies	-9	+15	+2	+12	-	-	-	-
5086	Professional equipment and supplies	-13	+10	+1	+6	-	-	-	-
509	Miscellaneous durable goods	-9	+35	-1	+8	+7	+29	+2	+8
5093	Scrap and waste materials	-3	+13	-6	-5	-	-	-	-
5093 pt.	Iron and steel scrap	0	+11	-8	-6	-	-	-	-
5093 pt.	Waste materials	-7	+17	-1	-5	-	-	-	-
51	Nondurable goods, total	-7	+7	+2	+3	-1	+5	+3	+4
	Total (excluding farm-product raw materials)	-7	+10	+1	+7	0	+9	+2	+7
511	Paper and paper products	-2	+18	+1	+11	-1	+16	+4	+11
5111, 3	Printing, writing, industrial, and personal service paper	-5	+10	+1	+6	-	-	-	-
512	Drugs, drug proprietaries, and druggists' sundries	-1	+8	-3	+9	-1	+4	0	+9
5122	Drugs, drug proprietaries, and druggists' sundries	-1	+8	-3	+9	-	-	-	-
5122 pt.	General-line drugs	+1	+12	0	+8	-	-	-	-
514	Groceries and related products	-5	+12	-1	+9	-2	+11	0	+10
5141	Groceries, general-line	-5	+7	-4	+12	-	-	-	-
5141 pt.	Voluntary groups	-4	+2	-6	+18	-	-	-	-
5141 pt.	Retailer cooperatives	-4	+10	-4	+21	-	-	-	-
5141 pt.	Other general-lines	-5	+10	-2	+4	-	-	-	-
5142,3,6,9	Specialty-line groceries	-4	+18	+1	+9	-	-	-	-
5144	Poultry and poultry products	-11	0	-2	-21	-	-	-	-
5145	Confectionery	-19	+22	+5	+9	-	-	-	-
5147	Meats and meat products	-6	+11	-1	+9	-	-	-	-
5148	Fresh fruits and vegetables	-4	+22	-2	-2	-	-	-	-
515	Farm-product raw materials[2]	-6	-6	+2	-7	-4	-7	+5	-6
5152	Cotton	-7	+17	+20	-41	-	-	-	-
5153	Grain	-5	-9	-1	+2	-	-	-	-
517	Petroleum and petroleum products	-3	+8	-1	-2	+6	+6	-2	-2
5171	Petroleum bulk stations and terminals	-5	+7	-5	-8	-	-	-	-
518	Beer, wine, and distilled alcoholic beverages	-30	+28	+6	+7	+7	+24	+5	+7
5181	Beer and ale	-19	+28	+10	+18	-	-	-	-
5182	Wines and distilled alcoholic beverages	-38	+29	+5	+2	-	-	-	-
519	Miscellaneous nondurable goods	-8	-4	+5	+3	-5	-7	+6	+3
5191	Farm supplies	-5	-27	+9	+19	-	-	-	-
5194	Tobacco and tobacco products	-14	+5	-1	0	-	-	-	-
5198	Paints, varnishes, and supplies	+5	+27	-4	+20	-	-	-	-
5199 pt.	Books, periodicals, newspapers	+5	+60	-7	-17	-	-	-	-

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

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

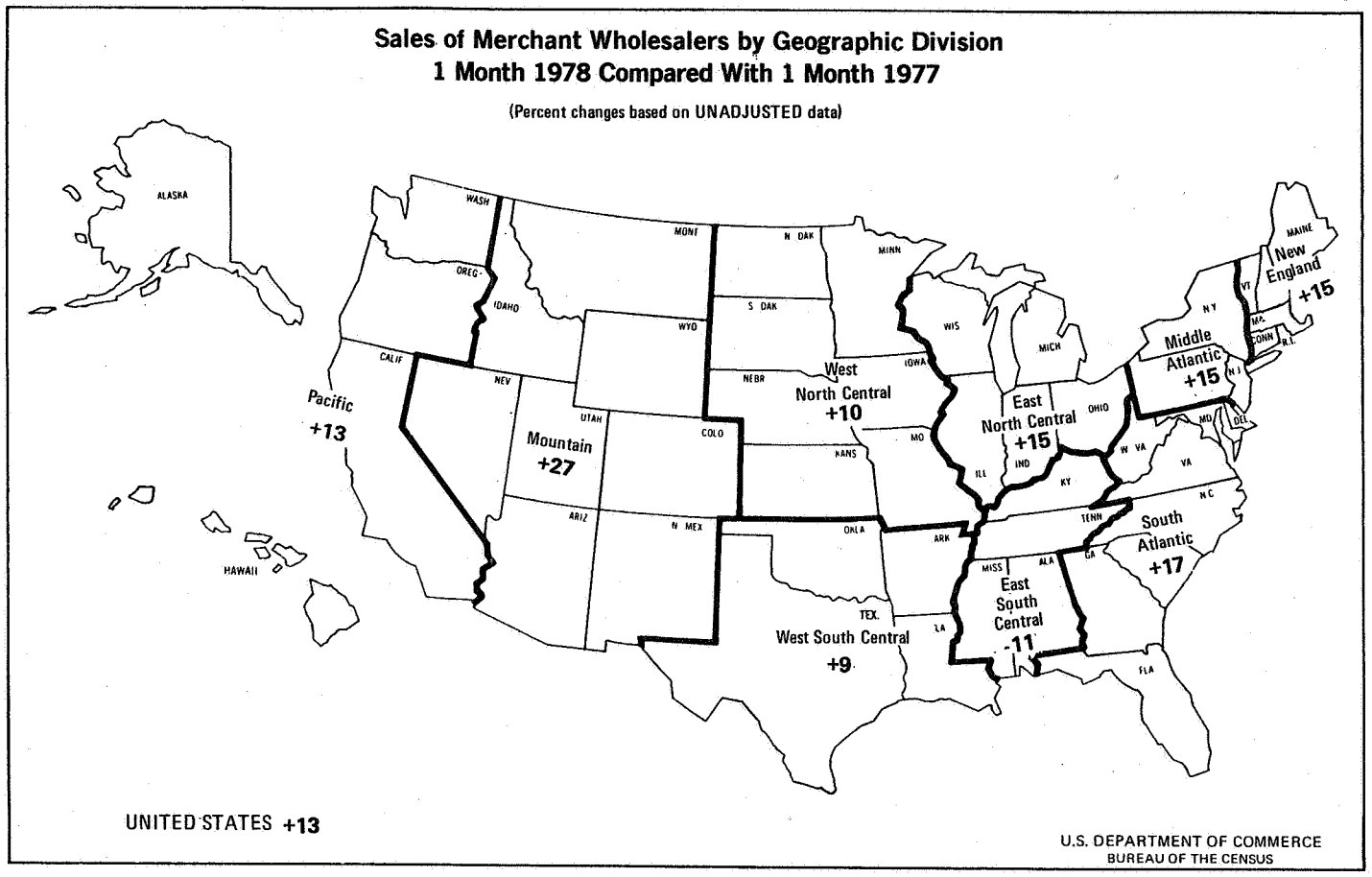


Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1978 and 1977

(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]	1978	1977												Total 12 mos. 1977	Sampling error of the estimate	
		Jan.[p]	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.		Range[2]	Median
	Merchant wholesalers, total	52,262	46,352	47,683	56,383	53,357	54,633	55,794	51,290	55,597	54,505	54,251	56,034	56,224	642,104	0.8-0.9	0.9
	New England	2,737	2,381	2,365	2,893	2,649	2,744	2,890	2,651	2,856	2,880	2,919	3,036	3,008	33,272	5-6	6
	Middle Atlantic	12,027	10,442	10,806	12,783	11,835	12,208	12,592	11,263	12,356	12,428	11,945	12,494	12,924	144,076	2-2	2
	East North Central	8,823	7,692	8,164	9,363	9,042	9,361	9,520	8,807	9,685	9,431	9,724	9,841	9,596	110,226	2-3	3
	West North Central	5,522	5,001	5,028	5,842	6,018	6,106	5,820	5,332	5,639	5,509	5,670	5,977	5,617	67,559	2-3	2
	South Atlantic	5,712	4,862	4,965	6,061	5,699	5,850	6,017	5,548	6,015	5,934	5,854	6,126	6,188	69,119	2-3	2
	East South Central	2,384	2,665	2,632	3,158	2,882	2,882	2,884	2,652	2,853	2,723	2,813	2,765	2,822	33,731	4-5	4
	West South Central	5,653	5,165	5,429	6,367	5,842	5,774	6,096	5,715	6,108	5,745	5,644	6,008	6,283	70,176	3-4	4
	Mountain	2,035	1,603	1,679	2,029	1,887	1,897	2,054	1,949	2,040	2,177	2,027	1,964	2,099	23,405	5-5	5
	Pacific	7,368	6,541	6,609	7,887	7,503	7,811	7,921	7,373	8,045	7,678	7,655	7,821	7,688	90,532	2-3	3
50	Durable goods, total	22,977	18,895	20,013	24,008	23,356	24,159	25,292	22,915	25,998	25,461	25,369	25,340	24,797	285,605	0.8-1.0	0.9
	Middle Atlantic	5,045	3,995	4,184	5,128	4,921	5,062	5,315	4,662	5,354	5,366	5,420	5,477	5,379	60,263	4-5	4
	East North Central	3,900	3,338	3,700	4,199	4,187	4,367	4,549	4,073	4,771	4,635	4,573	4,549	4,282	51,223	3-4	4
	West North Central	1,767	1,550	1,637	1,862	1,931	1,996	2,098	1,911	2,083	2,003	2,061	2,075	1,900	23,107	5-6	5
	South Atlantic	2,845	2,283	2,406	2,992	2,827	2,957	3,134	2,840	3,127	3,113	3,088	3,051	2,971	34,789	4-5	4
	West South Central	2,466	2,089	2,212	2,584	2,508	2,593	2,725	2,520	2,886	2,673	2,643	2,611	2,729	30,773	4-4	4
	Mountain	957	686	734	922	851	856	1,000	921	1,016	1,051	988	900	989	10,914	6-7	7
	Pacific	4,034	3,294	3,427	4,130	4,001	4,156	4,265	3,967	4,477	4,282	4,210	4,335	4,262	48,806	2-3	3
51	Nondurable goods, total	29,285	27,457	27,670	32,375	30,001	30,474	30,502	28,375	29,599	29,044	28,882	30,694	31,427	356,498	1.0-1.2	1.0
	New England	1,742	1,627	1,614	1,882	1,717	1,800	1,923	1,786	1,860	1,843	1,839	1,918	1,918	21,727	5-7	6
	Middle Atlantic	6,982	6,447	6,622	7,655	6,914	7,146	7,277	6,601	7,002	7,062	6,525	7,017	7,545	83,813	3-3	3
	East North Central	4,924	4,354	4,464	5,164	4,855	4,994	4,971	4,734	4,914	4,796	5,151	5,292	5,314	59,003	3-4	3
	West North Central	3,755	3,451	3,391	3,980	4,087	4,110	3,722	3,421	3,556	3,506	3,609	3,902	3,717	44,452	3-4	3
	South Atlantic	2,867	2,579	2,559	3,069	2,872	2,893	2,883	2,708	2,888	2,821	2,766	3,075	3,217	34,330	3-5	3
	East South Central	1,415	1,759	1,676	1,978	1,684	1,654	1,645	1,496	1,565	1,422	1,507	1,542	1,626	19,554	3-4	4
	West South Central	3,187	3,076	3,217	3,783	3,334	3,181	3,371	3,195	3,222	3,072	3,001	3,397	3,554	39,403	5-5	5
	Pacific	3,334	3,247	3,182	3,757	3,502	3,655	3,656	3,406	3,568	3,396	3,445	3,486	3,426	41,726	4-5	4

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

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

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: January 1978

(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[1]		Inventories			
		January 1978 from--		January 1978 from--			
		December 1977	January 1977	December 1977	January 1977		
		A	B	D	E	A	D
	Merchant wholesalers, total	-7	+13	+1	+10	0.4	0.2
	New England	-9	+15	+1	+9	2.0	1.9
	Middle Atlantic	-7	+15	0	+2	1.1	0.6
	East North Central	-8	+15	0	+15	1.2	0.8
	West North Central	-2	+10	+1	+10	1.3	1.1
	South Atlantic	-8	+17	+1	+10	1.6	1.0
	East South Central	-16	-11	+2	+6	1.7	1.4
	West South Central	-12	+9	+4	+12	1.4	0.8
	Mountain	-3	+27	+2	+24	2.4	1.3
	Pacific	-4	+13	0	+14	1.2	0.5
50	Durable goods, total	-7	+22	+1	+14	0.6	0.3
	New England	-9	+32	0	+10	2.4	1.3
	Middle Atlantic	-6	+26	0	+8	1.7	1.0
	East North Central	-9	+17	0	+15	1.9	1.0
	West North Central	-7	+14	+1	+7	3.3	1.7
	South Atlantic	-4	+25	+2	+16	1.9	1.2
	East South Central	-19	+7	-1	+19	3.9	2.5
	West South Central	-10	+18	+3	+19	2.1	1.2
	Mountain	-3	+40	+3	+29	2.9	1.7
	Pacific	-5	+22	0	+20	1.9	0.7
51	Nondurable goods, total	-7	+7	+2	+3	0.6	0.4
	New England	-9	+7	+2	+8	1.9	2.7
	Middle Atlantic	-7	+8	0	-6	1.9	0.9
	East North Central	-7	+13	+1	+15	1.4	1.1
	West North Central	+1	+9	0	+12	1.6	1.4
	South Atlantic	-11	+11	-1	0	2.4	1.8
	East South Central	-13	-20	+8	-10	1.7	2.4
	West South Central	-14	+4	+6	+3	2.2	1.3
	Mountain	-3	+18	0	+14	3.2	1.2
	Pacific	-3	+2	+1	+3	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	-3	+22	+1	+21	2	1
	New England	-23	+36	-3	+3	7	4
	Middle Atlantic	-7	+26	+1	+27	4	2
	East North Central	-9	+12	0	+23	7	1
	West North Central	+1	+20	+2	+11	5	2
	South Atlantic	-1	+33	0	+58	4	2
	East South Central	-13	(S)	0	+43	4	3
	West South Central	-2	+4	+3	+6	5	2
	Mountain	+15	+30	+15	+43	7	3
	Pacific	+2	+34	-6	0	3	2
502	Furniture and home furnishings	-13	+23	+5	+19	2	1
	Middle Atlantic	-16	+5	+6	+17	4	2
	East North Central	-25	+12	+1	+42	7	2
	West North Central	-15	+21	+6	+6	5	4
	West South Central	-16	+11	+4	+13	5	7
	Pacific	-9	+43	+4	+22	5	3
503	Lumber and other construction materials	-11	+24	+4	+28	2	1
	New England	-19	+28	-1	+14	4	5
	Middle Atlantic	-15	+50	+4	+19	4	2
	East North Central	-12	+33	+3	+53	3	2
	West North Central	-6	+7	+7	+10	7	7
	South Atlantic	-5	+61	+3	+32	4	2
	East South Central	-29	+55	+8	+31	4	3
	West South Central	-6	+26	+8	+28	6	5
	Pacific	-9	-4	+3	+26	5	1
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-9	+20	0	+19	2	1
	Middle Atlantic	-7	+23	-1	+1	5	2
	East North Central	-12	+26	+1	+23	3	2
	West North Central	-13	+29	-4	+9	4	1
	South Atlantic	-14	+2	-1	+18	3	1
	West South Central	-15	+2	-5	+14	3	6
	Pacific	-8	+21	+1	+49	4	1
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-18	+20	-1	+19	3	1
	Middle Atlantic	-20	+23	-6	+11	3	2
	East North Central	-18	-8	-3	+4	4	1
	West North Central	-22	+8	+2	+45	4	4
	South Atlantic	-17	+48	-3	+13	6	4
	West South Central	-8	+33	+3	+38	4	4
	Mountain	-13	(S)	+9	(S)	6	3
	Pacific	-17	+34	+3	+75	3	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 1978—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[1] January 1978 from-- December 1977	Sales[1] January 1978 from-- January 1977	Inventories January 1978 from-- December 1977	Inventories January 1978 from-- January 1977	Sampling errors of the ratio corresponding to the percent change in columns[2]-- A	Sampling errors of the ratio corresponding to the percent change in columns[2]-- D
		A	B	D	E	A	D
5072	Hardware	+3	+13	+1	+20	1	1
	New England	-2	-4	-3	+4	6	3
	Middle Atlantic	-3	-1	+1	+21	6	2
	East North Central	+15	+39	0	+25	4	2
	West North Central	+5	+5	+2	+11	3	3
	South Atlantic	-5	+14	+5	+43	4	2
	East South Central	-12	-34	+5	-1	4	1
	Mountain	+1	+8	-3	-12	7	5
	Pacific	+9	+11	-2	+17	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	-8	+18	-2	+8	2	1
	Middle Atlantic	-5	+8	0	-8	6	3
	East North Central	-8	+19	-7	-7	3	3
	South Atlantic	-11	+22	-2	+1	3	2
	Mountain	+15	(S)	+6	(S)	7	4
	Pacific	-9	+23	-3	+36	5	4
5084,5	Industrial machinery, equipment, and supplies	-9	+15	+2	+12	2	1
	Middle Atlantic	-10	+17	+3	+10	7	2
	East North Central	-7	+17	-1	+3	3	2
	South Atlantic	-13	-14	+2	+1	4	3
	West South Central	-6	+33	+6	+19	4	3
	Mountain	+2	(S)	+1	+23	5	2
	Pacific	-8	+37	-2	+19	5	2
512	Drugs, drug proprietaries, and druggists' sundries	-1	+8	-3	+9	1	1
	New England	+10	+25	+2	+14	5	3
	Middle Atlantic	-17	-5	-14	-9	3	2
	East North Central	-3	+12	-4	+13	6	3
	West North Central	+7	+20	-4	+8	2	2
	South Atlantic	+2	+22	+4	+19	6	5
	East South Central	+5	+18	0	+5	6	5
	West South Central	+2	-3	-3	-6	3	2
	Mountain	+7	+4	0	-3	3	2
	Pacific	+8	+1	+5	+36	3	3
5141	Groceries, general-line	-5	+7	-4	+12	1	1
	New England	-4	+13	+1	+24	2	1
	Middle Atlantic	-1	+6	0	+14	1	2
	East North Central	-7	+11	-2	+23	3	1
	West North Central	-8	+1	-5	-6	1	1
	South Atlantic	+2	+9	-3	+3	2	1
	East South Central	-2	(S)	-14	+14	2	1
	West South Central	-8	+8	-6	+18	2	1
	Mountain	-8	+19	-5	+16	2	2
	Pacific	-4	+12	-4	+10	1	1
5142,3,6,9	Specialty-line groceries	-4	+18	+1	+9	1	1
	New England	-10	(S)	-7	+2	4	3
	Middle Atlantic	-5	+25	+9	+11	4	2
	East North Central	-1	+24	-1	+8	3	2
	West North Central	-1	(S)	+8	(S)	3	1
	South Atlantic	+2	+49	+2	+22	5	6
	East South Central	-1	+5	-14	-11	2	2
	Pacific	-2	-2	-11	-11	4	5
5148	Fresh fruits and vegetables	-4	+22	-2	-2	2	4
	Middle Atlantic	-7	+28	-3	+13	7	5
	East North Central	-12	+13	0	-8	6	6
	West North Central	-5	+24	+6	0	6	3
	East South Central	-7	(S)	-6	+17	3	6
	West South Central	-17	+21	+2	(S)	5	3
	Pacific	+5	+20	-8	(S)	4	4
5194	Tobacco and tobacco products	-14	+5	-1	0	1	1
	New England	-17	-9	+1	(S)	5	3
	Middle Atlantic	-13	+5	-3	+15	4	3
	East North Central	-17	+10	+3	+10	4	3
	West North Central	-1	0	+2	-13	4	2
	South Atlantic	-28	-6	-3	-2	6	6
	East South Central	-15	+8	-1	0	7	4
	West South Central	-24	+3	-8	-15	7	6
	Mountain	-14	+14	-3	(S)	6	2
	Pacific	0	+21	-3	+7	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 8.

[2] The sampling errors (in percent) shown in columns A and D are based on medians of measurements on data for August, September, and October 1977.

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 10 percent of the sales estimates and 20 percent for inventories.

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

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

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

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

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

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

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

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

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1977-December 1978

1972 SIC code	Kind of business	1977											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	91.7	92.1	107.2	99.0	100.6	103.8	95.5	104.5	102.5	100.4	101.1	99.6
	Total (excluding farm-product raw materials)	89.6	91.5	106.3	99.7	101.8	106.0	96.5	105.8	103.6	100.0	100.0	96.9
50	Durable goods, total	87.1	88.2	106.3	101.3	103.7	107.8	96.9	106.5	105.8	101.1	99.3	94.0
501	Motor vehicles and automotive parts and supplies	89.7	89.3	109.5	108.3	107.5	107.2	100.5	105.9	101.1	94.2	95.0	90.0
502	Furniture and home furnishings	82.6	89.5	104.2	97.8	98.8	106.7	90.7	106.4	106.9	110.3	109.2	94.7
503	Lumber and other construction materials	78.4	80.8	101.1	99.8	108.0	112.1	104.6	116.4	108.7	102.4	100.6	85.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.7	89.9	104.1	101.6	101.8	104.0	92.1	106.4	102.0	109.1	110.4	98.2
505	Metals and minerals, except petroleum	94.4	90.9	110.4	99.9	105.3	104.8	92.5	107.5	105.0	96.0	99.5	90.8
506	Electrical goods	87.8	88.6	101.8	97.1	96.0	108.4	98.5	105.9	104.2	106.4	101.9	101.6
507	Hardware, plumbing, heating equipment, and supplies	87.4	87.4	101.2	99.4	102.9	108.3	99.4	108.7	106.9	105.8	100.8	89.9
508	Machinery, equipment, and supplies	86.4	89.0	107.7	102.7	104.4	108.8	95.7	103.5	107.3	102.5	95.5	94.9
509	Miscellaneous durable goods	82.8	89.8	105.7	98.8	100.4	107.7	89.8	105.8	106.7	104.1	104.3	102.0
51	Nondurable goods, total	95.1	95.1	108.4	97.4	98.3	100.7	94.8	102.3	99.7	99.4	102.8	103.9
	Total (excluding farm-product raw materials)	91.7	94.2	106.8	98.1	100.0	104.1	96.3	104.6	101.6	99.0	100.6	100.3
511	Paper and paper products	93.8	92.2	104.3	95.1	96.4	104.2	97.3	108.3	104.7	103.6	103.2	95.7
512	Drugs, drug proprietaries, and druggists' sundries	94.2	92.6	105.1	98.8	97.7	98.7	92.7	103.9	104.4	108.3	101.4	98.9
513	Apparel, piece goods, and notions	89.7	94.6	106.4	95.2	95.2	100.5	95.1	114.9	108.8	105.4	105.6	87.1
514	Groceries and related products	94.2	90.9	103.8	98.5	101.5	106.7	99.1	105.4	100.7	100.1	99.7	98.5
515	Farm-product raw materials[1]	105.1	95.8	112.8	96.9	101.5	88.2	88.5	95.5	93.5	102.2	110.6	108.6
516	Chemicals and allied products	87.1	89.9	107.4	101.2	102.5	106.5	97.0	107.2	103.4	102.0	99.3	94.3
517	Petroleum and petroleum products	94.8	102.6	105.4	98.9	90.9	98.9	100.1	101.9	97.3	102.4	101.4	105.6
518	Beer, wine, and distilled alcoholic beverages	75.8	80.8	101.4	94.1	103.0	113.8	98.1	107.0	100.3	98.8	105.8	120.1
519	Miscellaneous nondurable goods	95.1	101.7	116.8	104.4	101.4	100.9	88.1	96.2	99.6	95.4	96.1	100.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	102.1	101.4	100.9	99.9	98.4	98.4	98.4	98.4	98.6	100.9	102.1	101.1
	Total (excluding farm-product raw materials)	99.8	100.3	100.8	100.1	100.3	100.5	100.1	99.2	99.3	100.0	100.2	99.4
50	Durable goods, total	99.1	100.3	101.1	100.9	101.4	101.8	100.9	99.4	99.1	99.1	98.9	98.9
501	Motor vehicles and automotive parts and supplies	101.4	102.8	102.1	101.4	102.4	100.9	98.9	96.6	97.9	97.8	97.9	100.4
502	Furniture and home furnishings	98.9	99.4	100.1	99.8	99.9	101.4	100.9	101.3	100.9	99.6	100.4	98.1
503	Lumber and other construction materials	97.9	98.4	102.8	102.6	105.4	103.1	102.9	100.6	97.8	95.3	96.4	97.1
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	100.8	99.9	100.9	103.4	107.6	104.6	101.6	100.3	100.6	94.4	89.3
505	Metals and minerals, except petroleum	100.4	98.9	100.9	101.4	100.1	99.4	102.8	101.3	98.1	96.8	99.1	101.4
506	Electrical goods	97.3	97.6	99.1	99.4	100.6	101.9	101.1	101.3	100.4	101.6	101.4	98.8
507	Hardware, plumbing, heating equipment, and supplies	98.1	98.6	101.6	103.1	102.8	101.1	100.9	101.4	98.4	98.3	98.4	97.6
508	Machinery, equipment, and supplies	99.1	101.1	101.9	100.6	101.1	102.3	100.1	97.9	99.1	99.6	99.6	97.8
509	Miscellaneous durable goods	97.1	98.9	96.8	98.4	96.8	101.3	101.9	102.9	101.3	103.1	101.8	100.4
51	Nondurable goods, total	105.4	103.4	100.9	98.1	93.9	93.3	94.8	97.3	97.6	103.9	106.9	105.4
	Total (excluding farm-product raw materials)	100.5	100.2	100.5	99.4	98.2	98.4	98.3	99.0	99.8	101.9	102.7	100.9
511	Paper and paper products	99.1	99.1	98.8	100.4	99.8	101.9	99.6	100.9	100.1	100.3	99.8	100.9
512	Drugs, drug proprietaries, and druggists' sundries	96.4	97.8	100.1	101.4	98.1	100.4	99.3	100.1	102.4	104.4	101.4	98.9
513	Apparel, piece goods, and notions	100.1	99.6	98.4	98.6	101.1	100.4	102.6	101.1	100.4	99.1	99.1	99.9
514	Groceries and related products	99.9	100.9	102.4	99.9	98.4	98.4	98.1	98.1	99.1	101.3	102.9	101.1
515	Farm-product raw materials[1]	121.4	113.9	104.9	92.4	80.8	73.9	84.8	84.8	89.8	108.9	122.1	123.9
516	Chemicals and allied products	99.8	100.1	102.1	101.4	101.3	99.9	99.8	99.1	99.6	97.8	99.4	100.1
517	Petroleum and petroleum products	104.8	99.8	97.1	93.1	95.1	96.8	96.4	99.3	101.8	106.8	105.6	104.3
518	Beer, wine, and distilled alcoholic beverages	96.9	97.9	97.1	98.9	101.8	103.1	98.6	97.6	100.6	107.6	105.4	95.3
519	Miscellaneous nondurable goods	103.6	104.3	102.9	100.6	96.3	93.3	95.3	98.4	98.1	99.8	103.6	104.4

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1977-December 1978—Continued

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.9	92.2	106.9	96.5	103.5	103.8	95.4	105.1	98.9	102.5	101.4	96.7
	Total (excluding farm-product raw materials)	91.9	91.6	106.4	97.5	104.6	105.9	95.9	106.4	100.9	102.2	98.8	95.1
50	Durable goods, total	89.8	89.0	105.2	98.7	106.3	107.6	96.4	107.1	102.9	104.2	98.4	91.4
501	Motor vehicles and automotive parts and supplies	93.6	89.1	107.0	107.0	107.4	108.0	99.3	107.5	96.9	98.4	92.5	91.4
502	Furniture and home furnishings	84.6	89.1	104.6	95.9	101.6	106.2	89.4	107.2	104.2	112.8	108.3	93.8
503	Lumber and other construction materials	81.6	81.2	101.7	95.3	110.7	112.5	102.4	116.9	104.7	108.0	100.0	82.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.4	90.3	102.8	100.3	109.7	98.1	95.1	104.0	104.7	105.7	108.7	97.3
505	Metals and minerals, except petroleum	98.8	91.0	108.9	97.9	107.9	103.6	90.7	108.4	103.1	100.0	97.4	91.1
506	Electrical goods	89.4	89.1	101.7	95.2	99.2	106.4	100.2	104.9	100.9	107.7	103.3	98.5
507	Hardware, plumbing, heating equipment, and supplies	89.5	87.8	100.8	97.5	105.5	107.8	99.7	109.4	103.4	107.2	101.1	88.0
508	Machinery, equipment, and supplies	88.1	88.8	107.8	99.6	107.3	108.7	95.7	104.3	104.0	103.7	96.9	91.6
509	Miscellaneous durable goods	86.5	89.8	104.7	95.1	101.0	110.6	87.6	108.0	102.4	109.5	105.2	96.2
51	Nondurable goods, total	97.0	95.1	108.7	95.1	101.3	100.9	94.8	102.9	96.9	100.9	102.6	100.7
	Total (excluding farm-product raw materials)	93.9	94.5	107.7	95.7	102.7	104.4	95.6	105.1	98.6	100.5	100.4	97.5
511	Paper and paper products	95.2	92.4	104.5	92.6	101.9	103.0	96.6	108.3	103.7	105.0	100.5	92.7
512	Drugs, drug proprietaries, and druggists' sundries	98.2	92.7	104.9	96.0	100.4	99.8	92.7	104.5	101.4	108.3	100.6	96.9
513	Apparel, piece goods, and notions	91.3	94.8	106.4	92.3	99.6	99.3	93.5	115.1	106.8	108.1	103.9	86.0
514	Groceries and related products	95.0	91.0	104.1	96.4	104.5	106.2	99.1	106.0	100.1	100.3	99.9	94.3
515	Farm-product raw materials[1]	106.8	95.8	112.8	94.4	99.6	89.9	92.3	94.6	92.6	100.5	111.2	104.6
516	Chemicals and allied products	90.0	89.4	106.9	98.2	105.2	106.5	97.0	107.3	99.7	105.5	98.0	94.1
517	Petroleum and petroleum products	96.5	102.1	107.7	96.2	92.8	99.9	98.4	101.7	95.5	102.4	98.7	105.8
518	Beer, wine, and distilled alcoholic beverages	78.7	80.9	100.7	91.2	106.7	113.9	97.3	108.1	96.9	101.9	105.3	115.3
519	Miscellaneous nondurable goods	97.4	101.6	118.1	101.5	104.3	102.9	87.2	96.5	96.0	97.0	96.4	97.4
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	101.9	101.3	101.0	100.1	98.6	98.5	98.4	98.0	98.9	100.6	101.7	100.5
	Total (excluding farm-product raw materials)	99.7	100.3	100.8	100.2	100.2	100.5	100.1	99.1	99.4	100.0	100.3	99.2
50	Durable goods, total	99.1	100.2	100.9	100.6	101.1	101.6	100.8	99.3	99.3	99.0	99.1	98.7
501	Motor vehicles and automotive parts and supplies	101.4	102.6	101.8	101.0	102.1	100.9	98.9	96.8	97.9	97.8	98.1	100.5
502	Furniture and home furnishings	99.4	99.2	99.8	99.5	99.8	101.3	100.6	101.0	101.5	100.5	99.1	98.1
503	Lumber and other construction materials	98.1	98.8	103.0	102.6	105.0	101.6	101.5	100.2	98.9	96.1	96.9	97.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	102.4	99.2	100.5	103.3	107.3	104.4	101.1	100.6	101.2	93.9	89.0
505	Metals and minerals, except petroleum	100.4	98.6	100.5	101.0	99.7	99.2	102.4	101.9	98.6	96.7	99.5	101.5
506	Electrical goods	97.2	97.4	99.0	99.9	100.2	101.8	101.2	101.5	100.4	101.2	101.0	98.8
507	Hardware, plumbing, heating equipment, and supplies	97.8	98.0	101.6	103.2	102.8	101.7	100.5	101.4	98.7	98.6	98.2	97.3
508	Machinery, equipment, and supplies	99.2	101.1	101.7	100.0	101.0	102.3	100.1	98.1	99.3	99.6	99.5	97.8
509	Miscellaneous durable goods	97.1	98.7	96.6	98.2	96.6	101.2	101.8	102.6	101.5	103.1	102.1	100.2
51	Nondurable goods, total	104.8	103.2	101.6	98.3	95.3	93.7	94.6	96.3	98.6	103.3	106.0	103.9
	Total (excluding farm-product raw materials)	100.4	100.2	100.7	99.7	98.5	98.6	98.3	98.6	99.7	101.9	102.5	100.8
511	Paper and paper products	98.7	99.0	98.7	100.6	99.4	102.0	99.6	100.6	99.5	101.5	100.0	100.2
512	Drugs, drug proprietaries, and druggists' sundries	96.3	97.6	99.9	101.3	97.7	100.2	99.2	99.8	102.0	105.0	101.8	98.8
513	Apparel, piece goods, and notions	99.9	99.4	98.6	98.5	101.1	100.0	102.2	101.0	100.0	98.3	100.1	100.6
514	Groceries and related products	99.6	100.7	102.2	100.1	98.6	98.5	98.1	97.8	99.0	101.8	102.1	101.3
515	Farm-product raw materials[1]	120.2	114.0	106.9	93.1	81.5	76.1	84.4	83.5	88.3	108.7	121.4	120.9
516	Chemicals and allied products	99.9	99.9	102.7	101.1	101.3	99.8	99.6	99.4	99.9	96.9	98.7	100.6
517	Petroleum and petroleum products	104.9	100.2	97.9	93.5	95.6	97.0	95.4	99.0	102.5	104.8	104.6	104.2
518	Beer, wine, and distilled alcoholic beverages	96.6	96.5	97.2	99.0	101.3	103.1	98.9	97.6	100.8	107.5	106.5	94.6
519	Miscellaneous nondurable goods	103.4	103.2	105.3	101.1	96.2	92.9	95.1	97.2	98.6	99.7	103.2	104.1

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.

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.

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 bench-

mark 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)[1]

Ferrous Metals Service Centers and Offices (SIC 5051 pt.)[1]—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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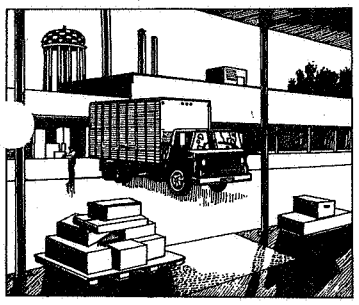
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Monthly Wholesale Trade

SALES AND INVENTORIES

Issued April 1978

February 1978

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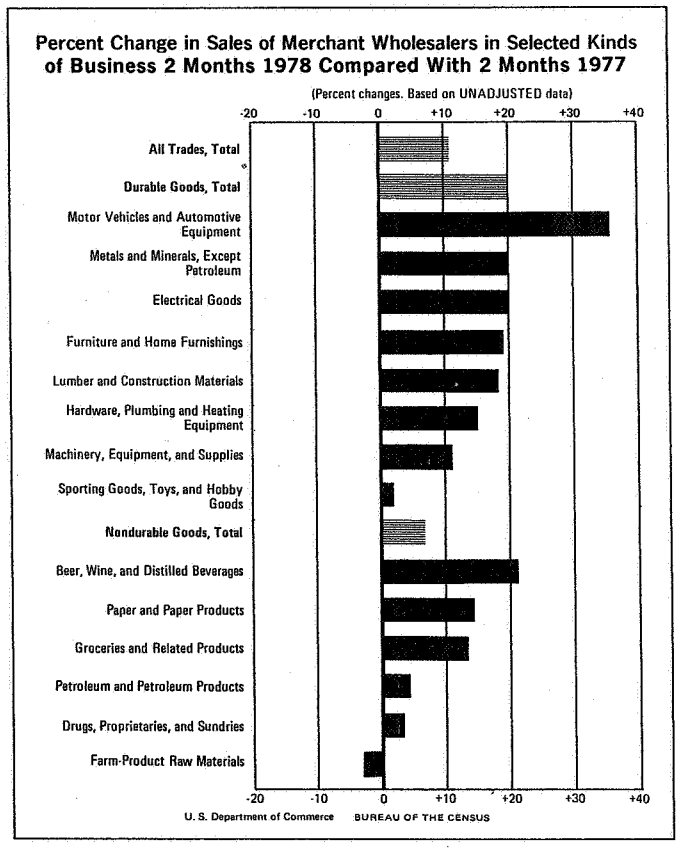
Sales—February 1978 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences, but not for price changes, were $57.5 billion, up 3 percent from the previous month and 11 percent above February 1977. Adjusted December-through-February total sales were up 5 percent from the September-through-November period and were 11 percent above the total sales for the comparable months a year ago.

After adjustment, February sales in the durable goods trades were up 5 percent from the previous month and were 18 percent above February 1977. Nondurable goods sales were up 1 percent from January and were 5 percent above the same month a year ago. Total monthly sales in the durable goods group during the December-through-February period were 5 percent above the prior 3 months and were 19 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were 5 percent above the September-through-November period and were 5 percent above sales for the same period a year ago.

By trade group, comparisons with previous month sales levels showed mixed results with 7 trade groups showing gains, 6 indicating declines, and 3 with no change. The larger increases were shown in motor vehicles and automotive equipment (13%) and farm-product raw materials (8%). The most notable decrease was shown in petroleum and petroleum products (-8%). Compared with sales of a year ago, most trade groups showed increases with the sharper increases reported in motor vehicles and automotive equipment (40%) and miscellaneous durable goods (21%). The most substantial decline was shown in miscellaneous nondurable goods (-7%).

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variations, but not for price changes, were $69.8 billion at the end of February, up 1 percent from last month and 11 percent above the same month a year ago. Stocks in both the durable and nondurable goods trades were up 1 percent from the previous month. However, durable goods stocks were up 15 percent above February 1977, while nondurable goods stocks increased 3 percent in the same period.

Based on adjusted data, comparisons with previous month inventory levels showed mixed results with 8 trade groups showing gains, 6 indicating declines, and 2 with no change. The largest increase was reported in hardware, plumbing and heating equipment (6%). The most notable decrease was shown in sporting goods, toys, and hobby goods (-4%). Compared with year-ago inventories, all trade groups showed increases with the exception of farm-product raw materials (-6%) and petroleum and petroleum products (-5%). The sharper increases were reported in lumber and construction materials (24%) and hardware, plumbing and heating equipment (21%).



Stock-Sales Ratio—The February stock-sales ratio for merchant wholesalers, based on seasonally-adjusted data, was 121, down 2 points from last month and 1 point below the year-ago ratio. The stock-sales ratio for durable goods was 169, down 6 points from January, and 5 points below the February 1977 ratio. The ratio for nondurable goods was 80, unchanged from last month, but 1 point below the year-ago ratio.

An advance release of the February 1978 data was issued on April 7, 1978.

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: 1978 and 1977

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

1972 SIC code	Kind of business	1978		1977										Total 2 months	
		Jan.	Feb.[p]	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1978	1977
	Merchant wholesalers, total	52,143	52,642	47,683	56,383	53,357	54,633	55,794	51,290	55,597	54,505	54,251	56,034	56,224	104,783	94,035
	Total (excluding farm-product raw materials)	46,343	47,003	41,918	49,806	47,066	47,931	49,990	45,838	50,659	49,544	49,132	49,762	50,139	93,345	82,184
50	Durable goods, total	22,869	23,727	20,013	24,008	23,356	24,159	25,292	22,915	25,998	25,461	25,369	25,340	24,797	46,596	38,908
501	Motor vehicles and automotive parts and supplies	4,797	5,177	3,716	4,598	4,663	4,866	4,795	4,463	4,762	4,554	4,605	4,721	4,698	9,974	7,321
5013,4	Automotive parts and supplies, tires and tubes[1]	2,517	2,656	2,052	2,363	2,415	2,482	2,597	2,395	2,657	2,538	2,661	2,651	2,551	5,173	4,067
5013	Automotive parts and supplies[2]	2,166	2,282	1,782	2,013	2,018	2,111	2,221	2,027	2,229	2,089	2,227	2,220	2,167	4,448	3,504
502	Furniture and home furnishings	867	907	763	911	860	891	968	816	972	998	1,048	1,045	1,025	1,774	1,492
5021	Furniture--household and office	304	300	216	269	262	272	291	251	310	308	320	340	350	604	436
5023	Home furnishings	564	607	547	642	598	619	677	565	662	689	728	705	676	1,171	1,056
503	Lumber and other construction materials	1,867	1,833	1,624	2,068	2,043	2,222	2,343	2,271	2,657	2,553	2,476	2,334	2,086	3,700	3,128
5031	Lumber, plywood, and millwork	1,290	1,261	1,119	1,389	1,343	1,513	1,571	1,511	1,792	1,681	1,637	1,540	1,389	2,551	2,191
5039	Construction materials, n.e.c.	576	572	505	679	700	709	772	760	866	872	839	794	697	1,148	937
505	Metals and minerals, except petroleum	2,505	2,405	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	2,731	2,709	2,437	2,592	2,423	4,910	4,103
5051 pt.	Ferrous metals service centers and offices	1,922	1,868	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	2,039	2,083	1,845	1,869	1,774	3,790	3,037
5051 pt.	Ferrous metals service centers[3]	1,386	1,349	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	1,480	1,478	1,385	1,359	1,282	2,735	2,155
506	Electrical goods	2,541	2,648	2,196	2,552	2,469	2,391	2,761	2,647	2,821	2,846	2,998	2,973	2,964	5,189	4,323
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,262	1,331	1,130	1,241	1,183	1,222	1,390	1,324	1,456	1,369	1,436	1,436	1,379	2,593	2,178
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,279	1,317	1,066	1,311	1,286	1,169	1,371	1,323	1,365	1,477	1,562	1,537	1,585	2,596	2,145
5064	Electrical appliances, TV and radio sets	763	789	689	836	831	731	940	914	919	979	1,011	989	1,003	1,552	1,378
507	Hardware, plumbing, heating equipment, and supplies	1,790	1,714	1,544	1,817	1,838	1,925	2,017	1,898	2,068	1,961	2,027	1,974	1,820	3,504	3,059
5072	Hardware	693	676	612	758	769	721	740	700	790	750	750	768	676	1,369	1,228
5074	Plumbing and heating equipment and supplies (hydronics)	726	690	635	708	747	824	852	799	842	802	846	791	753	1,416	1,[illegible]
508	Machinery, equipment, and supplies	6,190	6,590	6,009	7,126	6,806	7,034	7,349	6,465	7,380	7,217	7,163	6,941	7,019	12,780	11,503
5082	Construction and mining machinery and equipment	825	920	875	1,042	1,022	1,044	1,059	876	971	1,002	1,006	1,025	1,006	1,745	1,587
5084,5	Industrial machinery, equipment, and supplies	2,545	2,708	2,463	2,652	2,376	2,520	2,821	2,494	2,891	2,771	2,750	2,858	2,861	5,253	4,714
5086	Professional equipment, supplies	710	737	667	779	747	779	840	757	846	805	808	773	805	1,447	1,307
5093	Scrap and waste materials	757	789	764	844	895	869	903	679	802	810	807	812	779	1,546	1,432
51	Nondurable goods, total	29,274	28,915	27,670	32,375	30,001	30,474	30,502	28,375	29,599	29,044	28,882	30,694	31,427	58,188	55,127
	Total (excluding farm-product raw materials)	23,474	23,276	21,905	25,798	23,710	23,772	24,698	22,923	24,661	24,084	23,763	24,422	25,342	46,749	43,276
511	Paper and paper products	1,316	1,275	1,194	1,327	1,222	1,261	1,348	1,208	1,388	1,366	1,341	1,335	1,358	2,591	2,328
5111,3	Printing, writing, industrial, and personal service paper	950	924	906	1,011	959	991	1,054	935	1,060	1,032	1,007	988	995	1,874	1,767
512	Drugs, drug proprietaries, and druggists' sundries	887	836	832	964	891	897	907	848	952	948	939	926	922	1,723	1,674
5122	Drugs, drug proprietaries, and druggists' sundries	887	836	832	964	891	897	907	848	952	948	939	926	922	1,723	1,674
5122 pt.	General-line drugs	423	400	379	428	397	415	410	388	459	455	438	452	444	823	778
513	Apparel, piece goods, and notions[4]	1,620	1,577	1,404	1,667	1,446	1,510	1,589	1,521	1,938	1,815	1,919	1,837	1,617	3,197	2,736
514	Groceries and related products	9,261	9,120	8,029	9,559	9,094	9,359	9,414	9,132	9,716	9,433	9,289	9,591	9,798	18,381	16,315
5141	Groceries, general-line	3,426	3,364	3,034	3,545	3,278	3,387	3,412	3,347	3,493	3,396	3,360	3,579	3,587	6,790	6,226
5144	Poultry and poultry products	402	384	[r]392	419	400	438	448	412	456	432	419	458	454	786	[r]794
5145	Confectionery	154	159	129	167	147	150	150	146	171	172	183	194	188	313	253
5147	Meats and meat products	1,460	1,470	1,248	1,508	1,404	1,469	1,513	1,444	1,591	1,486	1,498	1,525	1,510	2,930	2,527
5148	Fresh fruits and vegetables	839	792	674	834	858	849	852	834	877	810	836	886	889	1,631	1,370
515	Farm-product raw materials	5,800	5,639	5,765	6,577	6,291	6,702	5,804	5,452	4,938	4,960	5,119	6,272	6,085	11,439	11,851
5153	Grain	4,549	4,482	4,761	5,430	5,344	5,589	4,830	4,580	4,011	4,005	4,069	4,968	4,730	9,031	9,718
517	Petroleum and petroleum products	4,209	4,115	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	3,752	3,612	3,839	3,983	4,355	8,324	7,999
5171	Petroleum bulk stations and terminals	2,387	2,301	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	2,160	2,103	2,195	2,266	2,523	4,688	4,594
518	Beer, wine, and distilled alcoholic beverages	1,654	1,782	1,504	1,929	1,842	1,978	2,233	1,951	2,108	2,018	1,884	2,143	2,444	3,436	2,841
5181	Beer and ale	795	839	707	850	902	1,043	1,126	1,010	1,093	1,012	888	938	1,020	1,634	1,352
5182	Wines and distilled alcoholic beverages	859	943	797	1,079	940	935	1,107	941	1,014	1,005	995	1,204	1,424	1,802	1,489
519	Miscellaneous nondurable goods	3,723	3,781	4,088	4,851	4,463	4,398	4,186	3,539	3,822	4,055	3,722	3,749	4,028	7,504	7,950
5194	Tobacco and tobacco products	721	725	669	751	717	743	787	734	780	751	748	705	819	1,446	1

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

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

[1]The automotive parts and supplies, tires and tubes group is subject to a sampling variability of 9 percent for February 1978.

[2]The automotive parts and supplies group is subject to a sampling variability of 11 percent for February 1978.

[3]The ferrous metals service centers group is subject to a sampling variability of 10 percent for January 1978.

[4]The apparel, piece goods, and notions group is subject to a sampling variability of 9 percent for February 1978.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978		1977										
		Jan.	Feb.[p]	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	69,596	70,620	63,985	65,097	65,042	64,088	64,117	63,666	64,105	65,291	66,530	68,082	68,555
	Total (excluding farm-product raw materials)	64,090	65,204	58,209	59,355	59,475	59,833	60,612	60,642	61,074	61,963	62,324	62,939	63,245
50	Durable goods, total	44,287	45,358	39,362	39,965	40,168	40,763	41,593	41,738	42,142	42,484	42,627	43,252	43,676
501	Motor vehicles and automotive parts and supplies	7,709	8,084	6,929	6,853	6,796	6,963	6,932	6,864	6,831	6,842	7,089	7,376	7,424
5013,4	Automotive parts and supplies, tires and tubes	4,743	4,770	3,995	4,070	4,061	4,219	4,333	4,304	4,512	4,496	4,438	4,669	4,607
5013	Automotive parts and supplies	3,953	4,003	3,372	3,396	3,338	3,481	3,616	3,534	3,712	3,663	3,639	3,912	3,790
502	Furniture and home furnishings	1,560	1,587	1,337	1,356	1,349	1,392	1,407	1,409	1,451	1,493	1,455	1,444	1,512
5023	Home furnishings	1,137	1,166	969	987	960	988	1,022	1,026	1,069	1,085	1,057	1,054	1,099
503	Lumber and other construction materials	2,676	2,731	2,191	2,399	2,323	2,340	2,309	2,353	2,429	2,510	2,489	2,513	2,602
5031	Lumber, plywood, and millwork	1,715	1,747	1,492	1,639	1,548	1,578	1,559	1,588	1,632	1,659	1,629	1,643	1,671
505	Metals and minerals, except petroleum	4,449	4,468	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	4,519	4,434	4,277	4,444	4,459
5051 pt.	Ferrous metals service centers and offices	3,471	3,437	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	3,692	3,689	3,511	3,514	3,568
5051 pt.	Ferrous metals service centers	2,633	2,614	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	2,858	2,874	2,686	2,738	2,768
506	Electrical goods	4,563	4,561	3,946	4,074	4,209	4,334	4,406	4,392	4,580	4,599	4,591	4,611	4,653
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,114	2,158	1,909	1,876	1,916	2,006	2,084	1,987	2,088	2,069	2,025	2,100	2,121
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,449	2,402	2,037	2,197	2,293	2,328	2,322	2,405	2,493	2,530	2,566	2,511	2,533
507	Hardware, plumbing, heating equipment, and supplies	3,712	3,938	3,277	3,443	3,679	3,599	3,639	3,704	3,582	3,578	3,621	3,608	3,620
5072	Hardware	1,366	1,399	1,177	1,254	1,183	1,237	1,256	1,286	1,282	1,296	1,319	1,320	1,358
5074	Plumbing and heating equipment and supplies (hydronics)[1]	1,590	1,744	1,438	1,493	1,763	1,588	1,619	1,669	1,588	1,579	1,566	1,562	1,555
508	Machinery, equipment, and supplies	15,508	15,844	13,703	13,861	13,717	14,007	14,574	14,417	14,513	14,706	14,631	15,026	15,307
5082	Construction and mining machinery and equipment	3,281	3,403	2,609	2,713	2,701	2,727	2,864	2,865	2,928	3,110	3,083	3,202	3,261
5084,5	Industrial machinery, equipment, and supplies	4,816	4,849	4,357	4,279	4,180	4,395	4,621	4,478	4,447	4,503	4,534	4,555	4,742
51	Nondurable goods, total	25,309	25,262	24,624	25,131	24,874	23,324	22,523	21,928	21 963	22,807	23,903	24,830	24,879
	Total (excluding farm-product raw materials)	19,803	19,847	18,847	19,390	19,307	19,069	19,018	18,904	18,932	19,479	19,697	19,687	19,569
511	Paper and paper products	1,298	1,273	1,217	1,236	1,265	1,301	1,322	1,297	1,276	1,301	1,304	1,309	1,301
5111,3	Printing, writing, industrial, and personal service paper	868	856	829	841	877	900	905	887	877	880	878	865	873
512	Drugs, drug proprietaries, and druggists' sundries	1,266	1,293	1,194	1,255	1,261	1,223	1,268	1,285	1,297	1,320	1,373	1,337	1,303
514	Groceries and related products	5,401	5,385	5,205	5,340	5,353	5,349	5,307	5,283	5,283	5,448	5,507	5,465	5,540
5141	Groceries, general-line	2,350	2,376	2,257	2,336	2,387	2,382	2,371	2,268	2,265	2,363	2,446	2,441	2,473
517	Petroleum and petroleum products	2,045	1,924	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	1,959	2,064	2,023	2,053	2,042
518	Beer, wine, and distilled alcoholic beverages	1,917	1,901	1,853	1,952	2,015	2,094	2,114	2,074	1,977	2,048	2,121	2,075	1,809
5181	Beer and ale	611	627	555	614	679	726	709	675	660	673	658	632	581
5182	Wines and distilled alcoholic beverages	1,305	1,274	1,298	1,338	1,336	1,368	1,405	1,399	1,317	1,375	1,462	1,443	1,228

See footnotes below table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978		1977										
		Jan.	Feb.[p]	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	133	134	134	115	122	117	115	124	115	120	123	122	122
	Total (excluding farm-product raw materials)	138	139	139	119	126	125	121	132	121	125	127	126	126
50	Durable goods, total	194	191	197	166	172	169	164	182	162	167	168	171	176
501	Motor vehicles and automotive parts and supplies	161	156	186	149	146	143	145	154	143	150	154	156	158
5013,4	Automotive parts and supplies, tires and tubes	188	180	195	172	168	170	167	180	170	177	167	176	181
5013	Automotive parts and supplies	183	175	189	169	165	165	163	174	167	175	163	176	175
502	Furniture and home furnishings	180	175	175	149	157	156	145	173	149	150	139	138	147
5023	Home furnishings	202	192	177	154	161	160	151	182	162	157	145	150	163
503	Lumber and other construction materials	143	149	135	116	114	105	99	104	91	98	101	108	125
5031	Lumber, plywood, and millwork	133	139	133	118	115	104	99	105	91	99	100	107	120
505	Metals and minerals, except petroleum	178	186	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	165	164	176	171	184
5051 pt.	Ferrous metals service centers and offices	181	184	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	181	177	190	188	201
5051 pt.	Ferrous metals service centers	190	194	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	193	194	194	201	216
506	Electrical goods	180	172	180	160	170	181	160	166	162	162	153	155	157
5063	Electrical apparatus and equipment, wiring supplies and construction materials	168	162	169	151	162	164	150	150	143	151	141	146	154
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	191	182	191	168	178	199	169	182	183	171	164	163	160
507	Hardware, plumbing, heating equipment, and supplies	207	230	212	189	200	187	180	195	173	182	179	183	199
5072	Hardware	197	207	192	165	154	172	170	184	162	173	176	172	201
5074	Plumbing and heating equipment and supplies (hydronics)	219	253	226	211	236	193	190	209	189	197	185	197	206
508	Machinery, equipment, and supplies	251	240	228	195	202	199	198	223	197	204	204	216	218
5082	Construction and mining machinery and equipment	398	370	298	260	264	261	270	327	302	310	306	312	324
5084,5	Industrial machinery, equipment, and supplies	189	179	177	161	176	174	164	180	154	163	165	159	166
51	Nondurable goods, total	86	87	89	78	83	77	74	77	74	79	83	81	79
	Total (excluding farm-product raw materials)	84	85	86	75	81	80	77	82	77	81	83	81	77
511	Paper and paper products	99	100	102	93	104	103	98	107	92	95	97	98	96
5111,3	Printing, writing, industrial, and personal service paper	91	93	92	83	91	91	86	95	83	85	87	88	88
	Drugs, drug proprietaries, and druggists' sundries	143	155	144	130	141	136	140	152	136	139	146	144	141
	Groceries and related products	58	59	65	56	59	57	56	58	54	58	59	57	57
5141	Groceries, general-line	69	71	74	66	73	70	69	68	65	70	73	68	69
517	Petroleum and petroleum products	49	47	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	52	57	53	52	47
518	Beer, wine, and distilled alcoholic beverages	116	107	123	101	109	106	95	106	94	102	113	97	74
5181	Beer and ale	77	75	78	72	75	70	63	67	60	66	74	67	57
5182	Wines and distilled alcoholic beverages	152	135	163	124	142	146	127	149	130	137	147	120	86

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

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

[1]The plumbing and heating equipment and supplies group is subject to a sampling variability of 9 percent for February 1978.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978		1977										
		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	55,985	57,493	51,857	52,672	53,385	53,866	53,735	53,495	53,208	53,307	53,639	55,558	57,266
	Total (excluding farm-product raw materials)	50,554	51,607	45,841	46,839	46,891	47,260	47,157	47,334	48,037	48,018	48,630	49,887	51,663
50	Durable goods, total	25,568	26,801	22,625	22,621	22,941	23,275	23,419	23,620	24,390	24,150	24,997	25,601	26,488
501	Motor vehicles and automotive parts and supplies	5,125	5,810	4,162	4,201	4,304	4,528	4,473	4,439	4,497	4,504	4,889	4,969	5,220
502	Furniture and home furnishings	1,025	1,018	853	874	879	901	907	900	914	934	950	957	1,082
503	Lumber and other construction materials	2,288	2,257	2,009	2,045	2,048	2,057	2,090	2,171	2,283	2,349	2,418	2,320	2,443
505	Metals and minerals, except petroleum	2,535	2,643	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	2,540	2,580	2,539	2,605	2,669
506	Electrical goods	2,842	2,972	2,480	2,508	2,544	2,491	2,547	2,686	2,664	2,731	2,818	2,918	2,917
507	Hardware, plumbing, heating equipment, and supplies	2,000	1,952	1,766	1,795	1,850	1,871	1,863	1,909	1,902	1,834	1,916	1,958	2,024
508	Machinery, equipment, and supplies	7,026	7,421	6,751	6,618	6,626	6,740	6,753	6,756	7,130	6,726	6,988	7,268	7,396
51	Nondurable goods, total	30,417	30,692	29,232	30,051	30,444	30,591	30,316	29,875	28,818	29,157	28,642	29,957	30,778
	Total (excluding farm-product raw materials)	24,986	24,806	23,216	24,218	23,950	23,985	23,738	23,714	23,647	23,852	23,633	24,286	25,175
511	Paper and paper products	1,382	1,380	1,295	1,272	1,285	1,308	1,294	1,242	1,282	1,305	1,294	1,294	1,419
512	Drugs, drug proprietaries, and druggists' sundries	903	902	898	917	902	919	919	914	916	908	867	913	932
513	Apparel, piece goods, and notions	1,774	1,664	1,484	1,566	1,519	1,585	1,580	1,600	1,687	1,668	1,821	1,740	1,856
514	Groceries and related products	9,748	10,022	8,828	9,206	9,228	9,225	8,825	9,210	9,218	9,367	9,280	9,620	9,947
515	Farm-product raw materials[1]	5,431	5,886	6,016	5,833	6,494	6,606	6,578	6,161	5,171	5,305	5,009	5,671	5,603
517	Petroleum and petroleum products	4,362	4,030	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	3,682	3,712	3,749	3,928	4,124
518	Beer, wine, and distilled alcoholic beverages	2,102	2,203	1,861	1,903	1,957	1,921	1,963	1,988	1,970	2,012	1,907	2,026	2,035
519	Miscellaneous nondurable goods	3,822	3,721	4,019	4,153	4,276	4,335	4,151	4,015	3,973	4,071	3,901	3,901	3,992
	Inventories ADJUSTED for seasonal variations													
	Merchant wholesalers, total	68,991	69,834	63,062	64,300	65,301	64,838	64,947	64,210	65,095	66,119	66,209	67,047	67,998
	Total (excluding farm-product raw materials)	64,410	65,083	57,988	58,829	59,280	59,575	60,207	60,647	61,521	62,413	62,347	62,835	63,712
50	Durable goods, total	44,686	45,286	39,264	39,527	39,809	40,224	40,876	41,404	42,396	42,896	43,014	43,642	44,
501	Motor vehicles and automotive parts and supplies	7,603	7,879	6,743	6,708	6,705	6,804	6,867	6,937	7,071	6,989	7,248	7,534	7,394
502	Furniture and home furnishings	1,569	1,600	1,345	1,356	1,352	1,392	1,388	1,395	1,432	1,480	1,461	1,438	1,541
503	Lumber and other construction materials	2,728	2,764	2,228	2,334	2,263	2,219	2,241	2,288	2,415	2,566	2,612	2,607	2,680
505	Metals and minerals, except petroleum	4,431	4,531	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	4,461	4,520	4,418	4,484	4,397
506	Electrical goods	4,694	4,683	4,041	4,108	4,237	4,310	4,326	4,347	4,521	4,581	4,519	4,547	4,710
507	Hardware, plumbing, heating equipment, and supplies	3,796	4,018	3,322	3,387	3,567	3,503	3,598	3,669	3,533	3,636	3,684	3,667	3,709
508	Machinery, equipment, and supplies	15,633	15,672	13,547	13,609	13,629	13,847	14,253	14,410	14,824	14,840	14,690	15,086	15,651
51	Nondurable goods, total	24,305	24,548	23,798	24,773	25,492	24,614	24,071	22,806	22,699	23,223	23,195	23,405	23,630
	Total (excluding farm-product raw materials)	19,724	19,797	18,724	19,302	19,471	19,351	19,331	19,243	19,125	19,517	19,333	19,193	19,344
511	Paper and paper products	1,315	1,286	1,228	1,252	1,260	1,304	1,297	1,302	1,265	1,300	1,300	1,312	1,289
512	Drugs, drug proprietaries, and druggists' sundries	1,315	1,325	1,221	1,254	1,243	1,247	1,263	1,295	1,296	1,289	1,315	1,319	1,317
514	Groceries and related products	5,423	5,348	5,156	5,212	5,356	5,433	5,396	5,389	5,385	5,497	5,436	5,311	5,480
517	Petroleum and petroleum products	1,949	1,920	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	1,973	2,028	1,894	1,944	1,958
518	Beer, wine, and distilled alcoholic beverages	1,984	1,970	1,892	2,011	2,038	2,058	2,051	2,104	2,026	2,036	1,971	1,969	1,898
	Stock-sales ratios based on ADJUSTED data													
	Merchant wholesalers, total	123	121	122	122	122	120	121	120	122	124	123	121	119
	Total (excluding farm-product raw materials)	127	126	126	126	126	126	128	128	128	130	128	126	123
50	Durable goods, total	175	169	174	175	174	173	175	175	174	178	172	170	168
501	Motor vehicles and automotive parts and supplies	148	136	162	160	156	150	154	156	157	155	148	152	142
502	Furniture and home furnishings	153	157	158	155	154	154	153	155	157	158	154	150	142
503	Lumber and other construction materials	119	122	111	114	110	108	107	105	106	109	108	112	110
505	Metals and minerals, except petroleum	175	171	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	176	175	174	172	165
506	Electrical goods	165	158	163	164	167	173	170	162	170	168	160	156	161
507	Hardware, plumbing, heating equipment, and supplies	190	206	188	189	193	187	193	192	186	198	192	187	183
508	Machinery, equipment, and supplies	223	211	201	206	206	205	211	213	208	221	210	208	212
51	Nondurable goods, total	80	80	81	82	84	80	79	76	79	80	81	78	77
	Total (excluding farm-product raw materials)	79	80	81	80	81	81	81	81	81	82	82	79	77
511	Paper and paper products	95	93	95	98	98	100	100	105	99	100	100	101	91
512	Drugs, drug proprietaries, and druggists' sundries	146	147	136	137	138	136	137	142	141	142	152	144	
514	Groceries and related products	56	53	58	57	58	59	61	59	58	59	59	55	
517	Petroleum and petroleum products	45	48	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	54	55	51	49	47
518	Beer, wine, and distilled alcoholic beverages	94	89	102	106	104	107	104	106	103	101	103	97	93

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

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

[1]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. 1977-Feb. 1978 from--			
	Sept. 1977-Nov. 1977 (3 months ago)	June 1977-Aug. 1977 (6 months ago)	Mar. 1977-May 1977 (9 months ago)	Dec. 1976-Feb. 1977 (12 months ago)
Merchant wholesalers, total.....	+5	+6	+7	+11
Durable goods, total.....	+5	+10	+15	+19
Nondurable goods, total.....	+5	+3	+1	+5

Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers: 1972-1978

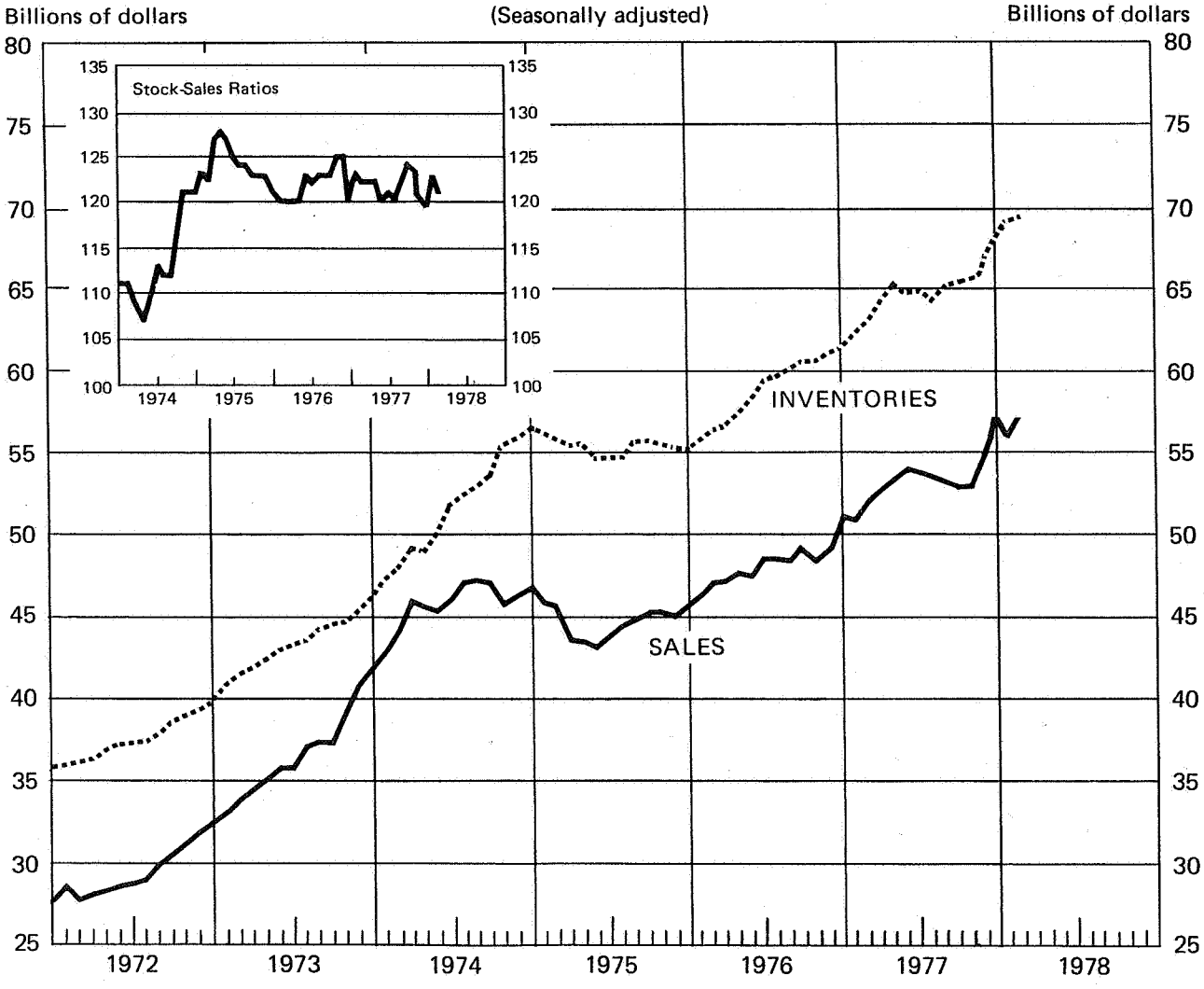


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: February 1978

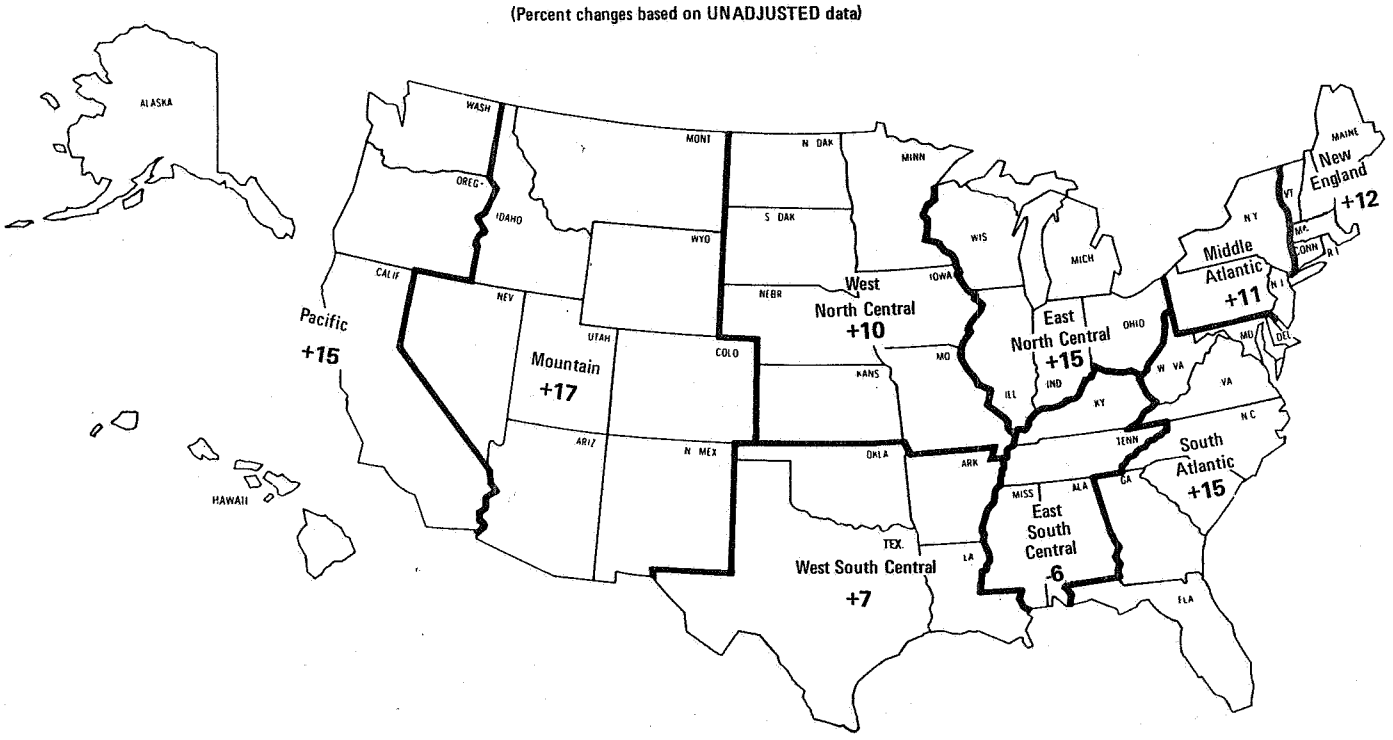
1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		February 1978 from January 1978	February 1978 from February 1977	2 months 1978 from 2 months 1977	February 1978 from January 1978	February 1978 from February 1977	February 1978 from January 1978	February 1978 from February 1977	February 1978 from January 1978	February 1978 from February 1977
	Merchant wholesalers, total	+1	+10	+11	+1	+10	+3	+11	+1	+11
	Total (excluding farm-product raw materials)	+1	+12	+14	+2	+12	+2	+13	+1	+12
50	Durable goods, total	+4	+19	+20	+2	+15	+5	+18	+1	+15
501	Motor vehicles and automotive parts and supplies	+8	+39	+36	+5	+17	+13	+40	+4	+17
5012	Automobiles and other motor vehicles	+11	+51	+48	+12	+13	-	-	-	-
5013, 4	Automotive parts and supplies, tires and tubes	+6	+29	+27	+1	+19	-	-	-	-
5013	Automotive parts and supplies	+5	+28	+27	+1	+19	-	-	-	-
502	Furniture and home furnishings	+5	+19	+19	+2	+19	-1	+19	+2	+19
5021	Furniture--household and office	-1	+39	+39	0	+15	-	-	-	-
5021 pt.	Household furniture	+4	+42	+39	+2	+10	-	-	-	-
5021 pt.	Office furniture	-4	+38	+38	-2	+18	-	-	-	-
5023	Home furnishings	+8	+11	+11	+3	+20	-	-	-	-
503	Lumber and other construction materials	-2	+13	+18	+2	+25	-1	+12	+1	+24
5031	Lumber, plywood, and millwork	-2	+13	+16	+2	+17	-	-	-	-
5039	Construction materials, n.e.c.	-1	+13	+23	+2	+41	-	-	-	-
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	+12	0	+2	+1	+3	-1	-1	-4	+1
505	Metals and minerals, except petroleum	-4	+18	+20	0	+11	+4	+18	+2	+12
5051 pt.	Ferrous metals service centers and offices	-3	+22	+25	-1	+7	-	-	-	-
5051 pt.	Ferrous metals service centers	-3	+21	+27	-1	+4	-	-	-	-
5051 pt.	Nonferrous metals service centers and offices	-9	+24	+16	+6	+34	-	-	-	-
506	Electrical goods	+4	+21	+20	0	+16	+5	+20	0	+16
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+5	+18	+19	+2	+13	-	-	-	-
5064, 5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+3	+24	+21	-2	+18	-	-	-	-
5064	Electrical appliances, TV and radio sets	+3	+14	+13	-2	+13	-	-	-	-
507	Hardware, plumbing, heating equipment, and supplies	-4	+11	+15	+6	+20	-2	+11	+6	+21
5072	Hardware	-2	+11	+11	+2	+19	-	-	-	
5074	Plumbing and heating equipment and supplies (hydronics)	-5	+9	+16	+10	+21	-	-	-	
5075	Warm air heating and air conditioning equipment and supplies	-3	+16	+15	+4	+22	-	-	-	-
508	Machinery, equipment, and supplies	+6	+10	+11	+2	+16	+6	+10	0	+16
5081	Commercial machines and equipment	+1	+34	+33	0	-6	-	-	-	-
5082	Construction and mining machinery and equipment	+12	+5	+10	+3	+30	-	-	-	-
5083	Farm and garden machinery and equipment	+12	+4	+3	+2	+18	-	-	-	-
5084, 5	Industrial machinery, equipment, and supplies	+6	+10	+11	+1	+11	-	-	-	-
5086	Professional equipment and supplies	+4	+10	+11	+3	+13	-	-	-	-
509	Miscellaneous durable goods	+4	+21	+27	0	+8	0	+21	-1	+8
5093	Scrap and waste materials	+4	+3	+8	+1	-2	-	-	-	-
5093 pt.	Iron and steel scrap	+5	-2	+4	+1	-3	-	-	-	-
5093 pt.	Waste materials	+3	+12	+14	0	-1	-	-	-	-
51	Nondurable goods, total	-1	+5	+6	0	+3	+1	+5	+1	+3
	Total (excluding farm-product raw materials)	-1	+6	+8	0	+5	-1	+7	0	+6
511	Paper and paper products	-3	+7	+14	-2	+5	0	+7	-2	+5
5111, 3	Printing, writing, industrial, and personal service paper	-3	+2	+6	-1	+3	-	-	-	-
512	Drugs, drug proprietaries, and druggists' sundries	-6	+1	+3	+2	+8	0	0	+1	+9
5122	Drugs, drug proprietaries, and druggists' sundries	-6	+1	+3	+2	+8	-	-	-	-
5122 pt.	General-line drugs	-5	+5	+6	+2	+9	-	-	-	-
514	Groceries and related products	-2	+14	+13	0	+3	+3	+14	-1	+4
5141	Groceries, general-line	-2	+11	+9	+1	+5	-	-	-	-
5141 pt.	Voluntary groups	-2	+5	+3	+2	+3	-	-	-	-
5141 pt.	Retailer cooperatives	+1	+16	+14	+3	+10	-	-	-	-
5141 pt.	Other general-lines	-4	+12	+10	-1	+4	-	-	-	-
5142,3,6, 9	Specialty-line groceries	-1	+18	+16	-3	+2	-	-	-	-
5144	Poultry and poultry products	-4	-2	-1	-1	-2	-	-	-	-
5145	Confectionery	+3	+23	+24	-2	+9	-	-	-	-
5147	Meats and meat products	+1	+18	+16	+5	+13	-	-	-	-
5148	Fresh fruits and vegetables	-6	+17	+19	-4	-10	-	-	-	-
515	Farm-product raw materials[2]	-3	-2	-3	-2	-6	+8	-2	+4	-6
5152	Cotton	-18	-14	+2	+3	-33	-	-	-	-
5153	Grain	-1	-6	-7	-2	-2	-	-	-	-
517	Petroleum and petroleum products	-2	0	+4	-6	-4	-8	+1	-1	-5
5171	Petroleum bulk stations and terminals	-4	-3	+2	-11	-17	-	-	-	-
518	Beer, wine, and distilled alcoholic beverages	+8	+18	+21	-1	+3	+5	+18	-1	+4
5181	Beer and ale	+5	+19	+21	+2	+13	-	-	-	-
5182	Wines and distilled alcoholic beverages	+10	+18	+21	-2	-2	-	-	-	-
519	Miscellaneous nondurable goods	+2	-8	-6	+4	+8	-3	-7	+4	
5191	Farm supplies	+1	-32	-28	+7	+29	-	-	-	
5194	Tobacco and tobacco products	+1	+8	+8	-1	-4	-	-	-	-
5198	Paints, varnishes, and supplies	-10	0	+10	-1	+8	-	-	-	-
5199 pt.	Books, periodicals, newspapers	0	+46	+48	+2	-16	-	-	-	-

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

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

Sales of Merchant Wholesalers by Geographic Division
2 Months 1978 Compared With 2 Months 1977

(Percent changes based on UNADJUSTED data)



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Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1978 and 1977

(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]	1978		1977										Total 2 months		Sampling error of the estimate	
		Jan.	Feb.[P]	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1978	1977	Range[2]	Median
	Merchant wholesalers, total	52,143	52,642	47,683	56,383	53,357	54,633	55,794	51,290	55,597	54,505	54,251	56,034	56,224	104,783	94,035	0.8-0.9	0.9
	New England	2,693	2,640	2,365	2,893	2,649	2,744	2,890	2,651	2,856	2,880	2,919	3,036	3,008	5,333	4,746	5-6	6
	Middle Atlantic	11,846	11,839	10,806	12,783	11,835	12,208	12,592	11,263	12,356	12,428	11,945	12,494	12,924	23,684	21,248	2-2	2
	East North Central	8,929	9,266	8,164	9,363	9,042	9,361	9,520	8,807	9,685	9,431	9,724	9,841	9,596	18,194	15,856	2-3	3
	West North Central	5,566	5,374	5,028	5,842	6,018	6,106	5,820	5,332	5,639	5,509	5,670	5,977	5,617	10,941	10,029	2-3	2
	South Atlantic	5,666	5,681	4,965	6,061	5,699	5,850	6,017	5,548	6,015	5,934	5,854	6,126	6,188	11,347	9,827	2-3	2
	East South Central	2,421	2,548	2,632	3,158	2,882	2,882	2,884	2,652	2,853	2,723	2,813	2,765	2,822	4,969	5,303	4-5	4
	West South Central	5,582	5,772	5,429	6,367	5,842	5,774	6,096	5,715	6,108	5,745	5,644	6,008	6,283	11,354	10,594	3-4	4
	Mountain	1,934	1,921	1,679	2,029	1,887	1,897	2,054	1,949	2,040	2,177	2,027	1,964	2,099	3,855	3,282	5-5	5
	Pacific	7,506	7,600	6,609	7,887	7,503	7,811	7,921	7,373	8,045	7,678	7,655	7,821	7,688	15,106	13,150	2-3	3
50	Durable goods, total	22,869	23,727	20,013	24,008	23,356	24,159	25,292	22,915	25,998	25,461	25,369	25,340	24,797	46,596	38,908	0.8-1.0	0.9
	Middle Atlantic	4,973	5,133	4,184	5,128	4,921	5,062	5,315	4,662	5,354	5,366	5,420	5,477	5,379	10,106	8,179	4-5	4
	East North Central	3,935	4,239	3,700	4,199	4,187	4,367	4,549	4,073	4,771	4,635	4,573	4,549	4,282	8,175	7,038	3-4	4
	West North Central	1,776	1,770	1,637	1,862	1,931	1,996	2,098	1,911	2,083	2,003	2,061	2,075	1,900	3,546	3,187	5-6	5
	South Atlantic	2,809	2,855	2,406	2,992	2,827	2,957	3,134	2,840	3,127	3,113	3,088	3,051	2,971	5,664	4,689	4-5	4
	West South Central	2,413	2,580	2,212	2,584	2,508	2,593	2,725	2,520	2,886	2,673	2,643	2,611	2,729	4,993	4,301	4-4	4
	Mountain	923	932	734	922	851	856	1,000	921	1,016	1,051	988	900	989	1,855	1,420	6-7	7
	Pacific	4,115	4,212	3,427	4,130	4,001	4,156	4,265	3,967	4,477	4,282	4,210	4,335	4,262	8,327	6,721	2-3	3
51	Nondurable goods, total	29,274	28,915	27,670	32,375	30,001	30,474	30,502	28,375	29,599	29,044	28,882	30,694	31,427	58,188	55,127	1.0-1.2	1.0
	New England	1,735	1,704	1,614	1,882	1,717	1,800	1,923	1,786	1,860	1,843	1,839	1,918	1,918	3,439	3,241	5-7	6
	Middle Atlantic	6,873	6,706	6,622	7,655	6,914	7,146	7,277	6,601	7,002	7,062	6,525	7,017	7,545	13,578	13,069	3-3	3
	East North Central	4,994	5,025	4,464	5,164	4,855	4,994	4,971	4,734	4,914	4,796	5,151	5,292	5,314	10,018	8,818	3-4	3
	West North Central	3,790	3,605	3,391	3,980	4,087	4,110	3,722	3,421	3,556	3,506	3,609	3,902	3,717	7,395	6,842	3-4	3
	South Atlantic	2,857	2,826	2,559	3,069	2,872	2,893	2,883	2,708	2,888	2,821	2,766	3,075	3,217	5,683	5,138	3-5	3
	East South Central	1,453	1,480	1,676	1,978	1,684	1,654	1,645	1,496	1,565	1,422	1,507	1,542	1,626	2,933	3,435	3-4	4
	West South Central	3,169	3,193	3,217	3,783	3,334	3,181	3,371	3,195	3,222	3,072	3,001	3,397	3,554	6,362	6,293	5-5	5
	Pacific	3,392	3,388	3,182	3,757	3,502	3,655	3,656	3,406	3,568	3,396	3,445	3,486	3,426	6,780	6,429	4-5	4

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

[P]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.
[1]See map on page 7.
[2]The range of sampling error of the estimate is based on data for August, September, and October 1977.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: February 1978

(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[1]			Inventories			
		February 1978 from January 1978	February 1978 from February 1977	2 months 1978 from 2 months 1977	February 1978 from January 1978	February 1978 from February 1977		
		A	B	C[1]	D	E	A	D
	Merchant wholesalers, total	+1	+10	+11	+1	+10	0.4	0.2
	New England	-2	+12	+12	0	+7	2.0	1.9
	Middle Atlantic	0	+10	+11	+1	+1	1.1	0.6
	East North Central	+4	+14	+15	+2	+18	1.2	0.8
	West North Central	-3	+8	+10	+4	+13	1.3	1.1
	South Atlantic	0	+14	+15	+3	+13	1.6	1.0
	East South Central	+5	-3	-6	+3	+12	1.7	1.4
	West South Central	+3	+6	+7	0	+11	1.4	0.8
	Mountain	-1	+14	+17	0	+7	2.4	1.3
	Pacific	+1	+15	+15	0	+14	1.2	0.5
50	Durable goods, total	+4	+19	+20	+2	+15	0.6	0.3
	New England	-2	+25	+26	+2	+6	2.4	1.3
	Middle Atlantic	+3	+23	+24	+3	+7	1.7	1.0
	East North Central	+8	+16	+18	+3	+21	1.9	1.0
	West North Central	0	+8	+11	+5	+15	3.3	1.7
	South Atlantic	+2	+19	+21	+4	+18	1.9	1.2
	East South Central	+10	+11	+9	0	+18	3.9	2.5
	West South Central	+7	+17	+16	+1	+18	2.1	1.2
	Mountain	+1	+27	+31	0	+11	2.9	1.7
	Pacific	+2	+23	+24	+1	+20	1.9	0.7
51	Nondurable goods, total	-1	+5	+6	0	+3	0.6	0.4
	New England	-2	+6	+6	-2	+7	1.9	2.7
	Middle Atlantic	-2	+1	+4	-1	-8	1.9	0.9
	East North Central	+2	+13	+13	0	+11	1.4	1.1
	West North Central	-5	+8	+9	+3	+10	1.6	1.4
	South Atlantic	-1	+10	+11	0	+3	2.4	1.8
	East South Central	+2	-12	-15	+6	+5	1.7	2.4
	West South Central	+1	-1	+1	-2	-1	2.2	1.3
	Mountain	-2	+5	+7	0	0	3.2	1.2
	Pacific	0	+7	+6	-3	+4	1.3	1
5013,4	Automotive parts and supplies, tires and tubes	+6	+29	+27	+1	+19	2	
	New England	+6	(S)	(S)	+13	(S)	7	4
	Middle Atlantic	(S)	(S)	(S)	0	+19	4	2
	East North Central	-2	+12	+12	-1	+16	7	1
	West North Central	+3	+6	+8	+2	+8	5	2
	South Atlantic	-2	+26	+27	-3	+32	4	2
	East South Central	+1	+2	+3	0	+26	4	3
	West South Central	-2	+2	+4	0	+14	5	2
	Mountain	+4	+26	+21	-5	+14	7	3
	Pacific	-7	+25	+34	+5	+19	3	2
502	Furniture and home furnishings	+5	+19	+19	+2	+19	2	1
	Middle Atlantic	+3	+6	+7	+1	+25	4	2
	East North Central	+6	+7	+6	0	+25	7	2
	West North Central	+6	+14	+14	+3	+12	5	4
	West South Central	+19	+44	+33	+7	+22	5	7
	Pacific	+8	+46	+41	+1	+27	5	3
503	Lumber and other construction materials	-2	+13	+18	+2	+25	2	1
	New England	-5	+9	+12	+4	+22	4	5
	Middle Atlantic	-9	+10	+29	+1	+4	4	2
	East North Central	+10	+33	+30	+2	+56	3	2
	West North Central	-9	+12	+18	-2	+22	7	7
	South Atlantic	+5	+46	+54	+7	+44	4	2
	East South Central	+3	+42	+48	+3	+32	4	3
	West South Central	-3	+3	+14	+4	+47	6	5
	Pacific	-4	-11	-8	-1	+7	5	1
5051 pt.	Ferrous metals service centers	-3	+21	+27	-1	+4	2	1
	Middle Atlantic	(S)	+8	+30	-1	+4	4	5
	East North Central	+6	+35	+31	-2	+22	4	1
	West North Central	-5	+3	+16	+2	-9	4	3
	East South Central	+4	+13	+11	+1	-14	2	4
	West South Central	+11	+39	+37	-2	-14	4	2
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+5	+18	+19	+2	+13	2	1
	Middle Atlantic	-1	+9	+13	+3	+3	5	2
	East North Central	+4	+19	+23	+2	+16	3	2
	West North Central	-1	+20	+24	+4	+14	4	1
	South Atlantic	+6	+3	+1	+1	+5	3	1
	West South Central	(S)	(S)	+22	+4	+18	3	6
	Pacific	+10	+29	+27	2	+40	4	1
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+3	+24	+21	-2	+18	3	
	Middle Atlantic	+8	+41	+31	0	+17	3	2
	East North Central	+6	+4	+2	0	-4	4	1
	West North Central	-6	-4	0	+2	+22	4	4
	South Atlantic	-9	+32	+40	+1	+20	6	4
	West South Central	-20	+18	+24	-6	+7	4	4
	Mountain	+9	+3	+3	+2	+9	6	3
	Pacific	+14	+36	+32	-9	+57	3	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 1978—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[1]			Inventories			
		February 1978 from January 1978	February 1978 from February 1977	2 months 1978 from 2 months 1977	February 1978 from January 1978	February 1978 from February 1977		
		A	B	C[1]	D	E	A	D
5072	Hardware	-2	+11	+11	+2	+19	1	1
	New England	+4	+27	+20	+7	+38	6	3
	Middle Atlantic	-14	-14	-9	-1	+15	6	2
	East North Central	+8	+53	+46	+5	+40	4	2
	West North Central	-10	+5	+9	+8	+26	3	3
	South Atlantic	-4	-1	+2	-1	+18	4	2
	East South Central	-1	-21	-23	+1	+6	4	1
	Pacific	-8	+5	+5	+2	+17	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	-5	+9	+16	+10	+21	2	1
	Middle Atlantic	-8	0	+2	+4	-5	6	3
	East North Central	-3	+18	+23	(S)	+22	3	3
	South Atlantic	-3	+17	+24	+8	+16	3	2
	Mountain	-3	+52	+67	+2	+14	7	4
	Pacific	0	+3	+14	0	+25	5	4
5084,5	Industrial machinery, equipment, and supplies	+6	+10	+11	+1	+11	2	1
	Middle Atlantic	+5	+10	+12	+1	+3	7	2
	East North Central	+12	+9	+14	+2	+13	3	2
	West South Central	+9	+33	+32	+1	+14	4	3
	Pacific	0	+29	+31	0	+22	5	2
512	Drugs, drug proprietaries, and druggists' sundries	-6	+1	+3	+2	+8	1	1
	New England	-11	-15	-3	+3	-14	5	3
	Middle Atlantic	0	-3	-3	+4	+3	3	2
	East North Central	0	+6	+9	0	+6	6	3
	West North Central	-14	0	+4	+3	-1	2	2
	South Atlantic	-8	+8	+11	+3	+20	6	5
	East South Central	-8	+3	+15	+9	+3	6	5
	West South Central	-8	-5	-4	+2	+6	3	2
	Mountain	-8	+9	+9	-1	-6	3	2
	Pacific	-8	+2	-2	0	+32	3	3
5141	Groceries, general-line	-2	+11	+9	+1	+5	1	1
	New England	-4	+21	+18	-3	+19	2	1
	Middle Atlantic	-4	+12	+7	+4	+14	1	2
	East North Central	+6	+13	+12	0	+7	3	1
	West North Central	-4	+13	+10	0	+3	1	1
	South Atlantic	-4	+6	+6	+2	-7	2	1
	West South Central	-4	+11	+12	+4	+6	2	1
	Mountain	0	+6	+8	+7	+1	2	2
	Pacific	-7	+11	+13	-1	+7	1	1
5142,3,6,9	Specialty-line groceries	-1	+18	+16	-3	+2	1	1
	Middle Atlantic	+5	+36	+27	-4	-7	4	2
	East North Central	-4	+21	+25	-2	+19	3	2
	West North Central	0	+48	+54	-6	+6	3	1
	South Atlantic	-11	+39	+42	+2	+30	5	6
	East South Central	-6	+17	+15	+13	(S)	2	2
5148	Fresh fruits and vegetables	-6	+17	+19	-4	-10	2	4
	Middle Atlantic	-6	+28	+30	+6	+6	7	5
	East North Central	-2	0	+7	-1	-17	6	6
	West North Central	-5	+11	+12	-6	-8	6	3
	West South Central	+2	+33	+27	+2	+27	5	3
	Pacific	-9	+27	+22	-5	-19	4	4
5194	Tobacco and tobacco products	+1	+8	+8	-1	-4	1	1
	New England	0	+7	+6	+4	-18	5	3
	Middle Atlantic	-4	+10	+12	+3	+9	4	3
	East North Central	-2	-1	+1	-5	-12	4	3
	West North Central	-4	+5	+7	+1	0	4	2
	South Atlantic	+25	+9	-3	-6	-15	6	6
	East South Central	+11	+13	+8	-5	-19	7	4
	West South Central	+6	+46	+41	+4	+9	7	6
	Mountain	+2	+12	+20	0	+28	6	2
	Pacific	-10	+5	+11	+2	+11	2	5

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

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

[1] See map on page 7.

[2] The sampling errors (in percent) shown in columns A and D are based on medians of measurements on data for August, September, and October 1977.

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 10 percent of the sales estimates and 20 percent for inventories.

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

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

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

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

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

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

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

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

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1977-December 1978

1972 SIC code	Kind of business	1977											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	91.7	92.1	107.2	99.0	100.6	103.8	95.5	104.5	102.5	100.4	101.1	99.6
	Total (excluding farm-product raw materials)	89.6	91.5	106.3	99.7	101.8	106.0	96.5	105.8	103.6	100.0	100.0	96.9
50	Durable goods, total	87.1	88.2	106.3	101.3	103.7	107.8	96.9	106.5	105.8	101.1	99.3	94.0
501	Motor vehicles and automotive parts and supplies	89.7	89.3	109.5	108.3	107.5	107.2	100.5	105.9	101.1	94.2	95.0	90.0
502	Furniture and home furnishings	82.6	89.5	104.2	97.8	98.8	106.7	90.7	106.4	106.9	110.3	109.2	94.7
503	Lumber and other construction materials	78.4	80.8	101.1	99.8	108.0	112.1	104.6	116.4	108.7	102.4	100.6	85.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.7	89.9	104.1	101.6	101.8	104.0	92.1	106.4	102.0	109.1	110.4	98.2
505	Metals and minerals, except petroleum	94.4	90.9	110.4	99.9	105.3	104.8	92.5	107.5	105.0	96.0	99.5	90.8
506	Electrical goods	87.8	88.6	101.8	97.1	96.0	108.4	98.5	105.9	104.2	106.4	101.9	101.6
507	Hardware, plumbing, heating equipment, and supplies	87.4	87.4	101.2	99.4	102.9	108.3	99.4	108.7	106.9	105.8	100.8	89.9
508	Machinery, equipment, and supplies	86.4	89.0	107.7	102.7	104.4	108.8	95.7	103.5	107.3	102.5	95.5	94.9
509	Miscellaneous durable goods	82.8	89.8	105.7	98.8	100.4	107.7	89.8	105.8	106.7	104.1	104.3	102.0
51	Nondurable goods, total	95.1	95.1	108.4	97.4	98.3	100.7	94.8	102.3	99.7	99.4	102.8	103.9
	Total (excluding farm-product raw materials)	91.7	94.2	106.8	98.1	100.0	104.1	96.3	104.6	101.6	99.0	100.6	100.3
511	Paper and paper products	93.8	92.2	104.3	95.1	96.4	104.2	97.3	108.3	104.7	103.6	103.2	95.7
512	Drugs, drug proprietaries, and druggists' sundries	94.2	92.6	105.1	98.8	97.7	98.7	92.7	103.9	104.4	108.3	101.4	98.9
513	Apparel, piece goods, and notions	89.7	94.6	106.4	95.2	95.2	100.5	95.1	114.9	108.8	105.4	105.6	87.1
514	Groceries and related products	94.2	90.9	103.8	98.5	101.5	106.7	99.1	105.4	100.7	100.1	99.7	98.5
515	Farm-product raw materials[1]	105.1	95.8	112.8	96.9	101.5	88.2	88.5	95.5	93.5	102.2	110.6	108.6
516	Chemicals and allied products	87.1	89.9	107.4	101.2	102.5	106.5	97.0	107.2	103.4	102.0	99.3	94.3
517	Petroleum and petroleum products	94.8	102.6	105.4	98.9	90.9	98.9	100.1	101.9	97.3	102.4	101.4	105.6
518	Beer, wine, and distilled alcoholic beverages	75.8	80.8	101.4	94.1	103.0	113.8	98.1	107.0	100.3	98.8	105.8	120.1
519	Miscellaneous nondurable goods	95.1	101.7	116.8	104.4	101.4	100.9	88.1	96.2	99.6	95.4	96.1	100.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	102.1	101.4	100.9	99.9	98.4	98.4	98.4	98.4	98.6	100.9	102.1	101.1
	Total (excluding farm-product raw materials)	99.8	100.3	100.8	100.1	100.3	100.5	100.1	99.2	99.3	100.0	100.2	99.4
50	Durable goods, total	99.1	100.3	101.1	100.9	101.4	101.8	100.9	99.4	99.1	99.1	98.9	98.9
501	Motor vehicles and automotive parts and supplies	101.4	102.8	102.1	101.4	102.4	100.9	98.9	96.6	97.9	97.8	97.9	100.4
502	Furniture and home furnishings	98.9	99.4	100.1	99.8	99.9	101.4	100.9	101.3	100.9	99.6	100.4	98.1
503	Lumber and other construction materials	97.9	98.4	102.8	102.6	105.4	103.1	102.9	100.6	97.8	95.3	96.4	97.1
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	100.8	99.9	100.9	103.4	107.6	104.6	101.6	100.3	100.6	94.4	89.3
505	Metals and minerals, except petroleum	100.4	98.9	100.9	101.4	100.1	99.4	102.8	101.3	98.1	96.8	99.1	101.4
506	Electrical goods	97.3	97.6	99.1	99.4	100.6	101.9	101.1	101.3	100.4	101.6	101.4	98.8
507	Hardware, plumbing, heating equipment, and supplies	98.1	98.6	101.6	103.1	102.8	101.1	100.9	101.4	98.4	98.3	98.4	97.6
508	Machinery, equipment, and supplies	99.1	101.1	101.9	100.6	101.1	102.3	100.1	97.9	99.1	99.6	99.6	97.8
509	Miscellaneous durable goods	97.1	98.9	96.8	98.4	96.8	101.3	101.9	102.9	101.3	103.1	101.8	100.4
51	Nondurable goods, total	105.4	103.4	100.9	98.1	93.9	93.3	94.8	97.3	97.6	103.9	106.9	105.4
	Total (excluding farm-product raw materials)	100.5	100.2	100.5	99.4	98.2	98.4	98.3	99.0	99.8	101.9	102.7	100.9
511	Paper and paper products	99.1	99.1	98.8	100.4	99.8	101.9	99.6	100.9	100.1	100.3	99.8	100.9
512	Drugs, drug proprietaries, and druggists' sundries	96.4	97.8	100.1	101.4	98.1	100.4	99.3	100.1	102.4	104.4	101.4	98.9
513	Apparel, piece goods, and notions	100.1	99.6	98.4	98.6	101.1	100.4	102.6	101.1	100.4	99.1	99.1	99.9
514	Groceries and related products	99.9	100.9	102.4	99.9	98.4	98.4	98.1	98.1	99.1	101.3	102.9	101.7
515	Farm-product raw materials[1]	121.4	113.9	104.9	92.4	80.8	73.9	84.8	84.8	89.8	108.9	122.1	123.
516	Chemicals and allied products	99.8	100.1	102.1	101.4	101.3	99.9	99.8	99.1	99.6	97.8	99.4	100.1
517	Petroleum and petroleum products	104.8	99.8	97.1	93.1	95.1	96.8	96.4	99.3	101.8	106.8	105.6	104.3
518	Beer, wine, and distilled alcoholic beverages	96.9	97.9	97.1	98.9	101.8	103.1	98.6	97.6	100.6	107.6	105.4	95.3
519	Miscellaneous nondurable goods	103.6	104.3	102.9	100.6	96.3	93.3	95.3	98.4	98.1	99.8	103.6	104.4

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1977-December 1978—Continued

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.9	92.2	106.9	96.5	103.5	103.8	95.4	105.1	98.9	102.5	101.4	96.7
	Total (excluding farm-product raw materials)	91.9	91.6	106.4	97.5	104.6	105.9	95.9	106.4	100.9	102.2	98.8	95.1
50	Durable goods, total	89.8	89.0	105.2	98.7	106.3	107.6	96.4	107.1	102.9	104.2	98.4	91.4
501	Motor vehicles and automotive parts and supplies	93.6	89.1	107.0	107.0	107.4	108.0	99.3	107.5	96.9	98.4	92.5	91.4
502	Furniture and home furnishings	84.6	89.1	104.6	95.9	101.6	106.2	89.4	107.2	104.2	112.8	108.3	93.8
503	Lumber and other construction materials	81.6	81.2	101.7	95.3	110.7	112.5	102.4	116.9	104.7	108.0	100.0	82.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.4	90.3	102.8	100.3	109.7	98.1	95.1	104.0	104.7	105.7	108.7	97.3
505	Metals and minerals, except petroleum	98.8	91.0	108.9	97.9	107.9	103.6	90.7	108.4	103.1	100.0	97.4	91.1
506	Electrical goods	89.4	89.1	101.7	95.2	99.2	106.4	100.2	104.9	100.9	107.7	103.3	98.5
507	Hardware, plumbing, heating equipment, and supplies	89.5	87.8	100.8	97.5	105.5	107.8	99.7	109.4	103.4	107.2	101.1	88.0
508	Machinery, equipment, and supplies	88.1	88.8	107.8	99.6	107.3	108.7	95.7	104.3	104.0	103.7	96.9	91.6
509	Miscellaneous durable goods	86.5	89.8	104.7	95.1	101.0	110.6	87.6	108.0	102.4	109.5	105.2	96.2
51	Nondurable goods, total	97.0	95.1	108.7	95.1	101.3	100.9	94.8	102.9	96.9	100.9	102.6	100.7
	Total (excluding farm-product raw materials)	93.9	94.5	107.7	95.7	102.7	104.4	95.6	105.1	98.6	100.5	100.4	97.5
511	Paper and paper products	95.2	92.4	104.5	92.6	101.9	103.0	96.6	108.3	103.7	105.0	100.5	92.7
512	Drugs, drug proprietaries, and druggists' sundries	98.2	92.7	104.9	96.0	100.4	99.8	92.7	104.5	101.4	108.3	100.6	96.9
513	Apparel, piece goods, and notions	91.3	94.8	106.4	92.3	99.6	99.3	93.5	115.1	106.8	108.1	103.9	86.0
514	Groceries and related products	95.0	91.0	104.1	96.4	104.5	106.2	99.1	106.0	100.1	100.3	99.9	94.3
515	Farm-product raw materials[1]	106.8	95.8	112.8	94.4	99.6	89.9	92.3	94.6	92.6	100.5	111.2	104.6
516	Chemicals and allied products	90.0	89.4	106.9	98.2	105.2	106.5	97.0	107.3	99.7	105.5	98.0	94.1
517	Petroleum and petroleum products	96.5	102.1	107.7	96.2	92.8	99.9	98.4	101.7	95.5	102.4	98.7	105.8
518	Beer, wine, and distilled alcoholic beverages	78.7	80.9	100.7	91.2	106.7	113.9	97.3	108.1	96.9	101.9	105.3	115.3
519	Miscellaneous nondurable goods	97.4	101.6	118.1	101.5	104.3	102.9	87.2	96.5	96.0	97.0	96.4	97.4
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	101.9	101.3	101.0	100.1	98.6	98.5	98.4	98.0	98.9	100.6	101.7	100.5
	Total (excluding farm-product raw materials)	99.7	100.3	100.8	100.2	100.2	100.5	100.1	99.1	99.4	100.0	100.3	99.2
50	Durable goods, total	99.1	100.2	100.9	100.6	101.1	101.6	100.8	99.3	99.3	99.0	99.1	98.7
501	Motor vehicles and automotive parts and supplies	101.4	102.6	101.8	101.0	102.1	100.9	98.9	96.8	97.9	97.8	98.1	100.5
502	Furniture and home furnishings	99.4	99.2	99.8	99.5	99.8	101.3	100.6	101.0	101.5	100.5	99.1	98.1
503	Lumber and other construction materials	98.1	98.8	103.0	102.6	105.0	101.6	101.5	100.2	98.9	96.1	96.9	97.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	102.4	99.2	100.5	103.3	107.3	104.4	101.1	100.6	101.2	93.9	89.0
505	Metals and minerals, except petroleum	100.4	98.6	100.5	101.0	99.7	99.2	102.4	101.9	98.6	96.7	99.5	101.5
506	Electrical goods	97.2	97.4	99.0	99.9	100.2	101.8	101.2	101.5	100.4	101.2	101.0	98.8
507	Hardware, plumbing, heating equipment, and supplies	97.8	98.0	101.6	103.2	102.8	101.7	100.5	101.4	98.7	98.6	98.2	97.3
508	Machinery, equipment, and supplies	99.2	101.1	101.7	100.0	101.0	102.3	100.1	98.1	99.3	99.6	99.5	97.8
509	Miscellaneous durable goods	97.1	98.7	96.6	98.2	96.6	101.2	101.8	102.6	101.5	103.1	102.1	100.2
51	Nondurable goods, total	104.8	103.2	101.6	98.3	95.3	93.7	94.6	96.3	98.6	103.3	106.0	103.9
	Total (excluding farm-product raw materials)	100.4	100.2	100.7	99.7	98.5	98.6	98.3	98.6	99.7	101.9	102.5	100.8
511	Paper and paper products	98.7	99.0	98.7	100.6	99.4	102.0	99.6	100.6	99.5	101.5	100.0	100.2
512	Drugs, drug proprietaries, and druggists' sundries	96.3	97.6	99.9	101.3	97.7	100.2	99.2	99.8	102.0	105.0	101.8	98.8
513	Apparel, piece goods, and notions	99.9	99.4	98.6	98.5	101.1	100.0	102.2	101.0	100.0	98.3	100.1	100.6
514	Groceries and related products	99.6	100.7	102.2	100.1	98.6	98.5	98.1	97.8	99.0	101.8	102.1	101.3
515	Farm-product raw materials[1]	120.2	114.0	106.9	93.1	81.5	76.1	84.4	83.5	88.3	108.7	121.4	120.9
516	Chemicals and allied products	99.9	99.9	102.7	101.1	101.3	99.8	99.6	99.4	99.9	96.9	98.7	100.6
517	Petroleum and petroleum products	104.9	100.2	97.9	93.5	95.6	97.0	95.4	99.0	102.5	104.8	104.6	104.2
518	Beer, wine, and distilled alcoholic beverages	96.6	96.5	97.2	99.0	101.3	103.1	98.9	97.6	100.8	107.5	106.5	94.6
519	Miscellaneous nondurable goods	103.4	103.2	105.3	101.1	96.2	92.9	95.1	97.2	98.6	99.7	103.2	104.1

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	3.6
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 MC moving average indicates that for this series the use of MCD spans reduces the effect of th 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.

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.

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 bench-

mark 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)[1]

Ferrous Metals Service Centers and Offices (SIC 5051 pt.)[1]—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 5,00(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 thei 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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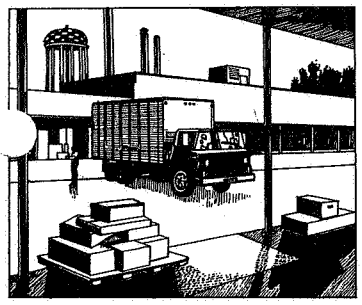
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued May 1978

March 1978

BW-78-3

Sales—March 1978 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences, but not for price changes, were $58.7 billion, up 2 percent from the previous month and 11 percent above March 1977. Adjusted January-through-March total sales were up 4 percent from the October-through-December period and were 11 percent above the total sales for the comparable months a year ago.

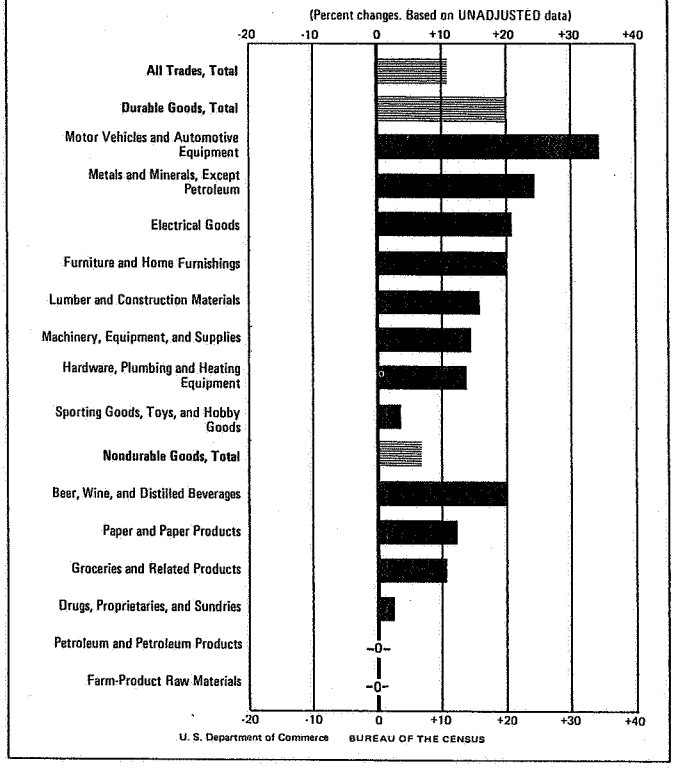
After adjustment, March sales in the durable goods trades were up 2 percent from the previous month and were 22 percent above sales for the same month a year ago. Nondurable goods sales were up 2 percent from February and were 4 percent above March 1977. Total monthly sales in the durable goods group during the January-through-March period were 4 percent above the prior 3 months and were 19 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were 3 percent above the October-through-December period and were 5 percent above the total sales for the same period a year ago.

Based on adjusted data, most trade groups showed increases from their previous month sales levels with the most substantial increase shown in sporting goods, toys, and hobby goods (10%). The largest decrease was reported in lumber and construction materials (-4%). Compared with sales of a year ago, all trade groups showed increases, with the exception of miscellaneous nondurable goods (-12%) and petroleum and petroleum products (-10%). The sharpest increase was reported in motor vehicles and automotive equipment (37%).

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variations, but not for price changes, were valued at $71.8 billion at the end of March, up 2 percent from last month, and 12 percent above the same month a year ago. Durable goods stocks were up 1 percent from February and were 17 percent above March 1977. Nondurable goods stocks were up 4 percent from last month and were 3 percent above stocks on hand a year ago.

Based on adjusted data, most trade groups showed increases from their previous month inventory levels with the larger increases reported in sporting goods, toys, and hobby goods and farm-product raw materials, both up 11 percent. The more substantial decreases were shown in furniture and home furnishings, and lumber and construction materials, both down 3 percent. Compared with year-ago inventories, all trade groups showed increases with the exception of farm-product raw materials, and petroleum and petroleum products, both down 3 percent. The sharper increases were noted in metals and minerals, except petroleum (22%), and motor vehicles and automotive equipment (19%).

Percent Change in Sales of Merchant Wholesalers in Selected Kinds of Business 3 Months 1978 Compared With 3 Months 1977



Stock-Sales Ratio—The March stock-sales ratio for merchant wholesalers, based on seasonally-adjusted data, was 122, virtually unchanged from both the previous month and the year-ago ratio. The stock-sales ratio for durable goods was 168, down 1 point from February and 7 points below the March 1977 ratio. The ratio for nondurable goods was 82, up 2 points from last month but unchanged from the year ago ratio.

An advance release of the March 1978 data was issued on May 9, 1978.

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: 1978 and 1977

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

1972 SIC code	Kind of business	1978			1977									Total 3 months	
		Jan.	Feb.	Mar.[p]	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1978	1977
	Merchant wholesalers, total	52,143	52,766	62,704	56,383	53,357	54,633	55,794	51,290	55,597	54,505	54,251	56,034	56,224	167,617	150,418
	Total (excluding farm-product raw materials)	46,343	47,112	55,771	49,806	47,066	47,931	49,990	45,838	50,659	49,544	49,132	49,762	50,139	149,230	131,990
50	Durable goods, total	22,869	23,880	29,054	24,008	23,356	24,159	25,292	22,915	25,998	25,461	25,369	25,340	24,797	75,805	62,916
501	Motor vehicles and automotive parts and supplies	4,797	5,065	6,145	4,598	4,663	4,866	4,795	4,463	4,762	4,554	4,605	4,721	4,698	16,007	11,919
5013,4	Automotive parts and supplies, tires and tubes[1]	2,517	2,666	3,327	2,363	2,415	2,482	2,597	2,395	2,657	2,538	2,661	2,651	2,551	8,511	6,430
5013	Automotive parts and supplies[2]	2,166	2,286	2,795	2,013	2,018	2,111	2,221	2,027	2,229	2,089	2,227	2,220	2,167	7,247	5,517
502	Furniture and home furnishings	867	921	1,107	911	860	891	968	816	972	998	1,048	1,045	1,025	2,895	2,403
5021	Furniture--household and office	304	311	352	269	262	272	291	251	310	308	320	340	350	967	705
5023	Home furnishings	564	610	755	642	598	619	677	565	662	689	728	705	676	1,928	1,698
503	Lumber and other construction materials	1,867	1,891	2,264	2,068	2,043	2,222	2,343	2,271	2,657	2,553	2,476	2,334	2,086	6,022	5,196
5031	Lumber, plywood, and millwork	1,290	1,288	1,506	1,389	1,343	1,513	1,571	1,511	1,792	1,681	1,637	1,540	1,389	4,084	3,580
5039	Construction materials, n.e.c.	576	603	759	679	700	709	772	760	866	872	839	794	697	1,938	1,616
505	Metals and minerals, except petroleum	2,505	2,557	3,098	(NA)	(NA)	(NA)	(NA)	(NA)	2,731	2,709	2,437	2,592	2,423	8,161	6,588
5051 pt.	Ferrous metals service centers and offices	1,922	1,970	2,377	(NA)	(NA)	(NA)	(NA)	(NA)	2,039	2,083	1,845	1,869	1,774	6,270	4,903
5051 pt.	Ferrous metals service centers	1,386	1,443	1,744	(NA)	(NA)	(NA)	(NA)	(NA)	1,480	1,478	1,385	1,359	1,282	4,573	3,423
506	Electrical goods	2,541	2,627	3,141	2,552	2,469	2,391	2,761	2,647	2,821	2,846	2,998	2,973	2,964	8,310	6,875
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,262	1,354	1,615	1,241	1,183	1,222	1,390	1,324	1,456	1,369	1,436	1,436	1,379	4,232	3,419
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,279	1,273	1,526	1,311	1,286	1,169	1,371	1,323	1,365	1,477	1,562	1,537	1,585	4,078	3,456
5064	Electrical appliances, TV and radio sets	763	762	935	836	831	731	940	914	919	979	1,011	989	1,003	2,459	2,214
507	Hardware, plumbing, heating equipment, and supplies	1,790	1,708	2,022	1,817	1,838	1,925	2,017	1,898	2,068	1,961	2,027	1,974	1,820	5,520	4,876
5072	Hardware	693	679	797	758	769	721	740	700	790	750	750	768	676	2,169	1,986
5074	Plumbing and heating equipment and supplies (hydronics)	726	675	789	708	747	824	852	799	842	802	846	791	753	2,190	1
508	Machinery, equipment, and supplies	6,190	6,632	8,328	7,126	6,806	7,034	7,349	6,465	7,380	7,217	7,163	6,941	7,019	21,150	18,029
5082	Construction and mining machinery and equipment	825	875	1,175	1,042	1,022	1,044	1,059	876	971	1,002	1,006	1,025	1,006	2,874	2,629
5084,5	Industrial machinery, equipment, and supplies	2,545	2,790	3,297	2,652	2,376	2,520	2,821	2,494	2,891	2,771	2,750	2,858	2,861	8,632	7,366
5086	Professional equipment, supplies	710	732	843	779	747	779	840	757	846	805	808	773	805	2,285	2,086
5093	Scrap and waste materials	757	815	965	844	895	869	903	679	802	810	807	812	779	2,536	2,276
51	Nondurable goods, total	29,274	28,886	33,650	32,375	30,001	30,474	30,502	28,375	29,599	29,044	28,882	30,694	31,427	91,812	87,502
	Total (excluding farm-product raw materials)	23,474	23,232	26,717	25,798	23,710	23,772	24,698	22,923	24,661	24,084	23,763	24,422	25,342	73,425	69,074
511	Paper and paper products	1,316	1,284	1,485	1,327	1,222	1,261	1,348	1,208	1,388	1,366	1,341	1,335	1,358	4,086	3,655
5111,3	Printing, writing, industrial, and personal service paper	950	926	1,092	1,011	959	991	1,054	935	1,060	1,032	1,007	988	995	2,968	2,778
512	Drugs, drug proprietaries, and druggists' sundries	887	824	1,006	964	891	897	907	848	952	948	939	926	922	2,717	2,638
5122	Drugs, drug proprietaries, and druggists' sundries	887	824	1,006	964	891	897	907	848	952	948	939	926	922	2,717	2,638
5122 pt.	General-line drugs	423	393	471	428	397	415	410	388	459	455	438	452	444	1,287	1,206
513	Apparel, piece goods, and notions[3]	1,620	1,615	1,994	1,667	1,446	1,510	1,589	1,521	1,938	1,815	1,919	1,837	1,617	5,228	4,403
514	Groceries and related products	9,261	9,093	10,383	9,559	9,094	9,359	9,414	9,132	9,716	9,433	9,289	9,591	9,798	28,738	25,874
5141	Groceries, general-line	3,426	3,333	3,713	3,545	3,278	3,387	3,412	3,347	3,493	3,396	3,360	3,579	3,587	10,471	9,771
5144	Poultry and poultry products	402	397	492	419	400	438	448	412	456	432	419	458	454	1,291	1,213
5145	Confectionery	154	163	194	167	147	150	150	146	171	172	183	194	188	511	420
5147	Meats and meat products	1,460	1,462	1,684	1,508	1,404	1,469	1,513	1,444	1,591	1,486	1,498	1,525	1,510	4,606	4,035
5148	Fresh fruits and vegetables	839	824	1,017	834	858	849	852	834	877	810	836	886	889	2,680	2,204
515	Farm-product raw materials	5,800	5,654	6,933	6,577	6,291	6,702	5,804	5,452	4,938	4,960	5,119	6,272	6,085	18,387	18,428
5153	Grain	4,549	4,503	5,589	5,430	5,344	5,589	4,830	4,580	4,011	4,005	4,069	4,968	4,730	14,641	15,148
517	Petroleum and petroleum products	4,209	4,085	4,249	(NA)	(NA)	(NA)	(NA)	(NA)	3,752	3,612	3,839	3,983	4,355	12,543	12,598
5171	Petroleum bulk stations and terminals	2,387	2,293	2,370	(NA)	(NA)	(NA)	(NA)	(NA)	2,160	2,103	2,195	2,266	2,523	7,049	7,238
518	Beer, wine, and distilled alcoholic beverages	1,654	1,770	2,286	1,929	1,842	1,978	2,233	1,951	2,108	2,018	1,884	2,143	2,444	5,709	4,770
5181	Beer and ale	795	839	1,076	850	902	1,043	1,126	1,010	1,093	1,012	888	938	1,020	2,710	2,202
5182	Wines and distilled alcoholic beverages	859	931	1,209	1,079	940	935	1,107	941	1,014	1,005	995	1,204	1,424	3,000	2,568
519	Miscellaneous nondurable goods	3,723	3,782	4,329	4,851	4,463	4,398	4,186	3,539	3,822	4,055	3,722	3,749	4,028	11,834	12,801
5194	Tobacco and tobacco products	721	692	754	751	717	743	787	734	780	751	748	705	819	2,167	2,[illegible]

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

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

[1]The automotive parts and supplies, tires and tubes group is subject to a sampling variability of 9 percent for March 1978.

[2]The automotive parts and supplies group is subject to a sampling variability of 10 percent for March 1978.

[3]The apparel, piece goods, and notions group is subject to a sampling variability of 12 percent for March 1978.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978			1977									
		Jan.	Feb.	Mar.[p]	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	69,596	71,156	72,849	65,097	65,042	64,088	64,117	63,666	64,105	65,291	66,530	68,082	68,555
	Total (excluding farm-product raw materials)	64,090	65,682	67,161	59,355	59,475	59,833	60,612	60,642	61,074	61,963	62,324	62,939	63,245
50	Durable goods, total	44,287	45,757	46,628	39,965	40,168	40,763	41,593	41,738	42,142	42,484	42,627	43,252	43,676
501	Motor vehicles and automotive parts and supplies	7,709	8,189	8,139	6,853	6,796	6,963	6,932	6,864	6,831	6,842	7,089	7,376	7,424
5013,4	Automotive parts and supplies, tires and tubes	4,743	4,962	4,996	4,070	4,061	4,219	4,333	4,304	4,512	4,496	4,438	4,669	4,607
5013	Automotive parts and supplies	3,953	4,163	4,203	3,396	3,338	3,481	3,616	3,534	3,712	3,663	3,639	3,912	3,790
502	Furniture and home furnishings	1,560	1,606	1,564	1,356	1,349	1,392	1,407	1,409	1,451	1,493	1,455	1,444	1,512
5023	Home furnishings	1,137	1,184	1,148	987	960	988	1,022	1,026	1,069	1,085	1,057	1,054	1,099
503	Lumber and other construction materials	2,676	2,761	2,789	2,399	2,323	2,340	2,309	2,353	2,429	2,510	2,489	2,513	2,602
5031	Lumber, plywood, and millwork	1,715	1,775	1,793	1,639	1,548	1,578	1,559	1,588	1,632	1,659	1,629	1,643	1,671
505	Metals and minerals, except petroleum	4,449	4,660	4,971	(NA)	(NA)	(NA)	(NA)	(NA)	4,519	4,434	4,277	4,444	4,459
5051 pt.	Ferrous metals service centers and offices	3,471	3,591	3,779	(NA)	(NA)	(NA)	(NA)	(NA)	3,692	3,689	3,511	3,514	3,568
5051 pt.	Ferrous metals service centers	2,633	2,760	2,958	(NA)	(NA)	(NA)	(NA)	(NA)	2,858	2,874	2,686	2,738	2,768
506	Electrical goods	4,563	4,594	4,750	4,074	4,209	4,334	4,406	4,392	4,580	4,599	4,591	4,611	4,653
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,114	2,214	2,256	1,876	1,916	2,006	2,084	1,987	2,088	2,069	2,025	2,100	2,121
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,449	2,380	2,494	2,197	2,293	2,328	2,322	2,405	2,493	2,530	2,566	2,511	2,533
507	Hardware, plumbing, heating equipment, and supplies	3,712	3,876	3,993	3,443	3,679	3,599	3,639	3,704	3,582	3,578	3,621	3,608	3,620
5072	Hardware	1,366	1,384	1,402	1,254	1,183	1,237	1,256	1,286	1,282	1,296	1,319	1,320	1,358
5074	Plumbing and heating equipment and supplies (hydronics)	1,590	1,678	1,757	1,493	1,763	1,588	1,619	1,669	1,588	1,579	1,566	1,562	1,555
508	Machinery, equipment, and supplies	15,508	16,005	16,228	13,861	13,717	14,007	14,574	14,417	14,513	14,706	14,631	15,026	15,307
5082	Construction and mining machinery and equipment	3,281	3,396	3,440	2,713	2,701	2,727	2,864	2,865	2,928	3,110	3,083	3,202	3,261
5084,5	Industrial machinery, equipment, and supplies	4,816	4,912	4,905	4,279	4,180	4,395	4,621	4,478	4,447	4,503	4,534	4,555	4,742
51	Nondurable goods, total	25,309	25,399	26,221	25,131	24,874	23,324	22,523	21,928	21,963	22,807	23,903	24,830	24,879
	Total (excluding farm-product raw materials)	19,803	19,925	20,533	19,390	19,307	19,069	19,018	18,904	18,932	19,479	19,697	19,687	19,569
511	Paper and paper products	1,298	1,301	1,337	1,236	1,265	1,301	1,322	1,297	1,276	1,301	1,304	1,309	1,301
5111,3	Printing, writing, industrial, and personal service paper	868	877	895	841	877	900	905	887	877	880	878	865	873
512	Drugs, drug proprietaries, and druggists' sundries	1,266	1,292	1,334	1,255	1,261	1,223	1,268	1,285	1,297	1,320	1,373	1,337	1,303
514	Groceries and related products	5,401	5,376	5,618	5,340	5,353	5,349	5,307	5,283	5,283	5,448	5,507	5,465	5,540
5141	Groceries, general-line	2,350	2,366	2,533	2,336	2,387	2,382	2,371	2,268	2,265	2,363	2,446	2,441	2,473
517	Petroleum and petroleum products	2,045	1,936	2,010	(NA)	(NA)	(NA)	(NA)	(NA)	1,959	2,064	2,023	2,053	2,042
518	Beer, wine, and distilled alcoholic beverages	1,917	1,889	1,991	1,952	2,015	2,094	2,114	2,074	1,977	2,048	2,121	2,075	1,809
5181	Beer and ale	611	641	685	614	679	726	709	675	660	673	658	632	581
5182	Wines and distilled alcoholic beverages	1,305	1,248	1,306	1,338	1,336	1,368	1,405	1,399	1,317	1,375	1,462	1,443	1,228

See footnotes below table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978			1977									
		Jan.	Feb.	Mar.[p]	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	133	135	116	115	122	117	115	124	115	120	123	122	122
	Total (excluding farm-product raw materials)	138	139	120	119	126	125	121	132	121	125	127	126	126
50	Durable goods, total	194	192	160	166	172	169	164	182	162	167	168	171	176
501	Motor vehicles and automotive parts and supplies	161	162	132	149	146	143	145	154	143	150	154	156	158
5013,4	Automotive parts and supplies, tires and tubes	188	186	150	172	168	170	167	180	170	177	167	176	181
5013	Automotive parts and supplies	183	182	150	169	165	165	163	174	167	175	163	176	175
502	Furniture and home furnishings	180	174	141	149	157	156	145	173	149	150	139	138	147
5023	Home furnishings	202	194	152	154	161	160	151	182	162	157	145	150	163
503	Lumber and other construction materials	143	146	123	116	114	105	99	104	91	98	101	108	125
5031	Lumber, plywood, and millwork	133	138	119	118	115	104	99	105	91	99	100	107	120
505	Metals and minerals, except petroleum	178	182	160	(NA)	(NA)	(NA)	(NA)	(NA)	165	164	176	171	184
5051 pt.	Ferrous metals service centers and offices	181	182	159	(NA)	(NA)	(NA)	(NA)	(NA)	181	177	190	188	201
5051 pt.	Ferrous metals service centers	190	191	170	(NA)	(NA)	(NA)	(NA)	(NA)	193	194	194	201	216
506	Electrical goods	180	175	151	160	170	181	160	166	162	162	153	155	157
5063	Electrical apparatus and equipment, wiring supplies and construction materials	168	163	140	151	162	164	150	150	143	151	141	146	154
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	191	187	163	168	178	199	169	182	183	171	164	163	160
507	Hardware, plumbing, heating equipment, and supplies	207	227	197	189	200	187	180	195	173	182	179	183	199
5072	Hardware	197	204	176	165	154	172	170	184	162	173	176	172	201
5074	Plumbing and heating equipment and supplies (hydronics)	219	249	223	211	236	193	190	209	189	197	185	197	206
508	Machinery, equipment, and supplies	251	241	195	195	202	199	198	223	197	204	204	216	218
5082	Construction and mining machinery and equipment	398	388	293	260	264	261	270	327	302	310	306	312	324
5084,5	Industrial machinery, equipment, and supplies	189	176	149	161	176	174	164	180	154	163	165	159	166
51	Nondurable goods, total	86	88	78	78	83	77	74	77	74	79	83	81	79
	Total (excluding farm-product raw materials)	84	86	77	75	81	80	77	82	77	81	83	81	77
511	Paper and paper products	99	101	90	93	104	103	98	107	92	95	97	98	96
5111,3	Printing, writing, industrial, and personal service paper	91	95	82	83	91	91	86	95	83	85	87	88	88
512	Drugs, drug proprietaries, and druggists' sundries	143	157	133	130	141	136	140	152	136	139	146	144	141
	Groceries and related products	58	59	54	56	59	57	56	58	54	58	59	57	57
	Groceries, general-line	69	71	68	66	73	70	69	68	65	70	73	68	69
	Petroleum and petroleum products	49	47	47	(NA)	(NA)	(NA)	(NA)	(NA)	52	57	53	52	47
518	Beer, wine, and distilled alcoholic beverages	116	107	87	101	109	106	95	106	94	102	113	97	74
5181	Beer and ale	77	76	64	72	75	70	63	67	60	66	74	67	57
5182	Wines and distilled alcoholic beverages	152	134	108	124	142	146	127	149	130	137	147	120	86

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

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

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978			1977								
		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	55,985	57,635	58,696	52,672	53,385	53,866	53,735	53,495	53,208	53,307	53,639	55,558	57,266
	Total (excluding farm-product raw materials)	50,554	51,733	52,550	46,839	46,891	47,260	47,157	47,334	48,037	48,018	48,630	49,887	51,663
50	Durable goods, total	25,568	26,976	27,520	22,621	22,941	23,275	23,419	23,620	24,390	24,150	24,997	25,601	26,488
501	Motor vehicles and automotive parts and supplies	5,125	5,685	5,743	4,201	4,304	4,528	4,473	4,439	4,497	4,504	4,889	4,969	5,220
502	Furniture and home furnishings	1,025	1,034	1,058	874	879	901	907	900	914	934	950	957	1,082
503	Lumber and other construction materials	2,288	2,329	2,226	2,045	2,048	2,057	2,090	2,171	2,283	2,349	2,418	2,320	2,443
505	Metals and minerals, except petroleum	2,535	2,810	2,845	(NA)	(NA)	(NA)	(NA)	(NA)	2,540	2,580	2,539	2,605	2,669
506	Electrical goods	2,842	2,948	3,088	2,508	2,544	2,491	2,547	2,686	2,664	2,731	2,818	2,918	2,917
507	Hardware, plumbing, heating equipment, and supplies	2,000	1,945	2,006	1,795	1,850	1,871	1,863	1,909	1,902	1,834	1,916	1,958	2,024
508	Machinery, equipment, and supplies	7,026	7,468	7,725	6,618	6,626	6,740	6,753	6,756	7,130	6,726	6,988	7,268	7,396
51	Nondurable goods, total	30,417	30,659	31,176	30,051	30,444	30,591	30,316	29,875	28,818	29,157	28,642	29,957	30,778
	Total (excluding farm-product raw materials)	24,986	24,757	25,030	24,218	23,950	23,985	23,738	23,714	23,647	23,852	23,633	24,286	25,175
511	Paper and paper products	1,382	1,390	1,421	1,272	1,285	1,308	1,294	1,242	1,282	1,305	1,294	1,294	1,419
512	Drugs, drug proprietaries, and druggists' sundries	903	889	959	917	902	919	919	914	916	908	867	913	932
513	Apparel, piece goods, and notions	1,774	1,704	1,874	1,566	1,519	1,585	1,580	1,600	1,687	1,668	1,821	1,740	1,856
514	Groceries and related products	9,748	9,992	9,974	9,206	9,228	9,225	8,825	9,210	9,218	9,367	9,280	9,620	9,947
515	Farm-product raw materials[1]	5,431	5,902	6,146	5,833	6,494	6,606	6,578	6,161	5,171	5,305	5,009	5,671	5,603
517	Petroleum and petroleum products	4,362	4,001	3,945	(NA)	(NA)	(NA)	(NA)	(NA)	3,682	3,712	3,749	3,928	4,124
518	Beer, wine, and distilled alcoholic beverages	2,102	2,188	2,270	1,903	1,957	1,921	1,963	1,988	1,970	2,012	1,907	2,026	2,035
519	Miscellaneous nondurable goods	3,822	3,722	3,666	4,153	4,276	4,335	4,151	4,015	3,973	4,071	3,901	3,901	3,992
	Inventories ADJUSTED for seasonal variations													
	Merchant wholesalers, total	68,991	70,361	71,828	64,300	65,301	64,838	64,947	64,210	65,095	66,119	66,209	67,047	67,998
	Total (excluding farm-product raw materials)	64,410	65,559	66,507	58,829	59,280	59,575	60,207	60,647	61,521	62,413	62,347	62,835	63,712
50	Durable goods, total	44,686	45,684	46,195	39,527	39,809	40,224	40,876	41,404	42,396	42,896	43,014	43,642	44,[illegible]
501	Motor vehicles and automotive parts and supplies	7,603	7,981	7,995	6,708	6,705	6,804	6,867	6,937	7,071	6,989	7,248	7,534	7,[illegible]
502	Furniture and home furnishings	1,569	1,619	1,567	1,356	1,352	1,392	1,388	1,395	1,432	1,480	1,461	1,438	1,541
503	Lumber and other construction materials	2,728	2,795	2,708	2,334	2,263	2,219	2,241	2,288	2,415	2,566	2,612	2,607	2,680
505	Metals and minerals, except petroleum	4,431	4,726	4,946	(NA)	(NA)	(NA)	(NA)	(NA)	4,461	4,520	4,418	4,484	4,397
506	Electrical goods	4,694	4,717	4,798	4,108	4,237	4,310	4,326	4,347	4,521	4,581	4,519	4,547	4,710
507	Hardware, plumbing, heating equipment, and supplies	3,796	3,955	3,930	3,387	3,567	3,503	3,598	3,669	3,533	3,636	3,684	3,667	3,709
508	Machinery, equipment, and supplies	15,633	15,831	15,957	13,609	13,629	13,847	14,253	14,410	14,824	14,840	14,690	15,086	15,651
51	Nondurable goods, total	24,305	24,677	25,633	24,773	25,492	24,614	24,071	22,806	22,699	23,223	23,195	23,405	23,630
	Total (excluding farm-product raw materials)	19,724	19,875	20,312	19,302	19,471	19,351	19,331	19,243	19,125	19,517	19,333	19,193	19,344
511	Paper and paper products	1,315	1,314	1,355	1,252	1,260	1,304	1,297	1,302	1,265	1,300	1,300	1,312	1,289
512	Drugs, drug proprietaries, and druggists' sundries	1,315	1,324	1,335	1,254	1,243	1,247	1,263	1,295	1,296	1,289	1,315	1,319	1,317
514	Groceries and related products	5,423	5,339	5,497	5,212	5,356	5,433	5,396	5,389	5,385	5,497	5,436	5,311	5,480
517	Petroleum and petroleum products	1,949	1,932	2,053	(NA)	(NA)	(NA)	(NA)	(NA)	1,973	2,028	1,894	1,944	1,958
518	Beer, wine, and distilled alcoholic beverages	1,984	1,958	2,048	2,011	2,038	2,058	2,051	2,104	2,026	2,036	1,971	1,969	1,898
	Stock-sales ratios based on ADJUSTED data													
	Merchant wholesalers, total	123	122	122	122	122	120	121	120	122	124	123	121	119
	Total (excluding farm-product raw materials)	127	127	127	126	126	126	128	128	128	130	128	126	123
50	Durable goods, total	175	169	168	175	174	173	175	175	174	178	172	170	168
501	Motor vehicles and automotive parts and supplies	148	140	139	160	156	150	154	156	157	155	148	152	142
502	Furniture and home furnishings	153	157	148	155	154	154	153	155	157	158	154	150	142
503	Lumber and other construction materials	119	120	122	114	110	108	107	105	106	109	108	112	110
505	Metals and minerals, except petroleum	175	168	174	(NA)	(NA)	(NA)	(NA)	(NA)	176	175	174	172	165
506	Electrical goods	165	160	155	164	167	173	170	162	170	168	160	156	161
507	Hardware, plumbing, heating equipment, and supplies	190	203	196	189	193	187	193	192	186	198	192	187	183
508	Machinery, equipment, and supplies	223	212	207	206	206	205	211	213	208	221	210	208	212
51	Nondurable goods, total	80	80	82	82	84	80	79	76	79	80	81	78	77
	Total (excluding farm-product raw materials)	79	80	81	80	81	81	81	81	81	82	82	79	77
511	Paper and paper products	95	95	95	98	98	100	100	105	99	100	100	101	91
512	Drugs, drug proprietaries, and druggists' sundries	146	149	139	137	138	136	137	142	141	142	152	144	[illegible]
514	Groceries and related products	56	53	55	57	58	59	61	59	58	59	59	55	
517	Petroleum and petroleum products	45	48	52	(NA)	(NA)	(NA)	(NA)	(NA)	54	55	51	49	
518	Beer, wine, and distilled alcoholic beverages	94	89	90	106	104	107	104	106	103	101	103	97	93

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

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

[1]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. 1978-Mar. 1978 from--			
	Oct. 1977-Dec. 1977 (3 months ago)	July 1977-Sept. 1977 (6 months ago)	Apr. 1977-June 1977 (9 months ago)	Jan. 1977-Mar. 1977 (12 months ago)
Merchant wholesalers, total.....	+4	+8	+7	+11
Durable goods, total.....	+4	+11	+15	+19
Nondurable goods, total.....	+3	+5	+1	+5

Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers: 1972-1978

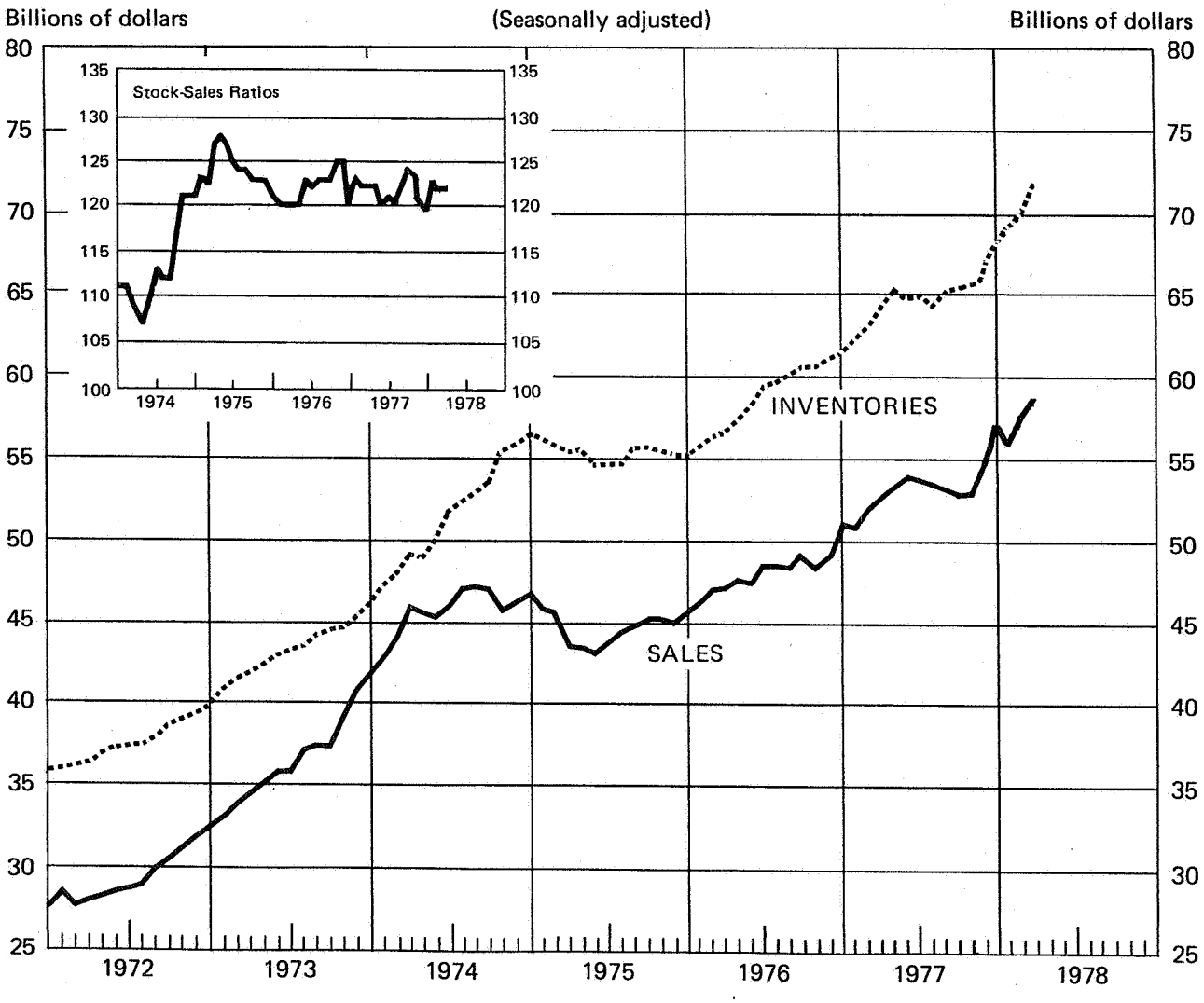


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: March 1978

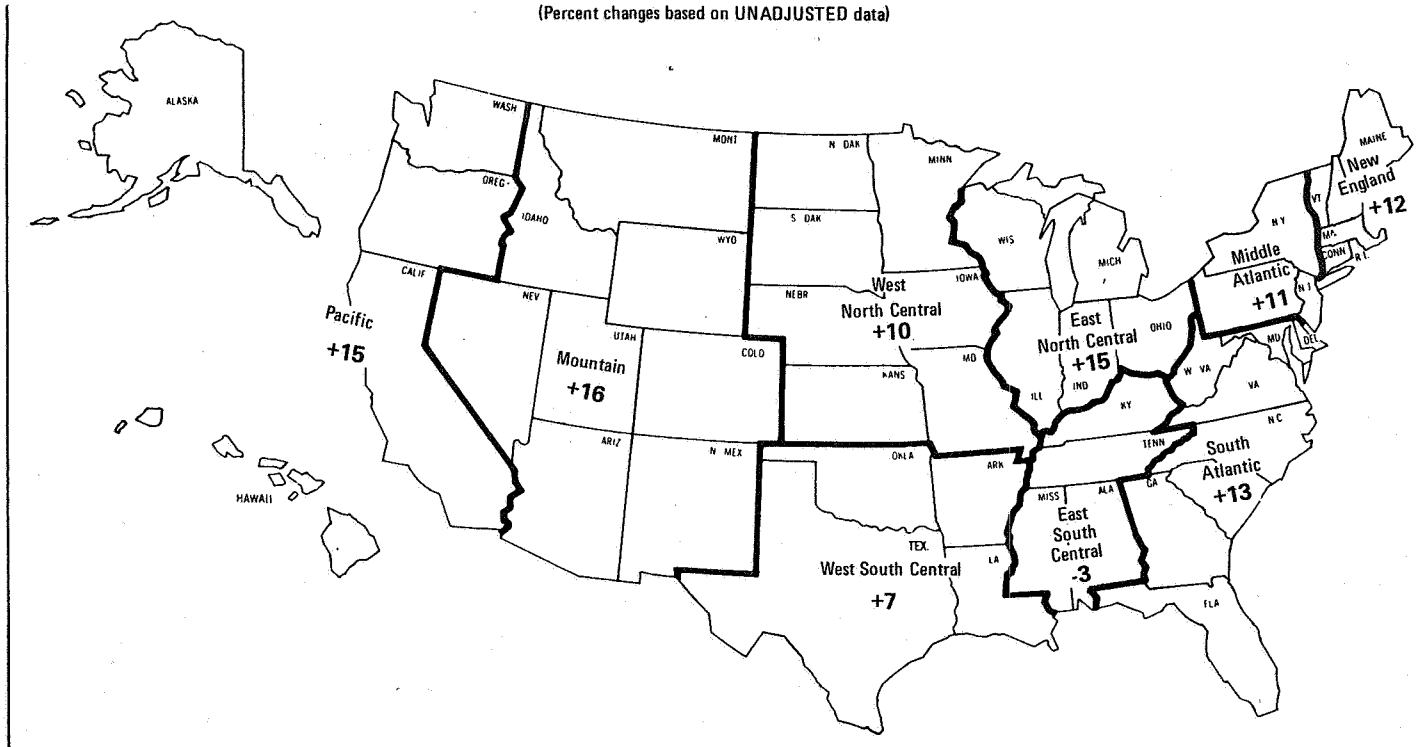
1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		March 1978 from February 1978	March 1978 from March 1977	3 months 1978 from 3 months 1977	March 1978 from February 1978	March 1978 from March 1977	March 1978 from February 1978	March 1978 from March 1977	March 1978 from February 1978	March 1978 from March 1977
	Merchant wholesalers, total	+19	+11	+11	+2	+12	+2	+11	+2	+12
	Total (excluding farm-product raw materials)	+18	+12	+13	+2	+13	+2	+12	+1	+13
50	Durable goods, total	+22	+21	+20	+2	+17	+2	+22	+1	+17
501	Motor vehicles and automotive parts and supplies	+21	+34	+34	-1	+19	+1	+37	0	+19
5012	Automobiles and other motor vehicles	+17	+26	+37	-3	+13	-	-	-	-
5013, 4	Automotive parts and supplies, tires and tubes	+25	+41	+32	+1	+23	-	-	-	-
5013	Automotive parts and supplies	+22	+39	+31	+1	+24	-	-	-	-
502	Furniture and home furnishings	+20	+22	+20	-3	+15	+2	+21	-3	+16
5021	Furniture--household and office	+13	+31	+37	-2	+13	-	-	-	-
5021 pt.	Household furniture	+15	+19	+31	0	+6	-	-	-	-
5021 pt.	Office furniture	+12	+38	+40	-3	+18	-	-	-	-
5023	Home furnishings	+24	+18	+14	-3	+16	-	-	-	-
503	Lumber and other construction materials	+20	+9	+16	+1	+16	-4	+9	-3	+16
5031	Lumber, plywood, and millwork	+17	+8	+14	+1	+9	-	-	-	-
5039	Construction materials, n.e.c.	+26	+12	+20	+1	+31	-	-	-	-
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	+25	+7	+4	+8	+11	+10	+9	+11	+11
505	Metals and minerals, except petroleum	+21	+25	+24	+7	+21	+1	+26	+5	+22
5051 pt.	Ferrous metals service centers and offices	+21	+27	+28	+5	+16	-	-	-	-
5051 pt.	Ferrous metals service centers	+21	+38	+34	+7	+17	-	-	-	-
5051 pt.	Nonferrous metals service centers and offices	+17	+22	+26	+10	+47	-	-	-	-
506	Electrical goods	+20	+23	+21	+3	+17	+5	+23	+2	+17
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+19	+30	+24	+2	+20	-	-	-	-
5064, 5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+20	+16	+18	+5	+13	-	-	-	-
5064	Electrical appliances, TV and radio sets	+23	+12	+11	+3	+6	-	-	-	-
507	Hardware, plumbing, heating equipment, and supplies	+18	+11	+13	+3	+16	+3	+12	-1	+16
5072	Hardware	+17	+5	+9	+1	+12	-	-	-	
5074	Plumbing and heating equipment and supplies (hydronics)	+17	+11	+13	+5	+18	-	-	-	
5075	Warm air heating and air conditioning equipment and supplies	+18	+21	+18	+1	+21	-	-	-	-
508	Machinery, equipment, and supplies	+26	+17	+14	+1	+17	+3	+17	+1	+17
5081	Commercial machines and equipment	+18	+34	+34	+6	+3	-	-	-	-
5082	Construction and mining machinery and equipment	+34	+13	+9	+1	+27	-	-	-	-
5083	Farm and garden machinery and equipment	+50	+12	+7	+1	+20	-	-	-	-
5084, 5	Industrial machinery, equipment, and supplies	+18	+24	+17	0	+15	-	-	-	-
5086	Professional equipment and supplies	+15	+8	+10	+4	+15	-	-	-	-
509	Miscellaneous durable goods	+17	+25	+27	0	+8	0	+27	+2	+9
5093	Scrap and waste materials	+18	+14	+11	+2	+2	-	-	-	-
5093 pt.	Iron and steel scrap	+23	+26	+13	-1	0	-	-	-	-
5093 pt.	Waste materials	+12	0	+9	+8	+8	-	-	-	-
51	Nondurable goods, total	+16	+4	+5	+3	+4	+2	+4	+4	+3
	Total (excluding farm-product raw materials)	+15	+4	+6	+3	+6	+1	+3	+2	+5
511	Paper and paper products	+16	+12	+12	+3	+8	+2	+12	+3	+8
5111, 3	Printing, writing, industrial, and personal service paper	+18	+8	+7	+2	+6	-	-	-	-
512	Drugs, drug proprietaries, and druggists' sundries	+22	+4	+3	+3	+6	+8	+5	+1	+6
5122	Drugs, drug proprietaries, and druggists' sundries	+22	+4	+3	+3	+6	-	-	-	-
5122 pt.	General-line drugs	+20	+10	+7	+1	+9	-	-	-	-
514	Groceries and related products	+14	+9	+11	+5	+5	0	+8	+3	+5
5141	Groceries, general-line	+11	+5	+7	+7	+8	-	-	-	-
5141 pt.	Voluntary groups	+10	+3	+3	+5	+8	-	-	-	-
5141 pt.	Retailer cooperatives	+8	+4	+10	+8	+8	-	-	-	-
5141 pt.	Other general-lines	+16	+8	+9	+8	+9	-	-	-	-
5142,3,6,9	Specialty-line groceries	+13	+6	+12	+1	+1	-	-	-	-
5144	Poultry and poultry products	+24	+17	+6	+4	-1	-	-	-	-
5145	Confectionery	+19	+16	+22	-1	+13	-	-	-	-
5147	Meats and meat products	+15	+12	+14	+9	+15	-	-	-	-
5148	Fresh fruits and vegetables	+23	+22	+22	+4	-5	-	-	-	-
515	Farm-product raw materials[2]	+23	+5	0	+4	-1	+4	+5	+11	-3
5152	Cotton	+33	+25	+9	-4	-21	-	-	-	-
5153	Grain	+24	+3	-3	+10	+1	-	-	-	-
517	Petroleum and petroleum products	+4	-8	0	+4	-2	-1	-10	+6	-3
5171	Petroleum bulk stations and terminals	+3	-10	-3	+2	-15	-	-	-	-
518	Beer, wine, and distilled alcoholic beverages	+29	+18	+20	+5	+2	+4	+19	+5	+2
5181	Beer and ale	+28	+27	+23	+7	+12	-	-	-	-
5182	Wines and distilled alcoholic beverages	+30	+12	+17	+5	-2	-	-	-	-
519	Miscellaneous nondurable goods	+14	-11	-8	+3	+6	-2	-12	+1	3
5191	Farm supplies	+17	-29	-27	+3	+21	-	-	-	
5194	Tobacco and tobacco products	+9	0	+4	+2	+2	-	-	-	
5198	Paints, varnishes, and supplies	+18	+6	+9	0	+16	-	-	-	-
5199 pt.	Books, periodicals, newspapers	+10	+45	+48	+1	-15	-	-	-	-

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

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

Sales of Merchant Wholesalers by Geographic Division
3 Months 1978 Compared With 3 Months 1977

(Percent changes based on UNADJUSTED data)



UNITED STATES +11

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Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1978 and 1977

(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]	1978			1977										Total 3 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.[p]	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1978	1977	Range[2]	Median
	Merchant wholesalers, total	52,143	52,766	62,704	56,383	53,357	54,633	55,794	51,290	55,597	54,505	54,251	56,034	56,224	167,617	150,418	0.8-0.9	0.9
	New England	2,693	2,657	3,205	2,893	2,649	2,744	2,890	2,651	2,856	2,880	2,919	3,036	3,008	8,555	7,639	5-6	6
	Middle Atlantic	11,846	11,840	14,166	12,783	11,835	12,208	12,592	11,263	12,356	12,428	11,945	12,494	12,924	37,852	34,031	2-2	2
	East North Central	8,929	9,269	10,710	9,363	9,042	9,361	9,520	8,807	9,685	9,431	9,724	9,841	9,596	28,908	25,219	2-3	3
	West North Central	5,566	5,390	6,532	5,842	6,018	6,106	5,820	5,332	5,639	5,509	5,670	5,977	5,617	17,488	15,871	2-3	2
	South Atlantic	5,666	5,686	6,663	6,061	5,699	5,850	6,017	5,548	6,015	5,934	5,854	6,126	6,188	18,015	15,888	2-3	2
	East South Central	2,421	2,534	3,233	3,158	2,882	2,882	2,884	2,652	2,853	2,723	2,813	2,765	2,822	8,188	8,461	4-5	4
	West South Central	5,582	5,843	6,802	6,367	5,842	5,774	6,096	5,715	6,108	5,745	5,644	6,008	6,283	18,227	16,961	3-4	4
	Mountain	1,934	1,900	2,339	2,029	1,887	1,897	2,054	1,949	2,040	2,177	2,027	1,964	2,099	6,173	5,311	5-5	5
	Pacific	7,506	7,649	9,056	7,887	7,503	7,811	7,921	7,373	8,045	7,678	7,655	7,821	7,688	24,214	21,037	2-3	3
50	Durable goods, total	22,869	23,880	29,054	24,008	23,356	24,159	25,292	22,915	25,998	25,461	25,369	25,340	24,797	75,805	62,916	0.8-1.0	0.9
	Middle Atlantic	4,973	5,138	6,297	5,128	4,921	5,062	5,315	4,662	5,354	5,366	5,420	5,477	5,379	16,409	13,307	4-5	4
	East North Central	3,935	4,363	5,188	4,199	4,187	4,367	4,549	4,073	4,771	4,635	4,573	4,549	4,282	13,486	11,237	3-4	4
	West North Central	1,776	1,805	2,354	1,862	1,931	1,996	2,098	1,911	2,083	2,003	2,061	2,075	1,900	5,934	5,049	5-6	5
	South Atlantic	2,809	2,768	3,319	2,992	2,827	2,957	3,134	2,840	3,127	3,113	3,088	3,051	2,971	8,896	7,681	4-5	4
	West South Central	2,413	2,626	3,160	2,584	2,508	2,593	2,725	2,520	2,886	2,673	2,643	2,611	2,729	8,199	6,885	4-4	4
	Mountain	923	893	1,081	922	851	856	1,000	921	1,016	1,051	988	900	989	2,897	2,342	6-7	7
	Pacific	4,115	4,283	5,042	4,130	4,001	4,156	4,265	3,967	4,477	4,282	4,210	4,335	4,262	13,440	10,851	2-3	3
51	Nondurable goods, total	29,274	28,886	33,650	32,375	30,001	30,474	30,502	28,375	29,599	29,044	28,882	30,694	31,427	91,812	87,502	1.0-1.2	1.0
	New England	1,735	1,735	2,040	1,882	1,717	1,800	1,923	1,786	1,860	1,843	1,839	1,918	1,918	5,511	5,123	5-7	6
	Middle Atlantic	6,873	6,701	7,868	7,655	6,914	7,146	7,277	6,601	7,002	7,062	6,525	7,017	7,545	21,443	20,724	3-3	3
	East North Central	4,994	4,906	5,522	5,164	4,855	4,994	4,971	4,734	4,914	4,796	5,151	5,292	5,314	15,422	13,982	3-4	3
	West North Central	3,790	3,584	4,178	3,980	4,087	4,110	3,722	3,421	3,556	3,506	3,609	3,902	3,717	11,533	10,822	3-4	3
	South Atlantic	2,857	2,918	3,344	3,069	2,872	2,893	2,883	2,708	2,888	2,821	2,766	3,075	3,217	9,119	8,207	3-5	3
	East South Central	1,453	1,451	1,783	1,978	1,684	1,654	1,645	1,496	1,565	1,422	1,507	1,542	1,626	4,688	5,413	3-4	4
	West South Central	3,169	3,217	3,642	3,783	3,334	3,181	3,371	3,195	3,222	3,072	3,001	3,397	3,554	10,028	10,076	5-5	5
	Pacific	3,392	3,367	4,014	3,757	3,502	3,655	3,656	3,406	3,568	3,396	3,445	3,486	3,426	10,772	10,186	4-5	4

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

[p]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.
[1]See map on page 7.
[2]The range of sampling error of the estimate is based on data for August, September, and October 1977.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: March 1978

(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[1]			Inventories			
		March 1978 from February 1978	March 1978 from March 1977	3 months 1978 from 3 months 1977	March 1978 from February 1978	March 1978 from March 1977		
		A	B	C[1]	D	E	A	D
	Merchant wholesalers, total	+19	+11	+11	+2	+12	0.4	0.2
	New England	+21	+11	+12	+2	+2	2.0	1.9
	Middle Atlantic	+20	+11	+11	+2	+5	1.1	0.6
	East North Central	+16	+14	+15	+5	+19	1.2	0.8
	West North Central	+21	+12	+10	+2	+11	1.3	1.1
	South Atlantic	+17	+10	+13	+1	+11	1.6	1.0
	East South Central	+28	+2	-3	+4	+19	1.7	1.4
	West South Central	+16	+7	+7	-1	+13	1.4	0.8
	Mountain	+23	+15	+16	+2	+8	2.4	1.3
	Pacific	+18	+15	+15	+3	+16	1.2	0.5
50	Durable goods, total	+22	+21	+20	+2	+17	0.6	0.3
	New England	+26	+15	+21	+3	+3	2.4	1.3
	Middle Atlantic	+23	+23	+23	+2	+11	1.7	1.0
	East North Central	+19	+24	+20	+2	+22	1.9	1.0
	West North Central	+30	+26	+18	+2	+13	3.3	1.7
	South Atlantic	+20	+11	+16	+1	+13	1.9	1.2
	East South Central	+34	+23	+15	+3	+27	3.9	2.5
	West South Central	+20	+22	+19	0	+22	2.1	1.2
	Mountain	+21	+17	+24	+3	+13	2.9	1.7
	Pacific	+18	+22	+24	+3	+23	1.9	0.7
51	Nondurable goods, total	+16	+4	+5	+3	+4	0.6	0.4
	New England	+18	+8	+8	+2	+2	1.9	2.7
	Middle Atlantic	+17	+3	+3	+3	-3	1.9	0.9
	East North Central	+13	+7	+10	+10	+14	1.4	1.1
	West North Central	+17	+5	+7	+3	+10	1.6	1.4
	South Atlantic	+15	+9	+11	+1	+5	2.4	1.8
	East South Central	+23	-10	-13	+4	+9	1.7	2.4
	West South Central	+13	-4	0	-2	-1	2.2	1.3
	Mountain	+25	+14	+10	+2	-3	3.2	1.2
	Pacific	+19	+7	+6	+3	+4	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	+25	+41	+32	+1	+23	2	
	New England	+22	+32	(S)	-2	+21	7	
	Middle Atlantic	+35	(S)	(S)	+1	+25	4	2
	East North Central	+19	+30	+21	+2	+18	7	1
	West North Central	+18	(S)	+29	+5	+23	5	2
	South Atlantic	+26	+21	+24	+3	+29	4	2
	East South Central	+32	+19	+8	+5	+41	4	3
	West South Central	+34	+35	+15	-6	+18	5	2
	Mountain	+29	+20	+18	-5	+2	7	3
	Pacific	+17	+28	+32	+2	+28	3	2
502	Furniture and home furnishings	+20	+22	+20	-3	+15	2	1
	Middle Atlantic	+31	+17	+11	-1	+19	4	2
	East North Central	+24	+4	+6	-4	+10	7	2
	West North Central	+17	+39	+33	+2	+28	5	4
	West South Central	+18	+47	+41	+3	+37	5	7
	Pacific	+18	+30	+33	-11	+8	5	3
503	Lumber and other construction materials	+20	+9	+16	+1	+16	2	1
	New England	+40	+27	+20	+2	+6	4	5
	Middle Atlantic	+31	+4	+17	-2	+10	4	2
	East North Central	+21	+39	+37	0	+44	3	2
	West North Central	+9	+2	+11	+6	+20	7	7
	South Atlantic	+19	+25	+42	-3	+13	4	2
	East South Central	+48	+21	+35	+4	+22	4	3
	West South Central	(S)	-8	+3	+3	+22	6	5
	Pacific	+11	-9	-6	+3	+4	5	1
5051 pt.	Ferrous metals service centers	+21	+38	+34	+7	+17	2	1
	Middle Atlantic	+33	+55	+40	+2	+11	4	5
	East North Central	+14	+38	+35	+7	+32	4	1
	West North Central	+26	+14	+12	+5	+5	4	3
	East South Central	+17	+19	+10	+8	-6	2	4
	West South Central	+12	+25	+29	+18	+8	4	2
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+19	+30	+24	+2	+20	2	1
	Middle Atlantic	+20	+29	+20	0	+9	5	2
	East North Central	+12	+31	+26	+1	+18	3	2
	West North Central	+33	+32	+26	0	+17	4	1
	South Atlantic	+14	+14	+8	+3	+20	3	1
	West South Central	+25	+42	+30	+5	+27	3	6
	Pacific	+7	+32	+31	+2	+53	4	1
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+20	+16	+18	+5	+13	3	1
	Middle Atlantic	+21	+26	+25	+5	+7	3	
	East North Central	+19	-6	-3	+10	+13	4	
	West North Central	+33	+18	+10	+3	+29	4	
	South Atlantic	+11	+11	+28	+2	+2	6	4
	West South Central	+21	+12	+20	+5	+4	4	4
	Mountain	+18	(S)	(S)	+5	+3	6	3
	Pacific	+17	+33	+31	+3	+28	3	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 1978—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[1]			Inventories			
		March 1978 from February 1978	March 1978 from March 1977	3 months 1978 from 3 months 1977	March 1978 from February 1978	March 1978 from March 1977		
		A	B	C[1]	D	E	A	D
5072	Hardware	+17	+5	+9	+1	+12	1	1
	New England	+19	+19	+22	+4	+13	6	3
	Middle Atlantic	+14	-3	-5	+4	+22	6	2
	East North Central	+5	+19	+32	+4	+23	4	2
	West North Central	+33	+15	+14	+5	+24	3	3
	South Atlantic	+12	-10	-3	+2	+12	4	2
	East South Central	+26	-23	-25	-3	-12	4	1
	Pacific	+22	-1	+4	+3	+9	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	+17	+11	+13	+5	+18	2	1
	Middle Atlantic	+5	-11	-4	-1	-7	6	3
	East North Central	+20	+36	+28	+2	+22	3	3
	South Atlantic	+16	+7	+17	+4	+7	3	2
	Mountain	+28	+45	+53	+1	-12	7	4
	Pacific	+15	+14	+13	+12	+35	5	4
5084,5	Industrial machinery, equipment, and supplies	+18	+24	+17	0	+15	2	1
	Middle Atlantic	+17	+17	+14	-9	-10	7	2
	East North Central	+14	+26	+19	0	+10	3	2
	West South Central	+26	+63	+43	-3	+25	4	3
	Pacific	+17	+30	+34	+5	+26	5	2
512	Drugs, drug proprietaries, and druggists' sundries	+22	+4	+3	+3	+6	1	1
	New England	+27	0	-2	+11	+2	5	3
	Middle Atlantic	+29	-1	-4	+5	+2	3	2
	East North Central	+20	+6	+4	-2	-2	6	3
	West North Central	+16	+4	+6	+4	+3	2	2
	South Atlantic	+17	+7	+12	+3	+13	6	5
	East South Central	+36	+29	+20	+4	+14	6	5
	West South Central	+18	0	-1	+4	+21	3	2
	Mountain	+10	+10	+10	+4	0	3	2
	Pacific	+18	-2	-3	+2	+9	3	3
5141	Groceries, general-line	+11	+5	+7	+7	+8	1	1
	New England	+17	+22	+17	+5	+11	2	1
	Middle Atlantic	+15	+4	+5	+8	+11	1	2
	East North Central	+5	-3	+6	+11	+7	3	1
	West North Central	+12	+3	+6	+6	+5	1	1
	South Atlantic	+14	+11	+8	+11	+13	2	1
	West South Central	+8	+7	+10	+2	+4	2	1
	Mountain	+18	+9	+11	+3	-1	2	2
	Pacific	+16	+8	+11	+8	+12	1	1
5142,3,6,9	Specialty-line groceries	+13	+6	+12	+1	+1	1	1
	Middle Atlantic	+14	+15	+21	-3	-6	4	2
	East North Central	+11	+10	+19	+7	+16	3	2
	West North Central	+6	+32	+46	+7	+12	3	1
	South Atlantic	+13	+16	+32	+1	+23	5	6
	East South Central	+8	-17	-2	+3	+5	2	2
5148	Fresh fruits and vegetables	+23	+22	+22	+4	-5	2	4
	Middle Atlantic	+22	+15	+25	+1	+3	7	5
	East North Central	+19	+11	+8	+16	+2	6	6
	West North Central	+36	+25	+17	+3	-13	6	3
	West South Central	+20	+30	+30	0	+33	5	3
	Pacific	+26	+16	+18	-5	-33	4	4
5194	Tobacco and tobacco products	+9	0	+4	+2	+2	1	1
	New England	+15	-11	-5	-5	(S)	5	3
	Middle Atlantic	+7	+10	+13	+3	+35	4	3
	East North Central	+15	+1	-2	+1	-2	4	3
	West North Central	+5	(S)	-9	-2	-8	4	2
	South Atlantic	+2	+10	+7	+8	+21	6	6
	East South Central	-1	-21	-9	+2	-24	7	4
	West South Central	+6	(S)	+42	+1	+23	7	6
	Mountain	+2	-16	-2	-4	+2	6	2
	Pacific	+18	+5	+7	+2	+6	2	5

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

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

[1] See map on page 7.

[2] The sampling errors (in percent) shown in columns A and D are based on medians of measurements on data for August, September, and October 1977.

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 10 percent of the sales estimates and 20 percent for inventories.

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

1972 SIC code	Kind of business	Sales						Inventories					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total	0.8-1.1	0.9	0.8-0.9	0.9	0.4-0.5	0.5	0.8-1.0	0.9	0.7-1.0	0.9	0.2-0.5	0.4
	Total (excluding farm-product raw materials)	0.9-1.2	1.1	0.9-1.0	1.0	0.4-0.6	0.5	0.9-1.0	1.0	0.8-1.0	0.9	0.2-0.5	0.3
50	Durable goods, total	1.1-1.3	1.2	0.9-1.0	1.0	0.6-0.6	0.6	1.1-1.2	1.2	1.0-1.2	1.1	0.3-0.7	0.5
501	Motor vehicles and automotive parts and supplies	2.3-3.3	3.1	1.9-2.8	2.2	1.4-1.9	1.7	2.5-3.3	2.9	2.6-3.1	3.0	0.6-1.3	1.0
5012	Automobiles and other motor vehicles	-	-	-	-	1.7-3.9	3.1	-	-	-	-	1.7-3.0	2.8
5013,4	Automotive parts and supplies, tires and tubes	2.9-3.7	3.1	2.9-3.2	3.1	1.5-2.0	1.6	4.0-4.5	4.3	3.9-4.4	4.0	0.4-1.4	0.7
5013	Automotive parts and supplies	3.3-4.0	3.9	3.1-3.8	3.7	1.9-2.2	2.0	4.7-5.3	5.2	4.7-5.2	5.0	0.5-1.5	0.9
502	Furniture and home furnishings	4.2-5.8	4.6	4.2-4.4	4.3	1.7-2.9	2.0	3.2-4.9	3.7	3.4-4.2	3.7	0.8-2.3	2.0
5021	Furniture--household and office	6.6-7.6	6.9	5.6-7.1	6.9	4.0-5.7	4.3	-	-	-	-	1.4-3.4	2.2
5021 pt.	Household furniture	-	-	-	-	5.0-5.8	5.1	-	-	-	-	1.4-4.3	2.0
5021 pt.	Office furniture	-	-	-	-	5.7-8.0	5.9	-	-	-	-	0.7-3.7	2.1
5023	Home furnishings	5.1-7.5	6.1	5.1-6.1	5.5	1.6-3.6	2.2	4.8-6.9	5.6	4.9-6.0	5.0	1.0-3.1	2.6
503	Lumber and other construction materials	2.8-4.4	3.1	2.9-3.9	3.1	1.6-2.5	1.9	4.5-6.5	4.9	4.8-5.8	4.9	0.7-1.8	0.9
5031	Lumber, plywood, and millwork	4.1-4.6	4.3	3.3-4.6	4.0	2.1-2.5	2.4	5.9-8.2	6.5	6.0-6.9	6.5	1.0-2.6	1.8
5039	Construction materials, n.e.c.	4.2-7.2	4.9	4.5-5.9	4.9	2.0-3.4	2.2	-	-	-	-	1.1-2.0	1.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	-	-	-	-	2.2-2.4	2.3	-	-	-	-	1.0-2.5	1.4
505	Metals and minerals, except petroleum	4.4-6.0	4.7	4.0-5.1	4.0	1.5-3.0	2.8	3.2-3.8	3.7	3.7-4.1	4.0	0.8-1.4	1.3
5051 pt.	Ferrous metals service centers and offices	5.0-5.8	5.7	4.1-5.2	4.7	1.2-3.8	3.1	3.8-4.2	4.1	4.1-4.3	4.2	0.5-1.6	1.4
5051 pt.	Ferrous metals service centers	6.7-8.0	6.8	5.0-6.8	5.8	1.1-5.3	3.5	2.9-4.4	3.4	3.4-4.0	3.5	0.6-2.2	2.1
5051 pt.	Nonferrous metals service centers and offices	-	-	-	-	4.5-7.0	6.1	-	-	-	-	2.8-5.4	4.7
506	Electrical goods	1.9-2.6	2.3	1.6-2.1	1.7	1.3-1.6	1.4	2.5-2.9	2.6	2.2-2.8	2.4	0.5-1.0	0.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2.2-3.1	2.6	2.3-2.7	2.4	1.4-1.7	1.6	2.9-3.5	3.2	3.0-3.2	3.1	0.6-1.2	0.7
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3.4-4.0	3.8	3.0-3.2	3.1	1.6-2.8	2.5	2.9-4.2	3.2	2.7-3.8	3.0	0.7-1.6	0.9
5064	Electrical appliances, TV and radio sets	3.0-3.8	3.6	2.6-3.7	3.1	1.7-2.7	2.5	-	-	-	-	0.9-1.7	1.4
507	Hardware, plumbing, heating equipment, and supplies	2.7-3.0	2.9	2.4-2.6	2.5	1.1-1.9	1.5	2.4-2.8	2.6	2.4-2.9	2.7	0.3-1.4	0.6
5072	Hardware	3.6-4.2	3.8	2.6-3.1	3.0	1.3-2.4	1.9	2.0-4.1	2.7	2.2-3.5	2.8	0.4-2.1	0.8
5074	Plumbing and heating equipment and supplies (hydronics)	4.1-5.3	4.2	3.9-5.1	4.2	1.6-3.8	2.1	5.0-7.0	6.0	4.5-7.1	5.3	0.5-3.1	0.9
5075	Warm air heating and air conditioning equipment and supplies	-	-	-	-	2.0-4.4	2.7	-	-	-	-	1.1-4.3	1.4
35	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
3081	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
509	Miscellaneous durable goods	-	-	-	-	2.4-3.5	3.1	-	-	-	-	0.8-2.1	1.1
5093	Scrap and waste materials	4.6-13.3	9.0	4.6-8.8	5.0	2.2-4.9	2.7	-	-	-	-	0.7-3.8	0.9
5093 pt.	Iron and steel scrap	-	-	-	-	2.6-3.5	3.1	-	-	-	-	0.8-1.4	1.0
5093 pt.	Waste materials	-	-	-	-	2.6-8.8	4.8	-	-	-	-	1.2-9.1	1.6
51	Nondurable goods, total	1.0-1.3	1.1	1.0-1.1	1.1	0.4-0.7	0.6	1.5-1.7	1.6	1.4-1.6	1.5	0.3-0.7	0.4
	Total (excluding farm-product raw materials)	1.0-1.6	1.2	1.3-1.4	1.4	0.5-0.8	0.6	1.7-2.0	1.9	1.6-1.8	1.7	0.3-0.7	0.4
511	Paper and paper products	2.6-4.0	3.7	2.4-4.1	3.1	1.0-1.4	1.3	2.5-3.4	2.7	2.4-3.2	2.8	0.4-1.5	0.6
5111,3	Printing, writing, industrial, and personal service paper	2.4-3.1	2.7	2.3-2.8	2.4	1.3-1.5	1.4	2.9-3.4	3.1	2.7-3.2	2.8	0.4-1.3	0.9
5112	Stationery supplies	-	-	-	-	2.4-3.4	2.5	3.2-6.1	5.8	3.6-5.1	4.4	0.9-4.8	1.4
512	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	5.6-6.3	5.7	5.6-5.7	5.7	0.6-2.2	0.7
5122	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	-	-	-	-	0.6-2.2	0.7
5122 pt.	General-line drugs	7.2-9.8	7.9	7.5-8.5	7.6	0.7-3.0	1.0	-	-	-	-	05.-3.1	1.0
513	Apparel, piece goods, and notions	8.3-12.4	8.8	8.6-9.3	9.1	2.6-4.0	3.3	-	-	-	-	-	-
514	Groceries and related products	1.7-2.2	2.0	1.6-2.0	1.9	0.4-1.2	0.5	1.5-2.5	1.8	1.8-2.1	1.9	0.4-1.3	0.6
5141	Groceries, general-line	1.9-2.7	2.1	1.7-2.7	2.0	0.4-1.5	0.7	1.8-2.7	2.3	1.7-2.0	1.8	0.3-1.2	0.8
5141 pt.	Voluntary groups	-	-	-	-	0.5-1.7	0.6	-	-	-	-	0.4-1.7	0.5
5141 pt.	Retailer cooperatives	-	-	-	-	0.6-1.6	1.1	-	-	-	-	0.4-2.4	0.7
5141 pt.	Other general-lines	-	-	-	-	0.9-3.1	1.8	-	-	-	-	0.5-1.3	0.7
5142,3,6,9	Specialty-line groceries	-	-	-	-	0.7-3.4	1.3	-	-	-	-	0.9-2.4	1.0
5144	Poultry and poultry products	3.4-5.5	4.4	4.0-4.4	4.2	0.6-2.2	1.5	-	-	-	-	2.1-4.1	2.3
5145	Confectionery	4.7-6.3	4.7	3.6-5.4	4.3	2.0-3.2	2.2	-	-	-	-	0.8-2.4	2.3
5147	Meats and meat products	4.5-4.8	4.7	4.6-4.6	4.6	1.4-2.9	1.7	-	-	-	-	1.7-3.9	2.2
5148	Fresh fruits and vegetables	4.7-5.4	4.9	3.9-4.1	4.0	1.9-4.2	2.7	-	-	-	-	2.9-4.4	3.9
515	Farm-product raw materials	1.8-2.2	2.0	1.6-2.0	1.7	1.1-1.7	1.3	-	-	-	-	1.1-2.8	2.4
5152	Cotton	-	-	-	-	1.8-4.9	2.8	-	-	-	-	1.3-2.9	2.4
5153	Grain	2.4-2.7	2.6	2.2-2.4	2.3	1.0-1.7	1.3	-	-	-	-	1.6-3.3	1.9
517	Petroleum and petroleum products	4.0-5.0	4.7	4.2-4.6	4.5	1.1-1.9	1.5	4.1-5.2	5.0	4.4-5.4	4.7	1.6-3.0	2.3
5171	Petroleum bulk stations and terminals	2.8-3.3	2.9	2.8-3.0	2.9	0.9-1.4	1.2	-	-	-	-	1.7-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages	3.4-3.9	3.7	3.1-3.7	3.2	0.8-1.8	1.7	3.9-4.2	4.1	4.0-4.3	4.2	1.0-2.0	1.3
5181	Beer and ale	2.2-4.4	3.1	2.8-3.2	2.9	1.0-2.5	2.0	3.6-5.5	3.8	3.6-4.1	3.8	1.7-2.7	2.1
5182	Wines and distilled alcoholic beverages	5.2-6.3	5.4	4.6-5.6	4.7	1.2-3.4	1.7	4.6-5.4	4.8	5.0-5.6	5.3	1.4-2.3	1.6
	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
	Farm supplies	-	-	-	-	3.2-3.6	3.3	-	-	-	-	1.7-3.9	2.0
54	Tobacco and tobacco products	4.0-5.2	4.1	3.4-4.5	4.2	1.3-2.4	1.7	-	-	-	-	0.8-4.3	1.0
5198	Paints, varnishes, and supplies	-	-	-	-	2.8-3.8	3.0	-	-	-	-	1.5-3.1	2.9
5199 pt.	Books, magazines, newspapers	-	-	-	-	3.2-8.0	5.6	-	-	-	-	2.0-6.5	5.1

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

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

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

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

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

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

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1977-December 1978

1972 SIC code	Kind of business	1977											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	91.7	92.1	107.2	99.0	100.6	103.8	95.5	104.5	102.5	100.4	101.1	99.6
	Total (excluding farm-product raw materials)	89.6	91.5	106.3	99.7	101.8	106.0	96.5	105.8	103.6	100.0	100.0	96.9
50	Durable goods, total	87.1	88.2	106.3	101.3	103.7	107.8	96.9	106.5	105.8	101.1	99.3	94.0
501	Motor vehicles and automotive parts and supplies	89.7	89.3	109.5	108.3	107.5	107.2	100.5	105.9	101.1	94.2	95.0	90.0
502	Furniture and home furnishings	82.6	89.5	104.2	97.8	98.8	106.7	90.7	106.4	106.9	110.3	109.2	94.7
503	Lumber and other construction materials	78.4	80.8	101.1	99.8	108.0	112.1	104.6	116.4	108.7	102.4	100.6	85.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.7	89.9	104.1	101.6	101.8	104.0	92.1	106.4	102.0	109.1	110.4	98.2
505	Metals and minerals, except petroleum	94.4	90.9	110.4	99.9	105.3	104.8	92.5	107.5	105.0	96.0	99.5	90.8
506	Electrical goods	87.8	88.6	101.8	97.1	96.0	108.4	98.5	105.9	104.2	106.4	101.9	101.6
507	Hardware, plumbing, heating equipment, and supplies	87.4	87.4	101.2	99.4	102.9	108.3	99.4	108.7	106.9	105.8	100.8	89.9
508	Machinery, equipment, and supplies	86.4	89.0	107.7	102.7	104.4	108.8	95.7	103.5	107.3	102.5	95.5	94.9
509	Miscellaneous durable goods	82.8	89.8	105.7	98.8	100.4	107.7	89.8	105.8	106.7	104.1	104.3	102.0
51	Nondurable goods, total	95.1	95.1	108.4	97.4	98.3	100.7	94.8	102.3	99.7	99.4	102.8	103.9
	Total (excluding farm-product raw materials)	91.7	94.2	106.8	98.1	100.0	104.1	96.3	104.6	101.6	99.0	100.6	100.[illegible]
511	Paper and paper products	93.8	92.2	104.3	95.1	96.4	104.2	97.3	108.3	104.7	103.6	103.2	95.7
512	Drugs, drug proprietaries, and druggists' sundries	94.2	92.6	105.1	98.8	97.7	98.7	92.7	103.9	104.4	108.3	101.4	98.9
513	Apparel, piece goods, and notions	89.7	94.6	106.4	95.2	95.2	100.5	95.1	114.9	108.8	105.4	105.6	87.1
514	Groceries and related products	94.2	90.9	103.8	98.5	101.5	106.7	99.1	105.4	100.7	100.1	99.7	98.5
515	Farm-product raw materials[1]	105.1	95.8	112.8	96.9	101.5	88.2	88.5	95.5	93.5	102.2	110.6	108.6
516	Chemicals and allied products	87.1	89.9	107.4	101.2	102.5	106.5	97.0	107.2	103.4	102.0	99.3	94.3
517	Petroleum and petroleum products	94.8	102.6	105.4	98.9	90.9	98.9	100.1	101.9	97.3	102.4	101.4	105.6
518	Beer, wine, and distilled alcoholic beverages	75.8	80.8	101.4	94.1	103.0	113.8	98.1	107.0	100.3	98.8	105.8	120.1
519	Miscellaneous nondurable goods	95.1	101.7	116.8	104.4	101.4	100.9	88.1	96.2	99.6	95.4	96.1	100.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	102.1	101.4	100.9	99.9	98.4	98.4	98.4	98.4	98.6	100.9	102.1	101.1
	Total (excluding farm-product raw materials)	99.8	100.3	100.8	100.1	100.3	100.5	100.1	99.2	99.3	100.0	100.2	99.4
50	Durable goods, total	99.1	100.3	101.1	100.9	101.4	101.8	100.9	99.4	99.1	99.1	98.9	98.9
501	Motor vehicles and automotive parts and supplies	101.4	102.8	102.1	101.4	102.4	100.9	98.9	96.6	97.9	97.8	97.9	100.4
502	Furniture and home furnishings	98.9	99.4	100:1	99.8	99.9	101.4	100.9	101.3	100.9	99.6	100.4	98.1
503	Lumber and other construction materials	97.9	98.4	102.8	102.6	105.4	103.1	102.9	100.6	97.8	95.3	96.4	97.1
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	100.8	99.9	100.9	103.4	107.6	104.6	101.6	100.3	100.6	94.4	89.3
505	Metals and minerals, except petroleum	100.4	98.9	100.9	101.4	100.1	99.4	102.8	101.3	98.1	96.8	99.1	101.4
506	Electrical goods	97.3	97.6	99.1	99.4	100.6	101.9	101.1	101.3	100.4	101.6	101.4	98.8
507	Hardware, plumbing, heating equipment, and supplies	98.1	98.6	101.6	103.1	102.8	101.1	100.9	101.4	98.4	98.3	98.4	97.6
508	Machinery, equipment, and supplies	99.1	101.1	101.9	100.6	101.1	102.3	100.1	97.9	99.1	99.6	99.6	97.8
509	Miscellaneous durable goods	97.1	98.9	96.8	98.4	96.8	101.3	101.9	102.9	101.3	103.1	101.8	100.4
51	Nondurable goods, total	105.4	103.4	100.9	98.1	93.9	93.3	94.8	97.3	97.6	103.9	106.9	105.4
	Total (excluding farm-product raw materials)	100.5	100.2	100.5	99.4	98.2	98.4	98.3	99.0	99.8	101.9	102.7	100.9
511	Paper and paper products	99.1	99.1	98.8	100.4	99.8	101.9	99.6	100.9	100.1	100.3	99.8	100.9
512	Drugs, drug proprietaries, and druggists' sundries	96.4	97.8	100.1	101.4	98.1	100.4	99.3	100.1	102.4	104.4	101.4	98.9
513	Apparel, piece goods, and notions	100.1	99.6	98.4	98.6	101.1	100.4	102.6	101.1	100.4	99.1	99.1	99.9
514	Groceries and related products	99.9	100.9	102.4	99.9	98.4	98.4	98.1	98.1	99.1	101.3	102.9	101.1
515	Farm-product raw materials[1]	121.4	113.9	104.9	92.4	80.8	73.9	84.8	84.8	89.8	108.9	122.1	123
516	Chemicals and allied products	99.8	100.1	102.1	101.4	101.3	99.9	99.8	99.1	99.6	97.8	99.4	100
517	Petroleum and petroleum products	104.8	99.8	97.1	93.1	95.1	96.8	96.4	99.3	101.8	106.8	105.6	104.[illegible]
518	Beer, wine, and distilled alcoholic beverages	96.9	97.9	97.1	98.9	101.8	103.1	98.6	97.6	100.6	107.6	105.4	95.3
519	Miscellaneous nondurable goods	103.6	104.3	102.9	100.6	96.3	93.3	95.3	98.4	98.1	99.8	103.6	104.4

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1977-December 1978—Continued

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.9	92.2	106.9	96.5	103.5	103.8	95.4	105.1	98.9	102.5	101.4	96.7
	Total (excluding farm-product raw materials)	91.9	91.6	106.4	97.5	104.6	105.9	95.9	106.4	100.9	102.2	98.8	95.1
50	Durable goods, total	89.8	89.0	105.2	98.7	106.3	107.6	96.4	107.1	102.9	104.2	98.4	91.4
501	Motor vehicles and automotive parts and supplies	93.6	89.1	107.0	107.0	107.4	108.0	99.3	107.5	96.9	98.4	92.5	91.4
502	Furniture and home furnishings	84.6	89.1	104.6	95.9	101.6	106.2	89.4	107.2	104.2	112.8	108.3	93.8
503	Lumber and other construction materials	81.6	81.2	101.7	95.3	110.7	112.5	102.4	116.9	104.7	108.0	100.0	82.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.4	90.3	102.8	100.3	109.7	98.1	95.1	104.0	104.7	105.7	108.7	97.3
505	Metals and minerals, except petroleum	98.8	91.0	108.9	97.9	107.9	103.6	90.7	108.4	103.1	100.0	97.4	91.1
506	Electrical goods	89.4	89.1	101.7	95.2	99.2	106.4	100.2	104.9	100.9	107.7	103.3	98.5
507	Hardware, plumbing, heating equipment, and supplies	89.5	87.8	100.8	97.5	105.5	107.8	99.7	109.4	103.4	107.2	101.1	88.0
508	Machinery, equipment, and supplies	88.1	88.8	107.8	99.6	107.3	108.7	95.7	104.3	104.0	103.7	96.9	91.6
509	Miscellaneous durable goods	86.5	89.8	104.7	95.1	101.0	110.6	87.6	108.0	102.4	109.5	105.2	96.2
51	Nondurable goods, total	97.0	95.1	108.7	95.1	101.3	100.9	94.8	102.9	96.9	100.9	102.6	100.7
	Total (excluding farm-product raw materials)	93.9	94.5	107.7	95.7	102.7	104.4	95.6	105.1	98.6	100.5	100.4	97.5
511	Paper and paper products	95.2	92.4	104.5	92.6	101.9	103.0	96.6	108.3	103.7	105.0	100.5	92.7
512	Drugs, drug proprietaries, and druggists' sundries	98.2	92.7	104.9	96.0	100.4	99.8	92.7	104.5	101.4	108.3	100.6	96.9
513	Apparel, piece goods, and notions	91.3	94.8	106.4	92.3	99.6	99.3	93.5	115.1	106.8	108.1	103.9	86.0
514	Groceries and related products	95.0	91.0	104.1	96.4	104.5	106.2	99.1	106.0	100.1	100.3	99.9	94.3
515	Farm-product raw materials[1]	106.8	95.8	112.8	94.4	99.6	89.9	92.3	94.6	92.6	100.5	111.2	104.6
516	Chemicals and allied products	90.0	89.4	106.9	98.2	105.2	106.5	97.0	107.3	99.7	105.5	98.0	94.1
517	Petroleum and petroleum products	96.5	102.1	107.7	96.2	92.8	99.9	98.4	101.7	95.5	102.4	98.7	105.8
518	Beer, wine, and distilled alcoholic beverages	78.7	80.9	100.7	91.2	106.7	113.9	97.3	108.1	96.9	101.9	105.3	115.3
519	Miscellaneous nondurable goods	97.4	101.6	118.1	101.5	104.3	102.9	87.2	96.5	96.0	97.0	96.4	97.4
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	101.9	101.3	101.0	100.1	98.6	98.5	98.4	98.0	98.9	100.6	101.7	100.5
	Total (excluding farm-product raw materials)	99.7	100.3	100.8	100.2	100.2	100.5	100.1	99.1	99.4	100.0	100.3	99.2
50	Durable goods, total	99.1	100.2	100.9	100.6	101.1	101.6	100.8	99.3	99.3	99.0	99.1	98.7
501	Motor vehicles and automotive parts and supplies	101.4	102.6	101.8	101.0	102.1	100.9	98.9	96.8	97.9	97.8	98.1	100.5
502	Furniture and home furnishings	99.4	99.2	99.8	99.5	99.8	101.3	100.6	101.0	101.5	100.5	99.1	98.1
503	Lumber and other construction materials	98.1	98.8	103.0	102.6	105.0	101.6	101.5	100.2	98.9	96.1	96.9	97.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	102.4	99.2	100.5	103.3	107.3	104.4	101.1	100.6	101.2	93.9	89.0
505	Metals and minerals, except petroleum	100.4	98.6	100.5	101.0	99.7	99.2	102.4	101.9	98.6	96.7	99.5	101.5
506	Electrical goods	97.2	97.4	99.0	99.9	100.2	101.8	101.2	101.5	100.4	101.2	101.0	98.8
507	Hardware, plumbing, heating equipment, and supplies	97.8	98.0	101.6	103.2	102.8	101.7	100.5	101.4	98.7	98.6	98.2	97.3
508	Machinery, equipment, and supplies	99.2	101.1	101.7	100.0	101.0	102.3	100.1	98.1	99.3	99.6	99.5	97.8
509	Miscellaneous durable goods	97.1	98.7	96.6	98.2	96.6	101.2	101.8	102.6	101.5	103.1	102.1	100.2
51	Nondurable goods, total	104.8	103.2	101.6	98.3	95.3	93.7	94.6	96.3	98.6	103.3	106.0	103.9
	Total (excluding farm-product raw materials)	100.4	100.2	100.7	99.7	98.5	98.6	98.3	98.6	99.7	101.9	102.5	100.8
511	Paper and paper products	98.7	99.0	98.7	100.6	99.4	102.0	99.6	100.6	99.5	101.5	100.0	100.2
512	Drugs, drug proprietaries, and druggists' sundries	96.3	97.6	99.9	101.3	97.7	100.2	99.2	99.8	102.0	105.0	101.8	98.8
513	Apparel, piece goods, and notions	99.9	99.4	98.6	98.5	101.1	100.0	102.2	101.0	100.0	98.3	100.1	100.6
514	Groceries and related products	99.6	100.7	102.2	100.1	98.6	98.5	98.1	97.8	99.0	101.8	102.1	101.3
515	Farm-product raw materials[1]	120.2	114.0	106.9	93.1	81.5	76.1	84.4	83.5	88.3	108.7	121.4	120.9
516	Chemicals and allied products	99.9	99.9	102.7	101.1	101.3	99.8	99.6	99.4	99.9	96.9	98.7	100.6
517	Petroleum and petroleum products	104.9	100.2	97.9	93.5	95.6	97.0	95.4	99.0	102.5	104.8	104.6	104.2
518	Beer, wine, and distilled alcoholic beverages	96.6	96.5	97.2	99.0	101.3	103.1	98.9	97.6	100.8	107.5	106.5	94.6
519	Miscellaneous nondurable goods	103.4	103.2	105.3	101.1	96.2	92.9	95.1	97.2	98.6	99.7	103.2	104.1

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.

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.

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 bench-

mark 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)[1]

Ferrous Metals Service Centers and Offices (SIC 5051 pt.)[1]—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

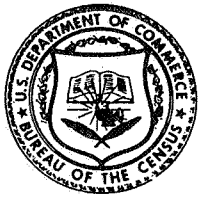
plumbing, heating, and air-conditioning equipment and electrical supplies were classified in wholesale trade rather than retail trade. However, establishments primarily selling lumber and other building materials and paint, glass, and wallpaper were classified in retail trade if they sell to the public,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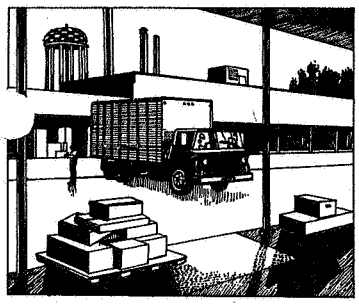
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued June 1978

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BW-78-4

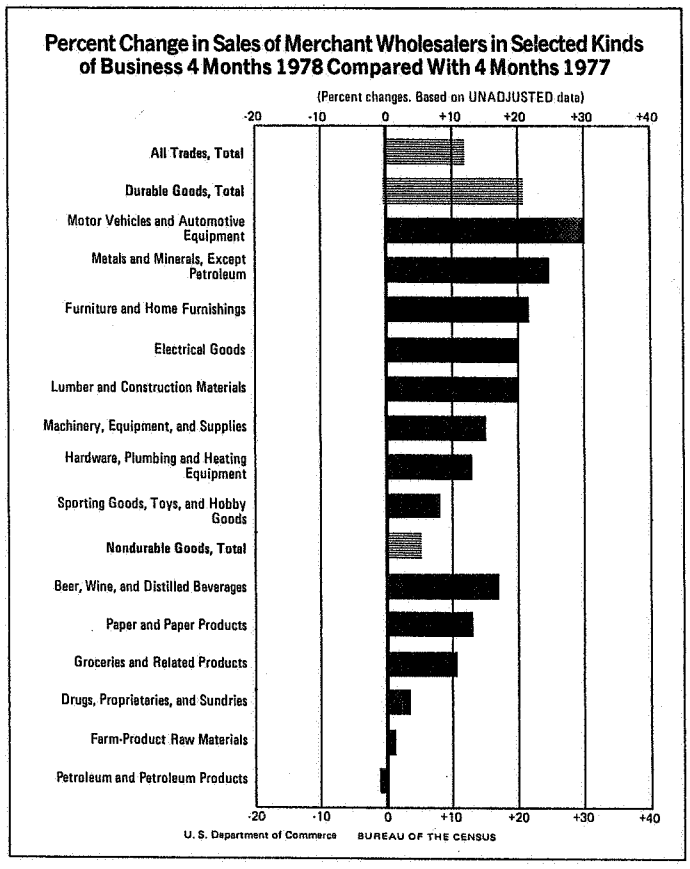
Sales—April 1978 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences, but not for price changes, were $62.1 billion, up 5 percent from the previous month and 16 percent above April 1977. Adjusted February-through-April total sales were up 6 percent from the November-through-January period and were 13 percent above the total sales for the comparable months a year ago.

After adjustment, April sales in the durable goods trades were up 6 percent from the previous month and were 27 percent above sales for the same month a year ago. Nondurable goods sales were up 5 percent from March and were 8 percent above April 1977. Total monthly sales in the durable goods group during the February-through-April period were 8 percent above the prior 3 months and were 23 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were 4 percent above the November-through-January period and were 6 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 more substantial increases shown in miscellaneous nondurable goods (19%) and lumber and construction materials (15%). The largest decrease was reported in beer, wine, and distilled beverages (-2%). Compared with sales of a year ago, all trade groups showed increases, with the exception of petroleum and petroleum products which remained unchanged. The sharper increases were reported in miscellaneous durable goods (39%) and metals and minerals, except petroleum (32%).

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variations, but not for price changes, were valued at $74.3 billion at the end of April, up 2 percent from last month, and 14 percent above the same month a year ago. Durable goods stocks were up 1 percent from March and were 19 percent above April 1977. Nondurable goods stocks were up 4 percent from last month and were 6 percent above stocks on hand a year ago.

Based on adjusted data, most trade groups showed increases from their previous month inventory levels with the larger increases reported in farm-product raw materials (8%) and miscellaneous nondurable goods (6%). The most substantial decrease was shown in motor vehicles and automotive equipment (-3%). Compared with year-ago inventories, all trade groups reported increases with the exception of farm-product raw materials which showed no change. The sharper increases were noted in lumber and construction materials (27%) and furniture and home furnishings (24%).



Stock-Sales Ratio—The April stock-sales ratio for merchant wholesalers, based on seasonally-adjusted data, was 120, down 4 points from March and 2 points below April 1977. The stock-sales ratio for durable goods was 162, down 9 points from last month and 12 points below the year-ago ratio. The ratio for nondurable goods was 82, down 1 point from March and 2 points below the April 1977 ratio.

An advance release of the April 1978 data was issued on June 8, 1978.

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: 1978 and 1977

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

1972 SIC code	Kind of business	1978				1977									Total 4 months	
		Jan.	Feb.	Mar.	Apr.[P]	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1978	1977
	Merchant wholesalers, total	52,143	52,766	62,900	60,556	53,357	54,633	55,794	51,290	55,597	54,505	54,251	56,034	56,224	228,363	203,775
	Total (excluding farm-product raw materials)	46,343	47,112	55,848	54,102	47,066	47,931	49,990	45,838	50,659	49,544	49,132	49,762	50,139	203,403	179,056
50	Durable goods, total	22,869	23,880	28,985	28,927	23,356	24,159	25,292	22,915	25,998	25,461	25,369	25,340	24,797	104,659	86,272
501	Motor vehicles and automotive parts and supplies	4,797	5,065	5,870	5,873	4,663	4,866	4,795	4,463	4,762	4,554	4,605	4,721	4,698	21,605	16,582
5013,4	Automotive parts and supplies, tires and tubes	2,517	2,666	3,128	3,200	2,415	2,482	2,597	2,395	2,657	2,538	2,661	2,651	2,551	11,511	8,845
5013	Automotive parts and supplies	2,166	2,286	2,602	2,669	2,018	2,111	2,221	2,027	2,229	2,089	2,227	2,220	2,167	9,723	7,535
502	Furniture and home furnishings	867	921	1,111	1,090	860	891	968	816	972	998	1,048	1,045	1,025	3,989	3,263
5021	Furniture--household and office	304	311	356	375	262	272	291	251	310	308	320	340	350	1,346	967
5023	Home furnishings	564	610	755	714	598	619	677	565	662	689	728	705	676	2,643	2,296
503	Lumber and other construction materials	1,867	1,891	2,368	2,547	2,043	2,222	2,343	2,271	2,657	2,553	2,476	2,334	2,086	8,673	7,239
5031	Lumber, plywood, and millwork	1,290	1,288	1,582	1,659	1,343	1,513	1,571	1,511	1,792	1,681	1,637	1,540	1,389	5,819	4,923
5039	Construction materials, n.e.c.	576	603	786	888	700	709	772	760	866	872	839	794	697	2,854	2,316
505	Metals and minerals, except petroleum	2,505	2,557	3,040	2,965	(NA)	(NA)	(NA)	(NA)	2,731	2,709	2,437	2,592	2,423	11,068	8,887
5051 pt.	Ferrous metals service centers and offices	1,922	1,970	2,344	2,219	(NA)	(NA)	(NA)	(NA)	2,039	2,083	1,845	1,869	1,774	8,455	6,555
5051 pt.	Ferrous metals service centers	1,386	1,443	1,713	1,704	(NA)	(NA)	(NA)	(NA)	1,480	1,478	1,385	1,359	1,282	6,247	4,616
506	Electrical goods	2,541	2,627	3,096	2,976	2,469	2,391	2,761	2,647	2,821	2,846	2,998	2,973	2,964	11,240	9,344
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,262	1,354	1,561	1,558	1,183	1,222	1,390	1,324	1,456	1,369	1,436	1,436	1,379	5,735	4,602
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,279	1,273	1,535	1,418	1,286	1,169	1,371	1,323	1,365	1,477	1,562	1,537	1,585	5,505	4,742
5064	Electrical appliances, TV and radio sets	763	762	939	836	831	731	940	914	919	979	1,011	989	1,003	3,299	3,045
507	Hardware, plumbing, heating equipment, and supplies	1,790	1,708	2,021	2,068	1,838	1,925	2,017	1,898	2,068	1,961	2,027	1,974	1,820	7,586	6,714
5072	Hardware	693	679	793	794	769	721	740	700	790	750	750	768	676	2,959	2,755
5074	Plumbing and heating equipment and supplies (hydronics)	726	675	801	811	747	824	852	799	842	802	846	791	753	3,013	2,680
508	Machinery, equipment, and supplies	6,190	6,632	8,301	8,373	6,806	7,034	7,349	6,465	7,380	7,217	7,163	6,941	7,019	29,496	25,47
5082	Construction and mining machinery and equipment	825	875	1,130	1,277	1,022	1,044	1,059	876	971	1,002	1,006	1,025	1,006	4,107	3,651
5084,5	Industrial machinery, equipment, and supplies	2,545	2,790	3,294	3,106	2,376	2,520	2,821	2,494	2,891	2,771	2,750	2,858	2,861	11,736	9,742
5086	Professional equipment, supplies	710	732	863	807	747	779	840	757	846	805	808	773	805	3,111	2,833
5093	Scrap and waste materials	757	815	979	975	895	869	903	679	802	810	807	812	779	3,525	3,171
51	Nondurable goods, total	29,274	28,886	33,915	31,629	30,001	30,474	30,502	28,375	29,599	29,044	28,882	30,694	31,427	123,704	117,503
	Total (excluding farm-product raw materials)	23,474	23,232	26,863	25,175	23,710	23,772	24,698	22,923	24,661	24,084	23,763	24,422	25,342	98,743	92,784
511	Paper and paper products	1,316	1,284	1,506	1,387	1,222	1,261	1,348	1,208	1,388	1,366	1,341	1,335	1,358	5,494	4,877
5111,3	Printing, writing, industrial, and personal service paper	950	926	1,100	1,019	959	991	1,054	935	1,060	1,032	1,007	988	995	3,995	3,737
512	Drugs, drug proprietaries, and druggists' sundries	887	824	994	933	891	897	907	848	952	948	939	926	922	3,638	3,529
5122	Drugs, drug proprietaries, and druggists' sundries	887	824	994	933	891	897	907	848	952	948	939	926	922	3,638	3,529
5122 pt.	General-line drugs	423	393	470	441	397	415	410	388	459	455	438	452	444	1,726	1,603
513	Apparel, piece goods, and notions[1]	1,620	1,615	2,063	1,700	1,446	1,510	1,589	1,521	1,938	1,815	1,919	1,837	1,617	6,997	5,849
514	Groceries and related products	9,261	9,093	10,398	9,919	9,094	9,359	9,414	9,132	9,716	9,433	9,289	9,591	9,798	38,672	34,968
5141	Groceries, general-line	3,426	3,333	3,740	3,547	3,278	3,387	3,412	3,347	3,493	3,396	3,360	3,579	3,587	14,046	13,049
5144	Poultry and poultry products	402	397	486	478	400	438	448	412	456	432	419	458	454	1,762	1,613
5145	Confectionery	154	163	191	173	147	150	150	146	171	172	183	194	188	680	567
5147	Meats and meat products	1,460	1,462	1,651	1,632	1,404	1,469	1,513	1,444	1,591	1,486	1,498	1,525	1,510	6,205	5,439
5148	Fresh fruits and vegetables	839	824	986	1,033	858	849	852	834	877	810	836	886	889	3,682	3,062
515	Farm-product raw materials	5,800	5,654	7,052	6,454	6,291	6,702	5,804	5,452	4,938	4,960	5,119	6,272	6,085	24,960	24,719
5153	Grain	4,549	4,503	5,718	5,312	5,344	5,589	4,830	4,580	4,011	4,005	4,069	4,968	4,730	20,083	20,492
517	Petroleum and petroleum products	4,209	4,085	4,249	3,781	(NA)	(NA)	(NA)	(NA)	3,752	3,612	3,839	3,983	4,355	16,323	16,488
5171	Petroleum bulk stations and terminals	2,387	2,293	2,384	2,218	(NA)	(NA)	(NA)	(NA)	2,160	2,103	2,195	2,266	2,523	9,282	9,476
518	Beer, wine, and distilled alcoholic beverages	1,654	1,770	2,299	2,038	1,842	1,978	2,233	1,951	2,108	2,018	1,884	2,143	2,444	7,760	6,612
5181	Beer and ale	795	839	1,094	1,035	902	1,043	1,126	1,010	1,093	1,012	888	938	1,020	3,762	3,104
5182	Wines and distilled alcoholic beverages	859	931	1,204	1,003	940	935	1,107	941	1,014	1,005	995	1,204	1,424	3,998	3,508
519	Miscellaneous nondurable goods	3,723	3,782	4,434	4,540	4,463	4,398	4,186	3,539	3,822	4,055	3,722	3,749	4,028	16,479	17,264
5194	Tobacco and tobacco products	721	692	782	739	717	743	787	734	780	751	748	705	819	2,935	2,801

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

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

[1]The apparel, piece goods, and notions group is subject to a sampling variability of 10 percent for April 1978.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978				1977								
		Jan.	Feb.	Mar.	Apr.[P]	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	69,596	71,156	73,931	74,072	65,042	64,088	64,117	63,666	64,105	65,291	66,530	68,082	68,555
	Total (excluding farm-product raw materials)	64,090	65,682	67,973	68,478	59,475	59,833	60,612	60,642	61,074	61,963	62,324	62,939	63,245
50	Durable goods, total	44,287	45,757	47,275	47,565	40,168	40,763	41,593	41,738	42,142	42,484	42,627	43,252	43,676
501	Motor vehicles and automotive parts and supplies	7,709	8,189	7,995	7,728	6,796	6,963	6,932	6,864	6,831	6,842	7,089	7,376	7,424
5013,4	Automotive parts and supplies, tires and tubes	4,743	4,962	4,856	4,789	4,061	4,219	4,333	4,304	4,512	4,496	4,438	4,669	4,607
5013	Automotive parts and supplies	3,953	4,163	4,041	4,016	3,338	3,481	3,616	3,534	3,712	3,663	3,639	3,912	3,790
502	Furniture and home furnishings	1,560	1,606	1,633	1,665	1,349	1,392	1,407	1,409	1,451	1,493	1,455	1,444	1,512
5023	Home furnishings	1,137	1,184	1,182	1,207	960	988	1,022	1,026	1,069	1,085	1,057	1,054	1,099
503	Lumber and other construction materials	2,676	2,761	2,919	2,960	2,323	2,340	2,309	2,353	2,429	2,510	2,489	2,513	2,602
5031	Lumber, plywood, and millwork[1]	1,715	1,775	1,870	1,891	1,548	1,578	1,559	1,588	1,632	1,659	1,629	1,643	1,671
505	Metals and minerals, except petroleum	4,449	4,660	4,953	5,076	(NA)	(NA)	(NA)	(NA)	4,519	4,434	4,277	4,444	4,459
5051 pt.	Ferrous metals service centers and offices	3,471	3,591	3,820	3,931	(NA)	(NA)	(NA)	(NA)	3,692	3,689	3,511	3,514	3,568
5051 pt.	Ferrous metals service centers	2,633	2,760	3,039	3,129	(NA)	(NA)	(NA)	(NA)	2,858	2,874	2,686	2,738	2,768
506	Electrical goods	4,563	4,594	4,867	4,986	4,209	4,334	4,406	4,392	4,580	4,599	4,591	4,611	4,653
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,114	2,214	2,226	2,287	1,916	2,006	2,084	1,987	2,088	2,069	2,025	2,100	2,121
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,449	2,380	2,640	2,699	2,293	2,328	2,322	2,405	2,493	2,530	2,566	2,511	2,533
507	Hardware, plumbing, heating equipment, and supplies	3,712	3,876	4,058	4,117	3,679	3,599	3,639	3,704	3,582	3,578	3,621	3,608	3,620
5072	Hardware	1,366	1,384	1,421	1,419	1,183	1,237	1,256	1,286	1,282	1,296	1,319	1,320	1,358
5074	Plumbing and heating equipment and supplies (hydronics)[2]	1,590	1,678	1,784	1,786	1,763	1,588	1,619	1,669	1,588	1,579	1,566	1,562	1,555
508	Machinery, equipment, and supplies	15,508	16,005	16,511	16,605	13,717	14,007	14,574	14,417	14,513	14,706	14,631	15,026	15,307
5082	Construction and mining machinery and equipment	3,281	3,396	3,505	3,511	2,701	2,727	2,864	2,865	2,928	3,110	3,083	3,202	3,261
5084,5	Industrial machinery, equipment, and supplies	4,816	4,912	4,996	5,043	4,180	4,395	4,621	4,478	4,447	4,503	4,534	4,555	4,742
51	Nondurable goods, total	25,309	25,399	26,656	26,507	24,874	23,324	22,523	21,928	21,963	22,807	23,903	24,830	24,879
	Total (excluding farm-product raw materials)	19,803	19,925	20,699	20,911	19,307	19,069	19,018	18,904	18,932	19,479	19,697	19,687	19,569
511	Paper and paper products	1,298	1,301	1,354	1,354	1,265	1,301	1,322	1,297	1,276	1,301	1,304	1,309	1,301
5111,3	Printing, writing, industrial, and personal service paper	868	877	910	911	877	900	905	887	877	880	878	865	873
512	Drugs, drug proprietaries, and druggists' sundries	1,266	1,292	1,330	1,332	1,261	1,223	1,268	1,285	1,297	1,320	1,373	1,337	1,303
514	Groceries and related products	5,401	5,376	5,710	5,801	5,353	5,349	5,307	5,283	5,283	5,448	5,507	5,465	5,540
5141	Groceries, general-line	2,350	2,366	2,562	2,559	2,387	2,382	2,371	2,268	2,265	2,363	2,446	2,441	2,473
517	Petroleum and petroleum products	2,045	1,936	1,953	1,863	(NA)	(NA)	(NA)	(NA)	1,959	2,064	2,023	2,053	2,042
518	Beer, wine, and distilled alcoholic beverages	1,917	1,889	2,017	2,117	2,015	2,094	2,114	2,074	1,977	2,048	2,121	2,075	1,809
5181	Beer and ale	611	641	707	768	679	726	709	675	660	673	658	632	581
5182	Wines and distilled alcoholic beverages	1,305	1,248	1,311	1,349	1,336	1,368	1,405	1,399	1,317	1,375	1,462	1,443	1,228

See footnotes below table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978				1977								
		Jan.	Feb.	Mar.	Apr.[P]	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	133	135	118	122	122	117	115	124	115	120	123	122	122
	Total (excluding farm-product raw materials)	138	139	122	127	126	125	121	132	121	125	127	126	126
50	Durable goods, total	194	192	163	164	172	169	164	182	162	167	168	171	176
501	Motor vehicles and automotive parts and supplies	161	162	136	132	146	143	145	154	143	150	154	156	158
5013,4	Automotive parts and supplies, tires and tubes	188	186	155	150	168	170	167	180	170	177	167	176	181
5013	Automotive parts and supplies	183	182	155	150	165	165	163	174	167	175	163	176	175
502	Furniture and home furnishings	180	174	147	153	157	156	145	173	149	150	139	138	147
5023	Home furnishings	202	194	157	169	161	160	151	182	162	157	145	150	163
503	Lumber and other construction materials	143	146	123	116	114	105	99	104	91	98	101	108	125
5031	Lumber, plywood, and millwork	133	138	118	114	115	104	99	105	91	99	100	107	120
505	Metals and minerals, except petroleum	178	182	163	171	(NA)	(NA)	(NA)	(NA)	165	164	176	171	184
5051 pt.	Ferrous metals service centers and offices	181	182	163	177	(NA)	(NA)	(NA)	(NA)	181	177	190	188	201
5051 pt.	Ferrous metals service centers	190	191	177	184	(NA)	(NA)	(NA)	(NA)	193	194	194	201	216
506	Electrical goods	180	175	157	168	170	181	160	166	162	162	153	155	157
5063	Electrical apparatus and equipment, wiring supplies and construction materials	168	163	143	147	162	164	150	150	143	151	141	146	154
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	191	187	172	190	178	199	169	182	183	171	164	163	160
507	Hardware, plumbing, heating equipment, and supplies	207	227	201	199	200	187	180	195	173	182	179	183	199
5072	Hardware	197	204	179	179	154	172	170	184	162	173	176	172	201
5074	Plumbing and heating equipment and supplies (hydronics)	219	249	223	220	236	193	190	209	189	197	185	197	206
508	Machinery, equipment, and supplies	251	241	199	198	202	199	198	223	197	204	204	216	218
5082	Construction and mining machinery and equipment	398	388	310	275	264	261	270	327	302	310	306	312	324
5084,5	Industrial machinery, equipment, and supplies	189	176	152	162	176	174	164	180	154	163	165	159	166
51	Nondurable goods, total	86	88	79	84	83	77	74	77	74	79	83	81	79
	Total (excluding farm-product raw materials)	84	86	77	83	81	80	77	82	77	81	83	81	77
511	Paper and paper products	99	101	90	98	104	103	98	107	92	95	97	98	96
5111,3	Printing, writing, industrial, and personal service paper	91	95	83	89	91	91	86	95	83	85	87	88	88
512	Drugs, drug proprietaries, and druggists' sundries	143	157	134	143	141	136	140	152	136	139	146	144	141
514	Groceries and related products	58	59	55	58	59	57	56	58	54	58	59	57	57
5141	Groceries, general-line	69	71	68	72	73	70	69	68	65	70	73	68	69
7	Petroleum and petroleum products	49	47	46	49	(NA)	(NA)	(NA)	(NA)	52	57	53	52	47
8	Beer, wine, and distilled alcoholic beverages	116	107	88	104	109	106	95	106	94	102	113	97	74
5181	Beer and ale	77	76	65	74	75	70	63	67	60	66	74	67	57
5182	Wines and distilled alcoholic beverages	152	134	109	134	142	146	127	149	130	137	147	120	86

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

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

[1]The lumber, plywood, and millwork group is subject to a sampling variability of 8 percent for April 1978.

[2]The plumbing and heating equipment and supplies (hydronics) group is subject to a sampling variability of 8 percent for April 1978.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978				1977								
		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	55,985	57,635	58,877	62,102	53,385	53,866	53,735	53,495	53,208	53,307	53,639	55,558	57,266
	Total (excluding farm-product raw materials)	50,554	51,733	52,625	55,265	46,891	47,260	47,157	47,334	48,037	48,018	48,630	49,887	51,663
50	Durable goods, total	25,568	26,976	27,466	29,133	22,941	23,275	23,419	23,620	24,390	24,150	24,997	25,601	26,488
501	Motor vehicles and automotive parts and supplies	5,125	5,685	5,486	5,489	4,304	4,528	4,473	4,439	4,497	4,504	4,889	4,969	5,220
502	Furniture and home furnishings	1,025	1,034	1,062	1,137	879	901	907	900	914	934	950	957	1,082
503	Lumber and other construction materials	2,288	2,329	2,328	2,673	2,048	2,057	2,090	2,171	2,283	2,349	2,418	2,320	2,443
505	Metals and minerals, except petroleum	2,535	2,810	2,792	3,029	(NA)	(NA)	(NA)	(NA)	2,540	2,580	2,539	2,605	2,669
506	Electrical goods	2,842	2,948	3,044	3,126	2,544	2,491	2,547	2,686	2,664	2,731	2,818	2,918	2,917
507	Hardware, plumbing, heating equipment, and supplies	2,000	1,945	2,005	2,121	1,850	1,871	1,863	1,909	1,902	1,834	1,916	1,958	2,024
508	Machinery, equipment, and supplies	7,026	7,468	7,700	8,407	6,626	6,740	6,753	6,756	7,130	6,726	6,988	7,268	7,396
51	Nondurable goods, total	30,417	30,659	31,411	32,969	30,444	30,591	30,316	29,875	28,818	29,157	28,642	29,957	30,778
	Total (excluding farm-product raw materials)	24,986	24,757	25,159	26,132	23,950	23,985	23,738	23,714	23,647	23,852	23,633	24,286	25,175
511	Paper and paper products	1,382	1,390	1,441	1,498	1,285	1,308	1,294	1,242	1,282	1,305	1,294	1,294	1,419
512	Drugs, drug proprietaries, and druggists' sundries	903	889	948	972	902	919	919	914	916	908	867	913	932
513	Apparel, piece goods, and notions	1,774	1,704	1,939	1,842	1,519	1,585	1,580	1,600	1,687	1,668	1,821	1,740	1,856
514	Groceries and related products	9,748	9,992	9,988	10,289	9,228	9,225	8,825	9,210	9,218	9,367	9,280	9,620	9,947
515	Farm-product raw materials[1]	5,431	5,902	6,252	6,837	6,494	6,606	6,578	6,161	5,171	5,305	5,009	5,671	5,603
517	Petroleum and petroleum products	4,362	4,001	3,945	3,930	(NA)	(NA)	(NA)	(NA)	3,682	3,712	3,749	3,928	4,124
518	Beer, wine, and distilled alcoholic beverages	2,102	2,188	2,283	2,235	1,957	1,921	1,963	1,988	1,970	2,012	1,907	2,026	2,035
519	Miscellaneous nondurable goods	3,822	3,722	3,754	4,473	4,276	4,335	4,151	4,015	3,973	4,071	3,901	3,901	3,992
	Inventories ADJUSTED for seasonal variations													
	Merchant wholesalers, total	68,991	70,361	72,882	74,306	65,301	64,838	64,947	64,210	65,095	66,119	66,209	67,047	67,998
	Total (excluding farm-product raw materials)	64,410	65,559	67,309	68,297	59,280	59,575	60,207	60,647	61,521	62,413	62,347	62,835	63,712
50	Durable goods, total	44,686	45,684	46,838	47,284	39,809	40,224	40,876	41,404	42,396	42,896	43,014	43,642	44,368
501	Motor vehicles and automotive parts and supplies	7,603	7,981	7,854	7,651	6,705	6,804	6,867	6,937	7,071	6,989	7,248	7,534	7,39
502	Furniture and home furnishings	1,569	1,619	1,636	1,673	1,352	1,392	1,388	1,395	1,432	1,480	1,461	1,438	1,541
503	Lumber and other construction materials	2,728	2,795	2,834	2,885	2,263	2,219	2,241	2,288	2,415	2,566	2,612	2,607	2,680
505	Metals and minerals, except petroleum	4,431	4,726	4,928	5,026	(NA)	(NA)	(NA)	(NA)	4,461	4,520	4,418	4,484	4,397
506	Electrical goods	4,694	4,717	4,916	4,991	4,237	4,310	4,326	4,347	4,521	4,581	4,519	4,547	4,710
507	Hardware, plumbing, heating equipment, and supplies	3,796	3,955	3,994	3,989	3,567	3,503	3,598	3,669	3,533	3,636	3,684	3,667	3,709
508	Machinery, equipment, and supplies	15,633	15,831	16,235	16,605	13,629	13,847	14,253	14,410	14,824	14,840	14,690	15,086	15,651
51	Nondurable goods, total	24,305	24,677	26,044	27,022	25,492	24,614	24,071	22,806	22,699	23,223	23,195	23,405	23,630
	Total (excluding farm-product raw materials)	19,724	19,875	20,471	21,013	19,471	19,351	19,331	19,243	19,125	19,517	19,333	19,193	19,344
511	Paper and paper products	1,315	1,314	1,372	1,346	1,260	1,304	1,297	1,302	1,265	1,300	1,300	1,312	1,289
512	Drugs, drug proprietaries, and druggists' sundries	1,315	1,324	1,331	1,315	1,243	1,247	1,263	1,295	1,296	1,289	1,315	1,319	1,317
514	Groceries and related products	5,423	5,339	5,587	5,795	5,356	5,433	5,396	5,389	5,385	5,497	5,436	5,311	5,480
517	Petroleum and petroleum products	1,949	1,932	1,995	1,993	(NA)	(NA)	(NA)	(NA)	1,973	2,028	1,894	1,944	1,958
518	Beer, wine, and distilled alcoholic beverages	1,984	1,958	2,075	2,138	2,038	2,058	2,051	2,104	2,026	2,036	1,971	1,969	1,898
	Stock-sales ratios based on ADJUSTED data													
	Merchant wholesalers, total	123	122	124	120	122	120	121	120	122	124	123	121	119
	Total (excluding farm-product raw materials)	127	127	128	124	126	126	128	128	128	130	128	126	123
50	Durable goods, total	175	169	171	162	174	173	175	175	174	178	172	170	168
501	Motor vehicles and automotive parts and supplies	148	140	143	139	156	150	154	156	157	155	148	152	142
502	Furniture and home furnishings	153	157	154	147	154	154	153	155	157	158	154	150	142
503	Lumber and other construction materials	119	120	122	108	110	108	107	105	106	109	108	112	110
505	Metals and minerals, except petroleum	175	168	177	166	(NA)	(NA)	(NA)	(NA)	176	175	174	172	165
506	Electrical goods	165	160	161	160	167	173	170	162	170	168	160	156	161
507	Hardware, plumbing, heating equipment, and supplies	190	203	199	188	193	187	193	192	186	198	192	187	183
508	Machinery, equipment, and supplies	223	212	211	198	206	205	211	213	208	221	210	208	212
51	Nondurable goods, total	80	80	83	82	84	80	79	76	79	80	81	78	77
	Total (excluding farm-product raw materials)	79	80	81	80	81	81	81	81	81	82	82	79	77
511	Paper and paper products	95	95	95	90	98	100	100	105	99	100	100	101	91
512	Drugs, drug proprietaries, and druggists' sundries	146	149	140	135	138	136	137	142	141	142	152	144	141
514	Groceries and related products	56	53	56	56	58	59	61	59	58	59	59	55	55
517	Petroleum and petroleum products	45	48	51	51	(NA)	(NA)	(NA)	(NA)	54	55	51	49	4
518	Beer, wine, and distilled alcoholic beverages	94	89	91	96	104	107	104	106	103	101	103	97	9

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

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

[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. 1978-Apr. 1978 from--			
	Nov. 1977-Jan. 1978 (3 months ago)	Aug. 1977-Oct. 1977 (6 months ago)	May 1977-July 1977 (9 months ago)	Feb. 1977-Apr. 1977 (12 months ago)
Merchant wholesalers, total.....	+6	+12	+11	+13
Durable goods, total.....	+8	+14	+19	+23
Nondurable goods, total.....	+4	+10	+5	+6

Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers: 1972-1978

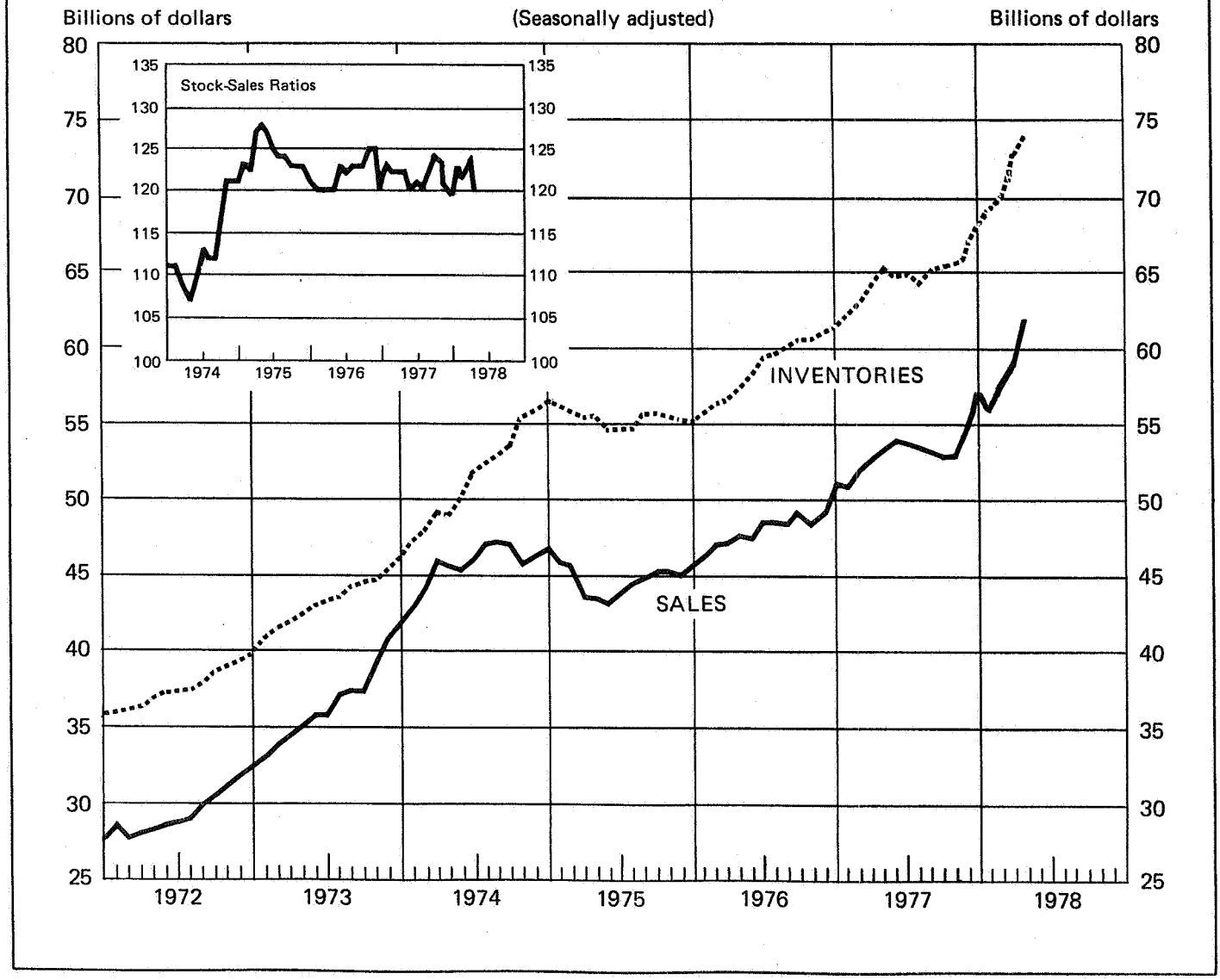


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: April 1978

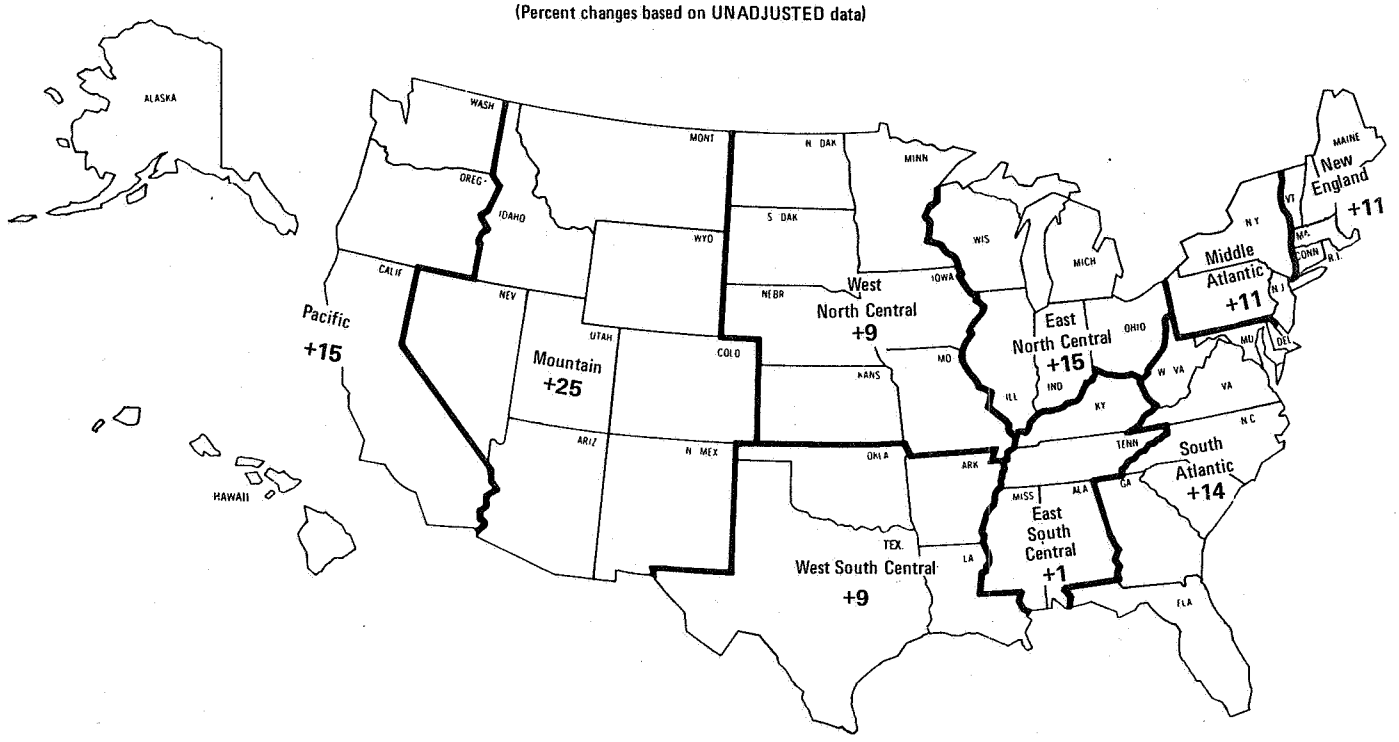
1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		April 1978 from March 1978	April 1978 from April 1977	4 months 1978 from 4 months 1977	April 1978 from March 1978	April 1978 from April 1977	April 1978 from March 1978	April 1978 from April 1977	April 1978 from March 1978	April 1978 from April 1977
	Merchant wholesalers, total	-4	+13	+12	0	+14	+5	+16	+2	+14
	Total (excluding farm-product raw materials)	-3	+15	+14	+1	+15	+5	+18	+1	+15
50	Durable goods, total	0	+24	+21	+1	+18	+6	+27	+1	+19
501	Motor vehicles and automotive parts and supplies	0	+26	+30	-3	+14	0	+28	-3	+14
5012	Automobiles and other motor vehicles	-2	+19	+30	-6	+7	-	-	-	-
5013, 4	Automotive parts and supplies, tires and tubes	+2	+32	+30	-1	+18	-	-	-	-
5013	Automotive parts and supplies	+3	+32	+29	-1	+20	-	-	-	-
502	Furniture and home furnishings	-2	+27	+22	+2	+23	+7	+29	+2	+24
5021	Furniture--household and office	+5	+43	+39	+2	+18	-	-	-	-
5021 pt.	Household furniture	+5	+31	+31	-1	+9	-	-	-	-
5021 pt.	Office furniture	+6	+50	+44	+3	+26	-	-	-	-
5023	Home furnishings	-5	+19	+15	+2	+26	-	-	-	-
503	Lumber and other construction materials	+8	+25	+20	+1	+27	+15	+31	+2	+27
5031	Lumber, plywood, and millwork	+5	+24	+18	+1	+22	-	-	-	-
5039	Construction materials, n.e.c.	+13	+27	+23	+2	+38	-	-	-	-
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	-3	+12	+8	+3	+18	-1	+14	+1	+19
505	Metals and minerals, except petroleum	-2	+29	+25	+2	+22	+8	+32	+2	+23
5051 pt.	Ferrous metals service centers and offices	-5	+34	+29	+3	+18	-	-	-	-
5051 pt.	Ferrous metals service centers	-1	+43	+35	+3	+23	-	-	-	-
5051 pt.	Nonferrous metals service centers and offices	+2	+25	+23	+1	+42	-	-	-	-
506	Electrical goods	-4	+21	+20	+2	+18	+3	+23	+2	+18
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	0	+32	+25	+3	+19	-	-	-	-
5064, 5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-8	+10	+16	+2	+18	-	-	-	-
5064	Electrical appliances, TV and radio sets	-11	+1	+8	+3	+7	-	-	-	-
507	Hardware, plumbing, heating equipment, and supplies	+2	+12	+13	+1	+12	+6	+15	0	+12
5072	Hardware	0	+3	+7	0	+20	-	-	-	-
5074	Plumbing and heating equipment and supplies (hydronics)	+1	+9	+12	0	+1	-	-	-	-
5075	Warm air heating and air conditioning equipment and supplies	+10	+45	+24	+8	+26	-	-	-	-
508	Machinery, equipment, and supplies	+1	+23	+16	+1	+21	+9	+27	+2	+22
5081	Commercial machines and equipment	-11	+22	+29	+1	-2	-	-	-	-
5082	Construction and mining machinery and equipment	+13	+25	+12	0	+30	-	-	-	-
5083	Farm and garden machinery and equipment	+23	+32	+15	-1	+24	-	-	-	-
5084, 5	Industrial machinery, equipment, and supplies	-6	+31	+20	+1	+21	-	-	-	-
5086	Professional equipment and supplies	-6	+8	+10	+4	+13	-	-	-	-
509	Miscellaneous durable goods	-5	+34	+32	+1	+10	+5	+39	0	+11
5093	Scrap and waste materials	0	+9	+11	+6	+10	-	-	-	-
5093 pt.	Iron and steel scrap	+1	+9	+12	+10	+10	-	-	-	-
5093 pt.	Waste materials	-3	+9	+10	-4	+8	-	-	-	-
51	Nondurable goods, total	-7	+5	+5	-1	+7	+5	+8	+4	+6
	Total (excluding farm-product raw materials)	-6	+6	+6	+1	+8	+4	+9	+3	+8
511	Paper and paper products	-8	+14	+13	0	+7	+4	+17	-2	+7
5111, 3	Printing, writing, industrial, and personal service paper	-7	+6	+7	0	+4	-	-	-	-
512	Drugs, drug proprietaries, and druggists' sundries	-6	+5	+3	0	+6	+3	+8	-1	+6
5122	Drugs, drug proprietaries, and druggists' sundries	-6	+5	+3	0	+6	-	-	-	-
5122 pt.	General-line drugs	-6	+11	+8	0	+7	-	-	-	-
514	Groceries and related products	-5	+9	+11	+2	+8	+3	+11	+4	+8
5141	Groceries, general-line	-5	+8	+8	0	+7	-	-	-	-
5141 pt.	Voluntary groups	-4	+3	+3	0	+5	-	-	-	-
5141 pt.	Retailer cooperatives	-7	+6	+9	-2	+8	-	-	-	-
5141 pt.	Other general-lines	-4	+15	+12	+2	+9	-	-	-	-
5142,3,6,9	Specialty-line groceries	-9	+2	+10	+1	+6	-	-	-	-
5144	Poultry and poultry products	-2	+20	+9	+6	-7	-	-	-	-
5145	Confectionery	-9	+18	+20	-4	+5	-	-	-	-
5147	Meats and meat products	-1	+16	+14	+9	+24	-	-	-	-
5148	Fresh fruits and vegetables	+5	+20	+20	+14	+16	-	-	-	-
515	Farm-product raw materials[2]	-8	+3	+1	-6	0	+9	+5	+8	0
5152	Cotton	-7	+25	+12	-10	-15	-	-	-	-
5153	Grain	-7	-1	-2	-4	+1	-	-	-	-
517	Petroleum and petroleum products	-11	-3	-1	-5	(S)	0	0	0	(S)
5171	Petroleum bulk stations and terminals	-7	-1	-2	-2	(S)	-	-	-	-
518	Beer, wine, and distilled alcoholic beverages	-11	+11	+17	+5	+5	-2	+14	+3	+5
5181	Beer and ale	-5	+15	+21	+9	+13	-	-	-	-
5182	Wines and distilled alcoholic beverages	-17	+7	+14	+3	+1	-	-	-	-
519	Miscellaneous nondurable goods	+2	+2	-5	+1	+18	+19	+5	+6	+17
5191	Farm supplies	+8	-18	-24	0	+50	-	-	-	-
5194	Tobacco and tobacco products	-6	+3	+5	+1	+3	-	-	-	-
5198	Paints, varnishes, and supplies	+1	+8	+11	+7	+26	-	-	-	-
5199 pt.	Books, periodicals, newspapers	+8	+71	+54	+3	-15	-	-	-	-

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

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

Sales of Merchant Wholesalers by Geographic Division
4 Months 1978 Compared With 4 Months 1977

(Percent changes based on UNADJUSTED data)



UNITED STATES +12

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Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1978 and 1977

(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]	1978				1977								Total 4 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.	Apr.P	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1978	1977	Range[2]	Median
	Merchant wholesalers, total	52,143	52,766	62,900	60,556	53,357	54,633	55,794	51,290	55,597	54,505	54,251	56,034	56,224	228,363	203,775	0.8-0.9	0.9
	New England	2,693	2,657	3,191	2,915	2,649	2,744	2,890	2,651	2,856	2,880	2,919	3,036	3,008	11,456	10,288	5-6	6
	Middle Atlantic	11,846	11,840	14,206	13,184	11,835	12,208	12,592	11,263	12,356	12,428	11,945	12,494	12,924	51,077	45,866	2-2	2
	East North Central	8,929	9,269	10,680	10,557	9,042	9,361	9,520	8,807	9,685	9,431	9,724	9,841	9,596	39,434	34,261	2-3	3
	West North Central	5,566	5,390	6,419	6,447	6,018	6,106	5,820	5,332	5,639	5,509	5,670	5,977	5,617	23,821	21,889	2-3	2
	South Atlantic	5,666	5,686	6,792	6,526	5,699	5,850	6,017	5,548	6,015	5,934	5,854	6,126	6,188	24,670	21,587	2-3	2
	East South Central	2,421	2,534	3,201	3,278	2,882	2,882	2,884	2,652	2,853	2,723	2,813	2,765	2,822	11,434	11,343	4-5	4
	West South Central	5,582	5,843	6,878	6,445	5,842	5,774	6,096	5,715	6,108	5,745	5,644	6,008	6,283	24,748	22,803	3-4	4
	Mountain	1,934	1,900	2,536	2,611	1,887	1,897	2,054	1,949	2,040	2,177	2,027	1,964	2,099	8,980	7,198	5-5	5
	Pacific	7,506	7,649	8,994	8,594	7,503	7,811	7,921	7,373	8,045	7,678	7,655	7,821	7,688	32,744	28,540	2-3	3
50	Durable goods, total	22,869	23,880	28,985	28,927	23,356	24,159	25,292	22,915	25,998	25,461	25,369	25,340	24,797	104,659	86,272	0.8-1.0	0.9
	Middle Atlantic	4,973	5,138	6,295	6,058	4,921	5,062	5,315	4,662	5,354	5,366	5,420	5,477	5,379	22,464	18,228	4-5	4
	East North Central	3,935	4,363	5,081	5,086	4,187	4,367	4,549	4,073	4,771	4,635	4,573	4,549	4,282	18,465	15,424	3-4	4
	West North Central	1,776	1,805	2,228	2,363	1,931	1,996	2,098	1,911	2,083	2,003	2,061	2,075	1,900	8,172	6,980	5-6	5
	South Atlantic	2,809	2,768	3,414	3,435	2,827	2,957	3,134	2,840	3,127	3,113	3,088	3,051	2,971	12,426	10,508	4-5	4
	West South Central	2,413	2,626	3,180	3,136	2,508	2,593	2,725	2,520	2,886	2,673	2,643	2,611	2,729	11,355	9,393	4-4	4
	Mountain	923	893	1,192	1,277	851	856	1,000	921	1,016	1,051	988	900	989	4,284	3,193	6-7	7
	Pacific	4,115	4,283	5,007	4,862	4,001	4,156	4,265	3,967	4,477	4,282	4,210	4,335	4,262	18,266	14,852	2-3	3
51	Nondurable goods, total	29,274	28,886	33,915	31,629	30,001	30,474	30,502	28,375	29,599	29,044	28,882	30,694	31,427	123,704	117,503	1.0-1.2	1.0
	New England	1,735	1,735	2,017	1,744	1,717	1,800	1,923	1,786	1,860	1,843	1,839	1,918	1,918	7,230	6,840	5-7	6
	Middle Atlantic	6,873	6,701	7,912	7,126	6,914	7,146	7,277	6,601	7,002	7,062	6,525	7,017	7,545	28,612	27,638	3-3	3
	East North Central	4,994	4,906	5,599	5,471	4,855	4,994	4,971	4,734	4,914	4,796	5,151	5,292	5,314	20,969	18,837	3-4	3
	West North Central	3,790	3,584	4,191	4,083	4,087	4,110	3,722	3,421	3,556	3,506	3,609	3,902	3,717	15,649	14,909	3-4	3
	South Atlantic	2,857	2,918	3,378	3,091	2,872	2,893	2,883	2,708	2,888	2,821	2,766	3,075	3,217	12,244	11,079	3-5	3
	East South Central	1,453	1,451	1,788	1,740	1,684	1,654	1,645	1,496	1,565	1,422	1,507	1,542	1,626	6,432	7,097	3-4	4
	West South Central	3,169	3,217	3,699	3,308	3,334	3,181	3,371	3,195	3,222	3,072	3,001	3,397	3,554	13,393	13,410	5-5	5
	Pacific	3,392	3,367	3,987	3,732	3,502	3,655	3,656	3,406	3,568	3,396	3,445	3,486	3,426	14,477	13,688	4-5	4

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

[P]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.
[1]See map on page 7.
[2]The range of sampling error of the estimate is based on data for August, September, and October 1977.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: April 1978

(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[1]			Inventories			
		April 1978 from March 1978	April 1978 from April 1977	4 months 1978 from 4 months 1977	April 1978 from March 1978	April 1978 from April 1977		
		A	B	C[1]	D	E	A	D
	Merchant wholesalers, total	-4	+13	+12	0	+14	0.4	0.2
	New England	-9	+10	+11	0	+7	2.0	1.9
	Middle Atlantic	-7	+11	+11	+1	+7	1.1	0.6
	East North Central	-1	+17	+15	0	+21	1.2	0.8
	West North Central	0	+7	+9	+1	+14	1.3	1.1
	South Atlantic	-4	+15	+14	-1	+9	1.6	1.0
	East South Central	+2	+14	+1	-2	+21	1.7	1.4
	West South Central	-6	+10	+9	0	+12	1.4	0.8
	Mountain	+3	+38	+25	+3	+30	2.4	1.3
	Pacific	-4	+15	+15	+1	+17	1.2	0.5
50	Durable goods, total	0	+24	+21	+1	+18	0.6	0.3
	New England	0	+26	+23	+2	+9	2.4	1.3
	Middle Atlantic	-4	+23	+23	+1	+13	1.7	1.0
	East North Central	0	+21	+20	0	+26	1.9	1.0
	West North Central	+6	+22	+17	+1	+15	3.3	1.7
	South Atlantic	+1	+22	+18	-1	+14	1.9	1.2
	East South Central	+9	+28	+18	-2	+23	3.9	2.5
	West South Central	-1	+25	+21	+1	+19	2.1	1.2
	Mountain	+7	+50	+34	+3	+41	2.9	1.7
	Pacific	-3	+22	+23	+1	+24	1.9	0.7
51	Nondurable goods, total	-7	+5	+5	-1	+7	0.6	0.4
	New England	-14	+2	+6	-3	+5	1.9	2.7
	Middle Atlantic	-10	+3	+4	+1	-2	1.9	0.9
	East North Central	-2	+13	+11	0	+21	1.4	1.1
	West North Central	-3	0	+5	0	+13	1.6	1.4
	South Atlantic	-9	+8	+11	-2	-1	2.4	1.8
	East South Central	-3	+3	-9	-2	+17	1.7	2.4
	West South Central	-11	-1	0	-3	0	2.2	1.3
	Mountain	-1	+29	+17	+2	+8	3.2	1.2
	Pacific	-6	+7	+6	0	+4	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	+2	+32	+30	-1	+18	2	
	New England	+8	+14	+35	-1	+4	7	4
	Middle Atlantic	+3	(S)	(S)	-5	+13	4	2
	East North Central	-1	+22	+20	-1	+20	7	1
	West North Central	+5	+32	+26	0	+25	5	2
	South Atlantic	-2	+27	+26	+1	+47	4	2
	East South Central	+5	+28	+15	-5	+46	4	3
	West South Central	+4	+22	+17	-2	-2	5	2
	Mountain	+14	+75	+38	+9	+67	7	3
	Pacific	-1	+17	+25	-4	(S)	3	2
502	Furniture and home furnishings	-2	+27	+22	+2	+23	2	1
	Middle Atlantic	-7	+8	+9	0	+17	4	2
	East North Central	+6	+48	+21	+5	+50	7	2
	West North Central	+10	+62	+41	+1	+24	5	4
	West South Central	-14	+22	+33	+1	+18	5	7
	Pacific	+1	+46	+37	+2	+18	5	3
503	Lumber and other construction materials	+8	+25	+20	+1	+27	2	1
	New England	+15	+34	+23	+9	+8	4	5
	Middle Atlantic	+17	+34	+23	0	+9	4	2
	East North Central	+7	+26	+33	0	+50	3	2
	West North Central	+21	+19	+15	+3	+29	7	7
	South Atlantic	-2	+36	+40	0	+18	4	2
	East South Central	+14	+44	+40	+1	+58	4	3
	West South Central	+13	+34	+17	-4	+32	6	5
	Pacific	+3	+6	-1	+3	+17	5	1
5051 pt.	Ferrous metals service centers	-1	+43	+35	+3	+23	2	1
	Middle Atlantic	-5	+45	+40	+3	+25	4	5
	East North Central	-7	+34	+35	0	+21	4	1
	West North Central	-3	+29	+21	+17	+45	4	3
	East South Central	+4	+22	+14	+15	+28	2	4
	West South Central	-3	+18	+24	+3	+2	4	2
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	0	+32	+25	+3	+19	2	1
	Middle Atlantic	+14	+40	+25	+2	+3	5	2
	East North Central	-2	+24	+27	+2	+16	3	2
	West North Central	-2	+13	+16	+1	+5	4	1
	South Atlantic	-10	+20	+12	+1	+14	3	1
	West South Central	+2	+43	+29	+4	+30	3	6
	Pacific	-5	+28	+29	+5	+57	4	1
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-8	+10	+16	+2	+18	3	1
	Middle Atlantic	-6	+25	+25	+6	+28	3	
	East North Central	-10	-12	-6	-2	+6	4	
	West North Central	-15	-3	+5	+3	+22	4	
	South Atlantic	-3	+4	+21	+1	-1	6	4
	West South Central	-8	+10	+21	+6	+19	4	4
	Mountain	-7	+1	+3	+2	-4	6	3
	Pacific	-8	+27	+32	0	+28	3	2

See footnotes at end of table.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: April 1978—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[1]			Inventories			
		April 1978 from March 1978	April 1978 from April 1977	4 months 1978 from 4 months 1977	April 1978 from March 1978	April 1978 from April 1977		
		A	B	C[1]	D	E	A	D
5072	Hardware	0	+3	+7	0	+20	1	1
	New England	-6	-15	+4	-4	+6	6	3
	Middle Atlantic	+3	+8	0	0	+29	6	2
	East North Central	0	+18	+29	+2	+30	4	2
	West North Central	-4	-11	+2	-3	+11	3	3
	South Atlantic	-3	-6	-1	-1	+34	4	2
	East South Central	+7	-17	-23	+1	-3	4	1
	Pacific	-1	+9	+6	+3	+32	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	+1	+9	+12	0	+1	2	1
	Middle Atlantic	+6	+7	+2	+1	-23	6	3
	East North Central	-5	0	+16	+3	+2	3	3
	South Atlantic	-8	-7	+10	-2	-17	3	2
	Mountain	+5	(S)	(S)	+13	+28	7	4
	Pacific	-2	+15	+15	+1	+25	5	4
5084,5	Industrial machinery, equipment, and supplies	-6	+31	+20	+1	+21	2	1
	Middle Atlantic	-10	+18	+17	0	-2	7	2
	East North Central	-8	+29	+20	-2	+7	3	2
	West South Central	-7	+71	+48	0	+22	4	3
	Pacific	-8	+28	+31	0	+40	5	2
512	Drugs, drug proprietaries, and druggists' sundries	-6	+5	+3	0	+6	1	1
	New England	-4	+8	+2	-2	+7	5	3
	Middle Atlantic	-6	+2	-4	0	-1	3	2
	East North Central	-8	+7	+5	+4	+13	6	3
	West North Central	-7	-1	+3	-1	+3	2	2
	South Atlantic	-1	+24	+16	-1	+12	6	5
	East South Central	-9	+20	+14	+1	+17	6	5
	West South Central	-10	-19	-8	-3	-7	3	2
	Mountain	-8	+6	+8	+1	-10	3	2
	Pacific	-6	-4	-1	0	+8	3	3
5141	Groceries, general-line	-5	+8	+8	0	+7	1	1
	New England	-13	+16	+17	+2	+19	2	1
	Middle Atlantic	-4	+5	+6	+1	+6	1	2
	East North Central	-7	+4	+6	-3	+10	3	1
	West North Central	+4	+16	+8	+3	-3	1	1
	South Atlantic	-4	+15	+10	-1	+12	2	1
	West South Central	-5	+4	+8	-1	-3	2	1
	Mountain	-12	+4	+11	+1	+11	2	2
	Pacific	-4	+14	+11	+4	+9	1	1
5142,3,6,9	Specialty-line groceries	-9	+2	+10	+1	+6	1	1
	Middle Atlantic	-12	+5	+18	+5	+12	4	2
	East North Central	-4	+13	+17	+1	+26	3	2
	West North Central	-1	+18	+27	+4	+14	3	1
	South Atlantic	-6	+1	+24	-10	+14	5	6
	East South Central	-9	(S)	(S)	-1	(S)	2	2
5148	Fresh fruits and vegetables	+5	+20	+20	+14	+16	2	4
	Middle Atlantic	+2	+13	+21	+5	+26	7	5
	East North Central	+10	+23	+10	+9	-1	6	6
	West North Central	+5	+16	+18	+16	+17	6	3
	West South Central	-7	+30	+29	+9	(S)	5	3
	Pacific	+3	+11	+16	+15	-16	4	4
5194	Tobacco and tobacco products	-6	+3	+5	+1	+3	1	1
	New England	-13	-9	-4	+2	(S)	5	3
	Middle Atlantic	-5	+1	+8	+1	+23	4	3
	East North Central	-3	+15	+8	0	+12	4	3
	West North Central	-6	-24	-13	+5	+1	4	2
	South Atlantic	-8	+1	+2	-1	+11	6	6
	East South Central	-2	-3	-4	0	+4	7	4
	West South Central	-10	-4	+21	-5	-17	7	6
	Mountain	+3	+10	+2	-1	+10	6	2
	Pacific	-6	+23	+14	+4	+1	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 precent) shown in columns A and D are based on medians of measurements on data for August, September, and October 1977.

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 10 percent of the sales estimates and 20 percent for inventories.

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

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

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

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

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

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

Adjustment of estimates is an approximation based on past experiences, and therefore, will be less precise to the extent that current competitive pressures, changes in economic condition, and other elements introduce significant changes in seasonal and trading-da 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 1977-December 1978

1972 SIC code	Kind of business	1977											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	91.7	92.1	107.2	99.0	100.6	103.8	95.5	104.5	102.5	100.4	101.1	99.6
	Total (excluding farm-product raw materials)	89.6	91.5	106.3	99.7	101.8	106.0	96.5	105.8	103.6	100.0	100.0	96.9
50	Durable goods, total	87.1	88.2	106.3	101.3	103.7	107.8	96.9	106.5	105.8	101.1	99.3	94.0
501	Motor vehicles and automotive parts and supplies	89.7	89.3	109.5	108.3	107.5	107.2	100.5	105.9	101.1	94.2	95.0	90.0
502	Furniture and home furnishings	82.6	89.5	104.2	97.8	98.8	106.7	90.7	106.4	106.9	110.3	109.2	94.7
503	Lumber and other construction materials	78.4	80.8	101.1	99.8	108.0	112.1	104.6	116.4	108.7	102.4	100.6	85.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.7	89.9	104.1	101.6	101.8	104.0	92.1	106.4	102.0	109.1	110.4	98.2
505	Metals and minerals, except petroleum	94.4	90.9	110.4	99.9	105.3	104.8	92.5	107.5	105.0	96.0	99.5	90.8
506	Electrical goods	87.8	88.6	101.8	97.1	96.0	108.4	98.5	105.9	104.2	106.4	101.9	101.6
507	Hardware, plumbing, heating equipment, and supplies	87.4	87.4	101.2	99.4	102.9	108.3	99.4	108.7	106.9	105.8	100.8	89.9
508	Machinery, equipment, and supplies	86.4	89.0	107.7	102.7	104.4	108.8	95.7	103.5	107.3	102.5	95.5	94.9
509	Miscellaneous durable goods	82.8	89.8	105.7	98.8	100.4	107.7	89.8	105.8	106.7	104.1	104.3	102.0
51	Nondurable goods, total	95.1	95.1	108.4	97.4	98.3	100.7	94.8	102.3	99.7	99.4	102.8	103.9
	Total (excluding farm-product raw materials)	91.7	94.2	106.8	98.1	100.0	104.1	96.3	104.6	101.6	99.0	100.6	100.3
511	Paper and paper products	93.8	92.2	104.3	95.1	96.4	104.2	97.3	108.3	104.7	103.6	103.2	95.7
512	Drugs, drug proprietaries, and druggists' sundries	94.2	92.6	105.1	98.8	97.7	98.7	92.7	103.9	104.4	108.3	101.4	98.9
513	Apparel, piece goods, and notions	89.7	94.6	106.4	95.2	95.2	100.5	95.1	114.9	108.8	105.4	105.6	87.1
514	Groceries and related products	94.2	90.9	103.8	98.5	101.5	106.7	99.1	105.4	100.7	100.1	99.7	98.5
515	Farm-product raw materials[1]	105.1	95.8	112.8	96.9	101.5	88.2	88.5	95.5	93.5	102.2	110.6	108.6
516	Chemicals and allied products	87.1	89.9	107.4	101.2	102.5	106.5	97.0	107.2	103.4	102.0	99.3	94.3
517	Petroleum and petroleum products	94.8	102.6	105.4	98.9	90.9	98.9	100.1	101.9	97.3	102.4	101.4	105.6
518	Beer, wine, and distilled alcoholic beverages	75.8	80.8	101.4	94.1	103.0	113.8	98.1	107.0	100.3	98.8	105.8	120.1
519	Miscellaneous nondurable goods	95.1	101.7	116.8	104.4	101.4	100.9	88.1	96.2	99.6	95.4	96.1	100.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	102.1	101.4	100.9	99.9	98.4	98.4	98.4	98.4	98.6	100.9	102.1	101.1
	Total (excluding farm-product raw materials)	99.8	100.3	100.8	100.1	100.3	100.5	100.1	99.2	99.3	100.0	100.2	99.4
50	Durable goods, total	99.1	100.3	101.1	100.9	101.4	101.8	100.9	99.4	99.1	99.1	98.9	98.9
501	Motor vehicles and automotive parts and supplies	101.4	102.8	102.1	101.4	102.4	100.9	98.9	96.6	97.9	97.8	97.9	100.4
502	Furniture and home furnishings	98.9	99.4	100.1	99.8	99.9	101.4	100.9	101.3	100.9	99.6	100.4	98.1
503	Lumber and other construction materials	97.9	98.4	102.8	102.6	105.4	103.1	102.9	100.6	97.8	95.3	96.4	97.1
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	100.8	99.9	100.9	103.4	107.6	104.6	101.6	100.3	100.6	94.4	89.3
505	Metals and minerals, except petroleum	100.4	98.9	100.9	101.4	100.1	99.4	102.8	101.3	98.1	96.8	99.1	101.4
506	Electrical goods	97.3	97.6	99.1	99.4	100.6	101.9	101.1	101.3	100.4	101.6	101.4	98.8
507	Hardware, plumbing, heating equipment, and supplies	98.1	98.6	101.6	103.1	102.8	101.1	100.9	101.4	98.4	98.3	98.4	97.6
508	Machinery, equipment, and supplies	99.1	101.1	101.9	100.6	101.1	102.3	100.1	97.9	99.1	99.6	99.6	97.8
509	Miscellaneous durable goods	97.1	98.9	96.8	98.4	96.8	101.3	101.9	102.9	101.3	103.1	101.8	100.4
51	Nondurable goods, total	105.4	103.4	100.9	98.1	93.9	93.3	94.8	97.3	97.6	103.9	106.9	105.4
	Total (excluding farm-product raw materials)	100.5	100.2	100.5	99.4	98.2	98.4	98.3	99.0	99.8	101.9	102.7	100.9
511	Paper and paper products	99.1	99.1	98.8	100.4	99.8	101.9	99.6	100.9	100.1	100.3	99.8	100.9
512	Drugs, drug proprietaries, and druggists' sundries	96.4	97.8	100.1	101.4	98.1	100.4	99.3	100.1	102.4	104.4	101.4	98.9
513	Apparel, piece goods, and notions	100.1	99.6	98.4	98.6	101.1	100.4	102.6	101.1	100.4	99.1	99.1	99.9
514	Groceries and related products	99.9	100.9	102.4	99.9	98.4	98.4	98.1	98.1	99.1	101.3	102.9	101.
515	Farm-product raw materials[1]	121.4	113.9	104.9	92.4	80.8	73.9	84.8	84.8	89.8	108.9	122.1	123.
516	Chemicals and allied products	99.8	100.1	102.1	101.4	101.3	99.9	99.8	99.1	99.6	97.8	99.4	100.1
517	Petroleum and petroleum products	104.8	99.8	97.1	93.1	95.1	96.8	96.4	99.3	101.8	106.8	105.6	104.3
518	Beer, wine, and distilled alcoholic beverages	96.9	97.9	97.1	98.9	101.8	103.1	98.6	97.6	100.6	107.6	105.4	95.3
519	Miscellaneous nondurable goods	103.6	104.3	102.9	100.6	96.3	93.3	95.3	98.4	98.1	99.8	103.6	104.4

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1977-December 1978—Continued

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.9	92.2	106.9	96.5	103.5	103.8	95.4	105.1	98.9	102.5	101.4	96.7
	Total (excluding farm-product raw materials)	91.9	91.6	106.4	97.5	104.6	105.9	95.9	106.4	100.9	102.2	98.8	95.1
50	Durable goods, total	89.8	89.0	105.2	98.7	106.3	107.6	96.4	107.1	102.9	104.2	98.4	91.4
501	Motor vehicles and automotive parts and supplies	93.6	89.1	107.0	107.0	107.4	108.0	99.3	107.5	96.9	98.4	92.5	91.4
502	Furniture and home furnishings	84.6	89.1	104.6	95.9	101.6	106.2	89.4	107.2	104.2	112.8	108.3	93.8
503	Lumber and other construction materials	81.6	81.2	101.7	95.3	110.7	112.5	102.4	116.9	104.7	108.0	100.0	82.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.4	90.3	102.8	100.3	109.7	98.1	95.1	104.0	104.7	105.7	108.7	97.3
505	Metals and minerals, except petroleum	98.8	91.0	108.9	97.9	107.9	103.6	90.7	108.4	103.1	100.0	97.4	91.1
506	Electrical goods	89.4	89.1	101.7	95.2	99.2	106.4	100.2	104.9	100.9	107.7	103.3	98.5
507	Hardware, plumbing, heating equipment, and supplies	89.5	87.8	100.8	97.5	105.5	107.8	99.7	109.4	103.4	107.2	101.1	88.0
508	Machinery, equipment, and supplies	88.1	88.8	107.8	99.6	107.3	108.7	95.7	104.3	104.0	103.7	96.9	91.6
509	Miscellaneous durable goods	86.5	89.8	104.7	95.1	101.0	110.6	87.6	108.0	102.4	109.5	105.2	96.2
51	Nondurable goods, total	97.0	95.1	108.7	95.1	101.3	100.9	94.8	102.9	96.9	100.9	102.6	100.7
	Total (excluding farm-product raw materials)	93.9	94.5	107.7	95.7	102.7	104.4	95.6	105.1	98.6	100.5	100.4	97.5
511	Paper and paper products	95.2	92.4	104.5	92.6	101.9	103.0	96.6	108.3	103.7	105.0	100.5	92.7
512	Drugs, drug proprietaries, and druggists' sundries	98.2	92.7	104.9	96.0	100.4	99.8	92.7	104.5	101.4	108.3	100.6	96.9
513	Apparel, piece goods, and notions	91.3	94.8	106.4	92.3	99.6	99.3	93.5	115.1	106.8	108.1	103.9	86.0
514	Groceries and related products	95.0	91.0	104.1	96.4	104.5	106.2	99.1	106.0	100.1	100.3	99.9	94.3
515	Farm-product raw materials[1]	106.8	95.8	112.8	94.4	99.6	89.9	92.3	94.6	92.6	100.5	111.2	104.6
516	Chemicals and allied products	90.0	89.4	106.9	98.2	105.2	106.5	97.0	107.3	99.7	105.5	98.0	94.1
517	Petroleum and petroleum products	96.5	102.1	107.7	96.2	92.8	99.9	98.4	101.7	95.5	102.4	98.7	105.8
518	Beer, wine, and distilled alcoholic beverages	78.7	80.9	100.7	91.2	106.7	113.9	97.3	108.1	96.9	101.9	105.3	115.3
519	Miscellaneous nondurable goods	97.4	101.6	118.1	101.5	104.3	102.9	87.2	96.5	96.0	97.0	96.4	97.4
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	101.9	101.3	101.0	100.1	98.6	98.5	98.4	98.0	98.9	100.6	101.7	100.5
	Total (excluding farm-product raw materials)	99.7	100.3	100.8	100.2	100.2	100.5	100.1	99.1	99.4	100.0	100.3	99.2
50	Durable goods, total	99.1	100.2	100.9	100.6	101.1	101.6	100.8	99.3	99.3	99.0	99.1	98.7
501	Motor vehicles and automotive parts and supplies	101.4	102.6	101.8	101.0	102.1	100.9	98.9	96.8	97.9	97.8	98.1	100.5
502	Furniture and home furnishings	99.4	99.2	99.8	99.5	99.8	101.3	100.6	101.0	101.5	100.5	99.1	98.1
503	Lumber and other construction materials	98.1	98.8	103.0	102.6	105.0	101.6	101.5	100.2	98.9	96.1	96.9	97.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	102.4	99.2	100.5	103.3	107.3	104.4	101.1	100.6	101.2	93.9	89.0
505	Metals and minerals, except petroleum	100.4	98.6	100.5	101.0	99.7	99.2	102.4	101.9	98.6	96.7	99.5	101.5
506	Electrical goods	97.2	97.4	99.0	99.9	100.2	101.8	101.2	101.5	100.4	101.2	101.0	98.8
507	Hardware, plumbing, heating equipment, and supplies	97.8	98.0	101.6	103.2	102.8	101.7	100.5	101.4	98.7	98.6	98.2	97.3
508	Machinery, equipment, and supplies	99.2	101.1	101.7	100.0	101.0	102.3	100.1	98.1	99.3	99.6	99.5	97.8
509	Miscellaneous durable goods	97.1	98.7	96.6	98.2	96.6	101.2	101.8	102.6	101.5	103.1	102.1	100.2
51	Nondurable goods, total	104.8	103.2	101.6	98.3	95.3	93.7	94.6	96.3	98.6	103.3	106.0	103.9
	Total (excluding farm-product raw materials)	100.4	100.2	100.7	99.7	98.5	98.6	98.3	98.6	99.7	101.9	102.5	100.8
511	Paper and paper products	98.7	99.0	98.7	100.6	99.4	102.0	99.6	100.6	99.5	101.5	100.0	100.2
512	Drugs, drug proprietaries, and druggists' sundries	96.3	97.6	99.9	101.3	97.7	100.2	99.2	99.8	102.0	105.0	101.8	98.8
513	Apparel, piece goods, and notions	99.9	99.4	98.6	98.5	101.1	100.0	102.2	101.0	100.0	98.3	100.1	100.6
514	Groceries and related products	99.6	100.7	102.2	100.1	98.6	98.5	98.1	97.8	99.0	101.8	102.1	101.3
515	Farm-product raw materials[1]	120.2	114.0	106.9	93.1	81.5	76.1	84.4	83.5	88.3	108.7	121.4	120.9
516	Chemicals and allied products	99.9	99.9	102.7	101.1	101.3	99.8	99.6	99.4	99.9	96.9	98.7	100.6
517	Petroleum and petroleum products	104.9	100.2	97.9	93.5	95.6	97.0	95.4	99.0	102.5	104.8	104.6	104.2
518	Beer, wine, and distilled alcoholic beverages	96.6	96.5	97.2	99.0	101.3	103.1	98.9	97.6	100.8	107.5	106.5	94.6
519	Miscellaneous nondurable goods	103.4	103.2	105.3	101.1	96.2	92.9	95.1	97.2	98.6	99.7	103.2	104.1

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.

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.

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 bench-

mark 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)[1]

Ferrous Metals Service Centers and Offices (SIC 5051 pt.)[1]—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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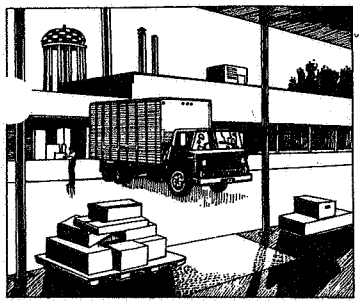
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued July 1978

May 1978

BW-78-5

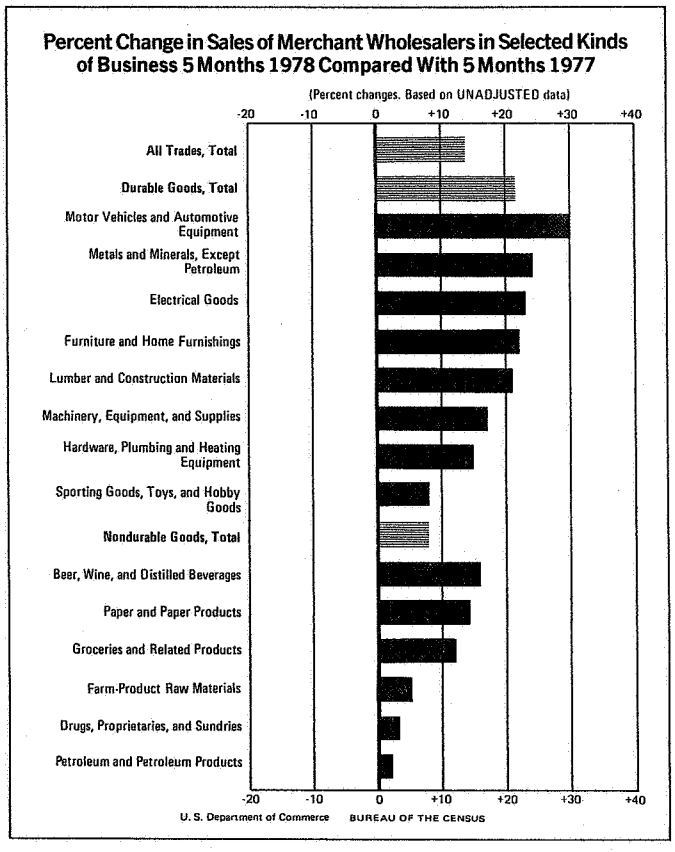
Sales–May 1978 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences, but not for price changes, were $63.4 billion, up 2 percent from the previous month and 18 percent above May 1977. Adjusted March-through-May total sales were up 8 percent from the December-through-February period and were 15 percent above the total sales for the comparable months a year ago.

After adjustment, May sales in the durable goods trades were down 1 percent from last month, but were 23 percent above sales for the same month a year ago. Nondurable goods sales were up 5 percent from April and were 14 percent above May 1977. Total monthly sales in the durable goods group during the March-through-May period were 8 percent above the prior 3 months and were 24 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were 8 percent above the December-through-February period and were 9 percent above the total sales for the same period a year ago.

By trade group, comparisons with previous month sales levels owed mixed results with seven trade groups showing gains, seven indicating declines, and two with no change. The larger increases were shown in farm-product raw materials (16%) and petroleum and petroleum products (10%). The more notable decreases were shown in sporting goods, toys, and hobby goods (-10%) and metals and minerals, except petroleum (-7%). Compared with sales of a year ago, all trade groups showed increases, with the sharper increases reported in miscellaneous durable goods (38%) and electrical goods (28%).

Inventories–Total inventories of merchant wholesalers, after adjustment for seasonal variations, but not for price changes, were valued at $74.8 billion at the end of May, virtually unchanged from last month, but 15 percent above the same month a year ago. Durable goods stocks were unchanged from April, but were 19 percent above May 1977. Nondurable goods stocks were down 1 percent from last month, but were 9 percent above stocks on hand a year ago.

Based on adjusted data, comparisons with previous month inventory levels showed mixed results with nine trade groups showing gains, six indicating declines, and one with no change. The larger increases were reported in metals and minerals, except petroleum; and drugs, proprietaries, and sundries, both up 4 percent. The most substantial decrease was shown in farm-product raw materials (-4%). Compared with year-ago inventories, all trade groups showed increases. The sharper increases were reported in lumber and construction materials (29%) and furniture and home furnishings (23%).



Stock-Sales Ratio–The May stock-sales ratio for merchant wholesalers, based on seasonally-adjusted data, was 118, down 2 points from both the previous month and the year-ago ratio. The stock-sales ratio for durable goods was 167, up 2 points from April, but down 6 points from May 1977. The ratio for nondurable goods was 77, down 5 points from last month and 3 points below the year-ago ratio.

An advance release of the May 1978 data was issued on July 12, 1978.

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: 1978 and 1977

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

1972 SIC code	Kind of business	1978					1977								Total 5 months	
		Jan.	Feb.	Mar.	Apr.	May[P]	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1978	1977
	Merchant wholesalers, total	52,143	52,766	62,900	60,613	65,626	54,633	55,794	51,290	55,597	54,505	54,251	56,034	56,224	294,045	258,408
	Total (excluding farm-product raw materials)	46,343	47,112	55,848	54,095	57,666	47,931	49,990	45,838	50,659	49,544	49,132	49,762	50,139	261,061	226,987
50	Durable goods, total	22,869	23,880	28,985	28,784	30,296	24,159	25,292	22,915	25,998	25,461	25,369	25,340	24,797	134,812	110,431
501	Motor vehicles and automotive parts and supplies	4,797	5,065	5,870	5,956	6,194	4,866	4,795	4,463	4,762	4,554	4,605	4,721	4,698	27,882	21,448
5013,4	Automotive parts and supplies, tires and tubes	2,517	2,666	3,128	3,217	3,365	2,482	2,597	2,395	2,657	2,538	2,661	2,651	2,551	14,893	11,327
5013	Automotive parts and supplies	2,166	2,286	2,602	2,706	2,798	2,111	2,221	2,027	2,229	2,089	2,227	2,220	2,167	12,558	9,646
502	Furniture and home furnishings	867	921	1,111	1,046	1,108	891	968	816	972	998	1,048	1,045	1,025	5,053	4,154
5021	Furniture--household and office	304	311	356	352	366	272	291	251	310	308	320	340	350	1,688	1,239
5023	Home furnishings	564	610	755	695	742	619	677	565	662	689	728	705	676	3,365	2,915
503	Lumber and other construction materials	1,867	1,891	2,368	2,517	2,830	2,222	2,343	2,271	2,657	2,553	2,476	2,334	2,086	11,473	9,461
5031	Lumber, plywood, and millwork	1,290	1,288	1,582	1,676	1,914	1,513	1,571	1,511	1,792	1,681	1,637	1,540	1,389	7,750	6,436
5039	Construction materials, n.e.c.	576	603	786	841	916	709	772	760	866	872	839	794	697	3,722	3,025
505	Metals and minerals, except petroleum	2,505	2,557	3,040	2,942	3,031	(NA)	(NA)	(NA)	2,731	2,709	2,437	2,592	2,423	14,075	11,339
5051 pt.	Ferrous metals service centers and offices	1,922	1,970	2,344	2,190	2,266	(NA)	(NA)	(NA)	2,039	2,083	1,845	1,869	1,774	10,692	8,318
5051 pt.	Ferrous metals service centers	1,386	1,443	1,713	1,629	1,691	(NA)	(NA)	(NA)	1,480	1,478	1,385	1,359	1,282	7,862	5,809
506	Electrical goods	2,541	2,627	3,096	2,980	3,163	2,391	2,761	2,647	2,821	2,846	2,998	2,973	2,964	14,407	11,735
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,262	1,354	1,561	1,556	1,610	1,222	1,390	1,324	1,456	1,369	1,436	1,436	1,379	7,343	5,824
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,279	1,273	1,535	1,424	1,553	1,169	1,371	1,323	1,365	1,477	1,562	1,537	1,585	7,064	5,911
5064	Electrical appliances, TV and radio sets	763	762	939	841	905	731	940	914	919	979	1,011	989	1,003	4,209	3,776
507	Hardware, plumbing, heating equipment, and supplies	1,790	1,708	2,021	2,102	2,326	1,925	2,017	1,898	2,068	1,961	2,027	1,974	1,820	9,947	8,639
5072	Hardware	693	679	793	797	854	721	740	700	790	750	750	768	676	3,816	3,476
5074	Plumbing and heating equipment and supplies (hydronics)	726	675	801	834	927	824	852	799	842	802	846	791	753	3,963	
508	Machinery, equipment, and supplies	6,190	6,632	8,301	8,296	8,555	7,034	7,349	6,465	7,380	7,217	7,163	6,941	7,019	37,973	32,469
5082	Construction and mining machinery and equipment	825	875	1,130	1,254	1,282	1,044	1,059	876	971	1,002	1,006	1,025	1,006	5,367	4,695
5084,5	Industrial machinery, equipment, and supplies	2,545	2,790	3,294	3,077	3,318	2,520	2,821	2,494	2,891	2,771	2,750	2,858	2,861	15,025	12,262
5086	Professional equipment, supplies	710	732	863	816	896	779	840	757	846	805	808	773	805	4,016	3,612
5093	Scrap and waste materials	757	815	979	958	1,022	869	903	679	802	810	807	812	779	4,530	4,040
51	Nondurable goods, total	29,274	28,886	33,915	31,829	35,330	30,474	30,502	28,375	29,599	29,044	28,882	30,694	31,427	159,232	147,977
	Total (excluding farm-product raw materials)	23,474	23,232	26,863	25,311	27,370	23,772	24,698	22,923	24,661	24,084	23,763	24,422	25,342	126,249	116,556
511	Paper and paper products	1,316	1,284	1,506	1,395	1,524	1,261	1,348	1,208	1,388	1,366	1,341	1,335	1,358	7,026	6,138
5111,3	Printing, writing, industrial, and personal service paper	950	926	1,100	1,032	1,147	991	1,054	935	1,060	1,032	1,007	988	995	5,155	4,728
512	Drugs, drug proprietaries, and druggists' sundries	887	824	994	912	933	897	907	848	952	948	939	926	922	4,550	4,426
5122	Drugs, drug proprietaries, and druggists' sundries	887	824	994	912	933	897	907	848	952	948	939	926	922	4,550	4,426
5122 pt.	General-line drugs	423	393	470	423	438	415	410	388	459	455	438	452	444	2,147	2,018
513	Apparel, piece goods, and notions[1]	1,620	1,615	2,063	1,818	2,044	1,510	1,589	1,521	1,938	1,815	1,919	1,837	1,617	9,159	7,359
514	Groceries and related products	9,261	9,093	10,398	9,916	10,852	9,359	9,414	9,132	9,716	9,433	9,289	9,591	9,798	49,520	44,327
5141	Groceries, general-line	3,426	3,333	3,740	3,547	3,814	3,387	3,412	3,347	3,493	3,396	3,360	3,579	3,587	17,860	16,436
5144	Poultry and poultry products	402	397	486	468	488	438	448	412	456	432	419	458	454	2,240	2,051
5145	Confectionery	154	163	191	173	185	150	150	146	171	172	183	194	188	866	717
5147	Meats and meat products	1,460	1,462	1,651	1,688	1,888	1,469	1,513	1,444	1,591	1,486	1,498	1,525	1,510	8,149	6,908
5148	Fresh fruits and vegetables	839	824	986	1,035	1,159	849	852	834	877	810	836	886	889	4,843	3,911
515	Farm-product raw materials	5,800	5,654	7,052	6,518	7,960	6,702	5,804	5,452	4,938	4,960	5,119	6,272	6,085	32,984	31,421
5153	Grain	4,549	4,503	5,718	5,358	6,708	5,589	4,830	4,580	4,011	4,005	4,069	4,968	4,730	26,837	26,081
517	Petroleum and petroleum products	4,209	4,085	4,249	3,830	4,050	(NA)	(NA)	(NA)	3,752	3,612	3,839	3,983	4,355	20,422	19,959
5171	Petroleum bulk stations and terminals	2,387	2,293	2,384	2,188	2,338	(NA)	(NA)	(NA)	2,160	2,103	2,195	2,266	2,523	11,590	11,474
518	Beer, wine, and distilled alcoholic beverages	1,654	1,770	2,299	1,993	2,273	1,978	2,233	1,951	2,108	2,018	1,884	2,143	2,444	9,989	8,590
5181	Beer and ale	795	839	1,094	998	1,218	1,043	1,126	1,010	1,093	1,012	888	938	1,020	4,944	4,147
5182	Wines and distilled alcoholic beverages	859	931	1,204	996	1,055	935	1,107	941	1,014	1,005	995	1,204	1,424	5,045	4,443
519	Miscellaneous nondurable goods	3,723	3,782	4,434	4,568	4,685	4,398	4,186	3,539	3,822	4,055	3,722	3,749	4,028	21,193	21,662
5194	Tobacco and tobacco products	721	692	782	765	855	743	787	734	780	751	748	705	819	3,816	

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

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

[1]The apparel, piece goods, and notions group is subject to a sampling variability of 13 percent for May 1978.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978					1977							
		Jan.	Feb.	Mar.	Apr.	May[p]	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	69,596	71,156	73,931	74,635	73,949	64,088	64,117	63,666	64,105	65,291	66,530	68,082	68,555
	Total (excluding farm-product raw materials)	64,090	65,682	67,973	69,060	69,287	59,833	60,612	60,642	61,074	61,963	62,324	62,939	63,245
50	Durable goods, total	44,287	45,757	47,275	47,957	48,414	40,763	41,593	41,738	42,142	42,484	42,627	43,252	43,676
501	Motor vehicles and automotive parts and supplies	7,709	8,189	7,995	7,973	8,119	6,963	6,932	6,864	6,831	6,842	7,089	7,376	7,424
5013,4	Automotive parts and supplies, tires and tubes	4,743	4,962	4,856	4,901	4,923	4,219	4,333	4,304	4,512	4,496	4,438	4,669	4,607
5013	Automotive parts and supplies	3,953	4,163	4,041	4,171	4,195	3,481	3,616	3,534	3,712	3,663	3,639	3,912	3,790
502	Furniture and home furnishings	1,560	1,606	1,633	1,669	1,705	1,392	1,407	1,409	1,451	1,493	1,455	1,444	1,512
5023	Home furnishings	1,137	1,184	1,182	1,233	1,273	988	1,022	1,026	1,069	1,085	1,057	1,054	1,099
503	Lumber and other construction materials	2,676	2,761	2,919	2,966	3,000	2,340	2,309	2,353	2,429	2,510	2,489	2,513	2,602
5031	Lumber, plywood, and millwork	1,715	1,775	1,870	1,882	1,913	1,578	1,559	1,588	1,632	1,659	1,629	1,643	1,671
505	Metals and minerals, except petroleum	4,449	4,660	4,953	4,976	5,119	(NA)	(NA)	(NA)	4,519	4,434	4,277	4,444	4,459
5051 pt.	Ferrous metals service centers and offices	3,471	3,591	3,820	3,823	3,923	(NA)	(NA)	(NA)	3,692	3,689	3,511	3,514	3,568
5051 pt.	Ferrous metals service centers	2,633	2,760	3,039	2,971	3,068	(NA)	(NA)	(NA)	2,858	2,874	2,686	2,738	2,768
506	Electrical goods	4,563	4,594	4,867	4,951	5,061	4,334	4,406	4,392	4,580	4,599	4,591	4,611	4,653
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,114	2,214	2,226	2,286	2,356	2,006	2,084	1,987	2,088	2,069	2,025	2,100	2,121
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,449	2,380	2,640	2,665	2,705	2,328	2,322	2,405	2,493	2,530	2,566	2,511	2,533
507	Hardware, plumbing, heating equipment, and supplies	3,712	3,876	4,058	4,231	4,279	3,599	3,639	3,704	3,582	3,578	3,621	3,608	3,620
5072	Hardware	1,366	1,384	1,421	1,428	1,450	1,237	1,256	1,286	1,282	1,296	1,319	1,320	1,358
5074	Plumbing and heating equipment and supplies (hydronics)[1]	1,590	1,678	1,784	1,861	1,863	1,588	1,619	1,669	1,588	1,579	1,566	1,562	1,555
508	Machinery, equipment, and supplies	15,508	16,005	16,511	16,762	16,650	14,007	14,574	14,417	14,513	14,706	14,631	15,026	15,307
5082	Construction and mining machinery and equipment	3,281	3,396	3,505	3,516	3,562	2,727	2,864	2,865	2,928	3,110	3,083	3,202	3,261
5084,5	Industrial machinery, equipment, and supplies	4,816	4,912	4,996	5,055	5,121	4,395	4,621	4,478	4,447	4,503	4,534	4,555	4,742
51	Nondurable goods, total	25,309	25,399	26,656	26,678	25,535	23,324	22,523	21,928	21,963	22,807	23,903	24,830	24,879
	Total (excluding farm-product raw materials)	19,803	19,925	20,699	21,103	20,873	19,069	19,018	18,904	18,932	19,479	19,697	19,687	19,569
511	Paper and paper products	1,298	1,301	1,354	1,349	1,364	1,301	1,322	1,297	1,276	1,301	1,304	1,309	1,301
5111,3	Printing, writing, industrial, and personal service paper	868	877	910	911	917	900	905	887	877	880	878	865	873
512	Drugs, drug proprietaries, and druggists' sundries	1,266	1,292	1,330	1,345	1,343	1,223	1,268	1,285	1,297	1,320	1,373	1,337	1,303
514	Groceries and related products	5,401	5,376	5,710	5,740	5,747	5,349	5,307	5,283	5,283	5,448	5,507	5,465	5,540
5141	Groceries, general-line	2,350	2,366	2,562	2,500	2,502	2,382	2,371	2,268	2,265	2,363	2,446	2,441	2,473
517	Petroleum and petroleum products	2,045	1,936	1,953	1,872	1,882	(NA)	(NA)	(NA)	1,959	2,064	2,023	2,053	2,042
518	Beer, wine, and distilled alcoholic beverages	1,917	1,889	2,017	2,133	2,137	2,094	2,114	2,074	1,977	2,048	2,121	2,075	1,809
5181	Beer and ale	611	641	707	758	728	726	709	675	660	673	658	632	581
5182	Wines and distilled alcoholic beverages	1,305	1,248	1,311	1,375	1,409	1,368	1,405	1,399	1,317	1,375	1,462	1,443	1,228

e footnotes below table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978					1977							
		Jan.	Feb.	Mar.	Apr.	May[p]	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	133	135	118	123	113	117	115	124	115	120	123	122	122
	Total (excluding farm-product raw materials)	138	139	122	128	120	125	121	132	121	125	127	126	126
50	Durable goods, total	194	192	163	167	160	169	164	182	162	167	168	171	176
501	Motor vehicles and automotive parts and supplies	161	162	136	134	131	143	145	154	143	150	154	156	158
5013,4	Automotive parts and supplies, tires and tubes	188	186	155	152	146	170	167	180	170	177	167	176	181
5013	Automotive parts and supplies	183	182	155	154	150	165	163	174	167	175	163	176	175
502	Furniture and home furnishings	180	174	147	159	154	156	145	173	149	150	139	138	147
5023	Home furnishings	202	194	157	178	172	160	151	182	162	157	145	150	163
503	Lumber and other construction materials	143	146	123	118	106	105	99	104	91	98	101	108	125
5031	Lumber, plywood, and millwork	133	138	118	112	100	104	99	105	91	99	100	107	120
505	Metals and minerals, except petroleum	178	182	163	169	169	(NA)	(NA)	(NA)	165	164	176	171	184
5051 pt.	Ferrous metals service centers and offices	181	182	163	175	173	(NA)	(NA)	(NA)	181	177	190	188	201
5051 pt.	Ferrous metals service centers	190	191	177	182	181	(NA)	(NA)	(NA)	193	194	194	201	216
506	Electrical goods	180	175	157	166	160	181	160	166	162	162	153	155	157
5063	Electrical apparatus and equipment, wiring supplies and construction materials	168	163	143	147	146	164	150	150	143	151	141	146	154
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	191	187	172	187	174	199	169	182	183	171	164	163	160
507	Hardware, plumbing, heating equipment, and supplies	207	227	201	201	184	187	180	195	173	182	179	183	199
5072	Hardware	197	204	179	179	170	172	170	184	162	173	176	172	201
5074	Plumbing and heating equipment and supplies (hydronics)	219	249	223	223	201	193	190	209	189	197	185	197	206
508	Machinery, equipment, and supplies	251	241	199	202	195	199	198	223	197	204	204	216	218
5082	Construction and mining machinery and equipment	398	388	310	280	278	261	270	327	302	310	306	312	324
5084,5	Industrial machinery, equipment, and supplies	189	176	152	164	154	174	164	180	154	163	165	159	166
51	Nondurable goods, total	86	88	79	84	72	77	74	77	74	79	83	81	79
	Total (excluding farm-product raw materials)	84	86	77	83	76	80	77	82	77	81	83	81	77
511	Paper and paper products	99	101	90	97	89	103	98	107	92	95	97	98	96
5111,3	Printing, writing, industrial, and personal service paper	91	95	83	88	80	91	86	95	83	85	87	88	88
512	Drugs, drug proprietaries, and druggists' sundries	143	157	134	147	144	136	140	152	136	139	146	144	141
	Groceries and related products	58	59	55	58	53	57	56	58	54	58	59	57	57
	Groceries, general-line	69	71	68	70	66	70	69	68	65	70	73	68	69
517	Petroleum and petroleum products	49	47	46	49	46	(NA)	(NA)	(NA)	52	57	53	52	47
518	Beer, wine, and distilled alcoholic beverages	116	107	88	107	94	106	95	106	94	102	113	97	74
5181	Beer and ale	77	76	65	76	60	70	63	67	60	66	74	67	57
5182	Wines and distilled alcoholic beverages	152	134	109	138	134	146	127	149	130	137	147	120	86

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

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

[1]The plumbing and heating equipment and supplies (hydronics) group is subject to a sampling variability of 9 percent for May 1978.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978 Jan.	1978 Feb.	1978 Mar.	1978 Apr.	1978 May[p]	1977 May	1977 June	1977 July	1977 Aug.	1977 Sept.	1977 Oct.	1977 Nov.	1977 Dec.
	Sales ADJUSTED for seasonal variations and trading-day differences													
	Merchant wholesalers, total	55,985	57,635	58,877	62,152	63,389	53,866	53,735	53,495	53,208	53,307	53,639	55,558	57,266
	Total (excluding farm-product raw materials)	50,554	51,733	52,625	55,247	55,397	47,260	47,157	47,334	48,037	48,018	48,630	49,887	51,663
50	Durable goods, total	25,568	26,976	27,466	28,974	28,590	23,275	23,419	23,620	24,390	24,150	24,997	25,601	26,488
501	Motor vehicles and automotive parts and supplies	5,125	5,685	5,486	5,566	5,767	4,528	4,473	4,439	4,497	4,504	4,889	4,969	5,220
502	Furniture and home furnishings	1,025	1,034	1,062	1,091	1,091	901	907	900	914	934	950	957	1,082
503	Lumber and other construction materials	2,288	2,329	2,328	2,641	2,556	2,057	2,090	2,171	2,283	2,349	2,418	2,320	2,443
505	Metals and minerals, except petroleum	2,535	2,810	2,792	3,005	2,809	(NA)	(NA)	(NA)	2,540	2,580	2,539	2,605	2,669
506	Electrical goods	2,842	2,948	3,044	3,130	3,189	2,491	2,547	2,686	2,664	2,731	2,818	2,918	2,917
507	Hardware, plumbing, heating equipment, and supplies	2,000	1,945	2,005	2,156	2,205	1,871	1,863	1,909	1,902	1,834	1,916	1,958	2,024
508	Machinery, equipment, and supplies	7,026	7,468	7,700	8,329	7,973	6,740	6,753	6,756	7,130	6,726	6,988	7,268	7,396
51	Nondurable goods, total	30,417	30,659	31,411	33,178	34,799	30,591	30,316	29,875	28,818	29,157	28,642	29,957	30,778
	Total (excluding farm-product raw materials)	24,986	24,757	25,159	26,273	26,807	23,985	23,738	23,714	23,647	23,852	23,633	24,286	25,175
511	Paper and paper products	1,382	1,390	1,441	1,506	1,496	1,308	1,294	1,242	1,282	1,305	1,294	1,294	1,419
512	Drugs, drug proprietaries, and druggists' sundries	903	889	948	950	929	919	919	914	916	908	867	913	932
513	Apparel, piece goods, and notions	1,774	1,704	1,939	1,970	2,052	1,585	1,580	1,600	1,687	1,668	1,821	1,740	1,856
514	Groceries and related products	9,748	9,992	9,988	10,286	10,385	9,225	8,825	9,210	9,218	9,367	9,280	9,620	9,947
515	Farm-product raw materials[1]	5,431	5,902	6,252	6,905	7,992	6,606	6,578	6,161	5,171	5,305	5,009	5,671	5,603
517	Petroleum and petroleum products	4,362	4,001	3,945	3,981	4,364	(NA)	(NA)	(NA)	3,682	3,712	3,749	3,928	4,124
518	Beer, wine, and distilled alcoholic beverages	2,102	2,188	2,283	2,185	2,130	1,921	1,963	1,988	1,970	2,012	1,907	2,026	2,035
519	Miscellaneous nondurable goods	3,822	3,722	3,754	4,500	4,492	4,335	4,151	4,015	3,973	4,071	3,901	3,901	3,992
	Inventories ADJUSTED for seasonal variations													
	Merchant wholesalers, total	68,991	70,361	72,882	74,867	74,770	64,838	64,947	64,210	65,095	66,119	66,209	67,047	67,998
	Total (excluding farm-product raw materials)	64,410	65,559	67,309	68,879	69,050	59,575	60,207	60,647	61,521	62,413	62,347	62,835	63,712
50	Durable goods, total	44,686	45,684	46,838	47,673	47,857	40,224	40,876	41,404	42,396	42,896	43,014	43,642	44,
501	Motor vehicles and automotive parts and supplies	7,603	7,981	7,854	7,894	7,952	6,804	6,867	6,937	7,071	6,989	7,248	7,534	7,394
502	Furniture and home furnishings	1,569	1,619	1,636	1,677	1,708	1,392	1,388	1,395	1,432	1,480	1,461	1,438	1,541
503	Lumber and other construction materials	2,728	2,795	2,834	2,891	2,857	2,219	2,241	2,288	2,415	2,566	2,612	2,607	2,680
505	Metals and minerals, except petroleum	4,431	4,726	4,928	4,927	5,134	(NA)	(NA)	(NA)	4,461	4,520	4,418	4,484	4,397
506	Electrical goods	4,694	4,717	4,916	4,956	5,051	4,310	4,326	4,347	4,521	4,581	4,519	4,547	4,710
507	Hardware, plumbing, heating equipment, and supplies	3,796	3,955	3,994	4,100	4,162	3,503	3,598	3,669	3,533	3,636	3,684	3,667	3,709
508	Machinery, equipment, and supplies	15,633	15,831	16,235	16,762	16,485	13,847	14,253	14,410	14,824	14,840	14,690	15,086	15,651
51	Nondurable goods, total	24,305	24,677	26,044	27,194	26,913	24,614	24,071	22,806	22,699	23,223	23,195	23,405	23,630
	Total (excluding farm-product raw materials)	19,724	19,875	20,471	21,206	21,193	19,351	19,331	19,243	19,125	19,517	19,333	19,193	19,344
511	Paper and paper products	1,315	1,314	1,372	1,341	1,372	1,304	1,297	1,302	1,265	1,300	1,300	1,312	1,289
512	Drugs, drug proprietaries, and druggists' sundries	1,315	1,324	1,331	1,328	1,375	1,247	1,263	1,295	1,296	1,289	1,315	1,319	1,317
514	Groceries and related products	5,423	5,339	5,587	5,734	5,829	5,433	5,396	5,389	5,385	5,497	5,436	5,311	5,480
517	Petroleum and petroleum products	1,949	1,932	1,995	2,002	1,969	(NA)	(NA)	(NA)	1,973	2,028	1,894	1,944	1,958
518	Beer, wine, and distilled alcoholic beverages	1,984	1,958	2,075	2,155	2,110	2,058	2,051	2,104	2,026	2,036	1,971	1,969	1,898
	Stock-sales ratios based on ADJUSTED data													
	Merchant wholesalers, total	123	122	124	120	118	120	121	120	122	124	123	121	119
	Total (excluding farm-product raw materials)	127	127	128	125	125	126	128	128	128	130	128	126	123
50	Durable goods, total	175	169	171	165	167	173	175	175	174	178	172	170	168
501	Motor vehicles and automotive parts and supplies	148	140	143	142	138	150	154	156	157	155	148	152	142
502	Furniture and home furnishings	153	157	154	154	157	154	153	155	157	158	154	150	142
503	Lumber and other construction materials	119	120	122	109	112	108	107	105	106	109	108	112	110
505	Metals and minerals, except petroleum	175	168	177	164	183	(NA)	(NA)	(NA)	176	175	174	172	165
506	Electrical goods	165	160	161	158	158	173	170	162	170	168	160	156	161
507	Hardware, plumbing, heating equipment, and supplies	190	203	199	190	189	187	193	192	186	198	192	187	183
508	Machinery, equipment, and supplies	223	212	211	201	207	205	211	213	208	221	210	208	212
51	Nondurable goods, total	80	80	83	82	77	80	79	76	79	80	81	78	77
	Total (excluding farm-product raw materials)	79	80	81	81	79	81	81	81	81	82	82	79	77
511	Paper and paper products	95	95	95	89	92	100	100	105	99	100	100	101	91
512	Drugs, drug proprietaries, and druggists' sundries	146	149	140	140	148	136	137	142	141	142	152	144	
514	Groceries and related products	56	53	56	56	56	59	61	59	58	59	59	55	
517	Petroleum and petroleum products	45	48	51	50	45	(NA)	(NA)	(NA)	54	55	51	49	47
518	Beer, wine, and distilled alcoholic beverages	94	89	91	99	99	107	104	106	103	101	103	97	93

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

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

[1]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. 1978-May 1978 from--			
	Dec. 1977-Feb. 1978 (3 months ago)	Sept. 1977-Nov. 1977 (6 months ago)	June 1977-Aug. 1977 (9 months ago)	Mar. 1977-May 1977 (12 months ago)
Merchant wholesalers, total.....	+8	+13	+15	+15
Durable goods, total.....	+8	+14	+19	+24
Nondurable goods, total.....	+8	+13	+12	+9

Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers: 1972-1978

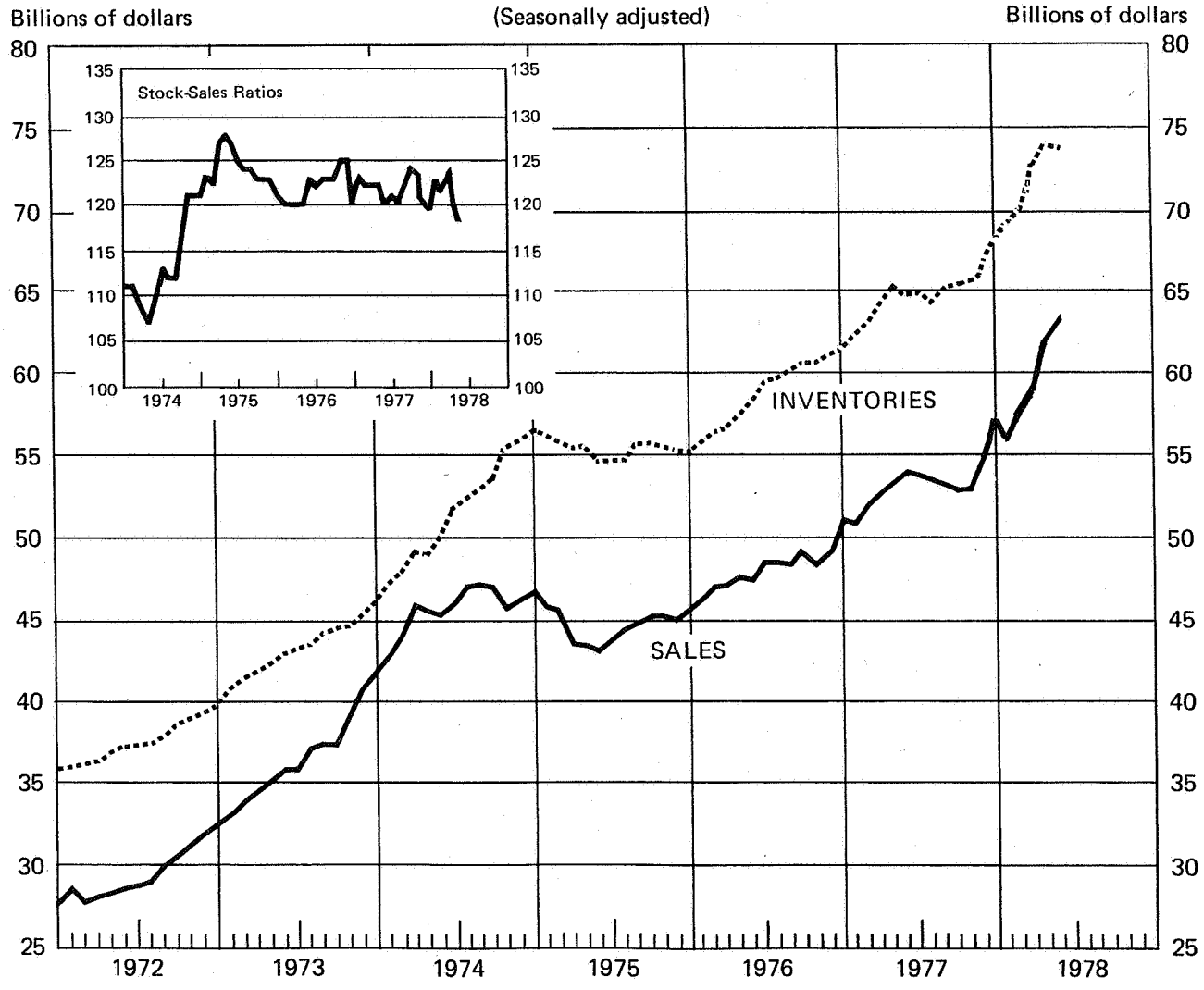


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: May 1978

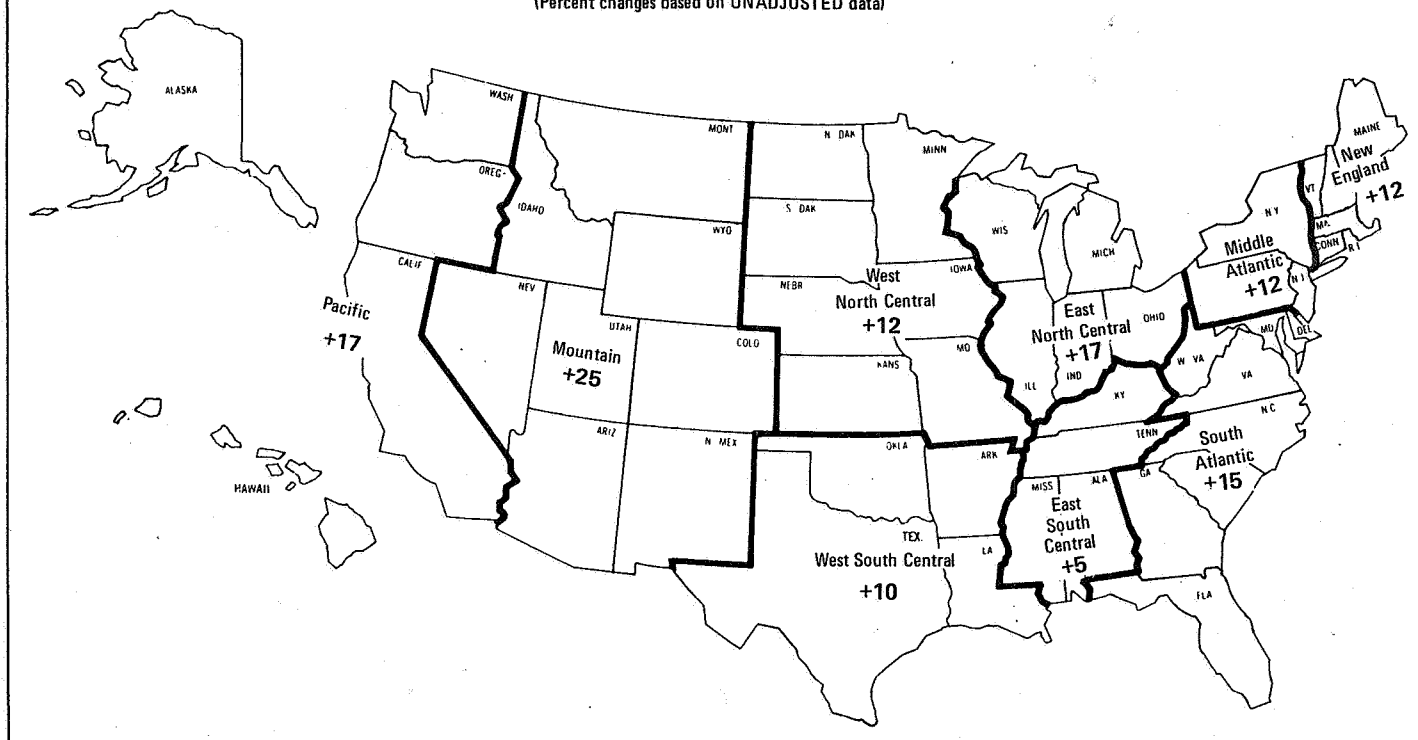
1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		May 1978 from April 1978	May 1978 from May 1977	5 months 1978 from 5 months 1977	May 1978 from April 1978	May 1978 from May 1977	May 1978 from April 1978	May 1978 from May 1977	May 1978 from April 1978	May 1978 from May 1977
	Merchant wholesalers, total	+8	+20	+14	-1	+15	+2	+18	0	+15
	Total (excluding farm-product raw materials)	+7	+20	+15	0	+16	0	+17	0	+16
50	Durable goods, total	+5	+25	+22	+1	+19	-1	+23	0	+19
501	Motor vehicles and automotive parts and supplies	+4	+27	+30	+2	+17	+4	+27	+1	+17
5012	Automobiles and other motor vehicles	+3	+19	+28	+4	+16	-	-	-	-
5013, 4	Automotive parts and supplies, tires and tubes	+5	+36	+31	0	+17	-	-	-	-
5013	Automotive parts and supplies	+3	+33	+30	+1	+21	-	-	-	-
502	Furniture and home furnishings	+6	+24	+22	+2	+23	0	+21	+2	+23
5021	Furniture--household and office	+4	+34	+36	-1	+7	-	-	-	-
5021 pt.	Household furniture	+15	+47	+33	+1	0	-	-	-	-
5021 pt.	Office furniture	-2	+28	+38	-2	+13	-	-	-	-
5023	Home furnishings	+7	+20	+15	+3	+29	-	-	-	-
503	Lumber and other construction materials	+12	+27	+21	+1	+28	-3	+24	-1	+29
5031	Lumber, plywood, and millwork	+14	+27	+20	+2	+21	-	-	-	-
5039	Construction materials, n.e.c.	+9	+29	+23	0	+43	-	-	-	-
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	-1	+9	+8	+3	+18	-10	+1	0	+18
505	Metals and minerals, except petroleum	+3	+24	+24	+3	+22	-7	+21	+4	+22
5051 pt.	Ferrous metals service centers and offices	+3	+29	+29	+3	+16	-	-	-	-
5051 pt.	Ferrous metals service centers	+4	(S)	+35	+3	(S)	-	-	-	-
5051 pt.	Nonferrous metals service centers and offices	+1	+9	+20	+3	+42	-	-	-	-
506	Electrical goods	+6	+32	+23	+2	+17	+2	+28	+2	+17
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+4	+32	+26	+3	+17	-	-	-	-
5064, 5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+9	+33	+20	+1	+16	-	-	-	-
5064	Electrical appliances, TV and radio sets	+8	+24	+11	+2	+14	-	-	-	-
507	Hardware, plumbing, heating equipment, and supplies	+11	+21	+15	+1	+19	+2	+18	+2	+19
5072	Hardware	+7	+18	+10	+2	+17	-	-	-	-
5074	Plumbing and heating equipment and supplies (hydronics)	+11	+13	+13	0	+17	-	-	-	-
5075	Warm air heating and air conditioning equipment and supplies	+13	+42	+29	+4	+28	-	-	-	-
508	Machinery, equipment, and supplies	+3	+22	+17	-1	+19	-4	+18	-2	+19
5081	Commercial machines and equipment	+5	+25	+29	-3	-6	-	-	-	-
5082	Construction and mining machinery and equipment	+2	+23	+14	+1	+31	-	-	-	-
5083	Farm and garden machinery and equipment	-8	+18	+15	-4	+19	-	-	-	-
5084, 5	Industrial machinery, equipment, and supplies	+8	+32	+23	+1	+17	-	-	-	-
5086	Professional equipment and supplies	+10	+15	+11	-3	+13	-	-	-	-
509	Miscellaneous durable goods	+7	+39	+32	0	+13	+1	+38	+2	+14
5093	Scrap and waste materials	+7	+18	+12	-1	+5	-	-	-	-
5093 pt.	Iron and steel scrap	+5	+20	+13	-1	+3	-	-	-	-
5093 pt.	Waste materials	+10	+14	+10	-1	+7	-	-	-	-
51	Nondurable goods, total	+11	+16	+8	-4	+9	+5	+14	-1	+9
	Total (excluding farm-product raw materials)	+8	+15	+8	-1	+9	+2	+12	0	+10
511	Paper and paper products	+9	+21	+14	+1	+5	-1	+14	+2	+5
5111, 3	Printing, writing, industrial, and personal service paper	+11	+16	+9	+1	+2	-	-	-	-
512	Drugs, drug proprietaries, and druggists' sundries	+2	+4	+3	0	+10	-2	+1	+4	+10
5122	Drugs, drug proprietaries, and druggists' sundries	+2	+4	+3	0	+10	-	-	-	-
5122 pt.	General-line drugs	+3	+6	+6	-2	+1	-	-	-	-
514	Groceries and related products	+9	+16	+12	0	+7	+1	+13	+2	+7
5141	Groceries, general-line	+8	+13	+9	0	+5	-	-	-	-
5141 pt.	Voluntary groups	+7	+11	+4	0	+8	-	-	-	-
5141 pt.	Retailer cooperatives	+9	+17	+11	-1	+12	-	-	-	-
5141 pt.	Other general-lines	+7	+11	+11	+1	-2	-	-	-	-
5142,3,6,9	Specialty-line groceries	+10	+8	+9	-2	+3	-	-	-	-
5144	Poultry and poultry products	+4	+11	+9	0	-5	-	-	-	-
5145	Confectionery	+7	+23	+21	+2	+10	-	-	-	-
5147	Meats and meat products	+12	+29	+18	+9	+40	-	-	-	-
5148	Fresh fruits and vegetables	+12	+37	+24	-4	+2	-	-	-	-
515	Farm-product raw materials[2]	+22	+19	+5	-16	+10	+16	+21	-4	+9
5152	Cotton	-5	+13	+11	-10	-4	-	-	-	-
5153	Grain	+25	+20	+3	-20	+10	-	-	-	-
517	Petroleum and petroleum products	+6	+17	+2	+1	(S)	+10	+14	-2	(S)
5171	Petroleum bulk stations and terminals	+7	+17	+1	-3	(S)	-	-	-	-
518	Beer, wine, and distilled alcoholic beverages	+14	+15	+16	0	+2	-3	+11	-2	+3
5181	Beer and ale	+22	+17	+19	-4	0	-	-	-	-
5182	Wines and distilled alcoholic beverages	+6	+13	+14	+2	+3	-	-	-	-
519	Miscellaneous nondurable goods	+3	+7	-2	-6	+17	0	+4	-2	+7
5191	Farm supplies	+5	-3	-20	-17	(S)	-	-	-	-
5194	Tobacco and tobacco products	+12	+15	+8	+7	-1	-	-	-	-
5198	Paints, varnishes, and supplies	+12	+12	+11	+2	+16	-	-	-	-
5199 pt.	Books, periodicals, newspapers	-10	+32	+48	+2	-7	-	-	-	-

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

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

Sales of Merchant Wholesalers by Geographic Division
5 Months 1978 Compared With 5 Months 1977

(Percent changes based on UNADJUSTED data)



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Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1978 and 1977

(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]	1978					1977								Total 5 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.	Apr.	May[P]	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1978	1977	Range[2]	Median
	Merchant wholesalers, total	52,143	52,766	62,900	60,613	65,626	54,633	55,794	51,290	55,597	54,505	54,251	56,034	56,224	294,045	258,408	0.8-0.9	0.9
	New England	2,693	2,657	3,191	2,913	3,161	2,744	2,890	2,651	2,856	2,880	2,919	3,036	3,008	14,615	13,032	5-6	6
	Middle Atlantic	11,846	11,840	14,206	13,114	14,208	12,208	12,592	11,263	12,356	12,428	11,945	12,494	12,924	65,215	58,074	2-2	2
	East North Central	8,929	9,269	10,680	10,708	11,550	9,361	9,520	8,807	9,685	9,431	9,724	9,841	9,596	51,135	43,622	2-3	3
	West North Central	5,566	5,390	6,419	6,522	7,542	6,106	5,820	5,332	5,639	5,509	5,670	5,977	5,617	31,439	27,995	2-3	2
	South Atlantic	5,666	5,686	6,792	6,533	6,915	5,850	6,017	5,548	6,015	5,934	5,854	6,126	6,188	31,591	27,437	2-3	2
	East South Central	2,421	2,534	3,201	3,318	3,431	2,882	2,884	2,652	2,853	2,723	2,813	2,765	2,822	14,905	14,225	4-5	4
	West South Central	5,582	5,843	6,878	6,433	6,706	5,774	6,096	5,715	6,108	5,745	5,644	6,008	6,283	31,442	28,577	3-4	4
	Mountain	1,934	1,900	2,536	2,412	2,566	1,897	2,054	1,949	2,040	2,177	2,027	1,964	2,099	11,348	9,095	5-5	5
	Pacific	7,506	7,649	8,994	8,659	9,546	7,811	7,921	7,373	8,045	7,678	7,655	7,821	7,688	42,355	36,351	2-3	3
50	Durable goods, total	22,869	23,880	28,985	28,784	30,296	24,159	25,292	22,915	25,998	25,461	25,369	25,340	24,797	134,812	110,431	0.8-1.0	0.9
	Middle Atlantic	4,973	5,138	6,295	5,952	6,160	5,062	5,315	4,662	5,354	5,366	5,420	5,477	5,379	28,519	23,290	4-5	4
	East North Central	3,935	4,363	5,081	5,128	5,357	4,367	4,549	4,073	4,771	4,635	4,573	4,549	4,282	23,864	19,791	3-4	4
	West North Central	1,776	1,805	2,228	2,378	2,513	1,996	2,098	1,911	2,083	2,003	2,061	2,075	1,900	10,700	8,976	5-6	5
	South Atlantic	2,809	2,768	3,414	3,455	3,668	2,957	3,134	2,840	3,127	3,113	3,088	3,051	2,971	16,114	13,465	4-5	4
	West South Central	2,413	2,626	3,180	3,097	3,257	2,593	2,725	2,520	2,886	2,673	2,643	2,611	2,729	14,573	11,986	4-4	4
	Mountain	923	893	1,192	1,208	1,312	856	1,000	921	1,016	1,051	988	900	989	5,528	4,049	6-7	7
	Pacific	4,115	4,283	5,007	4,901	5,286	4,156	4,265	3,967	4,477	4,282	4,210	4,335	4,262	23,592	19,008	2-3	3
51	Nondurable goods, total	29,274	28,886	33,915	31,829	35,330	30,474	30,502	28,375	29,599	29,044	28,882	30,694	31,427	159,232	147,977	1.0-1.2	1.0
	New England	1,735	1,735	2,017	1,747	1,928	1,800	1,923	1,786	1,860	1,843	1,839	1,918	1,918	9,163	8,640	5-7	6
	Middle Atlantic	6,873	6,701	7,912	7,162	8,048	7,146	7,277	6,601	7,002	7,062	6,525	7,017	7,545	36,696	34,784	3-3	3
	East North Central	4,994	4,906	5,599	5,580	6,193	4,994	4,971	4,734	4,914	4,796	5,151	5,292	5,314	27,271	23,831	3-4	3
	West North Central	3,790	3,584	4,191	4,145	5,029	4,110	3,722	3,421	3,556	3,506	3,609	3,902	3,717	20,739	19,019	3-4	3
	South Atlantic	2,857	2,918	3,378	3,078	3,246	2,893	2,883	2,708	2,888	2,821	2,766	3,075	3,217	15,478	13,972	3-5	3
	East South Central	1,453	1,451	1,788	1,819	1,923	1,654	1,645	1,496	1,565	1,422	1,507	1,542	1,626	8,434	8,751	3-4	4
	West South Central	3,169	3,217	3,699	3,336	3,449	3,181	3,371	3,195	3,222	3,072	3,001	3,397	3,554	16,869	16,591	5-5	5
	Pacific	3,392	3,367	3,987	3,757	4,260	3,655	3,656	3,406	3,568	3,396	3,445	3,486	3,426	18,763	17,343	4-5	4

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

[P]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.
[1]See map on page 7.
[2]The range of sampling error of the estimate is based on data for August, September, and October 1977.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: May 1978

(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[1]			Inventories			
		May 1978 from April 1978	May 1978 from May 1977	5 months 1978 from 5 months 1977	May 1978 from April 1978	May 1978 from May 1977		
		A	B	C[1]	D	E	A	D
	Merchant wholesalers, total	+8	+20	+14	-1	+15	0.4	0.2
	New England	+9	+15	+12	+2	+10	2.0	1.9
	Middle Atlantic	+8	+16	+12	+2	+8	1.1	0.6
	East North Central	+8	+23	+17	-2	+22	1.2	0.8
	West North Central	+16	+24	+12	-6	+14	1.3	1.1
	South Atlantic	+6	+18	+15	0	+13	1.6	1.0
	East South Central	+3	+19	+5	-1	+25	1.7	1.4
	West South Central	+4	+16	+10	-2	+15	1.4	0.8
	Mountain	+6	+35	+25	-1	+15	2.4	1.3
	Pacific	+10	+22	+17	0	+21	1.2	0.5
50	Durable goods, total	+5	+25	+22	+1	+19	0.6	0.3
	New England	+6	+31	+24	+2	+10	2.4	1.3
	Middle Atlantic	+3	+22	+22	+3	+14	1.7	1.0
	East North Central	+4	+23	+21	0	+20	1.9	1.0
	West North Central	+6	+26	+19	0	+16	3.3	1.7
	South Atlantic	+6	+24	+20	+2	+18	1.9	1.2
	East South Central	+1	+23	+18	+1	+22	3.9	2.5
	West South Central	+5	+26	+22	+1	+20	2.1	1.2
	Mountain	+9	+53	+37	-1	+23	2.9	1.7
	Pacific	+8	+27	+24	+1	+25	1.9	0.7
51	Nondurable goods, total	+11	+16	+8	-4	+9	0.6	0.4
	New England	+10	+7	+6	+2	+9	1.9	2.7
	Middle Atlantic	+12	+13	+6	0	0	1.9	0.9
	East North Central	+11	+24	+14	-6	+26	1.4	1.1
	West North Central	+21	+22	+9	-12	+11	1.6	1.4
	South Atlantic	+5	+12	+11	-3	+1	2.4	1.8
	East South Central	+6	+16	-4	-4	+30	1.7	2.4
	West South Central	+3	+8	+2	-7	+5	2.2	1.3
	Mountain	+4	+20	+15	-1	0	3.2	1.2
	Pacific	+13	+17	+8	-1	+12	1.3	1.1
5013,4	Automotive parts and supplies, tires and tubes	+5	+36	+31	0	+17	2	
	New England	+1	+39	+40	+8	+31	7	4
	Middle Atlantic	-7	(S)	(S)	+2	0	4	2
	East North Central	+5	+20	+20	+1	+17	7	1
	West North Central	+4	+13	+21	-2	-1	5	2
	South Atlantic	-3	+29	+27	-4	+29	4	2
	East South Central	+7	+36	+19	+1	+61	4	3
	West South Central	-2	+21	+17	+1	+7	5	2
	Mountain	+9	+74	+42	-5	+28	7	3
	Pacific	+22	+41	+31	+2	+23	3	2
502	Furniture and home furnishings	+6	+24	+22	+2	+23	2	1
	Middle Atlantic	+8	+15	+11	+8	+29	4	2
	East North Central	+3	+26	+19	-6	+14	7	2
	West North Central	+5	+66	+46	+1	+37	5	4
	West South Central	+13	+44	+37	+1	+28	5	7
	Pacific	+8	+34	+33	+3	+26	5	3
503	Lumber and other construction materials	+12	+27	+21	+1	+28	2	1
	New England	+22	+40	+24	-5	0	4	5
	Middle Atlantic	+11	+53	+31	+3	+22	4	2
	East North Central	+13	+18	+28	+1	+49	3	2
	West North Central	+12	+19	+18	-1	+18	7	7
	South Atlantic	+12	+51	+44	+5	+45	4	2
	East South Central	+4	+37	+37	+4	+52	4	3
	West South Central	+23	+52	+24	+2	+45	6	5
	Pacific	+10	+2	-1	-1	+8	5	1
5051 pt.	Ferrous metals service centers	+4	(S)	+35	+3	(S)	2	1
	Middle Atlantic	+2	(S)	+38	+4	(S)	4	5
	East North Central	+5	(S)	+35	+1	(S)	4	1
	West North Central	+8	(S)	+23	+10	(S)	4	3
	East South Central	+1	(S)	+11	-1	(S)	2	4
	West South Central	+5	(S)	+27	+4	(S)	4	2
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+4	+32	+26	+3	+17	2	1
	Middle Atlantic	-3	+33	+25	+1	0	5	2
	East North Central	+5	+27	+26	+5	+10	3	2
	West North Central	+10	+15	+18	-2	+21	4	1
	South Atlantic	+8	+19	+13	+1	+6	3	1
	West South Central	-3	+33	+31	+8	+32	3	6
	Pacific	+4	+29	+30	+5	+46	4	1
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+9	+33	+20	+1	+16	3	
	Middle Atlantic	+12	+50	+30	+2	+23	3	
	East North Central	+9	+16	+2	0	+8	4	1
	West North Central	-3	+10	+4	0	+16	4	4
	South Atlantic	+5	+22	+21	+5	+8	6	4
	West South Central	+22	+35	+23	+3	+23	4	4
	Mountain	+10	(S)	(S)	+3	0	6	3
	Pacific	+8	+49	+34	+1	+26	3	2

See footnotes at end of table.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: May 1978—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[1]			Inventories			
		May 1978 from April 1978	May 1978 from May 1977	5 months 1978 from 5 months 1977	May 1978 from April 1978	May 1978 from May 1977		
		A	B	C[1]	D	E	A	D
5072	Hardware	+7	+18	+10	+2	+17	1	1
	New England	+5	+21	+12	+5	+24	6	3
	Middle Atlantic	+16	+11	+1	-3	+4	6	2
	East North Central	0	+42	+33	+2	+45	4	2
	West North Central	+9	+4	+4	-1	+11	3	3
	South Atlantic	+5	-1	-2	-1	+14	4	2
	East South Central	+9	0	-18	+24	+3	4	1
	Pacific	+7	+11	+6	-2	+12	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	+11	+13	+13	0	+17	2	1
	Middle Atlantic	+3	-9	-2	0	-16	6	3
	East North Central	+33	+35	+24	0	+24	3	3
	South Atlantic	+1	-4	+8	0	+3	3	2
	Mountain	+10	(S)	(S)	+1	+39	7	4
	Pacific	+6	+6	+13	-3	+31	5	4
5084,5	Industrial machinery, equipment, and supplies	+8	+32	+23	+1	+17	2	1
	Middle Atlantic	+7	+24	+18	+1	+9	7	2
	East North Central	+9	+44	+26	+3	+24	3	2
	West South Central	+8	+58	+49	+1	+12	4	3
	Pacific	+14	+51	+36	+3	+43	5	2
512	Drugs, drug proprietaries, and druggists' sundries	+2	+4	+3	0	+10	1	1
	New England	+1	+3	0	0	0	5	3
	Middle Atlantic	-1	+1	-2	+4	+11	3	2
	East North Central	+1	+9	+6	-2	+18	6	3
	West North Central	+8	+4	+3	+2	+10	2	2
	South Atlantic	+2	+9	+12	-4	0	6	5
	East South Central	+13	+44	+22	+1	+38	6	5
	West South Central	+2	-8	-8	+3	+13	3	2
	Mountain	+1	+11	+9	-1	-6	3	2
	Pacific	+1	-13	-5	-4	+3	3	3
5141	Groceries, general-line	+8	+13	+9	0	+5	1	1
	New England	+14	+26	+20	0	+18	2	1
	Middle Atlantic	+9	+4	+5	-2	+3	1	2
	East North Central	+9	+11	+7	0	+11	3	1
	West North Central	+4	+14	+9	+1	-4	1	1
	South Atlantic	+7	+21	+12	0	+6	2	1
	West South Central	+5	+11	+10	0	+8	2	1
	Mountain	+10	+6	+7	+3	-5	2	2
	Pacific	+9	+19	+14	+2	+7	1	1
5142,3,6,9	Specialty-line groceries	+10	+8	+9	-2	+3	1	1
	Middle Atlantic	+9	+4	+14	-3	+8	4	2
	East North Central	+14	+43	+23	+1	+27	3	2
	West North Central	+12	+42	+42	-7	+12	3	1
	South Atlantic	+10	+18	+22	-5	+12	5	6
	East South Central	+15	(S)	(S)	+2	(S)	2	2
5148	Fresh fruits and vegetables	+12	+37	+24	-4	+2	2	4
	Middle Atlantic	+19	+47	+27	-5	+50	7	5
	East North Central	+24	+43	+18	-2	+3	6	6
	West North Central	+12	+6	+12	-5	-28	6	3
	West South Central	(S)	+27	+32	0	(S)	5	3
	Pacific	+20	+51	+24	-7	-28	4	4
5194	Tobacco and tobacco products	+12	+15	+8	+7	-1	1	1
	New England	+10	+12	+2	+7	(S)	5	3
	Middle Atlantic	+7	+16	+12	+4	+5	4	3
	East North Central	+14	+15	+8	+5	-1	4	3
	West North Central	+26	+14	-4	+2	-5	4	2
	South Atlantic	+13	-2	0	+14	-11	6	6
	East South Central	+14	+11	-2	+7	-14	7	4
	West South Central	+20	+45	+32	+21	+22	7	6
	Mountain	(S)	(S)	-1	(S)	(S)	6	2
	Pacific	+14	+32	+17	+1	+4	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 precent) shown in columns A and D are based on medians of measurements on data for August, September, and October 1977.

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 10 percent of the sales estimates and 20 percent for inventories.

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

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

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

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

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

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

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

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

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1977-December 1978

1972 SIC code	Kind of business	1977											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	91.7	92.1	107.2	99.0	100.6	103.8	95.5	104.5	102.5	100.4	101.1	99.6
	Total (excluding farm-product raw materials)	89.6	91.5	106.3	99.7	101.8	106.0	96.5	105.8	103.6	100.0	100.0	96.9
50	Durable goods, total	87.1	88.2	106.3	101.3	103.7	107.8	96.9	106.5	105.8	101.1	99.3	94.0
501	Motor vehicles and automotive parts and supplies	89.7	89.3	109.5	108.3	107.5	107.2	100.5	105.9	101.1	94.2	95.0	90.0
502	Furniture and home furnishings	82.6	89.5	104.2	97.8	98.8	106.7	90.7	106.4	106.9	110.3	109.2	94.7
503	Lumber and other construction materials	78.4	80.8	101.1	99.8	108.0	112.1	104.6	116.4	108.7	102.4	100.6	85.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.7	89.9	104.1	101.6	101.8	104.0	92.1	106.4	102.0	109.1	110.4	98.2
505	Metals and minerals, except petroleum	94.4	90.9	110.4	99.9	105.3	104.8	92.5	107.5	105.0	96.0	99.5	90.8
506	Electrical goods	87.8	88.6	101.8	97.1	96.0	108.4	98.5	105.9	104.2	106.4	101.9	101.6
507	Hardware, plumbing, heating equipment, and supplies	87.4	87.4	101.2	99.4	102.9	108.3	99.4	108.7	106.9	105.8	100.8	89.9
508	Machinery, equipment, and supplies	86.4	89.0	107.7	102.7	104.4	108.8	95.7	103.5	107.3	102.5	95.5	94.9
509	Miscellaneous durable goods	82.8	89.8	105.7	98.8	100.4	107.7	89.8	105.8	106.7	104.1	104.3	102.0
51	Nondurable goods, total	95.1	95.1	108.4	97.4	98.3	100.7	94.8	102.3	99.7	99.4	102.8	103.9
	Total (excluding farm-product raw materials)	91.7	94.2	106.8	98.1	100.0	104.1	96.3	104.6	101.6	99.0	100.6	100.3
511	Paper and paper products	93.8	92.2	104.3	95.1	96.4	104.2	97.3	108.3	104.7	103.6	103.2	95.7
512	Drugs, drug proprietaries, and druggists' sundries	94.2	92.6	105.1	98.8	97.7	98.7	92.7	103.9	104.4	108.3	101.4	98.9
513	Apparel, piece goods, and notions	89.7	94.6	106.4	95.2	95.2	100.5	95.1	114.9	108.8	105.4	105.6	87.1
514	Groceries and related products	94.2	90.9	103.8	98.5	101.5	106.7	99.1	105.4	100.7	100.1	99.7	98.5
515	Farm-product raw materials[1]	105.1	95.8	112.8	96.9	101.5	88.2	88.5	95.5	93.5	102.2	110.6	108.6
516	Chemicals and allied products	87.1	89.9	107.4	101.2	102.5	106.5	97.0	107.2	103.4	102.0	99.3	94.3
517	Petroleum and petroleum products	94.8	102.6	105.4	98.9	90.9	98.9	100.1	101.9	97.3	102.4	101.4	105.6
518	Beer, wine, and distilled alcoholic beverages	75.8	80.8	101.4	94.1	103.0	113.8	98.1	107.0	100.3	98.8	105.8	120.1
519	Miscellaneous nondurable goods	95.1	101.7	116.8	104.4	101.4	100.9	88.1	96.2	99.6	95.4	96.1	100.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	102.1	101.4	100.9	99.9	98.4	98.4	98.4	98.4	98.6	100.9	102.1	101.1
	Total (excluding farm-product raw materials)	99.8	100.3	100.8	100.1	100.3	100.5	100.1	99.2	99.3	100.0	100.2	99.4
50	Durable goods, total	99.1	100.3	101.1	100.9	101.4	101.8	100.9	99.4	99.1	99.1	98.9	98.9
501	Motor vehicles and automotive parts and supplies	101.4	102.8	102.1	101.4	102.4	100.9	98.9	96.6	97.9	97.8	97.9	100.4
502	Furniture and home furnishings	98.9	99.4	100.1	99.8	99.9	101.4	100.9	101.3	100.9	99.6	100.4	98.1
503	Lumber and other construction materials	97.9	98.4	102.8	102.6	105.4	103.1	102.9	100.6	97.8	95.3	96.4	97.1
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	100.8	99.9	100.9	103.4	107.6	104.6	101.6	100.3	100.6	94.4	89.3
505	Metals and minerals, except petroleum	100.4	98.9	100.9	101.4	100.1	99.4	102.8	101.3	98.1	96.8	99.1	101.4
506	Electrical goods	97.3	97.6	99.1	99.4	100.6	101.9	101.1	101.3	100.4	101.6	101.4	98.8
507	Hardware, plumbing, heating equipment, and supplies	98.1	98.6	101.6	103.1	102.8	101.1	100.9	101.4	98.4	98.3	98.4	97.6
508	Machinery, equipment, and supplies	99.1	101.1	101.9	100.6	101.1	102.3	100.1	97.9	99.1	99.6	99.6	97.8
509	Miscellaneous durable goods	97.1	98.9	96.8	98.4	96.8	101.3	101.9	102.9	101.3	103.1	101.8	100.4
51	Nondurable goods, total	105.4	103.4	100.9	98.1	93.9	93.3	94.8	97.3	97.6	103.9	106.9	105.4
	Total (excluding farm-product raw materials)	100.5	100.2	100.5	99.4	98.2	98.4	98.3	99.0	99.8	101.9	102.7	100.9
511	Paper and paper products	99.1	99.1	98.8	100.4	99.8	101.9	99.6	100.9	100.1	100.3	99.8	100.9
512	Drugs, drug proprietaries, and druggists' sundries	96.4	97.8	100.1	101.4	98.1	100.4	99.3	100.1	102.4	104.4	101.4	98.9
513	Apparel, piece goods, and notions	100.1	99.6	98.4	98.6	101.1	100.4	102.6	101.1	100.4	99.1	99.1	99.9
514	Groceries and related products	99.9	100.9	102.4	99.9	98.4	98.4	98.1	98.1	99.1	101.3	102.9	101.7
515	Farm-product raw materials[1]	121.4	113.9	104.9	92.4	80.8	73.9	84.8	84.8	89.8	108.9	122.1	123.9
516	Chemicals and allied products	99.8	100.1	102.1	101.4	101.3	99.9	99.8	99.1	99.6	97.8	99.4	100.1
517	Petroleum and petroleum products	104.8	99.8	97.1	93.1	95.1	96.8	96.4	99.3	101.8	106.8	105.6	104.3
518	Beer, wine, and distilled alcoholic beverages	96.9	97.9	97.1	98.9	101.8	103.1	98.6	97.6	100.6	107.6	105.4	95.3
519	Miscellaneous nondurable goods	103.6	104.3	102.9	100.6	96.3	93.3	95.3	98.4	98.1	99.8	103.6	104.4

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1977-December 1978—Continued

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.9	92.2	106.9	96.5	103.5	103.8	95.4	105.1	98.9	102.5	101.4	96.7
	Total (excluding farm-product raw materials)	91.9	91.6	106.4	97.5	104.6	105.9	95.9	106.4	100.9	102.2	98.8	95.1
50	Durable goods, total	89.8	89.0	105.2	98.7	106.3	107.6	96.4	107.1	102.9	104.2	98.4	91.4
501	Motor vehicles and automotive parts and supplies	93.6	89.1	107.0	107.0	107.4	108.0	99.3	107.5	96.9	98.4	92.5	91.4
502	Furniture and home furnishings	84.6	89.1	104.6	95.9	101.6	106.2	89.4	107.2	104.2	112.8	108.3	93.8
503	Lumber and other construction materials	81.6	81.2	101.7	95.3	110.7	112.5	102.4	116.9	104.7	108.0	100.0	82.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.4	90.3	102.8	100.3	109.7	98.1	95.1	104.0	104.7	105.7	108.7	97.3
505	Metals and minerals, except petroleum	98.8	91.0	108.9	97.9	107.9	103.6	90.7	108.4	103.1	100.0	97.4	91.1
506	Electrical goods	89.4	89.1	101.7	95.2	99.2	106.4	100.2	104.9	100.9	107.7	103.3	98.5
507	Hardware, plumbing, heating equipment, and supplies	89.5	87.8	100.8	97.5	105.5	107.8	99.7	109.4	103.4	107.2	101.1	88.0
508	Machinery, equipment, and supplies	88.1	88.8	107.8	99.6	107.3	108.7	95.7	104.3	104.0	103.7	96.9	91.6
509	Miscellaneous durable goods	86.5	89.8	104.7	95.1	101.0	110.6	87.6	108.0	102.4	109.5	105.2	96.2
51	Nondurable goods, total	97.0	95.1	108.7	95.1	101.3	100.9	94.8	102.9	96.9	100.9	102.6	100.7
	Total (excluding farm-product raw materials)	93.9	94.5	107.7	95.7	102.7	104.4	95.6	105.1	98.6	100.5	100.4	97.5
511	Paper and paper products	95.2	92.4	104.5	92.6	101.9	103.0	96.6	108.3	103.7	105.0	100.5	92.7
512	Drugs, drug proprietaries, and druggists' sundries	98.2	92.7	104.9	96.0	100.4	99.8	92.7	104.5	101.4	108.3	100.6	96.9
513	Apparel, piece goods, and notions	91.3	94.8	106.4	92.3	99.6	99.3	93.5	115.1	106.8	108.1	103.9	86.0
514	Groceries and related products	95.0	91.0	104.1	96.4	104.5	106.2	99.1	106.0	100.1	100.3	99.9	94.3
515	Farm-product raw materials[1]	106.8	95.8	112.8	94.4	99.6	89.9	92.3	94.6	92.6	100.5	111.2	104.6
516	Chemicals and allied products	90.0	89.4	106.9	98.2	105.2	106.5	97.0	107.3	99.7	105.5	98.0	94.1
517	Petroleum and petroleum products	96.5	102.1	107.7	96.2	92.8	99.9	98.4	101.7	95.5	102.4	98.7	105.8
518	Beer, wine, and distilled alcoholic beverages	78.7	80.9	100.7	91.2	106.7	113.9	97.3	108.1	96.9	101.9	105.3	115.3
519	Miscellaneous nondurable goods	97.4	101.6	118.1	101.5	104.3	102.9	87.2	96.5	96.0	97.0	96.4	97.4
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	101.9	101.3	101.0	100.1	98.6	98.5	98.4	98.0	98.9	100.6	101.7	100.5
	Total (excluding farm-product raw materials)	99.7	100.3	100.8	100.2	100.2	100.5	100.1	99.1	99.4	100.0	100.3	99.2
50	Durable goods, total	99.1	100.2	100.9	100.6	101.1	101.6	100.8	99.3	99.3	99.0	99.1	98.7
501	Motor vehicles and automotive parts and supplies	101.4	102.6	101.8	101.0	102.1	100.9	98.9	96.8	97.9	97.8	98.1	100.5
502	Furniture and home furnishings	99.4	99.2	99.8	99.5	99.8	101.3	100.6	101.0	101.5	100.5	99.1	98.1
503	Lumber and other construction materials	98.1	98.8	103.0	102.6	105.0	101.6	101.5	100.2	98.9	96.1	96.9	97.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	102.4	99.2	100.5	103.3	107.3	104.4	101.1	100.6	101.2	93.9	89.0
505	Metals and minerals, except petroleum	100.4	98.6	100.5	101.0	99.7	99.2	102.4	101.9	98.6	96.7	99.5	101.5
506	Electrical goods	97.2	97.4	99.0	99.9	100.2	101.8	101.2	101.5	100.4	101.2	101.0	98.8
507	Hardware, plumbing, heating equipment, and supplies	97.8	98.0	101.6	103.2	102.8	101.7	100.5	101.4	98.7	98.6	98.2	97.3
508	Machinery, equipment, and supplies	99.2	101.1	101.7	100.0	101.0	102.3	100.1	98.1	99.3	99.6	99.5	97.8
509	Miscellaneous durable goods	97.1	98.7	96.6	98.2	96.6	101.2	101.8	102.6	101.5	103.1	102.1	100.2
51	Nondurable goods, total	104.8	103.2	101.6	98.3	95.3	93.7	94.6	96.3	98.6	103.3	106.0	103.9
	Total (excluding farm-product raw materials)	100.4	100.2	100.7	99.7	98.5	98.6	98.3	98.6	99.7	101.9	102.5	100.8
511	Paper and paper products	98.7	99.0	98.7	100.6	99.4	102.0	99.6	100.6	99.5	101.5	100.0	100.2
512	Drugs, drug proprietaries, and druggists' sundries	96.3	97.6	99.9	101.3	97.7	100.2	99.2	99.8	102.0	105.0	101.8	98.8
513	Apparel, piece goods, and notions	99.9	99.4	98.6	98.5	101.1	100.0	102.2	101.0	100.0	98.3	100.1	100.6
514	Groceries and related products	99.6	100.7	102.2	100.1	98.6	98.5	98.1	97.8	99.0	101.8	102.1	101.3
515	Farm-product raw materials[1]	120.2	114.0	106.9	93.1	81.5	76.1	84.4	83.5	88.3	108.7	121.4	120.9
516	Chemicals and allied products	99.9	99.9	102.7	101.1	101.3	99.8	99.6	99.4	99.9	96.9	98.7	100.6
517	Petroleum and petroleum products	104.9	100.2	97.9	93.5	95.6	97.0	95.4	99.0	102.5	104.8	104.6	104.2
518	Beer, wine, and distilled alcoholic beverages	96.6	96.5	97.2	99.0	101.3	103.1	98.9	97.6	100.8	107.5	106.5	94.6
519	Miscellaneous nondurable goods	103.4	103.2	105.3	101.1	96.2	92.9	95.1	97.2	98.6	99.7	103.2	104.1

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.

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.

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 bench-

mark 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)[1]

Ferrous Metals Service Centers and Offices (SIC 5051 pt.)[1]—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

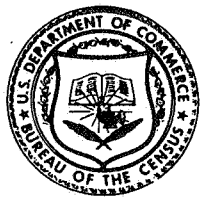
plumbing, heating, and air-conditioning equipment and electrical supplies were classified in wholesale trade rather than retail trade. However, establishments primarily selling lumber and other building materials and paint, glass, and wallpaper were classified in retail trade if they sell to the public,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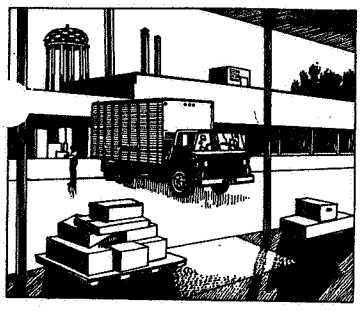
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued August 1978

June 1978

BW-78-6

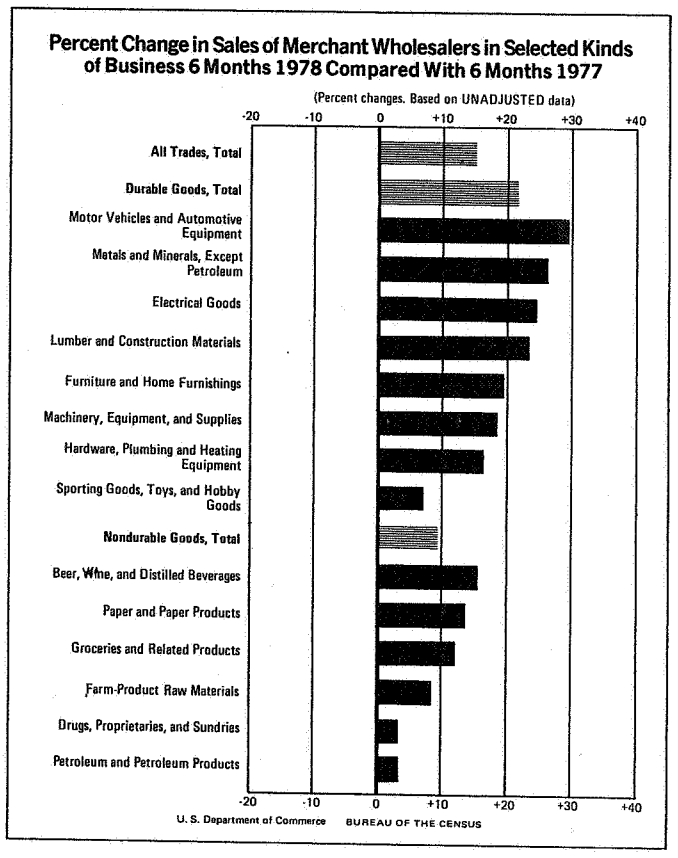
Sales—June 1978 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences, but not for price changes, were $63.4 billion, down 1 percent from the previous month, but 18 percent above June 1977. Adjusted April-through-June total sales were up 10 percent from the January-through-March period and were 18 percent above the total sales for the comparable months a year ago.

After adjustment, June sales in the durable goods trades were up 1 percent from last month and were 24 percent above sales for the same month a year ago. Nondurable goods sales were down 2 percent from May, but were 14 percent above June 1977. Total monthly sales in the durable goods group during the April-through-June period were 8 percent above the prior 3 months and were 24 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were 11 percent above the January-through-March period and were 13 percent above the total sales for the same period a year ago.

By trade group, comparisons with previous month sales levels owed mixed results with six trade groups showing gains, eight indicating declines, and two with no change. The larger increases were shown in sporting goods, toys, and hobby goods and metals and minerals, except petroleum, both up 9 percent. The most notable decrease was reported in petroleum and petroleum products (-8%). Compared with sales of a year ago, all trade groups showed increases, with the sharpest increase reported in metals and minerals, except petroleum (33%).

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variations, but not for price changes, were valued at $75.2 billion at the end of June, virtually unchanged from last month, but 16 percent above the same month a year ago. Durable goods stocks remained about the same level as May, but were 19 percent above June 1977. Nondurable goods stocks were down 2 percent from last month, but were 11 percent above stocks on hand a year ago.

Based on adjusted data, most trade groups showed decreases from their previous month inventory levels with the larger declines reported in miscellaneous durable goods (-6%) and petroleum and petroleum products (-5%). The most substantial increases were shown in motor vehicles and automotive equipment and metals and minerals, except petroleum, both up 3 percent. Compared with year-ago inventories, all trade groups reported increases. The sharper increases were noted in metals and minerals, except petroleum (32%) and lumber and construction materials (30%).



Stock-Sales Ratio—The June stock-sales ratio for merchant wholesalers, based on seasonally-adjusted data, was 119, up 1 point from May, but down 2 points from June 1977. The stock-sales ratio for durable goods was 167, down 2 points from last month and 8 points below the year-ago ratio. The ratio for nondurable goods was 78, up 1 point from May, but down 1 point from the June 1977 ratio.

An advance release of the June 1978 data was issued on August 11, 1978.

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: 1978 and 1977

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

1972 SIC code	Kind of business	1978						1977							Total 6 months	
		Jan.	Feb.	Mar.	Apr.	May	June[P]	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1978	1977
	Merchant wholesalers, total	52,143	52,766	62,900	60,613	66,249	66,022	55,794	51,290	55,597	54,505	54,251	56,034	56,224	360,692	314,202
	Total (excluding farm-product raw materials)	46,343	47,112	55,848	54,095	58,061	58,891	49,990	45,838	50,659	49,544	49,132	49,762	50,139	320,350	276,977
50	Durable goods, total	22,869	23,880	28,985	28,784	30,405	31,229	25,292	22,915	25,998	25,461	25,369	25,340	24,797	166,151	135,723
501	Motor vehicles and automotive parts and supplies	4,797	5,065	5,870	5,956	6,083	6,089	4,795	4,463	4,762	4,554	4,605	4,721	4,698	33,860	26,243
5013,4	Automotive parts and supplies, tires and tubes	2,517	2,666	3,128	3,217	3,403	3,346	2,597	2,395	2,657	2,538	2,661	2,651	2,551	18,278	13,924
5013	Automotive parts and supplies	2,166	2,286	2,602	2,706	2,828	2,783	2,221	2,027	2,229	2,089	2,227	2,220	2,167	15,371	11,867
502	Furniture and home furnishings	867	921	1,111	1,046	1,077	1,087	968	816	972	998	1,048	1,045	1,025	6,109	5,122
5021	Furniture--household and office	304	311	356	352	368	358	291	251	310	308	320	340	350	2,048	1,530
5023	Home furnishings	564	610	755	695	710	729	677	565	662	689	728	705	676	4,061	3,592
503	Lumber and other construction materials	1,867	1,891	2,368	2,517	2,889	3,015	2,343	2,271	2,657	2,553	2,476	2,334	2,086	14,547	11,804
5031	Lumber, plywood, and millwork	1,290	1,288	1,582	1,676	1,947	2,036	1,571	1,511	1,792	1,681	1,637	1,540	1,389	9,819	8,007
5039	Construction materials, n.e.c	576	603	786	841	942	979	772	760	866	872	839	794	697	4,728	3,797
505	Metals and minerals, except petroleum	2,505	2,557	3,040	2,942	3,153	3,314	(NA)	(NA)	2,731	2,709	2,437	2,592	2,423	17,512	13,856
5051 pt.	Ferrous metals service centers and offices	1,922	1,970	2,344	2,190	2,360	2,431	(NA)	(NA)	2,039	2,083	1,845	1,869	1,774	13,218	10,163
5051 pt.	Ferrous metals service centers	1,386	1,443	1,713	1,629	1,755	1,784	(NA)	(NA)	1,480	1,478	1,385	1,359	1,282	9,710	7,105
506	Electrical goods	2,541	2,627	3,096	2,980	3,239	[r]3,424	2,761	2,647	2,821	2,846	2,998	2,973	2,964	17,907	14,496
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,262	1,354	1,561	1,556	1,698	1,792	1,390	1,324	1,456	1,369	1,436	1,436	1,379	9,222	7,214
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,279	1,273	1,535	1,424	1,541	1,632	1,371	1,323	1,365	1,477	1,562	1,537	1,585	8,685	7,282
5064	Electrical appliances, TV and radio sets	763	762	939	841	931	1,000	940	914	919	979	1,011	989	1,003	5,236	4,716
507	Hardware, plumbing, heating equipment, and supplies	1,790	1,708	2,021	2,102	2,306	2,385	2,017	1,898	2,068	1,961	2,027	1,974	1,820	12,312	10,656
5072	Hardware	693	679	793	797	856	837	740	700	790	750	750	768	676	4,654	4,216
5074	Plumbing and heating equipment and supplies (hydronics)	726	675	801	834	904	907	852	799	842	802	846	791	753	4,848	4,[illegible]
508	Machinery, equipment, and supplies	6,190	6,632	8,301	8,296	8,616	8,778	7,349	6,465	7,380	7,217	7,163	6,941	7,019	46,813	39,[illegible]
5082	Construction and mining machinery and equipment	825	875	1,130	1,254	1,276	1,271	1,059	876	971	1,002	1,006	1,025	1,006	6,632	5,754
5084,5	Industrial machinery, equipment, and supplies	2,545	2,790	3,294	3,077	3,388	3,510	2,821	2,494	2,891	2,771	2,750	2,858	2,861	18,605	15,083
5086	Professional equipment, supplies	710	732	863	816	873	938	840	757	846	805	808	773	805	4,931	4,452
5093	Scrap and waste materials	757	815	979	958	1,058	1,052	903	679	802	810	807	812	779	5,618	4,943
51	Nondurable goods, total	29,274	28,886	33,915	31,829	35,844	34,793	30,502	28,375	29,599	29,044	28,882	30,694	31,427	194,542	178,479
	Total (excluding farm-product raw materials)	23,474	23,232	26,863	25,311	27,656	27,662	24,698	22,923	24,661	24,084	23,763	24,422	25,342	154,259	141,254
511	Paper and paper products	1,316	1,284	1,506	1,395	1,508	1,486	1,348	1,208	1,388	1,366	1,341	1,335	1,358	8,496	7,486
5111,3	Printing, writing, industrial, and personal service paper	950	926	1,100	1,032	1,126	1,132	1,054	935	1,060	1,032	1,007	988	995	6,266	5,782
512	Drugs, drug proprietaries, and druggists' sundries	887	824	994	912	943	948	907	848	952	948	939	926	922	5,508	5,333
5122	Drugs, drug proprietaries, and druggists' sundries	887	824	994	912	943	948	907	848	952	948	939	926	922	5,508	5,333
5122 pt.	General-line drugs	423	393	470	423	447	447	410	388	459	455	438	452	444	2,603	2,428
513	Apparel, piece goods, and notions[1]	1,620	1,615	2,063	1,818	2,099	2,182	1,589	1,521	1,938	1,815	1,919	1,837	1,617	11,396	8,948
514	Groceries and related products	9,261	9,093	10,398	9,916	10,873	10,687	9,414	9,132	9,716	9,433	9,289	9,591	9,798	60,229	53,741
5141	Groceries, general-line	3,426	3,333	3,740	3,547	3,791	3,684	3,412	3,347	3,493	3,396	3,360	3,579	3,587	21,520	19,848
5144	Poultry and poultry products	402	397	486	468	507	513	448	412	456	432	419	458	454	2,771	2,499
5145	Confectionery	154	163	191	173	191	193	150	146	171	172	183	194	188	1,065	867
5147	Meats and meat products	1,460	1,462	1,651	1,688	1,871	1,885	1,513	1,444	1,591	1,486	1,498	1,525	1,510	10,017	8,421
5148	Fresh fruits and vegetables	839	824	986	1,035	1,184	1,209	852	834	877	810	836	886	889	6,077	4,763
515	Farm-product raw materials	5,800	5,654	7,052	6,518	8,188	7,131	5,804	5,452	4,938	4,960	5,119	6,272	6,085	40,343	37,225
5153	Grain	4,549	4,503	5,718	5,358	6,890	6,030	4,830	4,580	4,011	4,005	4,069	4,968	4,730	33,049	30,911
517	Petroleum and petroleum products	4,209	4,085	4,249	3,830	4,178	4,128	(NA)	(NA)	3,752	3,612	3,839	3,983	4,355	24,678	24,026
5171	Petroleum bulk stations and terminals	2,387	2,293	2,384	2,188	2,425	2,314	(NA)	(NA)	2,160	2,103	2,195	2,266	2,523	13,991	13,817
518	Beer, wine, and distilled alcoholic beverages	1,654	1,770	2,299	1,993	2,295	2,438	2,233	1,951	2,108	2,018	1,884	2,143	2,444	12,449	10,823
5181	Beer and ale	795	839	1,094	998	1,219	1,320	1,126	1,010	1,093	1,012	888	938	1,020	6,264	5,273
5182	Wines and distilled alcoholic beverages	859	931	1,204	996	1,076	1,118	1,107	941	1,014	1,005	995	1,204	1,424	6,185	5,550
519	Miscellaneous nondurable goods	3,723	3,782	4,434	4,568	4,730	4,688	4,186	3,539	3,822	4,055	3,722	3,749	4,028	25,926	25,848
5194	Tobacco and tobacco products	721	692	782	765	812	828	787	734	780	751	748	705	819	4,601	4,331

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

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

[1]The apparel, piece goods, and notions group is subject to a sampling variability of 13 percent for June 1978.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978						1977						
		Jan.	Feb.	Mar.	Apr.	May	June[p]	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	69,596	71,156	73,931	74,635	74,634	74,269	64,117	63,666	64,105	65,291	66,530	68,082	68,555
	Total (excluding farm-product raw materials)	64,090	65,682	67,973	69,060	69,883	70,023	60,612	60,642	61,074	61,963	62,324	62,939	63,245
50	Durable goods, total	44,287	45,757	47,275	47,957	48,918	49,268	41,593	41,738	42,142	42,484	42,627	43,252	43,676
501	Motor vehicles and automotive parts and supplies	7,709	8,189	7,995	7,973	8,246	8,403	6,932	6,864	6,831	6,842	7,089	7,376	7,424
5013,4	Automotive parts and supplies, tires and tubes	4,743	4,962	4,856	4,901	5,149	5,180	4,333	4,304	4,512	4,496	4,438	4,669	4,607
5013	Automotive parts and supplies	3,953	4,163	4,041	4,171	4,382	4,410	3,616	3,534	3,712	3,663	3,639	3,912	3,790
502	Furniture and home furnishings	1,560	1,606	1,633	1,669	1,730	1,702	1,407	1,409	1,451	1,493	1,455	1,444	1,512
5023	Home furnishings	1,137	1,184	1,182	1,233	1,279	1,265	1,022	1,026	1,069	1,085	1,057	1,054	1,099
503	Lumber and other construction materials	2,676	2,761	2,919	2,966	3,030	2,967	2,309	2,353	2,429	2,510	2,489	2,513	2,602
5031	Lumber, plywood, and millwork[1]	1,715	1,775	1,870	1,882	1,963	1,917	1,559	1,588	1,632	1,659	1,629	1,643	1,671
505	Metals and minerals, except petroleum	4,449	4,660	4,953	4,976	5,356	5,493	(NA)	(NA)	4,519	4,434	4,277	4,444	4,459
5051 pt.	Ferrous metals service centers and offices	3,471	3,591	3,820	3,823	4,116	4,184	(NA)	(NA)	3,692	3,689	3,511	3,514	3,568
5051 pt.	Ferrous metals service centers	2,633	2,760	3,039	2,971	3,220	3,290	(NA)	(NA)	2,858	2,874	2,686	2,738	2,768
506	Electrical goods	4,563	4,594	4,867	4,951	5,129	5,183	4,406	4,392	4,580	4,599	4,591	4,611	4,653
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,114	2,214	2,226	2,286	2,417	2,397	2,084	1,987	2,088	2,069	2,025	2,100	2,121
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,449	2,380	2,640	2,665	2,712	2,785	2,322	2,405	2,493	2,530	2,566	2,511	2,533
507	Hardware, plumbing, heating equipment, and supplies	3,712	3,876	4,058	4,231	4,222	4,180	3,639	3,704	3,582	3,578	3,621	3,608	3,620
5072	Hardware	1,366	1,384	1,421	1,428	1,445	1,412	1,256	1,286	1,282	1,296	1,319	1,320	1,358
5074	Plumbing and heating equipment and supplies (hydronics)	1,590	1,678	1,784	1,861	1,815	1,820	1,619	1,669	1,588	1,579	1,566	1,562	1,555
508	Machinery, equipment, and supplies	15,508	16,005	16,511	16,762	16,796	16,950	14,574	14,417	14,513	14,706	14,631	15,026	15,307
5082	Construction and mining machinery and equipment	3,281	3,396	3,505	3,516	3,589	3,619	2,864	2,865	2,928	3,110	3,083	3,202	3,261
5084,5	Industrial machinery, equipment, and supplies	4,816	4,912	4,996	5,055	5,160	5,205	4,621	4,478	4,447	4,503	4,534	4,555	4,742
51	Nondurable goods, total	25,309	25,399	26,656	26,678	25,716	25,001	22,523	21,928	21,963	22,807	23,903	24,830	24,879
	Total (excluding farm-product raw materials)	19,803	19,925	20,699	21,103	20,966	20,755	19,018	18,904	18,932	19,479	19,697	19,687	19,569
511	Paper and paper products	r1,255	r1,259	r1,310	1,349	1,343	1,361	r1,293	r1,268	r1,248	r1,275	r1,261	r1,269	r1,261
5111,3	Printing, writing, industrial, and personal service paper	868	877	910	911	929	935	905	887	877	880	878	865	873
512	Drugs, drug proprietaries, and druggists' sundries	1,266	1,292	1,330	1,345	1,350	1,395	1,268	1,285	1,297	1,320	1,373	1,337	1,303
514	Groceries and related products	5,401	5,376	5,710	5,740	5,752	5,714	5,307	5,283	5,283	5,448	5,507	5,465	5,540
5141	Groceries, general-line	2,350	2,366	2,562	2,500	2,495	2,460	2,371	2,268	2,265	2,363	2,446	2,441	2,473
517	Petroleum and petroleum products	2,045	1,936	1,953	1,872	1,938	1,859	(NA)	(NA)	1,959	2,064	2,023	2,053	2,042
518	Beer, wine, and distilled alcoholic beverages	1,917	1,889	2,017	2,133	2,135	2,144	2,114	2,074	1,977	2,048	2,121	2,075	1,809
5181	Beer and ale	611	641	707	758	730	710	709	675	660	673	658	632	581
5182	Wines and distilled alcoholic beverages	1,305	1,248	1,311	1,375	1,405	1,434	1,405	1,399	1,317	1,375	1,462	1,443	1,228

See footnotes below table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978						1977						
		Jan.	Feb.	Mar.	Apr.	May	June[p]	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	133	135	118	123	113	112	115	124	115	120	123	122	122
	Total (excluding farm-product raw materials)	138	139	122	128	120	119	121	132	121	125	127	126	126
50	Durable goods, total	194	192	163	167	161	158	164	182	162	167	168	171	176
501	Motor vehicles and automotive parts and supplies	161	162	136	134	136	138	145	154	143	150	154	156	158
5013,4	Automotive parts and supplies, tires and tubes	188	186	155	152	151	155	167	180	170	177	167	176	181
5013	Automotive parts and supplies	183	182	155	154	155	158	163	174	167	175	163	176	175
502	Furniture and home furnishings	180	174	147	159	161	157	145	173	149	150	139	138	147
5023	Home furnishings	202	194	157	178	180	174	151	182	162	157	145	150	163
503	Lumber and other construction materials	143	146	123	118	105	98	99	104	91	98	101	108	125
5031	Lumber, plywood, and millwork[1]	133	138	118	112	101	94	99	105	91	99	100	107	120
505	Metals and minerals, except petroleum	178	182	163	169	170	166	(NA)	(NA)	165	164	176	171	184
5051 pt.	Ferrous metals service centers and offices	181	182	163	175	174	172	(NA)	(NA)	181	177	190	188	201
5051 pt.	Ferrous metals service centers	190	191	177	182	184	184	(NA)	(NA)	193	194	194	201	216
506	Electrical goods	180	175	157	166	158	r151	160	166	162	162	153	155	157
5063	Electrical apparatus and equipment, wiring supplies and construction materials	168	163	143	147	142	134	150	150	143	151	141	146	154
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	191	187	172	187	176	171	169	182	183	171	164	163	160
507	Hardware, plumbing, heating equipment, and supplies	207	227	201	201	183	175	180	195	173	182	179	183	199
5072	Hardware	197	204	179	179	169	169	170	184	162	173	176	172	201
5074	Plumbing and heating equipment and supplies (hydronics)	219	249	223	223	201	201	190	209	189	197	185	197	206
508	Machinery, equipment, and supplies	251	241	199	202	195	193	198	223	197	204	204	216	218
5082	Construction and mining machinery and equipment	398	388	310	280	281	285	270	327	302	310	306	312	324
5084,5	Industrial machinery, equipment, and supplies	189	176	152	164	152	148	164	180	154	163	165	159	166
51	Nondurable goods, total	86	88	79	84	72	72	74	77	74	79	83	81	79
	Total (excluding farm-product raw materials)	84	86	77	83	76	75	77	82	77	81	83	81	77
511	Paper and paper products	r95	r98	r87	97	89	92	r96	r105	r90	r93	r94	r95	r93
5111,3	Printing, writing, industrial, and personal service paper	91	95	83	88	82	83	86	95	83	85	87	88	88
512	Drugs, drug proprietaries, and druggists' sundries	143	157	134	147	143	147	140	152	136	139	146	144	141
514	Groceries and related products	58	59	55	58	53	53	56	58	54	58	59	57	57
5141	Groceries, general-line	69	71	68	70	66	67	69	68	65	70	73	68	69
517	Petroleum and petroleum products	49	47	46	49	46	45	(NA)	(NA)	52	57	53	52	47
518	Beer, wine, and distilled alcoholic beverages	116	107	88	107	93	88	95	106	94	102	113	97	74
5181	Beer and ale	77	76	65	76	60	54	63	67	60	66	74	67	57
5182	Wines and distilled alcoholic beverages	152	134	109	138	131	128	127	149	130	137	147	120	86

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

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

[1]The lumber, plywood, and millwork group is subject to a sampling variability of 8 percent for June 1978.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978 Jan.	Feb.	Mar.	Apr.	May	June[p]	1977 June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Sales ADJUSTED for seasonal variations and trading-day differences												
	Merchant wholesalers, total	55,985	57,635	58,877	62,152	64,011	63,417	53,735	53,495	53,208	53,307	53,639	55,558	57,266
	Total (excluding farm-product raw materials)	50,554	51,733	52,625	55,247	55,790	55,485	47,157	47,334	48,037	48,018	48,630	49,887	51,663
50	Durable goods, total	25,568	26,976	27,466	28,974	28,692	28,966	23,419	23,620	24,390	24,150	24,997	25,601	26,488
501	Motor vehicles and automotive parts and supplies	5,125	5,685	5,486	5,566	5,664	5,638	4,473	4,439	4,497	4,504	4,889	4,969	5,220
502	Furniture and home furnishings	1,025	1,034	1,062	1,091	1,060	1,024	907	900	914	934	950	957	1,082
503	Lumber and other construction materials	2,288	2,329	2,328	2,641	2,610	2,680	2,090	2,171	2,283	2,349	2,418	2,320	2,443
505	Metals and minerals, except petroleum	2,535	2,810	2,792	3,005	2,922	3,199	(NA)	(NA)	2,540	2,580	2,539	2,605	2,669
506	Electrical goods	2,842	2,948	3,044	3,130	3,265	r3,217	2,547	2,686	2,664	2,731	2,818	2,918	2,917
507	Hardware, plumbing, heating equipment, and supplies	2,000	1,945	2,005	2,156	2,186	2,212	1,863	1,909	1,902	1,834	1,916	1,958	2,024
508	Machinery, equipment, and supplies	7,026	7,468	7,700	8,329	8,030	8,075	6,753	6,756	7,130	6,726	6,988	7,268	7,396
51	Nondurable goods, total	30,417	30,659	31,411	33,178	35,319	34,451	30,316	29,875	28,818	29,157	28,642	29,957	30,778
	Total (excluding farm-product raw materials)	24,986	24,757	25,159	26,273	27,098	26,519	23,738	23,714	23,647	23,852	23,633	24,286	25,175
511	Paper and paper products	1,382	1,390	1,441	1,506	1,480	1,443	1,294	1,242	1,282	1,305	1,294	1,294	1,419
512	Drugs, drug proprietaries, and druggists' sundries	903	889	948	950	939	950	919	914	916	908	867	913	932
513	Apparel, piece goods, and notions	1,774	1,704	1,939	1,970	2,107	2,197	1,580	1,600	1,687	1,668	1,821	1,740	1,856
514	Groceries and related products	9,748	9,992	9,988	10,286	10,405	10,063	8,825	9,210	9,218	9,367	9,280	9,620	9,947
515	Farm-product raw materials[1]	5,431	5,902	6,252	6,905	8,221	7,932	6,578	6,161	5,171	5,305	5,009	5,671	5,603
517	Petroleum and petroleum products	4,362	4,001	3,945	3,981	4,502	4,132	(NA)	(NA)	3,682	3,712	3,749	3,928	4,124
518	Beer, wine, and distilled alcoholic beverages	2,102	2,188	2,283	2,185	2,151	2,143	1,963	1,988	1,970	2,012	1,907	2,026	2,035
519	Miscellaneous nondurable goods	3,822	3,722	3,754	4,500	4,535	4,556	4,151	4,015	3,973	4,071	3,901	3,901	3,992
		Inventories ADJUSTED for seasonal variations												
	Merchant wholesalers, total	68,991	70,361	72,882	74,867	75,474	75,172	64,947	64,210	65,095	66,119	66,209	67,047	67,998
	Total (excluding farm-product raw materials)	64,410	65,559	67,309	68,879	69,646	69,592	60,207	60,647	61,521	62,413	62,347	62,835	63,712
50	Durable goods, total	44,686	45,684	46,838	47,673	48,363	48,468	40,876	41,404	42,396	42,896	43,014	43,642	44,[illegible]
501	Motor vehicles and automotive parts and supplies	7,603	7,981	7,854	7,894	8,076	8,328	6,867	6,937	7,071	6,989	7,248	7,534	7,394
502	Furniture and home furnishings	1,569	1,619	1,636	1,677	1,733	1,680	1,388	1,395	1,432	1,480	1,461	1,438	1,541
503	Lumber and other construction materials	2,728	2,795	2,834	2,891	2,886	2,920	2,241	2,288	2,415	2,566	2,612	2,607	2,680
505	Metals and minerals, except petroleum	4,431	4,726	4,928	4,927	5,372	5,537	(NA)	(NA)	4,461	4,520	4,418	4,484	4,397
506	Electrical goods	4,694	4,717	4,916	4,956	5,119	5,091	4,326	4,347	4,521	4,581	4,519	4,547	4,710
507	Hardware, plumbing, heating equipment, and supplies	3,796	3,955	3,994	4,100	4,107	4,110	3,598	3,669	3,533	3,636	3,684	3,667	3,709
508	Machinery, equipment, and supplies	15,633	15,831	16,235	16,762	16,630	16,569	14,253	14,410	14,824	14,840	14,690	15,086	15,651
51	Nondurable goods, total	24,305	24,677	26,044	27,194	27,111	26,704	24,071	22,806	22,699	23,223	23,195	23,405	23,630
	Total (excluding farm-product raw materials)	19,724	19,875	20,471	21,206	21,283	21,124	19,331	19,243	19,125	19,517	19,333	19,193	19,344
511	Paper and paper products	r1,272	r1,272	r1,327	1,341	1,351	1,334	r1,269	r1,273	r1,237	r1,274	r1,257	r1,272	r1,250
512	Drugs, drug proprietaries, and druggists' sundries	1,315	1,324	1,331	1,328	1,382	1,392	1,263	1,295	1,296	1,289	1,315	1,319	1,317
514	Groceries and related products	5,423	5,339	5,587	5,734	5,834	5,801	5,396	5,389	5,385	5,497	5,436	5,311	5,480
517	Petroleum and petroleum products	1,949	1,932	1,995	2,002	2,027	1,916	(NA)	(NA)	1,973	2,028	1,894	1,944	1,958
518	Beer, wine, and distilled alcoholic beverages	1,984	1,958	2,075	2,155	2,108	2,080	2,051	2,104	2,026	2,036	1,971	1,969	1,898
		Stock-sales ratios based on ADJUSTED data												
	Merchant wholesalers, total	123	122	124	120	118	119	121	120	122	124	123	121	119
	Total (excluding farm-product raw materials)	127	127	128	125	125	125	128	128	128	130	128	126	123
50	Durable goods, total	175	169	171	165	169	167	175	175	174	178	172	170	168
501	Motor vehicles and automotive parts and supplies	148	140	143	142	143	148	154	156	157	155	148	152	142
502	Furniture and home furnishings	153	157	154	154	163	164	153	155	157	158	154	150	142
503	Lumber and other construction materials	119	120	122	109	111	109	107	105	106	109	108	112	110
505	Metals and minerals, except petroleum	175	168	177	164	184	173	(NA)	(NA)	176	175	174	172	165
506	Electrical goods	165	160	161	158	157	r158	170	162	170	168	160	156	161
507	Hardware, plumbing, heating equipment, and supplies	190	203	199	190	188	186	193	192	186	198	192	187	183
508	Machinery, equipment, and supplies	223	212	211	201	207	205	211	213	208	221	210	208	212
51	Nondurable goods, total	80	80	83	82	77	78	79	76	79	80	81	78	77
	Total (excluding farm-product raw materials)	79	80	81	81	79	80	81	81	81	82	82	79	77
511	Paper and paper products	r92	r92	r92	89	91	92	r98	r102	r96	r98	r97	r98	r88
512	Drugs, drug proprietaries, and druggists' sundries	146	149	140	140	147	147	137	142	141	142	152	144	[illegible]
514	Groceries and related products	56	53	56	56	56	58	61	59	58	59	59	55	
517	Petroleum and petroleum products	45	48	51	50	45	46	(NA)	(NA)	54	55	51	49	
518	Beer, wine, and distilled alcoholic beverages	94	89	91	99	98	97	104	106	103	101	103	97	93

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

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

[1]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. 1978-June 1978 from--			
	Jan. 1978-Mar. 1978 (3 months ago)	Oct. 1977-Dec. 1977 (6 months ago)	July 1977-Sept. 1977 (9 months ago)	Apr. 1977-June 1977 (12 months ago)
Merchant wholesalers, total.....	+10	+14	+18	+18
Durable goods, total.....	+8	+12	+20	+24
Nondurable goods, total.....	+11	+15	+17	+13

Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers: 1972-1978

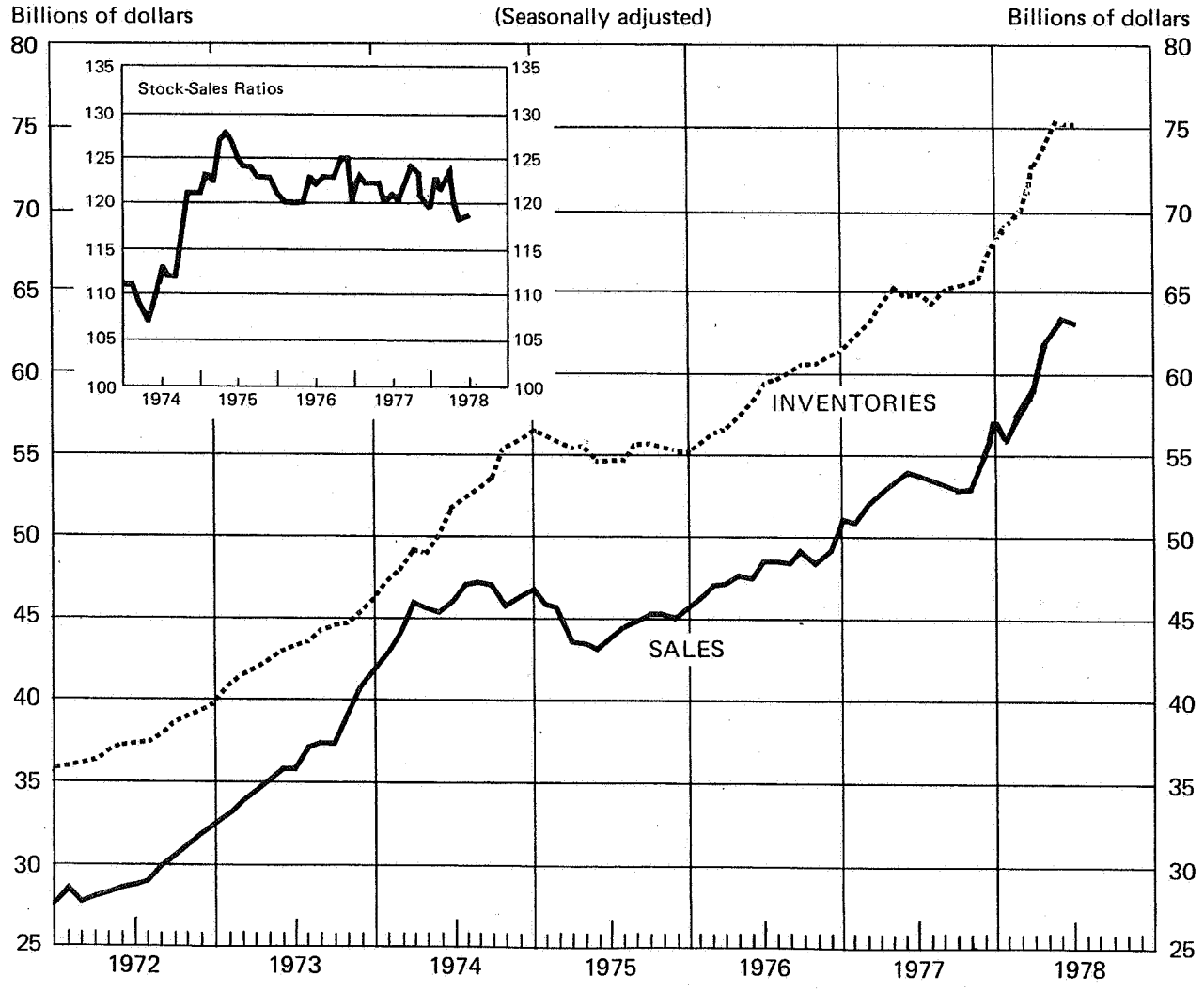


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: June 1978

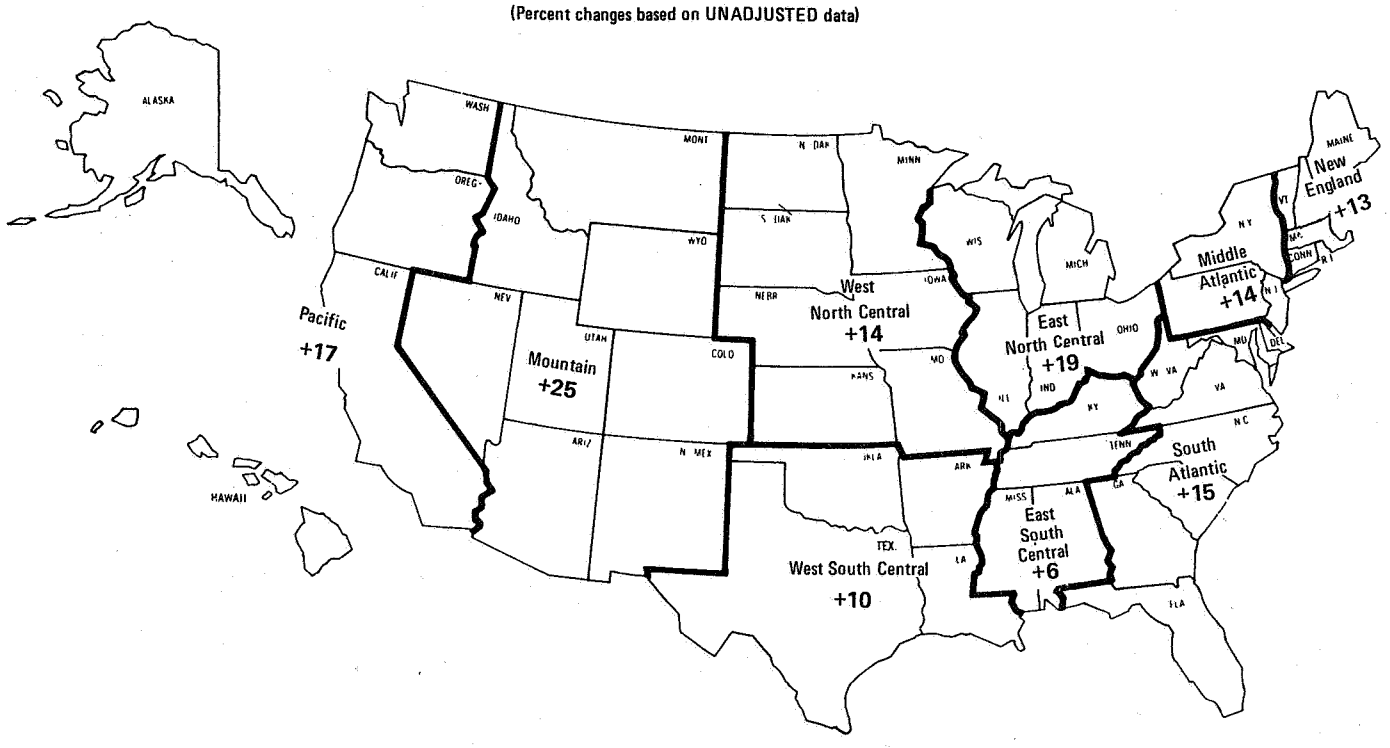
1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		June 1978 from May 1978	June 1978 from June 1977	6 months 1978 from 6 months 1977	June 1978 from May 1978	June 1978 from June 1977	June 1978 from May 1978	June 1978 from June 1977	June 1978 from May 1978	June 1978 from June 1977
	Merchant wholesalers, total	0	+18	+15	0	+16	-1	+18	0	+16
	Total (excluding farm-product raw materials)	+1	+18	+16	0	+16	-1	+18	0	+16
50	Durable goods, total	+3	+23	+22	+1	+18	+1	+24	0	+19
501	Motor vehicles and automotive parts and supplies	0	+27	+29	+2	+21	0	+26	+3	+21
5012	Automobiles and other motor vehicles	+2	+25	+26	+4	+24	-	-	-	-
5013, 4	Automotive parts and supplies, tires and tubes	-2	+29	+31	+1	+20	-	-	-	-
5013	Automotive parts and supplies	-2	+25	+30	+1	+22	-	-	-	-
502	Furniture and home furnishings	+1	+12	+19	-2	+21	-3	+13	-3	+21
5021	Furniture--household and office	-3	+23	+34	-3	+13	-	-	-	-
5021 pt.	Household furniture	-4	+38	+34	-8	+14	-	-	-	-
5021 pt.	Office furniture	-2	+16	+34	+1	+13	-	-	-	-
5023	Home furnishings	+3	+8	+13	-1	+24	-	-	-	-
503	Lumber and other construction materials	+4	+29	+23	-2	+28	+3	+28	+1	+30
5031	Lumber, plywood, and millwork	+5	+30	+23	-2	+23	-	-	-	-
5039	Construction materials, n.e.c.	+4	+27	+25	-2	(S)	-	-	-	-
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	-2	+3	+7	+1	+9	+9	+9	-3	+10
505	Metals and minerals, except petroleum	+5	+32	+26	+3	+31	+9	+33	+3	+32
5051 pt.	Ferrous metals service centers and offices	+3	+32	+30	+2	+25	-	-	-	-
5051 pt.	Ferrous metals service centers	+2	(S)	+37	+2	+28	-	-	-	-
5051 pt.	Nonferrous metals service centers and offices	+16	+40	+25	+6	+57	-	-	-	-
506	Electrical goods	r+6	r+24	+24	+1	+18	r-1	r+26	-1	+18
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+6	+29	+28	-1	+15	-	-	-	-
5064, 5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+6	+19	+19	+3	+20	-	-	-	-
5064	Electrical appliances, TV and radio sets	+7	+6	+11	+3	+16	-	-	-	-
507	Hardware, plumbing, heating equipment, and supplies	+3	+18	+16	-1	+15	+1	+19	0	+14
5072	Hardware	-2	+13	+10	-2	+12	-	-	-	-
5074	Plumbing and heating equipment and supplies (hydronics)	0	+6	+11	0	+12	-	-	-	-
5075	Warm air heating and air conditioning equipment and supplies	+20	(S)	+34	-3	+24	-	-	-	-
508	Machinery, equipment, and supplies	+2	+19	+18	+1	+16	+1	+20	0	+16
5081	Commercial machines and equipment	+4	+26	+28	+5	+3	-	-	-	-
5082	Construction and mining machinery and equipment	0	+20	+15	+1	+26	-	-	-	-
5083	Farm and garden machinery and equipment	-4	+22	+17	0	+17	-	-	-	-
5084, 5	Industrial machinery, equipment, and supplies	+4	+24	+23	+1	+13	-	-	-	-
5086	Professional equipment and supplies	+7	+12	+11	+2	+14	-	-	-	-
509	Miscellaneous durable goods	+1	+26	+31	-1	+6	-7	+23	-6	+6
5093	Scrap and waste materials	-1	+17	+14	+1	+3	-	-	-	-
5093 pt.	Iron and steel scrap	-1	+12	+14	+2	+3	-	-	-	-
5093 pt.	Waste materials	0	+25	+13	0	+2	-	-	-	-
51	Nondurable goods, total	-3	+14	+9	-3	+11	-2	+14	-2	+11
	Total (excluding farm-product raw materials)	0	+12	+9	-1	+9	-2	+12	-1	+9
511	Paper and paper products	-1	+10	+13	+1	+5	-2	+12	-1	+5
5111, 3	Printing, writing, industrial, and personal service paper	0	+7	+8	+1	+3	-	-	-	-
512	Drugs, drug proprietaries, and druggists' sundries	0	+4	+3	+3	+10	+1	+3	+1	+10
5122	Drugs, drug proprietaries, and druggists' sundries	0	+4	+3	+3	+10	-	-	-	-
5122 pt.	General-line drugs	0	+9	+7	+3	+10	-	-	-	-
514	Groceries and related products	-2	+14	+12	-1	+8	-3	+14	-1	+8
5141	Groceries, general-line	-3	+8	+8	-1	+4	-	-	-	-
5141 pt.	Voluntary groups	-1	+5	+4	-2	+5	-	-	-	-
5141 pt.	Retailer cooperatives	-3	+14	+11	-1	+8	-	-	-	-
5141 pt.	Other general-lines	-4	+6	+10	-1	0	-	-	-	-
5142,3,6,9	Specialty-line groceries	-4	+5	+9	+1	+6	-	-	-	-
5144	Poultry and poultry products	+1	+14	+11	-4	+12	-	-	-	-
5145	Confectionery	+1	+28	+23	-2	+6	-	-	-	-
5147	Meats and meat products	+1	+25	+19	-5	+20	-	-	-	-
5148	Fresh fruits and vegetables	+2	(S)	+28	+9	(S)	-	-	-	-
515	Farm-product raw materials[2]	-13	+23	+8	-11	+21	-4	+21	-4	+18
5152	Cotton	-17	-2	+9	-16	+26	-	-	-	-
5153	Grain	-12	+25	+7	-10	+22	-	-	-	-
517	Petroleum and petroleum products	-1	+2	+3	-4	(S)	-8	+1	-5	(S)
5171	Petroleum bulk stations and terminals	-5	-1	+1	-6	(S)	-	-	-	-
518	Beer, wine, and distilled alcoholic beverages	+6	+9	+15	0	+1	-1	+9	-1	+1
5181	Beer and ale	+8	+17	+19	-3	0	-	-	-	-
5182	Wines and distilled alcoholic beverages	+4	+1	+11	+2	+2	-	-	-	-
519	Miscellaneous nondurable goods	-1	+12	0	-8	+12	0	+10	-4	
5191	Farm supplies	-6	+30	-12	-14	+40	-	-	-	
5194	Tobacco and tobacco products	+2	+5	+6	+3	+3	-	-	-	
5198	Paints, varnishes, and supplies	-1	+4	+10	+1	+23	-	-	-	-
5199 pt.	Books, periodicals, newspapers	+5	+39	+47	+1	(S)	-	-	-	-

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

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

Sales of Merchant Wholesalers by Geographic Division
6 Months 1978 Compared With 6 Months 1977

(Percent changes based on UNADJUSTED data)



UNITED STATES +15

U.S. DEPARTMENT OF COMMERCE
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Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1978 and 1977

(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]	1978						1977							Total 6 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.	Apr.	May	June[P]	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1978	1977	Range[2]	Median
	Merchant wholesalers, total	52,143	52,766	62,900	60,613	66,249	66,022	55,794	51,290	55,597	54,505	54,251	56,034	56,224	360,692	314,202	0.8-0.9	0.9
	New England	2,693	2,657	3,191	2,913	3,231	3,367	2,890	2,651	2,856	2,880	2,919	3,036	3,008	18,052	15,922	5-6	6
	Middle Atlantic	11,846	11,840	14,206	13,114	14,345	14,861	12,592	11,263	12,356	12,428	11,945	12,494	12,924	80,213	70,666	2-2	2
	East North Central	8,929	9,269	10,680	10,708	11,787	11,626	9,520	8,807	9,685	9,431	9,724	9,841	9,596	62,998	53,142	2-3	3
	West North Central	5,566	5,390	6,419	6,522	7,583	7,230	5,820	5,332	5,639	5,509	5,670	5,977	5,617	38,710	33,815	2-3	2
	South Atlantic	5,666	5,686	6,792	6,533	6,858	6,949	6,017	5,548	6,015	5,934	5,854	6,126	6,188	38,484	33,454	2-3	2
	East South Central	2,421	2,534	3,201	3,318	3,453	3,127	2,884	2,652	2,853	2,723	2,813	2,765	2,822	18,055	17,109	4-5	4
	West South Central	5,582	5,843	6,878	6,433	6,857	6,700	6,096	5,715	6,108	5,745	5,644	6,008	6,283	38,293	34,673	3-4	4
	Mountain	1,934	1,900	2,536	2,412	2,537	2,595	2,054	1,949	2,040	2,177	2,027	1,964	2,099	13,913	11,149	5-5	5
	Pacific	7,506	7,649	8,994	8,659	9,600	9,567	7,921	7,373	8,045	7,678	7,655	7,821	7,688	51,976	44,272	2-3	3
50	Durable goods, total	22,869	23,880	28,985	28,784	30,405	31,229	25,292	22,915	25,998	25,461	25,369	25,340	24,797	166,151	135,723	0.8-1.0	0.9
	Middle Atlantic	4,973	5,138	6,295	5,952	6,181	6,473	5,315	4,662	5,354	5,366	5,420	5,477	5,379	35,012	28,605	4-5	4
	East North Central	3,935	4,363	5,081	5,128	5,495	5,548	4,549	4,073	4,771	4,635	4,573	4,549	4,282	29,549	24,340	3-4	4
	West North Central	1,776	1,805	2,228	2,378	2,548	2,668	2,098	1,911	2,083	2,003	2,061	2,075	1,900	13,402	11,074	5-6	5
	South Atlantic	2,809	2,768	3,414	3,455	3,538	3,776	3,134	2,840	3,127	3,113	3,088	3,051	2,971	19,759	16,599	4-5	4
	West South Central	2,413	2,626	3,180	3,097	3,303	3,318	2,725	2,520	2,886	2,673	2,643	2,611	2,729	17,937	14,711	4-4	4
	Mountain	923	893	1,192	1,208	1,247	1,320	1,000	921	1,016	1,051	988	900	989	6,783	5,049	6-7	7
	Pacific	4,115	4,283	5,007	4,901	5,316	5,326	4,265	3,967	4,477	4,282	4,210	4,335	4,262	28,948	23,273	2-3	3
51	Nondurable goods, total	29,274	28,886	33,915	31,829	35,844	34,793	30,502	28,375	29,599	29,044	28,882	30,694	31,427	194,542	178,479	1.0-1.2	1.0
	New England	1,735	1,735	2,017	1,747	2,014	2,110	1,923	1,786	1,860	1,843	1,839	1,918	1,918	11,358	10,563	5-7	6
	Middle Atlantic	6,873	6,701	7,912	7,162	8,164	8,388	7,277	6,601	7,002	7,062	6,525	7,017	7,545	45,201	42,061	3-3	3
	East North Central	4,994	4,906	5,599	5,580	6,292	6,079	4,971	4,734	4,914	4,796	5,151	5,292	5,314	33,448	28,802	3-4	3
	West North Central	3,790	3,584	4,191	4,145	5,035	4,563	3,722	3,421	3,556	3,506	3,609	3,902	3,717	25,308	22,741	3-4	3
	South Atlantic	2,857	2,918	3,378	3,078	3,320	3,173	2,883	2,708	2,888	2,821	2,766	3,075	3,217	18,725	16,855	3-5	3
	East South Central	1,453	1,451	1,788	1,819	1,892	1,584	1,645	1,496	1,565	1,422	1,507	1,542	1,626	9,988	10,396	3-4	4
	West South Central	3,169	3,217	3,699	3,336	3,554	3,381	3,371	3,195	3,222	3,072	3,001	3,397	3,554	20,356	19,962	5-5	5
	Pacific	3,392	3,367	3,987	3,757	4,284	4,241	3,656	3,406	3,568	3,396	3,445	3,486	3,426	23,028	20,999	4-5	4

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

[P]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.
[1]See map on page 7.
[2]The range of sampling error of the estimate is based on data for August, September, and October 1977.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: June 1978

(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[1]			Inventories		Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		June 1978 from May 1978	June 1978 from June 1977	6 months 1978 from 6 months 1977	June 1978 from May 1978	June 1978 from June 1977		
		A	B	C[1]	D	E	A	D
	Merchant wholesalers, total	0	+18	+15	0	+16	0.4	0.2
	New England	+4	+16	+13	-1	+8	2.0	1.9
	Middle Atlantic	+4	+18	+14	+1	+9	1.1	0.6
	East North Central	-1	+22	+19	-2	+20	1.2	0.8
	West North Central	-5	+24	+14	-3	+15	1.3	1.1
	South Atlantic	+1	+15	+15	-1	+11	1.6	1.0
	East South Central	-9	+8	+6	-3	+30	1.7	1.4
	West South Central	-2	+10	+10	0	+17	1.4	0.8
	Mountain	+2	+26	+25	+1	+11	2.4	1.3
	Pacific	0	+21	+17	+1	+26	1.2	0.5
50	Durable goods, total	+3	+23	+22	+1	+18	0.6	0.3
	New England	+3	+30	+25	-1	+11	2.4	1.3
	Middle Atlantic	+5	+22	+22	+1	+12	1.7	1.0
	East North Central	+1	+22	+21	+1	+23	1.9	1.0
	West North Central	+5	+27	+21	0	+16	3.3	1.7
	South Atlantic	+7	+20	+19	-1	+12	1.9	1.2
	East South Central	-1	+25	+20	-2	+29	3.9	2.5
	West South Central	0	+22	+22	+1	+19	2.1	1.2
	Mountain	+6	+32	+34	+2	+16	2.9	1.7
	Pacific	0	+25	+24	+2	+30	1.9	0.7
51	Nondurable goods, total	-3	+14	+9	-3	+11	0.6	0.4
	New England	+5	+10	+8	0	+4	1.9	2.7
	Middle Atlantic	+3	+15	+7	+1	+5	1.9	0.9
	East North Central	-3	+22	+16	-8	+14	1.4	1.1
	West North Central	-9	+23	+11	-7	+13	1.6	1.4
	South Atlantic	-4	+10	+11	0	+9	2.4	1.8
	East South Central	-16	-4	-4	-5	+30	1.7	2.4
	West South Central	-5	0	+2	-1	+12	2.2	1.3
	Mountain	-1	+21	+17	-2	+2	3.2	1.2
	Pacific	-1	+16	+10	-2	+17	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	-2	+29	+31	+1	+20	2	
	New England	-5	+20	+34	-6	+18	7	4
	Middle Atlantic	-6	(S)	(S)	0	+6	4	2
	East North Central	+1	+20	+21	+2	+21	7	1
	West North Central	0	+27	+26	+4	+28	5	2
	South Atlantic	+4	+18	+25	-1	+28	4	2
	East South Central	-2	+43	+22	+2	+49	4	3
	West South Central	-5	+15	+18	0	+2	5	2
	Mountain	+5	+33	+37	-5	+4	7	3
	Pacific	-3	+31	+30	+4	+30	3	2
502	Furniture and home furnishings	+1	+12	+19	-2	+21	2	1
	Middle Atlantic	+2	+5	+9	-4	+29	4	2
	East North Central	-2	+14	+18	-2	+20	7	2
	West North Central	-3	+37	+42	-2	+13	5	4
	West South Central	-3	+26	+36	-3	+30	5	7
	Pacific	-1	+13	+27	+1		5	3
503	Lumber and other construction materials	+4	+29	+23	-2	+28	2	1
	New England	+13	+51	+32	-3	+29	4	5
	Middle Atlantic	+5	+32	+30	-2	+6	4	2
	East North Central	+3	+36	+32	-7	+59	3	2
	West North Central	+6	+14	+16	-5	+13	7	7
	South Atlantic	0	+27	+40	-3	+30	4	2
	East South Central	+3	+46	+39	+1	+57	4	3
	West South Central	+1	+34	+24	-1	+35	6	5
	Pacific	+5	+15	+3	+1	+19	5	1
5051 pt.	Ferrous metals service centers	+2	(S)	+37	+2	+28	2	1
	Middle Atlantic	+4	(S)	+33	+3	+27	4	5
	East North Central	-2	(S)	+38	+6	+41	4	1
	West North Central	+4	(S)	+25	-6	+54	4	3
	East South Central	+7	(S)	+17	-3	+17	2	4
	West South Central	+11	(S)	+31	+3	+18	4	2
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+6	+29	+28	-1	+15	2	1
	Middle Atlantic	+2	+21	+24	-4	-3	5	2
	East North Central	+17	+30	+27	+1	+11	3	2
	West North Central	+7	+33	+22	+2	+19	4	1
	South Atlantic	+12	+27	+17	+1	+13	3	1
	West South Central	-11	+30	+34	+3	+31	3	6
	Pacific	+1	+20	+30	-3	+45	4	1
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+6	+19	+19	+3	+20	3	
	Middle Atlantic	+12	+38	+31	+3	+27	3	
	East North Central	-6	-1	+1	+7	+12	4	
	West North Central	+9	+10	+7	+7	+38	4	4
	South Atlantic	+2	+1	+17	+3	+8	6	4
	West South Central	+5	+10	+19	-7	+4	4	4
	Mountain	+4	(S)	(S)	-2	-12	6	3
	Pacific	+5	+36	+34	+1	+26	3	2

See footnotes at end of table.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: June 1978—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[1] June 1978 from May 1978	Sales[1] June 1978 from June 1977	Sales[1] 6 months 1978 from 6 months 1977	Inventories June 1978 from May 1978	Inventories June 1978 from June 1977	Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		A	B	C[1]	D	E	A	D
5072	Hardware	-2	+13	+10	-2	+12	1	1
	New England	-3	+28	+15	-3	+36	6	3
	Middle Atlantic	-1	+5	+2	-6	-3	6	2
	East North Central	-3	+21	+30	-8	+24	4	2
	West North Central	+5	+23	+7	-3	+3	3	3
	South Atlantic	-3	-3	-2	0	+6	4	2
	East South Central	-6	-11	-18	-1	-2	4	1
	Pacific	-2	+17	+8	-1	+22	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	0	+6	+11	0	+12	2	1
	Middle Atlantic	-2	-3	-1	-1	-18	6	3
	East North Central	+4	+29	+23	-1	+15	3	3
	South Atlantic	+6	+2	+7	+2	+10	3	2
	Mountain	+3	(S)	(S)	-3	+2	7	4
	Pacific	-7	-17	+6	+2	+10	5	4
5084,5	Industrial machinery, equipment, and supplies	+4	+24	+23	+1	+13	2	1
	Middle Atlantic	+5	+11	+16	-2	-7	7	2
	East North Central	-5	+12	+24	-1	+10	3	2
	West South Central	-5	+30	+46	+4	+18	4	3
	Pacific	+7	+49	+40	+2	+46	5	2
512	Drugs, drug proprietaries, and druggists' sundries	0	+4	+3	+3	+10	1	1
	New England	+5	-9	-2	-3	-18	5	3
	Middle Atlantic	+12	+10	0	+4	+12	3	2
	East North Central	-6	-8	+2	+2	0	6	3
	West North Central	-1	+12	+6	+1	+19	2	2
	South Atlantic	0	+23	+15	0	+15	6	5
	East South Central	-15	+3	+18	+12	+34	6	5
	West South Central	+7	+15	-2	+5	+27	3	2
	Mountain	+1	+6	+9	-1	-8	3	2
	Pacific	-4	-10	-6	+6	+9	3	3
5141	Groceries, general-line	-3	+8	+8	-1	+4	1	1
	New England	+4	+20	+19	+6	+22	2	1
	Middle Atlantic	-3	+14	+6	-1	+9	1	2
	East North Central	-4	-1	+6	-1	+4	3	1
	West North Central	+1	+19	+11	-4	0	1	1
	South Atlantic	-4	+12	+12	-3	-1	2	1
	West South Central	-3	+8	+9	+1	+2	2	1
	Mountain	+1	+20	+10	+2	-1	2	2
	Pacific	-1	+9	+12	-5	+6	1	1
5142,3,6,9	Specialty-line groceries	-4	+5	+9	+1	+6	1	1
	Middle Atlantic	-3	+5	+12	-3	+3	4	2
	East North Central	-7	+24	+22	0	+21	3	2
	West North Central	-8	+27	+39	+2	+4	3	1
	South Atlantic	-7	+16	+20	+9	+45	5	6
	East South Central	-1	0	(S)	-3	+2	2	2
5148	Fresh fruits and vegetables	+2	(S)	+28	+9	(S)	2	4
	Middle Atlantic	+14	(S)	+40	0	(S)	7	5
	East North Central	+3	+45	+22	+32	+53	6	6
	West North Central	+7	+21	+14	-2	-5	6	3
	West South Central	+5	+47	+35	+3	(S)	5	3
	Pacific	-3	+24	+23	+4	+1	4	4
5194	Tobacco and tobacco products	+2	+5	+6	+3	+3	1	1
	New England	+1	-9	-3	-3	(S)	5	3
	Middle Atlantic	+2	+13	+13	+6	+23	4	3
	East North Central	+1	-1	+4	+1	-9	4	3
	West North Central	-5	-19	-11	+1	-6	4	2
	South Atlantic	+9	+22	+7	+5	+15	6	6
	East South Central	0	-3	-4	+2	-11	7	4
	West South Central	-1	+52	+38	+1	+41	7	6
	Mountain	(S)	(S)	(S)	-2	-11	6	2
	Pacific	+3	+11	+14	+9	+6	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 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 precent) shown in columns A and D are based on medians of measurements on data for August, September, and October 1977.

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 10 percent of the sales estimates and 20 percent for inventories.

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

1972 SIC code	Kind of business	Sales						Inventories					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total	0.8-1.1	0.9	0.8-0.9	0.9	0.4-0.5	0.5	0.8-1.0	0.9	0.7-1.0	0.9	0.2-0.5	0.4
	Total (excluding farm-product raw materials)	0.9-1.2	1.1	0.9-1.0	1.0	0.4-0.6	0.5	0.9-1.0	1.0	0.8-1.0	0.9	0.2-0.5	0.3
50	Durable goods, total	1.1-1.3	1.2	0.9-1.0	1.0	0.6-0.6	0.6	1.1-1.2	1.2	1.0-1.2	1.1	0.3-0.7	0.5
501	Motor vehicles and automotive parts and supplies	2.3-3.3	3.1	1.9-2.8	2.2	1.4-1.9	1.7	2.5-3.3	2.9	2.6-3.1	3.0	0.6-1.3	1.0
5012	Automobiles and other motor vehicles	-	-	-	-	1.7-3.9	3.1	-	-	-	-	1.7-3.0	2.8
5013,4	Automotive parts and supplies, tires and tubes	2.9-3.7	3.1	2.9-3.2	3.1	1.5-2.0	1.6	4.0-4.5	4.3	3.9-4.4	4.0	0.4-1.4	0.7
5013	Automotive parts and supplies	3.3-4.0	3.9	3.1-3.8	3.7	1.9-2.2	2.0	4.7-5.3	5.2	4.7-5.2	5.0	0.5-1.5	0.9
502	Furniture and home furnishings	4.2-5.8	4.6	4.2-4.4	4.3	1.7-2.9	2.0	3.2-4.9	3.7	3.4-4.2	3.7	0.8-2.3	2.0
5021	Furniture--household and office	6.6-7.6	6.9	5.6-7.1	6.9	4.0-5.7	4.3	-	-	-	-	1.4-3.4	2.2
5021 pt.	Household furniture	-	-	-	-	5.0-5.8	5.1	-	-	-	-	1.4-4.3	2.0
5021 pt.	Office furniture	-	-	-	-	5.7-8.0	5.9	-	-	-	-	0.7-3.7	2.1
5023	Home furnishings	5.1-7.5	6.1	5.1-6.1	5.5	1.6-3.6	2.2	4.8-6.9	5.6	4.9-6.0	5.0	1.0-3.1	2.6
503	Lumber and other construction materials	2.8-4.4	3.1	2.9-3.9	3.1	1.6-2.5	1.9	4.5-6.5	4.9	4.8-5.8	4.9	0.7-1.8	0.9
5031	Lumber, plywood, and millwork	4.1-4.6	4.3	3.3-4.6	4.0	2.1-2.5	2.4	5.9-8.2	6.5	6.0-6.9	6.5	1.0-2.6	1.8
5039	Construction materials, n.e.c.	4.2-7.2	4.9	4.5-5.9	4.9	2.0-3.4	2.2	-	-	-	-	1.1-2.0	1.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	-	-	-	-	2.2-2.4	2.3	-	-	-	-	1.0-2.5	1.4
505	Metals and minerals, except petroleum	4.4-6.0	4.7	4.0-5.1	4.0	1.5-3.0	2.8	3.2-3.8	3.7	3.7-4.1	4.0	0.8-1.4	1.3
5051 pt.	Ferrous metals service centers and offices	5.0-5.8	5.7	4.1-5.2	4.7	1.2-3.8	3.1	3.8-4.2	4.1	4.1-4.3	4.2	0.5-1.6	1.4
5051 pt.	Ferrous metals service centers	6.7-8.0	6.8	5.0-6.8	5.8	1.1-5.3	3.5	2.9-4.4	3.4	3.4-4.0	3.5	0.6-2.2	2.1
5051 pt.	Nonferrous metals service centers and offices	-	-	-	-	4.5-7.0	6.1	-	-	-	-	2.8-5.4	4.7
506	Electrical goods	1.9-2.6	2.3	1.6-2.1	1.7	1.3-1.6	1.4	2.5-2.9	2.6	2.2-2.8	2.4	0.5-1.0	0.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2.2-3.1	2.6	2.3-2.7	2.4	1.4-1.7	1.6	2.9-3.5	3.2	3.0-3.2	3.1	0.6-1.2	0.7
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3.4-4.0	3.8	3.0-3.2	3.1	1.6-2.8	2.5	2.9-4.2	3.2	2.7-3.8	3.0	0.7-1.6	0.9
5064	Electrical appliances, TV and radio sets	3.0-3.8	3.6	2.6-3.7	3.1	1.7-2.7	2.5	-	-	-	-	0.9-1.7	1.4
507	Hardware, plumbing, heating equipment, and supplies	2.7-3.0	2.9	2.4-2.6	2.5	1.1-1.9	1.5	2.4-2.8	2.6	2.4-2.9	2.7	0.3-1.4	0.6
5072	Hardware	3.6-4.2	3.8	2.6-3.1	3.0	1.3-2.4	1.9	2.0-4.1	2.7	2.2-3.5	2.8	0.4-2.1	0.8
5074	Plumbing and heating equipment and supplies (hydronics)	4.1-5.3	4.2	3.9-5.1	4.2	1.6-3.8	2.1	5.0-7.0	6.0	4.5-7.1	5.3	0.5-3.1	0.9
5075	Warm air heating and air conditioning equipment and supplies	-	-	-	-	2.0-4.4	2.7	-	-	-	-	1.1-4.3	1.4
8	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
509	Miscellaneous durable goods	-	-	-	-	2.4-3.5	3.1	-	-	-	-	0.8-2.1	1.1
5093	Scrap and waste materials	4.6-13.3	9.0	4.6-8.8	5.0	2.2-4.9	2.7	-	-	-	-	0.7-3.8	0.9
5093 pt.	Iron and steel scrap	-	-	-	-	2.6-3.5	3.1	-	-	-	-	0.8-1.4	1.0
5093 pt.	Waste materials	-	-	-	-	2.6-8.8	4.8	-	-	-	-	1.2-9.1	1.6
51	Nondurable goods, total	1.0-1.3	1.1	1.0-1.1	1.1	0.4-0.7	0.6	1.5-1.7	1.6	1.4-1.6	1.5	0.3-0.7	0.4
	Total (excluding farm-product raw materials)	1.0-1.6	1.2	1.3-1.4	1.4	0.5-0.8	0.6	1.7-2.0	1.9	1.6-1.8	1.7	0.3-0.7	0.4
511	Paper and paper products	2.6-4.0	3.7	2.4-4.1	3.1	1.0-1.4	1.3	2.5-3.4	2.7	2.4-3.2	2.8	0.4-1.5	0.6
5111,3	Printing, writing, industrial, and personal service paper	2.4-3.1	2.7	2.3-2.8	2.4	1.3-1.5	1.4	2.9-3.4	3.1	2.7-3.2	2.8	0.4-1.3	0.9
5112	Stationery supplies	-	-	-	-	2.4-3.4	2.5	3.2-6.1	5.8	3.6-5.1	4.4	0.9-4.8	1.4
512	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	5.6-6.3	5.7	5.6-5.7	5.7	0.6-2.2	0.7
5122	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	-	-	-	-	0.6-2.2	0.7
5122 pt.	General-line drugs	7.2-9.8	7.9	7.5-8.5	7.6	0.7-3.0	1.0	-	-	-	-	05.-3.1	1.0
513	Apparel, piece goods, and notions	8.3-12.4	8.8	8.6-9.3	9.1	2.6-4.0	3.3	-	-	-	-	-	-
514	Groceries and related products	1.7-2.2	2.0	1.6-2.0	1.9	0.4-1.2	0.5	1.5-2.5	1.8	1.8-2.1	1.9	0.4-1.3	0.6
5141	Groceries, general-line	1.9-2.7	2.1	1.7-2.7	2.0	0.4-1.5	0.7	1.8-2.7	2.3	1.7-2.0	1.8	0.3-1.2	0.8
5141 pt.	Voluntary groups	-	-	-	-	0.5-1.7	0.6	-	-	-	-	0.4-1.7	0.5
5141 pt.	Retailer cooperatives	-	-	-	-	0.6-1.6	1.1	-	-	-	-	0.4-2.4	0.7
5141 pt.	Other general-lines	-	-	-	-	0.9-3.1	1.8	-	-	-	-	0.5-1.3	0.7
5142,3,6,9	Specialty-line groceries	-	-	-	-	0.7-3.4	1.3	-	-	-	-	0.9-2.4	1.0
5144	Poultry and poultry products	3.4-5.5	4.4	4.0-4.4	4.2	0.6-2.2	1.5	-	-	-	-	2.1-4.1	2.3
5145	Confectionery	4.7-6.3	4.7	3.6-5.4	4.3	2.0-3.2	2.2	-	-	-	-	0.8-2.4	2.3
5147	Meats and meat products	4.5-4.8	4.7	4.6-4.6	4.6	1.4-2.9	1.7	-	-	-	-	1.7-3.9	2.2
5148	Fresh fruits and vegetables	4.7-5.4	4.9	3.9-4.1	4.0	1.9-4.2	2.7	-	-	-	-	2.9-4.4	3.9
515	Farm-product raw materials	1.8-2.2	2.0	1.6-2.0	1.7	1.1-1.7	1.3	-	-	-	-	1.1-2.8	2.4
5152	Cotton	-	-	-	-	1.8-4.9	2.8	-	-	-	-	1.3-2.9	2.4
5153	Grain	2.4-2.7	2.6	2.2-2.4	2.3	1.0-1.7	1.3	-	-	-	-	1.6-3.3	1.9
517	Petroleum and petroleum products	4.0-5.0	4.7	4.2-4.6	4.5	1.1-1.9	1.5	4.1-5.2	5.0	4.4-5.4	4.7	1.6-3.0	2.3
5171	Petroleum bulk stations and terminals	2.8-3.3	2.9	2.8-3.0	2.9	0.9-1.4	1.2	-	-	-	-	1.7-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages	3.4-3.9	3.7	3.1-3.7	3.2	0.8-1.8	1.7	3.9-4.2	4.1	4.0-4.3	4.2	1.0-2.0	1.3
5181	Beer and ale	2.2-4.4	3.1	2.8-3.2	2.9	1.0-2.5	2.0	3.6-5.5	3.8	3.6-4.1	3.8	1.7-2.7	2.1
5182	Wines and distilled alcoholic beverages	5.2-6.3	5.4	4.6-5.6	4.7	1.2-3.4	1.7	4.6-5.4	4.8	5.0-5.6	5.3	1.4-2.3	1.6
519	Miscellaneous nondurable goods	2.4-3.2	2.9	2.4-2.7	2.5	1.4-2.3	1.6	-	-	-	-	0.8-1.7	1.4
51	Farm supplies	-	-	-	-	3.2-3.6	3.3	-	-	-	-	1.7-3.9	2.0
54	Tobacco and tobacco products	4.0-5.2	4.1	3.4-4.5	4.2	1.3-2.4	1.7	-	-	-	-	0.8-4.3	1.0
5198	Paints, varnishes, and supplies	-	-	-	-	2.8-3.8	3.0	-	-	-	-	1.5-3.1	2.9
5199 pt.	Books, magazines, newspapers	-	-	-	-	3.2-8.0	5.6	-	-	-	-	2.0-6.5	5.1

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

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

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

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

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

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

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1977-December 1978

1972 SIC code	Kind of business	1977											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	91.7	92.1	107.2	99.0	100.6	103.8	95.5	104.5	102.5	100.4	101.1	99.6
	Total (excluding farm-product raw materials)	89.6	91.5	106.3	99.7	101.8	106.0	96.5	105.8	103.6	100.0	100.0	96.9
50	Durable goods, total	87.1	88.2	106.3	101.3	103.7	107.8	96.9	106.5	105.8	101.1	99.3	94.0
501	Motor vehicles and automotive parts and supplies	89.7	89.3	109.5	108.3	107.5	107.2	100.5	105.9	101.1	94.2	95.0	90.0
502	Furniture and home furnishings	82.6	89.5	104.2	97.8	98.8	106.7	90.7	106.4	106.9	110.3	109.2	94.7
503	Lumber and other construction materials	78.4	80.8	101.1	99.8	108.0	112.1	104.6	116.4	108.7	102.4	100.6	85.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.7	89.9	104.1	101.6	101.8	104.0	92.1	106.4	102.0	109.1	110.4	98.2
505	Metals and minerals, except petroleum	94.4	90.9	110.4	99.9	105.3	104.8	92.5	107.5	105.0	96.0	99.5	90.8
506	Electrical goods	87.8	88.6	101.8	97.1	96.0	108.4	98.5	105.9	104.2	106.4	101.9	101.6
507	Hardware, plumbing, heating equipment, and supplies	87.4	87.4	101.2	99.4	102.9	108.3	99.4	108.7	106.9	105.8	100.8	89.9
508	Machinery, equipment, and supplies	86.4	89.0	107.7	102.7	104.4	108.8	95.7	103.5	107.3	102.5	95.5	94.9
509	Miscellaneous durable goods	82.8	89.8	105.7	98.8	100.4	107.7	89.8	105.8	106.7	104.1	104.3	102.0
51	Nondurable goods, total	95.1	95.1	108.4	97.4	98.3	100.7	94.8	102.3	99.7	99.4	102.8	103.9
	Total (excluding farm-product raw materials)	91.7	94.2	106.8	98.1	100.0	104.1	96.3	104.6	101.6	99.0	100.6	100.?
511	Paper and paper products	93.8	92.2	104.3	95.1	96.4	104.2	97.3	108.3	104.7	103.6	103.2	95.7
512	Drugs, drug proprietaries, and druggists' sundries	94.2	92.6	105.1	98.8	97.7	98.7	92.7	103.9	104.4	108.3	101.4	98.9
513	Apparel, piece goods, and notions	89.7	94.6	106.4	95.2	95.2	100.5	95.1	114.9	108.8	105.4	105.6	87.1
514	Groceries and related products	94.2	90.9	103.8	98.5	101.5	106.7	99.1	105.4	100.7	100.1	99.7	98.5
515	Farm-product raw materials[1]	105.1	95.8	112.8	96.9	101.5	88.2	88.5	95.5	93.5	102.2	110.6	108.6
516	Chemicals and allied products	87.1	89.9	107.4	101.2	102.5	106.5	97.0	107.2	103.4	102.0	99.3	94.3
517	Petroleum and petroleum products	94.8	102.6	105.4	98.9	90.9	98.9	100.1	101.9	97.3	102.4	101.4	105.6
518	Beer, wine, and distilled alcoholic beverages	75.8	80.8	101.4	94.1	103.0	113.8	98.1	107.0	100.3	98.8	105.8	120.1
519	Miscellaneous nondurable goods	95.1	101.7	116.8	104.4	101.4	100.9	88.1	96.2	99.6	95.4	96.1	100.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	102.1	101.4	100.9	99.9	98.4	98.4	98.4	98.4	98.6	100.9	102.1	101.1
	Total (excluding farm-product raw materials)	99.8	100.3	100.8	100.1	100.3	100.5	100.1	99.2	99.3	100.0	100.2	99.4
50	Durable goods, total	99.1	100.3	101.1	100.9	101.4	101.8	100.9	99.4	99.1	99.1	98.9	98.9
501	Motor vehicles and automotive parts and supplies	101.4	102.8	102.1	101.4	102.4	100.9	98.9	96.6	97.9	97.8	97.9	100.4
502	Furniture and home furnishings	98.9	99.4	100.1	99.8	99.9	101.4	100.9	101.3	100.9	99.6	100.4	98.1
503	Lumber and other construction materials	97.9	98.4	102.8	102.6	105.4	103.1	102.9	100.6	97.8	95.3	96.4	97.1
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	100.8	99.9	100.9	103.4	107.6	104.6	101.6	100.3	100.6	94.4	89.3
505	Metals and minerals, except petroleum	100.4	98.9	100.9	101.4	100.1	99.4	102.8	101.3	98.1	96.8	99.1	101.4
506	Electrical goods	97.3	97.6	99.1	99.4	100.6	101.9	101.1	101.3	100.4	101.6	101.4	98.8
507	Hardware, plumbing, heating equipment, and supplies	98.1	98.6	101.6	103.1	102.8	101.1	100.9	101.4	98.4	98.3	98.4	97.6
508	Machinery, equipment, and supplies	99.1	101.1	101.9	100.6	101.1	102.3	100.1	97.9	99.1	99.6	99.6	97.8
509	Miscellaneous durable goods	97.1	98.9	96.8	98.4	96.8	101.3	101.9	102.9	101.3	103.1	101.8	100.4
51	Nondurable goods, total	105.4	103.4	100.9	98.1	93.9	93.3	94.8	97.3	97.6	103.9	106.9	105.4
	Total (excluding farm-product raw materials)	100.5	100.2	100.5	99.4	98.2	98.4	98.3	99.0	99.8	101.9	102.7	100.9
511	Paper and paper products	99.1	99.1	98.8	100.4	99.8	101.9	99.6	100.9	100.1	100.3	99.8	100.9
512	Drugs, drug proprietaries, and druggists' sundries	96.4	97.8	100.1	101.4	98.1	100.4	99.3	100.1	102.4	104.4	101.4	98.9
513	Apparel, piece goods, and notions	100.1	99.6	98.4	98.6	101.1	100.4	102.6	101.1	100.4	99.1	99.1	99.9
514	Groceries and related products	99.9	100.9	102.4	99.9	98.4	98.4	98.1	98.1	99.1	101.3	102.9	101.1
515	Farm-product raw materials[1]	121.4	113.9	104.9	92.4	80.8	73.9	84.8	84.8	89.8	108.9	122.1	123.?
516	Chemicals and allied products	99.8	100.1	102.1	101.4	101.3	99.9	99.8	99.1	99.6	97.8	99.4	100.
517	Petroleum and petroleum products	104.8	99.8	97.1	93.1	95.1	96.8	96.4	99.3	101.8	106.8	105.6	104.?
518	Beer, wine, and distilled alcoholic beverages	96.9	97.9	97.1	98.9	101.8	103.1	98.6	97.6	100.6	107.6	105.4	95.3
519	Miscellaneous nondurable goods	103.6	104.3	102.9	100.6	96.3	93.3	95.3	98.4	98.1	99.8	103.6	104.4

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1977-December 1978—Continued

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.9	92.2	106.9	96.5	103.5	103.8	95.4	105.1	98.9	102.5	101.4	96.7
	Total (excluding farm-product raw materials)	91.9	91.6	106.4	97.5	104.6	105.9	95.9	106.4	100.9	102.2	98.8	95.1
50	Durable goods, total	89.8	89.0	105.2	98.7	106.3	107.6	96.4	107.1	102.9	104.2	98.4	91.4
501	Motor vehicles and automotive parts and supplies	93.6	89.1	107.0	107.0	107.4	108.0	99.3	107.5	96.9	98.4	92.5	91.4
502	Furniture and home furnishings	84.6	89.1	104.6	95.9	101.6	106.2	89.4	107.2	104.2	112.8	108.3	93.8
503	Lumber and other construction materials	81.6	81.2	101.7	95.3	110.7	112.5	102.4	116.9	104.7	108.0	100.0	82.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.4	90.3	102.8	100.3	109.7	98.1	95.1	104.0	104.7	105.7	108.7	97.3
505	Metals and minerals, except petroleum	98.8	91.0	108.9	97.9	107.9	103.6	90.7	108.4	103.1	100.0	97.4	91.1
506	Electrical goods	89.4	89.1	101.7	95.2	99.2	106.4	100.2	104.9	100.9	107.7	103.3	98.5
507	Hardware, plumbing, heating equipment, and supplies	89.5	87.8	100.8	97.5	105.5	107.8	99.7	109.4	103.4	107.2	101.1	88.0
508	Machinery, equipment, and supplies	88.1	88.8	107.8	99.6	107.3	108.7	95.7	104.3	104.0	103.7	96.9	91.6
509	Miscellaneous durable goods	86.5	89.8	104.7	95.1	101.0	110.6	87.6	108.0	102.4	109.5	105.2	96.2
51	Nondurable goods, total	97.0	95.1	108.7	95.1	101.3	100.9	94.8	102.9	96.9	100.9	102.6	100.7
	Total (excluding farm-product raw materials)	93.9	94.5	107.7	95.7	102.7	104.4	95.6	105.1	98.6	100.5	100.4	97.5
511	Paper and paper products	95.2	92.4	104.5	92.6	101.9	103.0	96.6	108.3	103.7	105.0	100.5	92.7
512	Drugs, drug proprietaries, and druggists' sundries	98.2	92.7	104.9	96.0	100.4	99.8	92.7	104.5	101.4	108.3	100.6	96.9
513	Apparel, piece goods, and notions	91.3	94.8	106.4	92.3	99.6	99.3	93.5	115.1	106.8	108.1	103.9	86.0
514	Groceries and related products	95.0	91.0	104.1	96.4	104.5	106.2	99.1	106.0	100.1	100.3	99.9	94.3
515	Farm-product raw materials[1]	106.8	95.8	112.8	94.4	99.6	89.9	92.3	94.6	92.6	100.5	111.2	104.6
516	Chemicals and allied products	90.0	89.4	106.9	98.2	105.2	106.5	97.0	107.3	99.7	105.5	98.0	94.1
517	Petroleum and petroleum products	96.5	102.1	107.7	96.2	92.8	99.9	98.4	101.7	95.5	102.4	98.7	105.8
518	Beer, wine, and distilled alcoholic beverages	78.7	80.9	100.7	91.2	106.7	113.9	97.3	108.1	96.9	101.9	105.3	115.3
519	Miscellaneous nondurable goods	97.4	101.6	118.1	101.5	104.3	102.9	87.2	96.5	96.0	97.0	96.4	97.4
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	101.9	101.3	101.0	100.1	98.6	98.5	98.4	98.0	98.9	100.6	101.7	100.5
	Total (excluding farm-product raw materials)	99.7	100.3	100.8	100.2	100.2	100.5	100.1	99.1	99.4	100.0	100.3	99.2
50	Durable goods, total	99.1	100.2	100.9	100.6	101.1	101.6	100.8	99.3	99.3	99.0	99.1	98.7
501	Motor vehicles and automotive parts and supplies	101.4	102.6	101.8	101.0	102.1	100.9	98.9	96.8	97.9	97.8	98.1	100.5
502	Furniture and home furnishings	99.4	99.2	99.8	99.5	99.8	101.3	100.6	101.0	101.5	100.5	99.1	98.1
503	Lumber and other construction materials	98.1	98.8	103.0	102.6	105.0	101.6	101.5	100.2	98.9	96.1	96.9	97.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	102.4	99.2	100.5	103.3	107.3	104.4	101.1	100.6	101.2	93.9	89.0
505	Metals and minerals, except petroleum	100.4	98.6	100.5	101.0	99.7	99.2	102.4	101.9	98.6	96.7	99.5	101.5
506	Electrical goods	97.2	97.4	99.0	99.9	100.2	101.8	101.2	101.5	100.4	101.2	101.0	98.8
507	Hardware, plumbing, heating equipment, and supplies	97.8	98.0	101.6	103.2	102.8	101.7	100.5	101.4	98.7	98.6	98.2	97.3
508	Machinery, equipment, and supplies	99.2	101.1	101.7	100.0	101.0	102.3	100.1	98.1	99.3	99.6	99.5	97.8
509	Miscellaneous durable goods	97.1	98.7	96.6	98.2	96.6	101.2	101.8	102.6	101.5	103.1	102.1	100.2
51	Nondurable goods, total	104.8	103.2	101.6	98.3	95.3	93.7	94.6	96.3	98.6	103.3	106.0	103.9
	Total (excluding farm-product raw materials)	100.4	100.2	100.7	99.7	98.5	98.6	98.3	98.6	99.7	101.9	102.5	100.8
511	Paper and paper products	98.7	99.0	98.7	100.6	99.4	102.0	99.6	100.6	99.5	101.5	100.0	100.2
512	Drugs, drug proprietaries, and druggists' sundries	96.3	97.6	99.9	101.3	97.7	100.2	99.2	99.8	102.0	105.0	101.8	98.8
513	Apparel, piece goods, and notions	99.9	99.4	98.6	98.5	101.1	100.0	102.2	101.0	100.0	98.3	100.1	100.6
514	Groceries and related products	99.6	100.7	102.2	100.1	98.6	98.5	98.1	97.8	99.0	101.8	102.1	101.3
515	Farm-product raw materials[1]	120.2	114.0	106.9	93.1	81.5	76.1	84.4	83.5	88.3	108.7	121.4	120.9
516	Chemicals and allied products	99.9	99.9	102.7	101.1	101.3	99.8	99.6	99.4	99.9	96.9	98.7	100.6
517	Petroleum and petroleum products	104.9	100.2	97.9	93.5	95.6	97.0	95.4	99.0	102.5	104.8	104.6	104.2
518	Beer, wine, and distilled alcoholic beverages	96.6	96.5	97.2	99.0	101.3	103.1	98.9	97.6	100.8	107.5	106.5	94.6
519	Miscellaneous nondurable goods	103.4	103.2	105.3	101.1	96.2	92.9	95.1	97.2	98.6	99.7	103.2	104.1

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 ade. 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	3.6
505	Metals and minerals, except petroleum	3.14	2.53	1.79	1.01	1.33	.76	1	3.26	1.72	8.47	3.2
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.

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.

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 bench-

mark 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 o er 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.

onferrous 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 onstruction 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 the 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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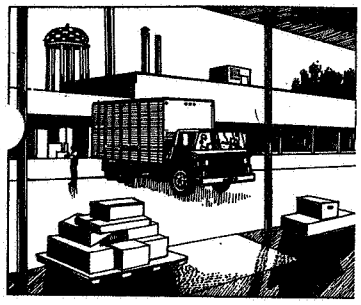
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued September 1978

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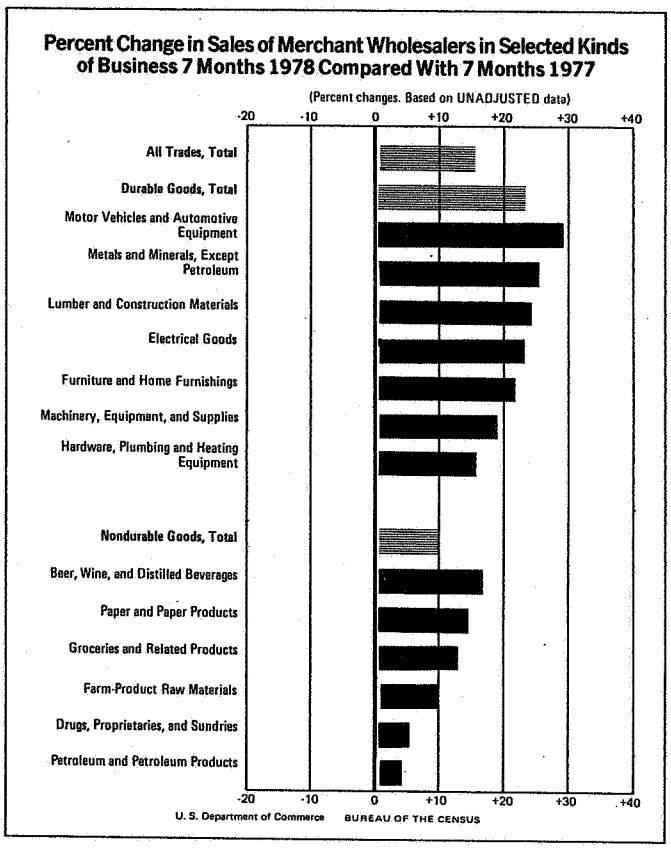
Sales—July 1978 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences, but not for price changes, were $63.2 billion, virtually unchanged from last month, but 18 percent above July 1977. Adjusted May-through-July total sales were up 7 percent from the February-through-April period and were 18 percent above the total sales for the comparable months a year ago.

After adjustment, July sales in the durable goods trades were up 4 percent from last month and were 27 percent above sales for the same month a year ago. Nondurable goods sales were down 3 percent from June, but were 11 percent above July 1977. Total monthly sales in the durable goods group during the May-through-July period were 5 percent above the prior 3 months and were 24 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were 8 percent above the February-through-April period and were 14 percent above the total sales for the same period a year ago.

Based on adjusted data, most trade groups showed increases from their previous month sales levels with the most substantial increase shown in furniture and home furnishings (11%). The largest decrease was reported in farm-product raw materials (-17%). Compared with sales of a year ago, all trade groups showed increases. Among the sharper increases were furniture and home furnishings, and metals and minerals, except petroleum, both up 28 percent.

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variations, but not for price changes, were valued at $75.2 billion at the end of July, down 1 percent from last month, but 17 percent above the same month a year ago. Durable goods stocks were up 1 percent from June and were 19 percent above July 1977. Nondurable goods stocks were down 5 percent from last month, but were 13 percent above stocks on hand a year ago.

Based on adjusted data, most trade groups showed increases from their previous month inventory levels, with the larger increases reported in petroleum and petroleum products (5%) and beer, wine, and distilled beverages (4%). The most substantial decrease was shown in farm-product raw materials (-24%). Compared with year-ago inventories, all trade groups reported increases. The sharper increases were noted in lumber and construction materials (34%) and furniture and home furnishings (27%).



Stocks-Sales Ratio—The July stock-sales ratio for merchant wholesalers, based on seasonally-adjusted data, was 119, down 1 point from both the previous month and July 1977. The stock-sales ratio for durable goods was 165, down 5 points from last month and 10 points below the year-ago ratio. The ratio for nondurable goods was 77, down 1 point from June, but up 1 point from the July 1977 ratio.

An advance release of the July 1978 data was issued on September 8, 1978.

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: 1978 and 1977

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

1972 SIC code	Kind of business	1978							1977						Total 7 months	
		Jan.	Feb.	Mar.	Apr.	May	June	July[p]	July	Aug.	Sept.	Oct.	Nov.	Dec.	1978	1977
	Merchant wholesalers, total	52,143	52,766	62,900	60,613	66,249	65,834	60,435	51,290	55,597	54,505	54,251	56,034	56,224	420,943	365,492
	Total (excluding farm-product raw materials)	46,343	47,112	55,848	54,095	58,061	58,658	54,315	45,838	50,659	49,544	49,132	49,762	50,139	374,436	322,815
50	Durable goods, total	22,869	23,880	28,985	28,784	30,405	30,991	28,748	22,915	25,998	25,461	25,369	25,340	24,797	194,664	158,638
501	Motor vehicles and automotive parts and supplies	4,797	5,065	5,870	5,956	6,083	5,929	5,472	4,463	4,762	4,554	4,605	4,721	4,698	39,172	30,706
5013,4	Automotive parts and supplies, tires and tubes	2,517	2,666	3,128	3,217	3,403	3,227	2,925	2,395	2,657	2,538	2,661	2,651	2,551	21,084	16,319
5013	Automotive parts and supplies	2,166	2,286	2,602	2,706	2,828	2,660	2,391	2,027	2,229	2,089	2,227	2,220	2,167	17,639	13,894
502	Furniture and home furnishings	867	921	1,111	1,046	1,077	1,104	1,031	816	972	998	1,048	1,045	1,025	7,158	5,938
5021	Furniture--household and office	304	311	356	352	368	370	339	251	310	308	320	340	350	2,398	1,781
5023	Home furnishings	564	610	755	695	710	735	692	565	662	689	728	705	676	4,759	4,157
503	Lumber and other construction materials	1,867	1,891	2,368	2,517	2,889	3,067	2,786	2,271	2,657	2,553	2,476	2,334	2,086	17,385	14,075
5031	Lumber, plywood, and millwork	1,290	1,288	1,582	1,676	1,947	2,037	1,816	1,511	1,792	1,681	1,637	1,540	1,389	11,636	9,518
5039	Construction materials, n.e.c.	576	603	786	841	942	1,031	970	760	866	872	839	794	697	5,749	4,557
505	Metals and minerals, except petroleum	2,505	2,557	3,040	2,942	3,153	3,169	2,833	(NA)	2,731	2,709	2,437	2,592	2,423	20,200	16,108
5051 pt.	Ferrous metals service centers and offices	1,922	1,970	2,344	2,190	2,360	2,380	2,163	(NA)	2,039	2,083	1,845	1,869	1,774	15,330	11,827
5051 pt.	Ferrous metals service centers	1,386	1,443	1,713	1,629	1,755	1,778	1,621	(NA)	1,480	1,478	1,385	1,359	1,282	11,326	8,313
506	Electrical goods	2,541	2,627	3,096	2,980	3,239	3,385	3,167	2,647	2,821	2,846	2,998	2,973	2,964	21,035	17,143
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,262	1,354	1,561	1,556	1,698	1,725	1,655	1,324	1,456	1,369	1,436	1,436	1,379	10,810	8,538
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment[1]	1,279	1,273	1,535	1,424	1,541	1,660	1,512	1,323	1,365	1,477	1,562	1,537	1,585	10,225	8,605
5064	Electrical appliances, TV and radio sets	763	762	939	841	931	994	910	914	919	979	1,011	989	1,003	6,140	5,630
507	Hardware, plumbing, heating equipment, and supplies	1,790	1,708	2,021	2,102	2,306	2,360	2,205	1,898	2,068	1,961	2,027	1,974	1,820	14,493	12,554
5072	Hardware	693	679	793	797	856	836	754	700	790	750	750	768	676	5,407	4,916
5074	Plumbing and heating equipment and supplies (hydronics)	726	675	801	834	904	902	899	799	842	802	846	791	753	5,741	5,155
508	Machinery, equipment, and supplies	6,190	6,632	8,301	8,296	8,616	8,790	7,950	6,465	7,380	7,217	7,163	6,941	7,019	54,774	46,28
5082	Construction and mining machinery and equipment	825	875	1,130	1,254	1,276	1,229	1,121	876	971	1,002	1,006	1,025	1,006	7,711	6,630
5084,5	Industrial machinery, equipment, and supplies	2,545	2,790	3,294	3,077	3,388	3,505	3,082	2,494	2,891	2,771	2,750	2,858	2,861	21,682	17,577
5086	Professional equipment, supplies	710	732	863	816	873	952	900	757	846	805	808	773	805	5,845	5,209
5093	Scrap and waste materials	757	815	979	958	1,058	1,057	949	679	802	810	807	812	779	6,572	5,622
51	Nondurable goods, total	29,274	28,886	33,915	31,829	35,844	34,843	31,687	28,375	29,599	29,044	28,882	30,694	31,427	226,281	206,854
	Total (excluding farm-product raw materials)	23,474	23,232	26,863	25,311	27,656	27,667	25,567	22,923	24,661	24,084	23,763	24,422	25,342	179,773	164,177
511	Paper and paper products	1,316	1,284	1,506	1,395	1,508	1,498	1,388	1,208	1,388	1,366	1,341	1,335	1,358	9,896	8,694
5111,3	Printing, writing, industrial, and personal service paper	950	926	1,100	1,032	1,126	1,125	1,039	935	1,060	1,032	1,007	988	995	7,299	6,717
512	Drugs, drug proprietaries, and druggists' sundries	887	824	994	912	943	950	911	848	952	948	939	926	922	6,421	6,181
5122	Drugs, drug proprietaries, and druggists' sundries	887	824	994	912	943	950	911	848	952	948	939	926	922	6,421	6,181
5122 pt.	General-line drugs	423	393	470	423	447	448	428	388	459	455	438	452	444	3,032	2,816
513	Apparel, piece goods, and notions[2]	1,620	1,615	2,063	1,818	2,099	2,066	1,934	1,521	1,938	1,815	1,919	1,837	1,617	13,214	10,469
514	Groceries and related products	9,261	9,093	10,398	9,916	10,873	10,685	10,163	9,132	9,716	9,433	9,289	9,591	9,798	70,390	62,873
5141	Groceries, general-line	3,426	3,333	3,740	3,547	3,791	3,724	3,649	3,347	3,493	3,396	3,360	3,579	3,587	25,209	23,195
5144	Poultry and poultry products	402	397	486	468	507	503	485	412	456	432	419	458	454	3,247	2,911
5145	Confectionery	154	163	191	173	191	189	169	146	171	172	183	194	188	1,230	1,013
5147	Meats and meat products	1,460	1,462	1,651	1,688	1,871	1,826	1,748	1,444	1,591	1,486	1,498	1,525	1,510	11,707	9,865
5148	Fresh fruits and vegetables	839	824	986	1,035	1,184	1,198	1,048	834	877	810	836	886	889	7,114	5,597
515	Farm-product raw materials	5,800	5,654	7,052	6,518	8,188	7,176	6,120	5,452	4,938	4,960	5,119	6,272	6,085	46,508	42,677
5153	Grain	4,549	4,503	5,718	5,358	6,890	6,078	5,227	4,580	4,011	4,005	4,069	4,968	4,730	38,324	35,491
517	Petroleum and petroleum products	4,209	4,085	4,249	3,830	4,178	4,111	3,932	(NA)	3,752	3,612	3,839	3,983	4,355	28,593	27,880
5171	Petroleum bulk stations and terminals	2,387	2,293	2,384	2,188	2,425	2,358	2,216	(NA)	2,160	2,103	2,195	2,266	2,523	16,251	16,039
518	Beer, wine, and distilled alcoholic beverages	1,654	1,770	2,299	1,993	2,295	2,506	2,244	1,951	2,108	2,018	1,884	2,143	2,444	14,761	12,774
5181	Beer and ale	795	839	1,094	998	1,219	1,372	1,247	1,010	1,093	1,012	888	938	1,020	7,564	6,283
5182	Wines and distilled alcoholic beverages	859	931	1,204	996	1,076	1,134	997	941	1,014	1,005	995	1,204	1,424	7,197	6,491
519	Miscellaneous nondurable goods	3,723	3,782	4,434	4,568	4,730	4,819	4,102	3,539	3,822	4,055	3,722	3,749	4,028	30,160	29,387
5194	Tobacco and tobacco products	721	692	782	765	812	849	797	734	780	751	748	705	819	5,419	5,065

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

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

[1]The electrical appliances, TV and radio sets, and electronic parts and equipment group is subject to a sampling variability of 8 percent for July 1978.

[2]The apparel, piece goods, and notions group is subject to a sampling variability of 13 percent for July 1978.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978							1977					
		Jan.	Feb.	Mar.	Apr.	May	June	July[P]	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	69,596	71,156	73,931	74,635	74,634	74,882	74,394	63,666	64,105	65,291	66,530	68,082	68,555
	Total (excluding farm-product raw materials)	64,090	65,682	67,973	69,060	69,883	70,513	70,707	60,642	61,074	61,963	62,324	62,939	63,245
50	Durable goods, total	44,287	45,757	47,275	47,957	48,918	49,627	49,751	41,738	42,142	42,484	42,627	43,252	43,676
501	Motor vehicles and automotive parts and supplies	7,709	8,189	7,995	7,973	8,246	8,218	8,176	6,864	6,831	6,842	7,089	7,376	7,424
5013,4	Automotive parts and supplies, tires and tubes	4,743	4,962	4,856	4,901	5,149	5,035	4,969	4,304	4,512	4,496	4,438	4,669	4,607
5013	Automotive parts and supplies	3,953	4,163	4,041	4,171	4,382	4,241	4,164	3,534	3,712	3,663	3,639	3,912	3,790
502	Furniture and home furnishings	1,560	1,606	1,633	1,669	1,730	1,781	1,777	1,409	1,451	1,493	1,455	1,444	1,512
5023	Home furnishings	1,137	1,184	1,182	1,233	1,279	1,305	1,296	1,026	1,069	1,085	1,057	1,054	1,099
503	Lumber and other construction materials	2,676	2,761	2,919	2,966	3,030	3,071	3,117	2,353	2,429	2,510	2,489	2,513	2,602
5031	Lumber, plywood, and millwork[1]	1,715	1,775	1,870	1,882	1,963	1,949	1,977	1,588	1,632	1,659	1,629	1,643	1,671
505	Metals and minerals, except petroleum	4,449	4,660	4,953	4,976	5,356	5,307	5,428	(NA)	4,519	4,434	4,277	4,444	4,459
5051 pt.	Ferrous metals service centers and offices	3,471	3,591	3,820	3,823	4,116	4,108	4,259	(NA)	3,692	3,689	3,511	3,514	3,568
5051 pt.	Ferrous metals service centers	2,633	2,760	3,039	2,971	3,220	3,268	3,387	(NA)	2,858	2,874	2,686	2,738	2,768
506	Electrical goods	4,563	4,594	4,867	4,951	5,129	5,312	5,260	4,392	4,580	4,599	4,591	4,611	4,653
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,114	2,214	2,226	2,286	2,417	2,358	2,275	1,987	2,088	2,069	2,025	2,100	2,121
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,449	2,380	2,640	2,665	2,712	2,954	2,986	2,405	2,493	2,530	2,566	2,511	2,533
507	Hardware, plumbing, heating equipment, and supplies	3,712	3,876	4,058	4,231	4,222	4,201	4,113	3,704	3,582	3,578	3,621	3,608	3,620
5072	Hardware	1,366	1,384	1,421	1,428	1,445	1,423	1,397	1,286	1,282	1,296	1,319	1,320	1,358
5074	Plumbing and heating equipment and supplies (hydronics)	1,590	1,678	1,784	1,861	1,815	1,818	1,778	1,669	1,588	1,579	1,566	1,562	1,555
508	Machinery, equipment, and supplies	15,508	16,005	16,511	16,762	16,796	17,061	17,137	14,417	14,513	14,706	14,631	15,026	15,307
5082	Construction and mining machinery and equipment	3,281	3,396	3,505	3,516	3,589	3,636	3,663	2,865	2,928	3,110	3,083	3,202	3,261
5084,5	Industrial machinery, equipment, and supplies	4,816	4,912	4,996	5,055	5,160	5,328	5,354	4,478	4,447	4,503	4,534	4,555	4,742
51	Nondurable goods, total	25,309	25,399	26,656	26,678	25,716	25,255	24,643	21,928	21,963	22,807	23,903	24,830	24,879
	Total (excluding farm-product raw materials)	19,803	19,925	20,699	21,103	20,966	20,887	20,956	18,904	18,932	19,479	19,697	19,687	19,569
511	Paper and paper products	1,255	1,259	1,310	1,349	1,343	1,376	1,381	1,268	1,248	1,275	1,261	1,269	1,261
5111,3	Printing, writing, industrial, and personal service paper	868	877	910	911	929	955	964	887	877	880	878	865	873
512	Drugs, drug proprietaries, and druggists' sundries	1,266	1,292	1,330	1,345	1,350	1,401	1,393	1,285	1,297	1,320	1,373	1,337	1,303
514	Groceries and related products	5,401	5,376	5,710	5,740	5,752	5,871	5,843	5,283	5,283	5,448	5,507	5,465	5,540
5141	Groceries, general-line	2,350	2,366	2,562	2,500	2,495	2,512	2,501	2,268	2,265	2,363	2,446	2,441	2,473
517	Petroleum and petroleum products	2,045	1,936	1,953	1,872	1,938	1,837	1,902	(NA)	1,959	2,064	2,023	2,053	2,042
518	Beer, wine, and distilled alcoholic beverages	1,917	1,889	2,017	2,133	2,135	2,148	2,140	2,074	1,977	2,048	2,121	2,075	1,809
5181	Beer and ale[2]	611	641	707	758	730	717	724	675	660	673	658	632	581
5182	Wines and distilled alcoholic beverages	1,305	1,248	1,311	1,375	1,405	1,431	1,416	1,399	1,317	1,375	1,462	1,443	1,228

See footnotes below table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978							1977					
		Jan.	Feb.	Mar.	Apr.	May	June	July[P]	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	133	135	118	123	113	114	123	124	115	120	123	122	122
	Total (excluding farm-product raw materials)	138	139	122	128	120	120	130	132	121	125	127	126	126
50	Durable goods, total	194	192	163	167	161	160	173	182	162	167	168	171	176
501	Motor vehicles and automotive parts and supplies	161	162	136	134	136	139	149	154	143	150	154	156	158
5013,4	Automotive parts and supplies, tires and tubes	188	186	155	152	151	156	170	180	170	177	167	176	181
5013	Automotive parts and supplies	183	182	155	154	155	159	174	174	167	175	163	176	175
502	Furniture and home furnishings	180	174	147	159	161	161	172	173	149	150	139	138	147
5023	Home furnishings	202	194	157	178	180	178	187	182	162	157	145	150	163
503	Lumber and other construction materials	143	146	123	118	105	100	112	104	91	98	101	108	125
5031	Lumber, plywood, and millwork[1]	133	138	118	112	101	96	109	105	91	99	100	107	120
505	Metals and minerals, except petroleum	178	182	163	169	170	167	192	(NA)	165	164	176	171	184
5051 pt.	Ferrous metals service centers and offices	181	182	163	175	174	173	197	(NA)	181	177	190	188	201
5051 pt.	Ferrous metals service centers	190	191	177	182	184	184	209	(NA)	193	194	194	201	216
506	Electrical goods	180	175	157	166	158	157	166	166	162	162	153	155	157
5063	Electrical apparatus and equipment, wiring supplies and construction materials	168	163	143	147	142	137	137	150	143	151	141	146	154
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	191	187	172	187	176	178	197	182	183	171	164	163	160
507	Hardware, plumbing, heating equipment, and supplies	207	227	201	201	183	178	186	195	173	182	179	183	199
5072	Hardware	197	204	179	179	169	170	185	184	162	173	176	172	201
5074	Plumbing and heating equipment and supplies (hydronics)	219	249	223	223	201	202	198	209	189	197	185	197	206
508	Machinery, equipment, and supplies	251	241	199	202	195	194	216	223	197	204	204	216	218
5082	Construction and mining machinery and equipment	398	388	310	280	281	296	327	327	302	310	306	312	324
5084,5	Industrial machinery, equipment, and supplies	189	176	152	164	152	152	174	180	154	163	165	159	166
51	Nondurable goods, total	86	88	79	84	72	72	78	77	74	79	83	81	79
	Total (excluding farm-product raw materials)	84	86	77	83	76	75	82	82	77	81	83	81	77
511	Paper and paper products	95	98	87	97	89	92	100	105	90	93	94	95	93
5111,3	Printing, writing, industrial, and personal service paper	91	95	83	88	82	85	93	95	83	85	87	88	88
512	Drugs, drug proprietaries, and druggists' sundries	143	157	134	147	143	147	153	152	136	139	146	144	141
514	Groceries and related products	58	59	55	58	53	55	57	58	54	58	59	57	57
5141	Groceries, general-line	69	71	68	70	66	67	69	68	65	70	73	68	69
	Petroleum and petroleum products	49	47	46	49	46	45	48	(NA)	52	57	53	52	47
518	Beer, wine, and distilled alcoholic beverages	116	107	88	107	93	86	95	106	94	102	113	97	74
5181	Beer and ale	77	76	65	76	60	52	58	67	60	66	74	67	57
5182	Wines and distilled alcoholic beverages	152	134	109	138	131	126	142	149	130	137	147	120	86

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

NA Not available. [P]Preliminary estimate. See p. 15. Sample Design and Estimation Procedures.
[1]The lumber, plywood, and millwork group is subject to a sampling variability of 9 percent for July 1978.
[2]The beer and ale group is subject to a sampling variability of 9 percent for July 1978.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978 Jan.	Feb.	Mar.	Apr.	May	June	July[p]	1977 July	Aug.	Sept.	Oct.	Nov.	Dec.
	Sales ADJUSTED for seasonal variations and trading-day differences													
	Merchant wholesalers, total	55,985	57,635	58,877	62,152	64,011	63,235	63,190	53,495	53,208	53,307	53,639	55,558	57,266
	Total (excluding farm-product raw materials)	50,554	51,733	52,625	55,247	55,790	55,253	56,559	47,334	48,037	48,018	48,630	49,887	51,663
50	Durable goods, total	25,568	26,976	27,466	28,974	28,692	28,738	29,889	23,620	24,390	24,150	24,997	25,601	26,488
501	Motor vehicles and automotive parts and supplies	5,125	5,685	5,486	5,566	5,664	5,490	5,511	4,439	4,497	4,504	4,889	4,969	5,220
502	Furniture and home furnishings	1,025	1,034	1,062	1,091	1,060	1,040	1,153	900	914	934	950	957	1,082
503	Lumber and other construction materials	2,288	2,329	2,328	2,641	2,610	2,726	2,721	2,171	2,283	2,349	2,418	2,320	2,443
505	Metals and minerals, except petroleum	2,535	2,810	2,792	3,005	2,922	3,059	3,122	(NA)	2,540	2,580	2,539	2,605	2,669
506	Electrical goods	2,842	2,948	3,044	3,130	3,265	3,181	3,161	2,686	2,664	2,731	2,818	2,918	2,917
507	Hardware, plumbing, heating equipment, and supplies	2,000	1,945	2,005	2,156	2,186	2,189	2,212	1,909	1,902	1,834	1,916	1,958	2,024
508	Machinery, equipment, and supplies	7,026	7,468	7,700	8,329	8,030	8,086	8,307	6,756	7,130	6,726	6,988	7,268	7,396
51	Nondurable goods, total	30,417	30,659	31,411	33,178	35,319	34,497	33,301	29,875	28,818	29,157	28,642	29,957	30,778
	Total (excluding farm-product raw materials)	24,986	24,757	25,159	26,273	27,098	26,515	26,670	23,714	23,647	23,852	23,633	24,286	25,175
511	Paper and paper products	1,382	1,390	1,441	1,506	1,480	1,454	1,437	1,242	1,282	1,305	1,294	1,294	1,419
512	Drugs, drug proprietaries, and druggists' sundries	903	889	948	950	939	952	983	914	916	908	867	913	932
513	Apparel, piece goods, and notions	1,774	1,704	1,939	1,970	2,107	2,081	2,068	1,600	1,687	1,668	1,821	1,740	1,856
514	Groceries and related products	9,748	9,992	9,988	10,286	10,405	10,061	10,255	9,210	9,218	9,367	9,280	9,620	9,947
515	Farm-product raw materials[1]	5,431	5,902	6,252	6,905	8,221	7,982	6,631	6,161	5,171	5,305	5,009	5,671	5,603
517	Petroleum and petroleum products	4,362	4,001	3,945	3,981	4,502	4,115	3,996	(NA)	3,682	3,712	3,749	3,928	4,124
518	Beer, wine, and distilled alcoholic beverages	2,102	2,188	2,283	2,185	2,151	2,200	2,306	1,988	1,970	2,012	1,907	2,026	2,035
519	Miscellaneous nondurable goods	3,822	3,722	3,754	4,500	4,535	4,683	4,704	4,015	3,973	4,071	3,901	3,901	3,992
	Inventories ADJUSTED for seasonal variations													
	Merchant wholesalers, total	68,991	70,361	72,882	74,867	75,474	75,820	75,158	64,210	65,095	66,119	66,209	67,047	67,998
	Total (excluding farm-product raw materials)	64,410	65,559	67,309	68,879	69,646	70,080	70,790	60,647	61,521	62,413	62,347	62,835	63,712
50	Durable goods, total	44,686	45,684	46,838	47,673	48,363	48,810	49,427	41,404	42,396	42,896	43,014	43,642	44,?
501	Motor vehicles and automotive parts and supplies	7,603	7,981	7,854	7,894	8,076	8,145	8,267	6,937	7,071	6,989	7,248	7,534	7,3?-
502	Furniture and home furnishings	1,569	1,619	1,636	1,677	1,733	1,758	1,766	1,395	1,432	1,480	1,461	1,438	1,541
503	Lumber and other construction materials	2,728	2,795	2,834	2,891	2,886	3,023	3,071	2,288	2,415	2,566	2,612	2,607	2,680
505	Metals and minerals, except petroleum	4,431	4,726	4,928	4,927	5,372	5,350	5,301	(NA)	4,461	4,520	4,418	4,484	4,397
506	Electrical goods	4,694	4,717	4,916	4,956	5,119	5,218	5,198	4,347	4,521	4,581	4,519	4,547	4,710
507	Hardware, plumbing, heating equipment, and supplies	3,796	3,955	3,994	4,100	4,107	4,131	4,093	3,669	3,533	3,636	3,684	3,667	3,709
508	Machinery, equipment, and supplies	15,633	15,831	16,235	16,762	16,630	16,677	17,120	14,410	14,824	14,840	14,690	15,086	15,651
51	Nondurable goods, total	24,305	24,677	26,044	27,194	27,111	27,010	25,731	22,806	22,699	23,223	23,195	23,405	23,630
	Total (excluding farm-product raw materials)	19,724	19,875	20,471	21,206	21,283	21,270	21,363	19,243	19,125	19,517	19,333	19,193	19,344
511	Paper and paper products	1,272	1,272	1,327	1,341	1,351	1,349	1,387	1,273	1,237	1,274	1,257	1,272	1,250
512	Drugs, drug proprietaries, and druggists' sundries	1,315	1,324	1,331	1,328	1,382	1,398	1,404	1,295	1,296	1,289	1,315	1,319	1,317
514	Groceries and related products	5,423	5,339	5,587	5,734	5,834	5,960	5,956	5,389	5,385	5,497	5,436	5,311	5,480
517	Petroleum and petroleum products	1,949	1,932	1,995	2,002	2,027	1,894	1,994	(NA)	1,973	2,028	1,894	1,944	1,958
518	Beer, wine, and distilled alcoholic beverages	1,984	1,958	2,075	2,155	2,108	2,083	2,164	2,104	2,026	2,036	1,971	1,969	1,898
	Stock-sales ratios based on ADJUSTED data													
	Merchant wholesalers, total	123	122	124	120	118	120	119	120	122	124	123	121	119
	Total (excluding farm-product raw materials)	127	127	128	125	125	127	125	128	128	130	128	126	123
50	Durable goods, total	175	169	171	165	169	170	165	175	174	178	172	170	168
501	Motor vehicles and automotive parts and supplies	148	140	143	142	143	148	150	156	157	155	148	152	142
502	Furniture and home furnishings	153	157	154	154	163	169	153	155	157	158	154	150	142
503	Lumber and other construction materials	119	120	122	109	111	111	113	105	106	109	108	112	110
505	Metals and minerals, except petroleum	175	168	177	164	184	175	170	(NA)	176	175	174	172	165
506	Electrical goods	165	160	161	158	157	164	164	162	170	168	160	156	161
507	Hardware, plumbing, heating equipment, and supplies	190	203	199	190	188	189	185	192	186	198	192	187	183
508	Machinery, equipment, and supplies	223	212	211	201	207	206	206	213	208	221	210	208	212
51	Nondurable goods, total	80	80	83	82	77	78	77	76	79	80	81	78	77
	Total (excluding farm-product raw materials)	79	80	81	81	79	80	80	81	81	82	82	79	77
511	Paper and paper products	92	92	92	89	91	93	97	102	96	98	97	98	88
512	Drugs, drug proprietaries, and druggists' sundries	146	149	140	140	147	147	143	142	141	142	152	144	1??
514	Groceries and related products	56	53	56	56	56	59	58	59	58	59	59	55	
517	Petroleum and petroleum products	45	48	51	50	45	46	50	(NA)	54	55	51	49	
518	Beer, wine, and distilled alcoholic beverages	94	89	91	99	98	95	94	106	103	101	103	97	93

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

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

[1]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 [redacted] 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 1978-July 1978 from--			
	Feb. 1978-Apr. 1978 (3 months ago)	Nov. 1977-Jan. 1978 (6 months ago)	Aug. 1977-Oct. 1977 (9 months ago)	May 1977-July 1977 (12 months ago)
Merchant wholesalers, total.....	+7	+13	+19	+18
Durable goods, total.....	+5	+12	+19	+24
Nondurable goods, total.....	+8	+13	+19	+14

Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers: 1972-1978

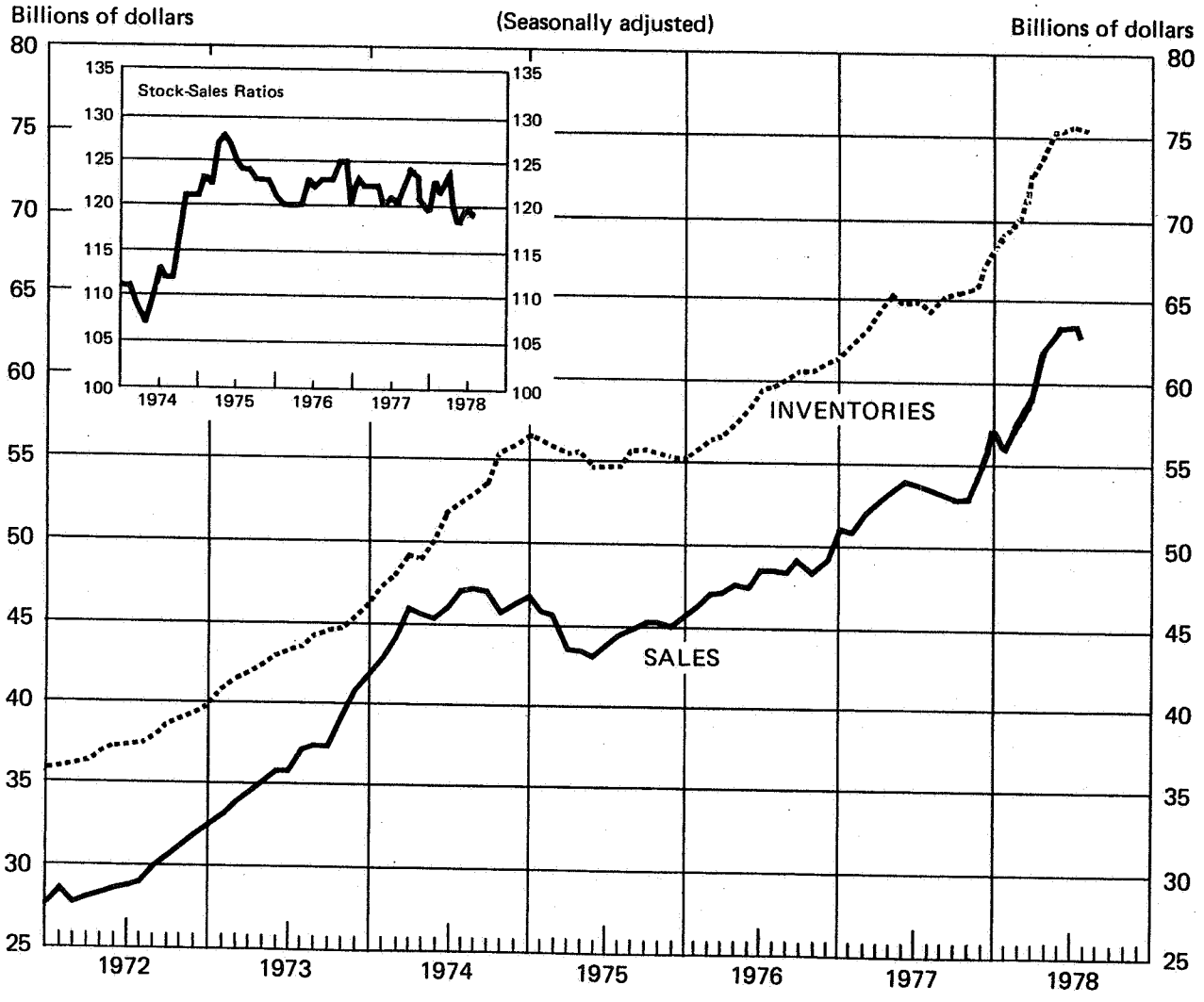


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: July 1978

1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		July 1978 from June 1978	July 1978 from July 1977	7 months 1978 from 7 months 1977	July 1978 from June 1978	July 1978 from July 1977	July 1978 from June 1978	July 1978 from July 1977	July 1978 from June 1978	July 1978 from July 1977
	Merchant wholesalers, total	-8	+18	+15	-1	+17	0	+18	-1	+17
	Total (excluding farm-product raw materials)	-7	+19	+16	0	+17	+2	+19	+1	+17
50	Durable goods, total	-7	+25	+23	0	+19	+4	+27	+1	+19
501	Motor vehicles and automotive parts and supplies	-8	+23	+28	-1	+19	0	+24	+1	+19
5012	Automobiles and other motor vehicles	-6	+23	+26	+1	+25	*	*	*	*
5013, 4	Automotive parts and supplies	-9	+22	+29	-1	+15	*	*	*	*
5013	Automotive parts and supplies	-10	+18	+27	-2	+18	*	*	*	*
502	Furniture and home furnishings	-7	+26	+21	0	+26	+11	+28	0	+27
5021	Furniture--household and office	-8	+35	+35	+1	+26	*	*	*	*
5021 pt.	Household furniture	-6	+41	+34	+1	+19	*	*	*	*
5021 pt.	Office furniture	-10	+32	+35	+1	+31	*	*	*	*
5023	Home furnishings	-6	+22	+14	-1	+26	*	*	*	*
503	Lumber and other construction materials	-9	+23	+24	+2	+32	0	+25	+2	+34
5031	Lumber, plywood, and millwork	-11	+20	+22	+1	+24	*	*	*	*
5039	Construction materials, n.e.c.	-6	+28	+26	+2	+49	*	*	*	*
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(S)	+16	(S)	0	+17	(S)	+12	+3	+18
505	Metals and minerals, except petroleum	-11	+26	+25	+2	+24	+2	+28	-1	+24
5051 pt.	Ferrous metals service centers and offices	-9	+30	+30	+4	+19	*	*	*	*
5051 pt.	Ferrous metals service centers	-9	(S)	+36	+4	+24	*	*	*	*
5051 pt.	Nonferrous metals service centers and offices	-17	+11	+20	-2	+42	*	*	*	*
506	Electrical goods	-6	+20	+23	-1	+20	-1	+18	0	+20
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-4	+25	+27	-4	+14	*	*	*	*
5064, 5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-9	+14	+19	+1	+24	*	*	*	*
5064	Electrical appliances, TV and radio sets	-9	0	+9	+1	+18	*	*	*	*
507	Hardware, plumbing, heating equipment, and supplies	-7	+16	+15	-2	+11	+1	+16	-1	+12
5072	Hardware	-10	+8	+10	-2	+9	*	*	*	*
5074	Plumbing and heating equipment and supplies (hydronics)	0	+12	+11	-2	+7	*	*	*	
5075	Warm air heating and air conditioning equipment and supplies	-13	+38	+34	-3	+24	*	*	*	*
508	Machinery, equipment, and supplies	-10	+23	+18	0	+19	+3	+23	+3	+19
5081	Commercial machines and equipment	+3	+41	+29	+3	+5	*	*	*	*
5082	Construction and mining machinery and equipment	-9	+28	+16	+1	+28	*	*	*	*
5083	Farm and garden machinery and equipment	-13	+25	+18	-1	+18	*	*	*	*
5084, 5	Industrial machinery, equipment, and supplies	-12	+24	+23	0	+20	*	*	*	*
5086	Professional equipment and supplies	-6	+19	+12	+2	+18	*	*	*	*
5093	Scrap and waste materials	-10	+40	+17	+2	+7	*	*	*	*
5093 pt.	Iron and steel scrap	-7	+44	+17	+1	+6	*	*	*	*
5093 pt.	Waste materials	-15	+34	+16	+4	+7	*	*	*	*
51	Nondurable goods, total	-9	+12	+9	-2	+12	-3	+11	-5	+13
	Total (excluding farm-product raw materials)	-8	+12	+10	0	+11	+1	+12	0	+11
511	Paper and paper products	-7	+15	+14	0	+9	-1	+16	+3	+9
5111, 3	Printing, writing, industrial, and personal service paper	-8	+11	+9	+1	+9	*	*	*	*
512	Drugs, drug proprietaries, and druggists' sundries	-4	+7	+4	-1	+8	+3	+8	0	+8
5122	Drugs, drug proprietaries, and druggists' sundries	-4	+7	+4	-1	+8	*	*	*	*
5122 pt.	General-line drugs	-4	+10	+8	+1	+11	*	*	*	*
514	Groceries and related products	-5	+11	+12	0	+11	+2	+11	0	+11
5141	Groceries, general-line	-2	+9	+9	0	+10	*	*	*	*
5141 pt.	Voluntary groups	+1	+9	+5	-1	+9	*	*	*	*
5141 pt.	Retailer cooperatives	-5	+6	+10	-1	+14	*	*	*	*
5141 pt.	Other general-lines	-2	+12	+11	0	+9	*	*	*	*
5142,3,6,9	Specialty-line groceries	-6	+4	+8	+1	+7	*	*	*	*
5144	Poultry and poultry products	-4	+18	+12	+3	+21	*	*	*	*
5145	Confectionery	-11	+15	+21	+1	+7	*	*	*	*
5147	Meats and meat products	-4	+21	+19	-6	+15	*	*	*	*
5148	Fresh fruits and vegetables	-13	+26	+27	+1	+38	*	*	*	*
515	Farm-product raw materials[2]	-15	+12	+9	-16	+22	-17	+8	-24	+23
5152	Cotton	-32	-1	+8	-21	+42	*	*	*	*
5153	Grain	-14	+14	+8	-13	+25	*	*	*	*
517	Petroleum and petroleum products	-4	+2	+3	+4	+1	-3	+4	+5	+2
5171	Petroleum bulk stations and terminals	-6	0	+1	+8	-7	*	*	*	*
518	Beer, wine, and distilled alcoholic beverages	-10	+15	+16	0	+3	+5	+16	+4	+3
5181	Beer and ale	-9	+23	+20	+1	+7	*	*	*	*
5182	Wines and distilled alcoholic beverages	-12	+6	+11	-1	+1	*	*	*	*
519	Miscellaneous nondurable goods	-15	+16	+3	0	+13	0	+17	-2	+14
5191	Farm supplies	-25	+19	-9	+1	+32	*	*	*	*
5194	Tobacco and tobacco products	-6	+9	+7	-2	+8	*	*	*	
5198	Paints, varnishes, and supplies	-9	+18	+12	+4	+40	*	*	*	
5199 pt.	Books, periodicals, newspapers	+17	+63	+50	+1	-9	*	*	*	

* Adjusted data are available only for summary group totals.

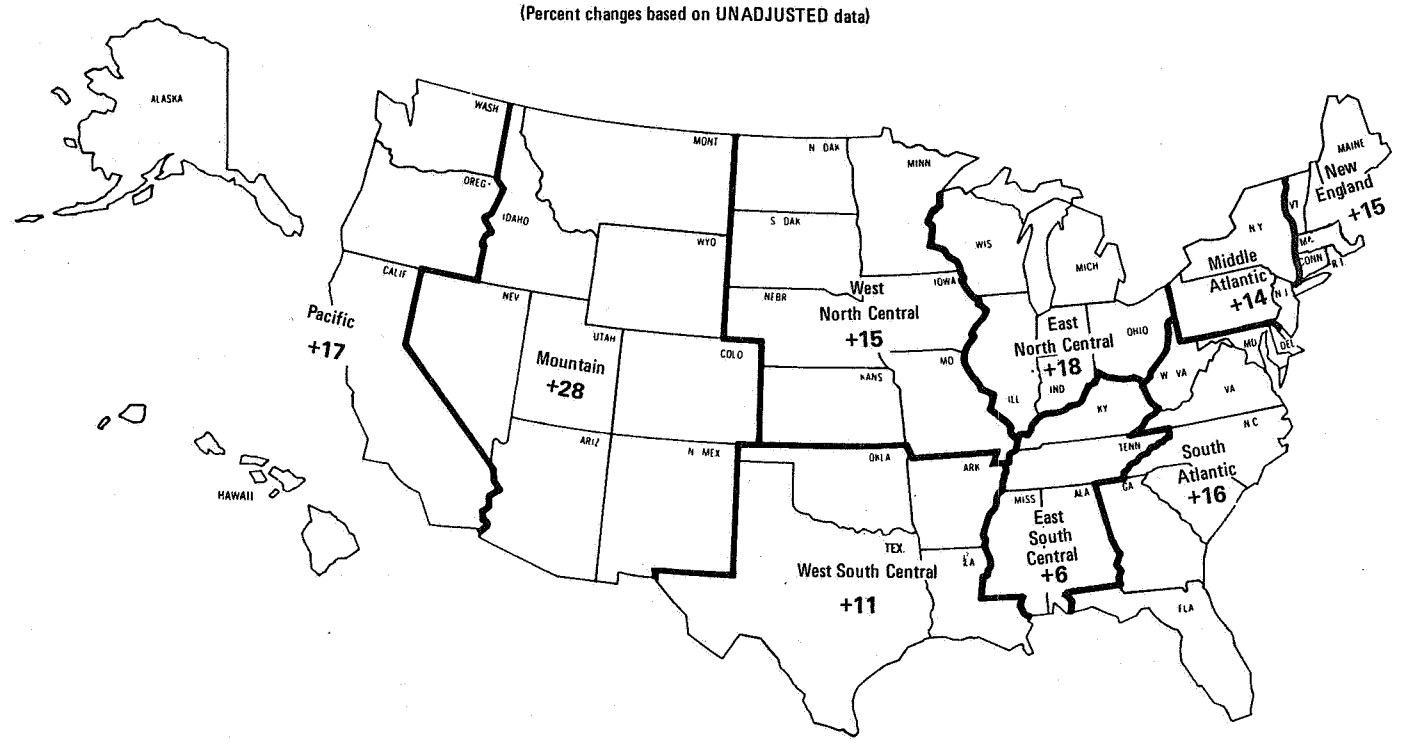
S Does not meet publication standards because of extreme variability or high nonresponse rate.

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

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

Sales of Merchant Wholesalers by Geographic Division
7 Months 1978 Compared With 7 Months 1977

(Percent changes based on UNADJUSTED data)



UNITED STATES +15

U.S. DEPARTMENT OF COMMERCE
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Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1978 and 1977

(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]	1978							1977						Total 7 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.	Apr.	May	June	July[P]	July	Aug.	Sept.	Oct.	Nov.	Dec.	1978	1977	Range[2]	Median
	Merchant wholesalers, total	52,143	52,766	62,900	60,613	66,249	65,834	60,435	51,290	55,597	54,505	54,251	56,034	56,224	420,943	365,492	0.8-0.9	0.9
	New England	2,693	2,657	3,191	2,913	3,231	3,451	3,272	2,651	2,856	2,880	2,919	3,036	3,008	21,408	18,573	5-6	6
	Middle Atlantic	11,846	11,840	14,206	13,114	14,345	14,752	13,296	11,263	12,356	12,428	11,945	12,494	12,924	93,400	81,929	2-2	2
	East North Central	8,929	9,269	10,680	10,708	11,787	11,510	10,193	8,807	9,685	9,431	9,724	9,841	9,596	73,075	61,949	2-3	3
	West North Central	5,566	5,390	6,419	6,522	7,583	6,999	6,485	5,332	5,639	5,509	5,670	5,977	5,617	44,904	39,147	2-3	2
	South Atlantic	5,666	5,686	6,792	6,533	6,858	7,044	6,525	5,548	6,015	5,934	5,854	6,126	6,188	45,104	39,002	2-3	2
	East South Central	2,421	2,534	3,201	3,318	3,453	3,132	2,891	2,652	2,853	2,723	2,813	2,765	2,822	20,951	19,761	4-5	4
	West South Central	5,582	5,843	6,878	6,433	6,857	6,744	6,328	5,715	6,108	5,745	5,644	6,008	6,283	44,666	40,388	3-4	4
	Mountain	1,934	1,900	2,536	2,412	2,537	2,777	2,709	1,949	2,040	2,177	2,027	1,964	2,099	16,804	13,098	5-5	5
	Pacific	7,506	7,649	8,994	8,659	9,600	9,426	8,739	7,373	8,045	7,678	7,655	7,821	7,688	60,574	51,645	2-3	3
50	Durable goods, total	22,869	23,880	28,985	28,784	30,405	30,991	28,748	22,915	25,998	25,461	25,369	25,340	24,797	194,664	158,638	0.8-1.0	0.9
	Middle Atlantic	4,973	5,138	6,295	5,952	6,181	6,464	5,939	4,662	5,354	5,366	5,420	5,477	5,379	40,943	33,267	4-5	4
	East North Central	3,935	4,363	5,081	5,128	5,495	5,407	4,819	4,073	4,771	4,635	4,573	4,549	4,282	34,227	28,413	3-4	4
	West North Central	1,776	1,805	2,228	2,378	2,548	2,446	2,366	1,911	2,083	2,003	2,061	2,075	1,900	15,546	12,985	5-6	5
	South Atlantic	2,809	2,768	3,414	3,455	3,538	3,817	3,513	2,840	3,127	3,113	3,088	3,051	2,971	23,314	19,349	4-5	4
	West South Central	2,413	2,626	3,180	3,097	3,303	3,366	3,111	2,520	2,886	2,673	2,643	2,611	2,729	21,095	17,231	4-4	4
	Mountain	923	893	1,192	1,208	1,247	1,412	1,435	921	1,016	1,051	988	900	989	8,310	5,970	6-7	7
	Pacific	4,115	4,283	5,007	4,901	5,316	5,256	4,946	3,967	4,477	4,282	4,210	4,335	4,262	33,824	27,240	2-3	3
51	Nondurable goods, total	29,274	28,886	33,915	31,829	35,844	34,843	31,687	28,375	29,599	29,044	28,882	30,694	31,427	226,281	206,854	1.0-1.2	1.0
	New England	1,735	1,735	2,017	1,747	2,014	2,151	2,049	1,786	1,860	1,843	1,839	1,918	1,918	13,448	12,349	5-7	6
	Middle Atlantic	6,873	6,701	7,912	7,162	8,164	8,288	7,356	6,601	7,002	7,062	6,525	7,017	7,545	52,457	48,662	3-3	3
	East North Central	4,994	4,906	5,599	5,580	6,292	6,103	5,374	4,734	4,914	4,796	5,151	5,292	5,314	38,848	33,536	3-4	3
	West North Central	3,790	3,584	4,191	4,145	5,035	4,554	4,119	3,421	3,556	3,506	3,609	3,902	3,717	29,358	26,162	3-4	3
	South Atlantic	2,857	2,918	3,378	3,078	3,320	3,227	3,011	2,708	2,888	2,821	2,766	3,075	3,217	21,790	19,563	3-5	3
	East South Central	1,453	1,451	1,788	1,819	1,892	1,609	1,493	1,496	1,565	1,422	1,507	1,542	1,626	11,506	11,892	3-4	4
	West South Central	3,169	3,217	3,699	3,336	3,554	3,378	3,217	3,195	3,222	3,072	3,001	3,397	3,554	23,570	23,157	5-5	5
	Pacific	3,392	3,367	3,987	3,757	4,284	4,170	3,793	3,406	3,568	3,396	3,445	3,486	3,426	26,750	24,405	4-5	4

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

[P]Preliminary estimate. See p. 15, Sample Design and Estimation Procedures.
[1]See map on page 7.
[2]The range of sampling error of the estimate is based on data for August, September, and October 1977.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: July 1978

(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[1] July 1978 from June 1978	Sales[1] July 1978 from July 1977	Sales[1] 7 months 1978 from 7 months 1977	Inventories July 1978 from June 1978	Inventories July 1978 from July 1977	Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		A	B	C[1]	D	E	A	D
	Merchant wholesalers, total	-8	+18	+15	-1	+17	0.4	0.2
	New England	-5	+23	+15	+2	+19	2.0	1.9
	Middle Atlantic	-10	+18	+14	0	+11	1.1	0.6
	East North Central	-11	+16	+18	-2	+17	1.2	0.8
	West North Central	-7	+22	+15	-2	+14	1.3	1.1
	South Atlantic	-7	+18	+16	-1	+13	1.6	1.0
	East South Central	-8	+9	+6	0	+30	1.7	1.4
	West South Central	-6	+11	+11	-1	+16	1.4	0.8
	Mountain	-2	+39	+28	+1	+30	2.4	1.3
	Pacific	-7	+19	+17	-1	+22	1.2	0.5
50	Durable goods, total	-7	+25	+23	0	+19	0.6	0.3
	New England	-6	+41	+28	+2	+21	2.4	1.3
	Middle Atlantic	-8	+27	+23	+1	+15	1.7	1.0
	East North Central	-11	+18	+21	0	+18	1.9	1.0
	West North Central	-3	+24	+20	-2	+9	3.3	1.7
	South Atlantic	-8	+24	+20	-1	+15	1.9	1.2
	East South Central	-8	+21	+20	+2	+30	3.9	2.5
	West South Central	-8	+23	+22	+1	+21	2.1	1.2
	Mountain	+2	+56	+39	+3	+40	2.9	1.7
	Pacific	-6	+25	+24	-1	+24	1.9	0.7
51	Nondurable goods, total	-9	+12	+9	-2	+12	0.6	0.4
	New England	-5	+15	+9	+2	+16	1.9	2.7
	Middle Atlantic	-11	+11	+8	-2	+5	1.9	0.9
	East North Central	-12	+14	+16	-4	+14	1.4	1.1
	West North Central	-10	+20	+12	-2	+19	1.6	1.4
	South Atlantic	-7	+11	+11	-2	+9	2.4	1.8
	East South Central	-7	0	-3	-5	+31	1.7	2.4
	West South Central	-5	+1	+2	-3	+6	2.2	1.3
	Mountain	-7	+24	+19	-4	+10	3.2	1.2
	Pacific	-9	+11	+10	-1	+17	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	-9	+22	+29	-1	+15	2	
	New England	-15	+5	+29	-5	0	7	
	Middle Atlantic	-18	+24	(S)	0	+5	4	2
	East North Central	-9	+12	+19	0	+18	7	1
	West North Central	-7	+21	+24	-1	+17	5	2
	South Atlantic	-2	+21	+25	0	+24	4	2
	East South Central	-5	+28	+23	-1	+47	4	3
	West South Central	-6	+27	+19	-2	+4	5	2
	Mountain	-4	+70	+47	+4	+63	7	3
	Pacific	-11	+19	+26	-7	+2	3	2
502	Furniture and home furnishings	-7	+26	+21	0	+26	2	1
	Middle Atlantic	-6	+36	+12	0	+31	4	2
	East North Central	-1	+30	+22	+3	+27	7	2
	West North Central	-16	+10	+37	+5	+30	5	4
	West South Central	-6	+33	+34	-1	+21	5	7
	Pacific	-10	+25	+28	-3	+18	5	3
503	Lumber and other construction materials	-9	+23	+24	+2	+32	2	1
	New England	-20	+17	+28	+9	+40	4	5
	Middle Atlantic	-10	+21	+29	0	+20	4	2
	East North Central	-12	+19	+29	0	+43	3	2
	West North Central	-8	+17	+17	+3	+29	7	7
	South Atlantic	-3	+26	+37	-2	+14	4	2
	East South Central	-7	+26	+38	-4	+53	4	3
	West South Central	-7	+33	+25	+3	+28	6	5
	Pacific	-10	+20	+6	+4	+30	5	1
5051 pt.	Ferrous metals service centers	-9	(S)	+36	+4	+24	2	1
	Middle Atlantic	+3	(S)	+35	+2	+4	4	5
	East North Central	-14	(S)	+36	+4	+28	4	1
	West North Central	-10	(S)	+32	+4	+54	4	3
	East South Central	-2	(S)	+18	+15	+24	2	4
	West South Central	-12	(S)	+27	+6	+30	4	2
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-4	+25	+27	-4	+14	2	1
	Middle Atlantic	-8	+28	+26	-4	-3	5	2
	East North Central	-4	+29	+27	-4	+14	3	2
	West North Central	-4	+7	+16	-5	-2	4	1
	South Atlantic	0	+34	+19	-3	+21	3	1
	West South Central	+1	+26	+31	-2	+32	3	6
	Pacific	-7	+13	+26	-6	+35	4	1
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-9	+14	+19	+1	+24	3	1
	Middle Atlantic	-10	+22	+29	+1	+29	3	
	North Central	-15	0	+2	-1	+21	4	
	West North Central	-7	0	+5	-5	+9	4	
	South Atlantic	+1	+5	+16	-3	+7	6	4
	West South Central	-17	+4	+18	+5	+13	4	4
	Mountain	+11	(S)	(S)	0	+20	6	3
	Pacific	-6	+35	+35	+5	+41	3	2

See footnotes at end of table.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: July 1978—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[1]			Inventories			
		July 1978 from June 1978	July 1978 from July 1977	7 months 1978 from 7 months 1977	July 1978 from June 1978	July 1978 from July 1977		
		A	B	C[1]	D	E	A	D
5072	Hardware	-10	+8	+10	-2	+9	1	1
	New England	-16	-11	+8	-6	-20	6	3
	Middle Atlantic	-12	+16	+4	+1	+3	6	2
	East North Central	-8	+20	+29	0	+23	4	2
	West North Central	-9	-7	+3	-6	-3	3	3
	South Atlantic	-14	-5	-1	-3	+8	4	2
	East South Central	-1	0	-15	0	0	4	1
	Pacific	-8	+9	+9	-1	+18	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	0	+12	+11	-2	+7	2	1
	Middle Atlantic	-3	+1	0	-1	-11	6	3
	East North Central	+3	+23	+20	-3	+14	3	3
	South Atlantic	-3	+4	+7	-3	-7	3	2
	Mountain	-15	(S)	(S)	0	+33	7	4
	Pacific	+6	+10	+9	+1	+19	5	4
5084,5	Industrial machinery, equipment, and supplies	-12	+24	+23	0	+20	2	1
	Middle Atlantic	-11	+20	+17	+5	+1	7	2
	East North Central	-12	+11	+21	+1	0	3	2
	West South Central	-16	+18	+42	+1	+34	4	3
	Pacific	-18	+28	+38	+2	+42	5	2
512	Drugs, drug proprietaries, and druggists' sundries	-4	+7	+4	-1	+8	1	1
	New England	-2	+16	+3	+1	+7	5	3
	Middle Atlantic	-8	+9	+1	-8	-6	3	2
	East North Central	-7	0	+3	+2	+17	6	3
	West North Central	-6	0	+4	-1	+7	2	2
	South Atlantic	+4	+35	+18	+1	+13	6	5
	East South Central	+2	-2	+13	0	+22	6	5
	West South Central	-10	-5	-4	-1	+8	3	2
	Mountain	-8	+2	+8	+4	-2	3	2
	Pacific	-4	-2	-4	+4	+14	3	3
5141	Groceries, general-line	-2	+9	+9	0	+10	1	1
	New England	-2	+20	+19	-6	+15	2	1
	Middle Atlantic	-7	-1	+5	-2	+12	1	2
	East North Central	-2	+5	+6	-1	+6	3	1
	West North Central	-3	+14	+12	0	+6	1	1
	South Atlantic	-1	+22	+14	+1	+11	2	1
	West South Central	-1	+2	+8	+1	+9	2	1
	Mountain	+4	+28	+13	-5	+8	2	2
	Pacific	-5	+8	+12	+2	+16	1	1
5142,3,6,9	Specialty-line groceries	-6	+4	+8	+1	+7	1	1
	Middle Atlantic	-2	+18	+13	-4	+11	4	2
	East North Central	-13	+6	+20	+8	+27	3	2
	West North Central	-1	+27	+37	+4	+19	3	1
	South Atlantic	-10	+1	+18	0	+12	5	6
	East South Central	-9	(S)	(S)	0	(S)	2	2
5148	Fresh fruits and vegetables	-13	+26	+27	+1	+38	2	4
	Middle Atlantic	-10	+20	+33	+1	+15	7	5
	East North Central	-11	+24	+22	-5	+31	6	6
	West North Central	-10	+31	+18	+3	+44	6	3
	West South Central	-23	-1	+31	+17	+55	5	3
	Pacific	-14	+17	+22	-4	+4	4	4
5194	Tobacco and tobacco products	-6	+9	+7	-2	+8	1	1
	New England	-8	-5	-2	-1	(S)	5	3
	Middle Atlantic	-4	+7	+11	-9	+4	4	3
	East North Central	-4	+34	+11	+2	+23	4	3
	West North Central	-5	-19	-12	0	-5	4	2
	South Atlantic	-6	+14	+6	-2	+24	6	6
	East South Central	-4	-1	-2	+5	+7	7	4
	West South Central	-11	+9	+28	-6	+7	7	6
	Mountain	-10	(S)	(S)	+1	+3	6	2
	Pacific	-12	+8	+14	-9	+7	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 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 precent) shown in columns A and D are based on medians of measurements on data for August, September, and October 1977.

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 10 percent of the sales estimates and 20 percent for inventories.

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

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

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

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

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

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

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

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

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1977-December 1978

1972 SIC code	Kind of business	1977											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	91.7	92.1	107.2	99.0	100.6	103.8	95.5	104.5	102.5	100.4	101.1	99.6
	Total (excluding farm-product raw materials)	89.6	91.5	106.3	99.7	101.8	106.0	96.5	105.8	103.6	100.0	100.0	96.9
50	Durable goods, total	87.1	88.2	106.3	101.3	103.7	107.8	96.9	106.5	105.8	101.1	99.3	94.0
501	Motor vehicles and automotive parts and supplies	89.7	89.3	109.5	108.3	107.5	107.2	100.5	105.9	101.1	94.2	95.0	90.0
502	Furniture and home furnishings	82.6	89.5	104.2	97.8	98.8	106.7	90.7	106.4	106.9	110.3	109.2	94.7
503	Lumber and other construction materials	78.4	80.8	101.1	99.8	108.0	112.1	104.6	116.4	108.7	102.4	100.6	85.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.7	89.9	104.1	101.6	101.8	104.0	92.1	106.4	102.0	109.1	110.4	98.2
505	Metals and minerals, except petroleum	94.4	90.9	110.4	99.9	105.3	104.8	92.5	107.5	105.0	96.0	99.5	90.8
506	Electrical goods	87.8	88.6	101.8	97.1	96.0	108.4	98.5	105.9	104.2	106.4	101.9	101.6
507	Hardware, plumbing, heating equipment, and supplies	87.4	87.4	101.2	99.4	102.9	108.3	99.4	108.7	106.9	105.8	100.8	89.9
508	Machinery, equipment, and supplies	86.4	89.0	107.7	102.7	104.4	108.8	95.7	103.5	107.3	102.5	95.5	94.9
509	Miscellaneous durable goods	82.8	89.8	105.7	98.8	100.4	107.7	89.8	105.8	106.7	104.1	104.3	102.0
51	Nondurable goods, total	95.1	95.1	108.4	97.4	98.3	100.7	94.8	102.3	99.7	99.4	102.8	103.9
	Total (excluding farm-product raw materials)	91.7	94.2	106.8	98.1	100.0	104.1	96.3	104.6	101.6	99.0	100.6	100
511	Paper and paper products	93.8	92.2	104.3	95.1	96.4	104.2	97.3	108.3	104.7	103.6	103.2	95.7
512	Drugs, drug proprietaries, and druggists' sundries	94.2	92.6	105.1	98.8	97.7	98.7	92.7	103.9	104.4	108.3	101.4	98.9
513	Apparel, piece goods, and notions	89.7	94.6	106.4	95.2	95.2	100.5	95.1	114.9	108.8	105.4	105.6	87.1
514	Groceries and related products	94.2	90.9	103.8	98.5	101.5	106.7	99.1	105.4	100.7	100.1	99.7	98.5
515	Farm-product raw materials[1]	105.1	95.8	112.8	96.9	101.5	88.2	88.5	95.5	93.5	102.2	110.6	108.6
516	Chemicals and allied products	87.1	89.9	107.4	101.2	102.5	106.5	97.0	107.2	103.4	102.0	99.3	94.3
517	Petroleum and petroleum products	94.8	102.6	105.4	98.9	90.9	98.9	100.1	101.9	97.3	102.4	101.4	105.6
518	Beer, wine, and distilled alcoholic beverages	75.8	80.8	101.4	94.1	103.0	113.8	98.1	107.0	100.3	98.8	105.8	120.1
519	Miscellaneous nondurable goods	95.1	101.7	116.8	104.4	101.4	100.9	88.1	96.2	99.6	95.4	96.1	100.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	102.1	101.4	100.9	99.9	98.4	98.4	98.4	98.4	98.6	100.9	102.1	101.1
	Total (excluding farm-product raw materials)	99.8	100.3	100.8	100.1	100.3	100.5	100.1	99.2	99.3	100.0	100.2	99.4
50	Durable goods, total	99.1	100.3	101.1	100.9	101.4	101.8	100.9	99.4	99.1	99.1	98.9	98.9
501	Motor vehicles and automotive parts and supplies	101.4	102.8	102.1	101.4	102.4	100.9	98.9	96.6	97.9	97.8	97.9	100.4
502	Furniture and home furnishings	98.9	99.4	100.1	99.8	99.9	101.4	100.9	101.3	100.9	99.6	100.4	98.1
503	Lumber and other construction materials	97.9	98.4	102.8	102.6	105.4	103.1	102.9	100.6	97.8	95.3	96.4	97.1
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	100.8	99.9	100.9	103.4	107.6	104.6	101.6	100.3	100.6	94.4	89.3
505	Metals and minerals, except petroleum	100.4	98.9	100.9	101.4	100.1	99.4	102.8	101.3	98.1	96.8	99.1	101.4
506	Electrical goods	97.3	97.6	99.1	99.4	100.6	101.9	101.1	101.3	100.4	101.6	101.4	98.8
507	Hardware, plumbing, heating equipment, and supplies	98.1	98.6	101.6	103.1	102.8	101.1	100.9	101.4	98.4	98.3	98.4	97.6
508	Machinery, equipment, and supplies	99.1	101.1	101.9	100.6	101.1	102.3	100.1	97.9	99.1	99.6	99.6	97.8
509	Miscellaneous durable goods	97.1	98.9	96.8	98.4	96.8	101.3	101.9	102.9	101.3	103.1	101.8	100.4
51	Nondurable goods, total	105.4	103.4	100.9	98.1	93.9	93.3	94.8	97.3	97.6	103.9	106.9	105.4
	Total (excluding farm-product raw materials)	100.5	100.2	100.5	99.4	98.2	98.4	98.3	99.0	99.8	101.9	102.7	100.9
511	Paper and paper products	99.1	99.1	98.8	100.4	99.8	101.9	99.6	100.9	100.1	100.3	99.8	100.9
512	Drugs, drug proprietaries, and druggists' sundries	96.4	97.8	100.1	101.4	98.1	100.4	99.3	100.1	102.4	104.4	101.4	98.9
513	Apparel, piece goods, and notions	100.1	99.6	98.4	98.6	101.1	100.4	102.6	101.1	100.4	99.1	99.1	99.9
514	Groceries and related products	99.9	100.9	102.4	99.9	98.4	98.4	98.1	98.1	99.1	101.3	102.9	101.1
515	Farm-product raw materials[1]	121.4	113.9	104.9	92.4	80.8	73.9	84.8	84.8	89.8	108.9	122.1	123
516	Chemicals and allied products	99.8	100.1	102.1	101.4	101.3	99.9	99.8	99.1	99.6	97.8	99.4	10
517	Petroleum and petroleum products	104.8	99.8	97.1	93.1	95.1	96.8	96.4	99.3	101.8	106.8	105.6	104.
518	Beer, wine, and distilled alcoholic beverages	96.9	97.9	97.1	98.9	101.8	103.1	98.6	97.6	100.6	107.6	105.4	95.3
519	Miscellaneous nondurable goods	103.6	104.3	102.9	100.6	96.3	93.3	95.3	98.4	98.1	99.8	103.6	104.4

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1977-December 1978—Continued

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.9	92.2	106.9	96.5	103.5	103.8	95.4	105.1	98.9	102.5	101.4	96.7
	Total (excluding farm-product raw materials)	91.9	91.6	106.4	97.5	104.6	105.9	95.9	106.4	100.9	102.2	98.8	95.1
50	Durable goods, total	89.8	89.0	105.2	98.7	106.3	107.6	96.4	107.1	102.9	104.2	98.4	91.4
501	Motor vehicles and automotive parts and supplies	93.6	89.1	107.0	107.0	107.4	108.0	99.3	107.5	96.9	98.4	92.5	91.4
502	Furniture and home furnishings	84.6	89.1	104.6	95.9	101.6	106.2	89.4	107.2	104.2	112.8	108.3	93.8
503	Lumber and other construction materials	81.6	81.2	101.7	95.3	110.7	112.5	102.4	116.9	104.7	108.0	100.0	82.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.4	90.3	102.8	100.3	109.7	98.1	95.1	104.0	104.7	105.7	108.7	97.3
505	Metals and minerals, except petroleum	98.8	91.0	108.9	97.9	107.9	103.6	90.7	108.4	103.1	100.0	97.4	91.1
506	Electrical goods	89.4	89.1	101.7	95.2	99.2	106.4	100.2	104.9	100.9	107.7	103.3	98.5
507	Hardware, plumbing, heating equipment, and supplies	89.5	87.8	100.8	97.5	105.5	107.8	99.7	109.4	103.4	107.2	101.1	88.0
508	Machinery, equipment, and supplies	88.1	88.8	107.8	99.6	107.3	108.7	95.7	104.3	104.0	103.7	96.9	91.6
509	Miscellaneous durable goods	86.5	89.8	104.7	95.1	101.0	110.6	87.6	108.0	102.4	109.5	105.2	96.2
51	Nondurable goods, total	97.0	95.1	108.7	95.1	101.3	100.9	94.8	102.9	96.9	100.9	102.6	100.7
	Total (excluding farm-product raw materials)	93.9	94.5	107.7	95.7	102.7	104.4	95.6	105.1	98.6	100.5	100.4	97.5
511	Paper and paper products	95.2	92.4	104.5	92.6	101.9	103.0	96.6	108.3	103.7	105.0	100.5	92.7
512	Drugs, drug proprietaries, and druggists' sundries	98.2	92.7	104.9	96.0	100.4	99.8	92.7	104.5	101.4	108.3	100.6	96.9
513	Apparel, piece goods, and notions	91.3	94.8	106.4	92.3	99.6	99.3	93.5	115.1	106.8	108.1	103.9	86.0
514	Groceries and related products	95.0	91.0	104.1	96.4	104.5	106.2	99.1	106.0	100.1	100.3	99.9	94.3
515	Farm-product raw materials[1]	106.8	95.8	112.8	94.4	99.6	89.9	92.3	94.6	92.6	100.5	111.2	104.6
516	Chemicals and allied products	90.0	89.4	106.9	98.2	105.2	106.5	97.0	107.3	99.7	105.5	98.0	94.1
517	Petroleum and petroleum products	96.5	102.1	107.7	96.2	92.8	99.9	98.4	101.7	95.5	102.4	98.7	105.8
518	Beer, wine, and distilled alcoholic beverages	78.7	80.9	100.7	91.2	106.7	113.9	97.3	108.1	96.9	101.9	105.3	115.3
519	Miscellaneous nondurable goods	97.4	101.6	118.1	101.5	104.3	102.9	87.2	96.5	96.0	97.0	96.4	97.4
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	101.9	101.3	101.0	100.1	98.6	98.5	98.4	98.0	98.9	100.6	101.7	100.5
	Total (excluding farm-product raw materials)	99.7	100.3	100.8	100.2	100.2	100.5	100.1	99.1	99.4	100.0	100.3	99.2
50	Durable goods, total	99.1	100.2	100.9	100.6	101.1	101.6	100.8	99.3	99.3	99.0	99.1	98.7
501	Motor vehicles and automotive parts and supplies	101.4	102.6	101.8	101.0	102.1	100.9	98.9	96.8	97.9	97.8	98.1	100.5
502	Furniture and home furnishings	99.4	99.2	99.8	99.5	99.8	101.3	100.6	101.0	101.5	100.5	99.1	98.1
503	Lumber and other construction materials	98.1	98.8	103.0	102.6	105.0	101.6	101.5	100.2	98.9	96.1	96.9	97.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	102.4	99.2	100.5	103.3	107.3	104.4	101.1	100.6	101.2	93.9	89.0
505	Metals and minerals, except petroleum	100.4	98.6	100.5	101.0	99.7	99.2	102.4	101.9	98.6	96.7	99.5	101.5
506	Electrical goods	97.2	97.4	99.0	99.9	100.2	101.8	101.2	101.5	100.4	101.2	101.0	98.8
507	Hardware, plumbing, heating equipment, and supplies	97.8	98.0	101.6	103.2	102.8	101.7	100.5	101.4	98.7	98.6	98.2	97.3
508	Machinery, equipment, and supplies	99.2	101.1	101.7	100.0	101.0	102.3	100.1	98.1	99.3	99.6	99.5	97.8
509	Miscellaneous durable goods	97.1	98.7	96.6	98.2	96.6	101.2	101.8	102.6	101.5	103.1	102.1	100.2
51	Nondurable goods, total	104.8	103.2	101.6	98.3	95.3	93.7	94.6	96.3	98.6	103.3	106.0	103.9
	Total (excluding farm-product raw materials)	100.4	100.2	100.7	99.7	98.5	98.6	98.3	98.6	99.7	101.9	102.5	100.8
511	Paper and paper products	98.7	99.0	98.7	100.6	99.4	102.0	99.6	100.6	99.5	101.5	100.0	100.2
512	Drugs, drug proprietaries, and druggists' sundries	96.3	97.6	99.9	101.3	97.7	100.2	99.2	99.8	102.0	105.0	101.8	98.8
513	Apparel, piece goods, and notions	99.9	99.4	98.6	98.5	101.1	100.0	102.2	101.0	100.0	98.3	100.1	100.6
514	Groceries and related products	99.6	100.7	102.2	100.1	98.6	98.5	98.1	97.8	99.0	101.8	102.1	101.3
515	Farm-product raw materials[1]	120.2	114.0	106.9	93.1	81.5	76.1	84.4	83.5	88.3	108.7	121.4	120.9
516	Chemicals and allied products	99.9	99.9	102.7	101.1	101.3	99.8	99.6	99.4	99.9	96.9	98.7	100.6
517	Petroleum and petroleum products	104.9	100.2	97.9	93.5	95.6	97.0	95.4	99.0	102.5	104.8	104.6	104.2
518	Beer, wine, and distilled alcoholic beverages	96.6	96.5	97.2	99.0	101.3	103.1	98.9	97.6	100.8	107.5	106.5	94.6
519	Miscellaneous nondurable goods	103.4	103.2	105.3	101.1	96.2	92.9	95.1	97.2	98.6	99.7	103.2	104.1

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.

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.

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 bench-

mark levels and on the difference between the new series level d 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 ıgaged 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 a 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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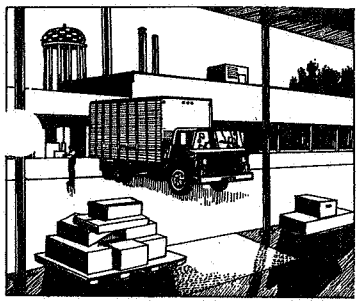
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued October 1978

August 1978

BW-78-8

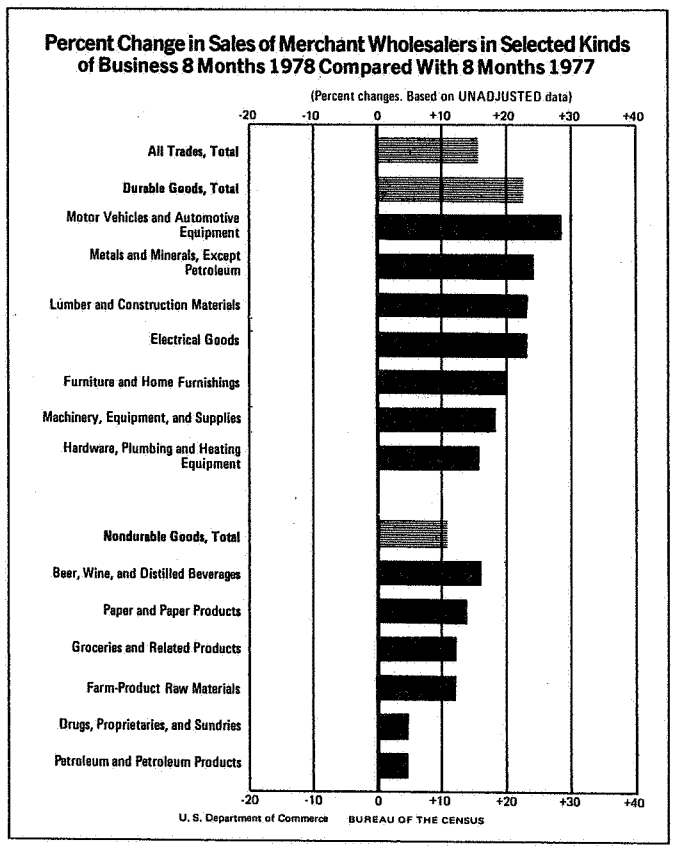
Sales—August 1978 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences, but not for price changes, were $64.4 billion, up 2 percent from the previous month and 21 percent above August 1977. Adjusted June-through-August total sales were up 3 percent from the March-through-May period and were 19 percent above the total sales for the comparable months a year ago.

After adjustment, August sales in the durable goods trades were up 1 percent from last month and were 23 percent above sales for the same month a year ago. Nondurable goods sales were up 2 percent from July and were 19 percent above August 1977. Total monthly sales in the durable goods group during the June-through-August period were 4 percent above the prior 3 months and were 24 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were 3 percent above the March-through-May period and were 15 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 increases shown in electrical goods; farm-product raw materials; and petroleum and petroleum products—all up 5 percent. The largest decrease was reported in furniture and home furnishings (-6%). Compared with sales of a year ago, all trade groups showed increases. Among the sharper increases were farm-product raw materials (38%) and motor vehicles and automotive equipment (28%).

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variations, but not for price changes, were valued at $75.5 billion at the end of August, virtually unchanged from the previous month, but 16 percent above the same month a year ago. Durable goods stocks remained about the same level as July, but were 17 percent above August 1977. Nondurable goods stocks were down 1 percent from last month, but were 14 percent above stocks on hand a year ago.

Based on adjusted data, comparisons with previous month inventory levels showed mixed results with five trade groups showing gains, nine indicating declines, and one with no change. The largest increase was reported in machinery, equipment, and supplies (2%), while the most substantial decrease was shown in farm-product raw materials (-4%). Compared with year-ago inventories, all trade groups showed increases. The sharper increases were reported in lumber and construction materials (24%) and farm-product raw materials (23%).



Stock-Sales Ratio—The August stock-sales ratio for merchant wholesalers, based on seasonally-adjusted data, was 117, down 2 points from July and down 5 points from August 1977. The stock-sales ratio for durable goods was 166, virtually unchanged from last month, but 8 points below the year-ago ratio. The ratio for nondurable goods was 75, down 3 points from July, and down 4 points from the August 1977 ratio.

An advance release of the August 1978 data was issued on October 12, 1978.

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: 1978 and 1977

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

1972 SIC code	Kind of business	1978								1977					Total 8 months	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.[p]	Aug.	Sept.	Oct.	Nov.	Dec.	1978	1977
	Merchant wholesalers, total	52,143	52,766	62,900	60,613	66,249	65,834	60,651	67,494	55,597	54,505	54,251	56,034	56,224	488,652	365,492
	Total (excluding farm-product raw materials)	46,343	47,112	55,848	54,095	58,061	58,658	54,411	60,751	50,659	49,544	49,132	49,762	50,139	435,282	322,815
50	Durable goods, total	22,869	23,880	28,985	28,784	30,405	30,991	28,701	32,184	25,998	25,461	25,369	25,340	24,797	226,799	158,638
501	Motor vehicles and automotive parts and supplies	4,797	5,065	5,870	5,956	6,083	5,929	5,552	6,208	4,762	4,554	4,605	4,721	4,698	45,460	30,706
5013,4	Automotive parts and supplies, tires and tubes	2,517	2,666	3,128	3,217	3,403	3,227	2,935	3,405	2,657	2,538	2,661	2,651	2,551	24,498	16,319
5013	Automotive parts and supplies	2,166	2,286	2,602	2,706	2,828	2,660	2,432	2,797	2,229	2,089	2,227	2,220	2,167	20,476	13,894
502	Furniture and home furnishings	867	921	1,111	1,046	1,077	1,104	1,013	1,147	972	998	1,048	1,045	1,025	8,286	5,938
5021	Furniture--household and office	304	311	356	352	368	370	328	361	310	308	320	340	350	2,748	1,781
5023	Home furnishings	564	610	755	695	710	735	685	785	662	689	728	705	676	5,538	4,157
503	Lumber and other construction materials	1,867	1,891	2,368	2,517	2,889	3,067	2,771	3,178	2,657	2,553	2,476	2,334	2,086	20,549	14,075
5031	Lumber, plywood, and millwork	1,290	1,288	1,582	1,676	1,947	2,037	1,845	2,091	1,792	1,681	1,637	1,540	1,389	13,756	9,518
5039	Construction materials, n.e.c.	576	603	786	841	942	1,031	927	1,087	866	872	839	794	697	6,794	4,557
505	Metals and minerals, except petroleum	2,505	2,557	3,040	2,942	3,153	3,169	2,817	3,186	2,731	2,709	2,437	2,592	2,423	23,371	16,108
5051 pt.	Ferrous metals service centers and offices	1,922	1,970	2,344	2,190	2,360	2,380	2,158	2,412	2,039	2,083	1,845	1,869	1,774	17,736	11,827
5051 pt.	Ferrous metals service centers	1,386	1,443	1,713	1,629	1,755	1,778	1,580	1,757	1,480	1,478	1,385	1,359	1,282	13,042	8,313
506	Electrical goods	2,541	2,627	3,096	2,980	3,239	3,385	3,193	3,519	2,821	2,846	2,998	2,973	2,964	24,580	17,143
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,262	1,354	1,561	1,556	1,698	1,725	1,663	1,757	1,456	1,369	1,436	1,436	1,379	12,575	8,538
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,279	1,273	1,535	1,424	1,541	1,660	1,530	1,762	1,365	1,477	1,562	1,537	1,585	12,005	8,605
5064	Electrical appliances, TV and radio sets	763	762	939	841	931	994	912	1,052	919	979	1,011	989	1,003	7,194	5,630
507	Hardware, plumbing, heating equipment, and supplies	1,790	1,708	2,021	2,102	2,306	2,360	2,247	2,452	2,068	1,961	2,027	1,974	1,820	16,987	12,554
5072	Hardware	693	679	793	797	856	836	760	867	790	750	750	768	676	6,281	4,916
5074	Plumbing and heating equipment and supplies (hydronics)	726	675	801	834	904	902	916	1,033	842	802	846	791	753	6,792	5,155
508	Machinery, equipment, and supplies	6,190	6,632	8,301	8,296	8,616	8,790	7,827	8,704	7,380	7,217	7,163	6,941	7,019	63,354	46,
5082	Construction and mining machinery and equipment	825	875	1,130	1,254	1,276	1,229	1,122	1,173	971	1,002	1,006	1,025	1,006	8,885	6,630
5084,5	Industrial machinery, equipment, and supplies	2,545	2,790	3,294	3,077	3,388	3,505	3,049	3,445	2,891	2,771	2,750	2,858	2,861	25,094	17,577
5086	Professional equipment, supplies	710	732	863	816	873	952	888	1,010	846	805	808	773	805	6,843	5,209
5093	Scrap and waste materials	757	815	979	958	1,058	1,057	940	1,032	802	810	807	812	779	7,595	5,622
51	Nondurable goods, total	29,274	28,886	33,915	31,829	35,844	34,843	31,950	35,310	29,599	29,044	28,882	30,694	31,427	261,854	206,854
	Total (excluding farm-product raw materials)	23,474	23,232	26,863	25,311	27,656	27,667	25,710	28,567	24,661	24,084	23,763	24,422	25,342	208,412	164,177
511	Paper and paper products	1,316	1,284	1,506	1,395	1,508	1,498	1,384	1,589	1,388	1,366	1,341	1,335	1,358	11,481	8,694
5111,3	Printing, writing, industrial, and personal service paper	950	926	1,100	1,032	1,126	1,125	1,046	1,197	1,060	1,032	1,007	988	995	8,502	6,717
512	Drugs, drug proprietaries, and druggists' sundries	887	824	994	912	943	950	902	1,024	952	948	939	926	922	7,437	6,181
5122	Drugs, drug proprietaries, and druggists' sundries	887	824	994	912	943	950	902	1,024	952	948	939	926	922	7,437	6,181
5122 pt.	General-line drugs	423	393	470	423	447	448	409	468	459	455	438	452	444	3,481	2,816
513	Apparel, piece goods, and notions[1]	1,620	1,615	2,063	1,818	2,099	2,066	2,036	2,645	1,938	1,815	1,919	1,837	1,617	15,962	10,469
514	Groceries and related products	9,261	9,093	10,398	9,916	10,873	10,685	10,237	11,008	9,716	9,433	9,289	9,591	9,798	81,472	62,873
5141	Groceries, general-line	3,426	3,333	3,740	3,547	3,791	3,724	3,649	3,960	3,493	3,396	3,360	3,579	3,587	29,170	23,195
5144	Poultry and poultry products	402	397	486	468	507	503	482	526	456	432	419	458	454	3,770	2,953
5145	Confectionery	154	163	191	173	191	189	171	186	171	172	183	194	188	1,418	1,013
5147	Meats and meat products	1,460	1,462	1,651	1,688	1,871	1,826	1,800	1,971	1,591	1,486	1,498	1,525	1,510	13,729	9,865
5148	Fresh fruits and vegetables	839	824	986	1,035	1,184	1,198	1,044	973	877	810	836	886	889	8,083	5,597
515	Farm-product raw materials	5,800	5,654	7,052	6,518	8,188	7,176	6,240	6,743	4,938	4,960	5,119	6,272	6,085	53,371	42,677
5153	Grain	4,549	4,503	5,718	5,358	6,890	6,078	5,317	5,719	4,011	4,005	4,069	4,968	4,730	44,134	35,491
517	Petroleum and petroleum products	4,209	4,085	4,249	3,830	4,178	4,111	4,000	4,353	3,752	3,612	3,839	3,983	4,355	33,014	27,880
5171	Petroleum bulk stations and terminals	2,387	2,293	2,384	2,188	2,425	2,358	2,190	2,347	2,160	2,103	2,195	2,266	2,523	18,572	16,039
518	Beer, wine, and distilled alcoholic beverages	1,654	1,770	2,299	1,993	2,295	2,506	2,191	2,496	2,108	2,018	1,884	2,143	2,444	17,204	12,774
5181	Beer and ale	795	839	1,094	998	1,219	1,372	1,217	1,347	1,093	1,012	888	938	1,020	8,880	6,283
5182	Wines and distilled alcoholic beverages	859	931	1,204	996	1,076	1,134	974	1,149	1,014	1,005	995	1,204	1,424	8,323	6,491
519	Miscellaneous nondurable goods	3,723	3,782	4,434	4,568	4,730	4,819	4,040	4,393	3,822	4,055	3,722	3,749	4,028	34,490	29,387
5194	Tobacco and tobacco products	721	692	782	765	812	849	838	914	780	751	748	705	819	6,375	5,065

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

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

[1]The apparel piece goods and notions group is subject to a sampling variability of 13 percent for August 1978.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978								1977				
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.[p]	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	69,596	71,156	73,931	74,635	74,634	74,882	74,874	74,269	64,105	65,291	66,530	68,082	68,555
	Total (excluding farm-product raw materials)	64,090	65,682	67,973	69,060	69,883	70,513	71,073	70,663	61,074	61,963	62,324	62,939	63,245
50	Durable goods, total	44,287	45,757	47,275	47,957	48,918	49,627	49,900	49,377	42,142	42,484	42,627	43,252	43,676
501	Motor vehicles and automotive parts and supplies	7,709	8,189	7,995	7,973	8,246	8,218	8,367	8,244	6,831	6,842	7,089	7,376	7,424
5013,4	Automotive parts and supplies, tires and tubes	4,743	4,962	4,856	4,901	5,149	5,035	5,034	5,015	4,512	4,496	4,438	4,669	4,607
5013	Automotive parts and supplies	3,953	4,163	4,041	4,171	4,382	4,241	4,288	4,276	3,712	3,663	3,639	3,912	3,790
502	Furniture and home furnishings	1,560	1,606	1,633	1,669	1,730	1,781	1,764	1,744	1,451	1,493	1,455	1,444	1,512
5023	Home furnishings	1,137	1,184	1,182	1,233	1,279	1,305	1,305	1,285	1,069	1,085	1,057	1,054	1,099
503	Lumber and other construction materials	2,676	2,761	2,919	2,966	3,030	3,071	3,095	3,005	2,429	2,510	2,489	2,513	2,602
5031	Lumber, plywood, and millwork	1,715	1,775	1,870	1,882	1,963	1,949	1,967	1,911	1,632	1,659	1,629	1,643	1,671
505	Metals and minerals, except petroleum	4,449	4,660	4,953	4,976	5,356	5,307	5,305	5,213	4,519	4,434	4,277	4,444	4,459
5051 pt.	Ferrous metals service centers and offices	3,471	3,591	3,820	3,823	4,116	4,108	4,104	4,056	3,692	3,689	3,511	3,514	3,568
5051 pt.	Ferrous metals service centers	2,633	2,760	3,039	2,971	3,220	3,268	3,191	3,143	2,858	2,874	2,686	2,738	2,768
506	Electrical goods	4,563	4,594	4,867	4,951	5,129	5,312	5,266	5,251	4,580	4,599	4,591	4,611	4,653
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,114	2,214	2,226	2,286	2,417	2,358	2,283	2,277	2,088	2,069	2,025	2,100	2,121
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,449	2,380	2,640	2,665	2,712	2,954	2,983	2,975	2,493	2,530	2,566	2,511	2,533
507	Hardware, plumbing, heating equipment, and supplies	3,712	3,876	4,058	4,231	4,222	4,201	4,215	4,184	3,582	3,578	3,621	3,608	3,620
5072	Hardware	1,366	1,384	1,421	1,428	1,445	1,423	1,410	1,416	1,282	1,296	1,319	1,320	1,358
5074	Plumbing and heating equipment and supplies (hydronics)[1]	1,590	1,678	1,784	1,861	1,815	1,818	1,839	1,822	1,588	1,579	1,566	1,562	1,555
508	Machinery, equipment, and supplies	15,508	16,005	16,511	16,762	16,796	17,061	17,057	16,973	14,513	14,706	14,631	15,026	15,307
5082	Construction and mining machinery and equipment	3,281	3,396	3,505	3,516	3,589	3,636	3,637	3,714	2,928	3,110	3,083	3,202	3,261
5084,5	Industrial machinery, equipment, and supplies	4,816	4,912	4,996	5,055	5,160	5,328	5,301	5,249	4,447	4,503	4,534	4,555	4,742
51	Nondurable goods, total	25,309	25,399	26,656	26,678	25,716	25,255	24,974	24,892	21,963	22,807	23,903	24,830	24,879
	Total (excluding farm-product raw materials)	19,803	19,925	20,699	21,103	20,966	20,887	21,173	21,286	18,932	19,479	19,697	19,687	19,569
511	Paper and paper products	1,255	1,259	1,310	1,349	1,343	1,376	1,341	1,332	1,248	1,275	1,261	1,269	1,261
5111,3	Printing, writing, industrial, and personal service paper	868	877	910	911	929	955	938	911	877	880	878	865	873
512	Drugs, drug proprietaries, and druggists' sundries	1,266	1,292	1,330	1,345	1,350	1,401	1,368	1,385	1,297	1,320	1,373	1,337	1,303
514	Groceries and related products	5,401	5,376	5,710	5,740	5,752	5,871	5,833	5,863	5,283	5,448	5,507	5,465	5,540
5141	Groceries, general-line	2,350	2,366	2,562	2,500	2,495	2,512	2,480	2,530	2,265	2,363	2,446	2,441	2,473
517	Petroleum and petroleum products	2,045	1,936	1,953	1,872	1,938	1,837	1,974	2,024	1,959	2,064	2,023	2,053	2,042
518	Beer, wine, and distilled alcoholic beverages	1,917	1,889	2,017	2,133	2,135	2,148	2,178	2,174	1,977	2,048	2,121	2,075	1,809
5181	Beer and ale	611	641	707	758	730	717	709	667	660	673	658	632	581
5182	Wines and distilled alcoholic beverages	1,305	1,248	1,311	1,375	1,405	1,431	1,469	1,508	1,317	1,375	1,462	1,443	1,228

See footnotes below table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978								1977				
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.[p]	Aug.	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	133	135	118	123	113	114	123	110	115	120	123	122	122
	Total (excluding farm-product raw materials)	138	139	122	128	120	120	131	116	121	125	127	126	126
50	Durable goods, total	194	192	163	167	161	160	174	153	162	167	168	171	176
501	Motor vehicles and automotive parts and supplies	161	162	136	134	136	139	151	133	143	150	154	156	158
5013,4	Automotive parts and supplies, tires and tubes	188	186	155	152	151	156	172	147	170	177	167	176	181
5013	Automotive parts and supplies	183	182	155	154	155	159	176	153	167	175	163	176	175
502	Furniture and home furnishings	180	174	147	159	161	161	174	152	149	150	139	138	147
5023	Home furnishings	202	194	157	178	180	178	190	164	162	157	145	150	163
503	Lumber and other construction materials	143	146	123	118	105	100	112	95	91	98	101	108	125
5031	Lumber, plywood, and millwork	133	138	118	112	101	96	107	91	91	99	100	107	120
505	Metals and minerals, except petroleum	178	182	163	169	170	167	188	164	165	164	176	171	184
5051 pt.	Ferrous metals service centers and offices	181	182	163	175	174	173	190	168	181	177	190	188	201
5051 pt.	Ferrous metals service centers	190	191	177	182	184	184	202	179	193	194	194	201	216
506	Electrical goods	180	175	157	166	158	157	165	149	162	162	153	155	157
5063	Electrical apparatus and equipment, wiring supplies and construction materials	168	163	143	147	142	137	137	130	143	151	141	146	154
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	191	187	172	187	176	178	195	169	183	171	164	163	160
507	Hardware, plumbing, heating equipment, and supplies	207	227	201	201	183	178	188	171	173	182	179	183	199
5072	Hardware	197	204	179	179	169	170	185	163	162	173	176	172	201
5074	Plumbing and heating equipment and supplies (hydronics)	219	249	223	223	201	202	201	176	189	197	185	197	206
508	Machinery, equipment, and supplies	251	241	199	202	195	194	218	195	197	204	204	216	218
5082	Construction and mining machinery and equipment	398	388	310	280	281	296	324	317	302	310	306	312	324
5084,5	Industrial machinery, equipment, and supplies	189	176	152	164	152	152	174	152	154	163	165	159	166
51	Nondurable goods, total	86	88	79	84	72	72	78	71	74	79	83	81	79
	Total (excluding farm-product raw materials)	84	86	77	83	76	75	82	75	77	81	83	81	77
511	Paper and paper products	95	98	87	97	89	92	97	84	90	93	94	95	93
5111,3	Printing, writing, industrial, and personal service paper	91	95	83	88	82	85	90	76	83	85	87	88	88
512	Drugs, drug proprietaries, and druggists' sundries	143	157	134	147	143	147	152	135	136	139	146	144	141
514	Groceries and related products	58	59	55	58	53	55	57	53	54	58	59	57	57
1	Groceries, general-line	69	71	68	70	66	67	68	64	65	70	73	68	69
	Petroleum and petroleum products	49	47	46	49	46	45	49	47	52	57	53	52	47
518	Beer, wine, and distilled alcoholic beverages	116	107	88	107	93	86	99	87	94	102	113	97	74
5181	Beer and ale	77	76	65	76	60	52	58	49	60	66	74	67	57
5182	Wines and distilled alcoholic beverages	152	134	109	138	131	126	151	131	130	137	147	120	86

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

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

[1]The plumbing and heating equipment and supplies (hydronics) group is subject to a sampling variability of 10 percent for August 1978.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978								1977				
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.P	Aug.	Sept.	Oct.	Nov.	Dec.
		Sales ADJUSTED for seasonal variations and trading-day differences												
	Merchant wholesalers, total	55,985	57,635	58,877	62,152	64,011	63,235	63,404	64,371	53,208	53,307	53,639	55,558	57,266
	Total (excluding farm-product raw materials)	50,554	51,733	52,625	55,247	55,790	55,253	56,643	57,243	48,037	48,018	48,630	49,887	51,663
50	Durable goods, total	25,568	26,976	27,466	28,974	28,692	28,738	29,831	29,985	24,390	24,150	24,997	25,601	26,488
501	Motor vehicles and automotive parts and supplies	5,125	5,685	5,486	5,566	5,664	5,490	5,591	5,775	4,497	4,504	4,889	4,969	5,220
502	Furniture and home furnishings	1,025	1,034	1,062	1,091	1,060	1,040	1,133	1,070	914	934	950	957	1,082
503	Lumber and other construction materials	2,288	2,329	2,328	2,641	2,610	2,726	2,706	2,719	2,283	2,349	2,418	2,320	2,443
505	Metals and minerals, except petroleum	2,535	2,810	2,792	3,005	2,922	3,059	3,106	2,939	2,540	2,580	2,539	2,605	2,669
506	Electrical goods	2,842	2,948	3,044	3,130	3,265	3,181	3,187	3,355	2,664	2,731	2,818	2,918	2,917
507	Hardware, plumbing, heating equipment, and supplies	2,000	1,945	2,005	2,156	2,186	2,189	2,254	2,241	1,902	1,834	1,916	1,958	2,024
508	Machinery, equipment, and supplies	7,026	7,468	7,700	8,329	8,030	8,086	8,179	8,345	7,130	6,726	6,988	7,268	7,396
51	Nondurable goods, total	30,417	30,659	31,411	33,178	35,319	34,497	33,573	34,386	28,818	29,157	28,642	29,957	30,778
	Total (excluding farm-product raw materials)	24,986	24,757	25,159	26,273	27,098	26,515	26,812	27,258	23,647	23,852	23,633	24,286	25,175
511	Paper and paper products	1,382	1,390	1,441	1,506	1,480	1,454	1,433	1,467	1,282	1,305	1,294	1,294	1,419
512	Drugs, drug proprietaries, and druggists' sundries	903	889	948	950	939	952	973	980	916	908	867	913	932
513	Apparel, piece goods, and notions	1,774	1,704	1,939	1,970	2,107	2,081	2,178	2,298	1,687	1,668	1,821	1,740	1,856
514	Groceries and related products	9,748	9,992	9,988	10,286	10,405	10,061	10,330	10,385	9,218	9,367	9,280	9,620	9,947
515	Farm-product raw materials[1]	5,431	5,902	6,252	6,905	8,221	7,982	6,761	7,128	5,171	5,305	5,009	5,671	5,603
517	Petroleum and petroleum products	4,362	4,001	3,945	3,981	4,502	4,115	4,065	4,280	3,682	3,712	3,749	3,928	4,124
518	Beer, wine, and distilled alcoholic beverages	2,102	2,188	2,283	2,185	2,151	2,200	2,252	2,309	1,970	2,012	1,907	2,026	2,035
519	Miscellaneous nondurable goods	3,822	3,722	3,754	4,500	4,535	4,683	4,633	4,552	3,973	4,071	3,901	3,901	3,992
		Inventories ADJUSTED for seasonal variations												
	Merchant wholesalers, total	68,991	70,361	72,882	74,867	75,474	75,820	75,664	75,538	65,095	66,119	66,209	67,047	67,998
	Total (excluding farm-product raw materials)	64,410	65,559	67,309	68,879	69,646	70,080	71,160	71,219	61,521	62,413	62,347	62,835	63,712
50	Durable goods, total	44,686	45,684	46,838	47,673	48,363	48,810	49,577	49,630	42,396	42,896	43,014	43,642	44,?
501	Motor vehicles and automotive parts and supplies	7,603	7,981	7,854	7,894	8,076	8,145	8,460	8,517	7,071	6,989	7,248	7,534	7,394
502	Furniture and home furnishings	1,569	1,619	1,636	1,677	1,733	1,758	1,753	1,727	1,432	1,480	1,461	1,438	1,541
503	Lumber and other construction materials	2,728	2,795	2,834	2,891	2,886	3,023	3,049	2,999	2,415	2,566	2,612	2,607	2,680
505	Metals and minerals, except petroleum	4,431	4,726	4,928	4,927	5,372	5,350	5,181	5,116	4,461	4,520	4,418	4,484	4,397
506	Electrical goods	4,694	4,717	4,916	4,956	5,119	5,218	5,204	5,173	4,521	4,581	4,519	4,547	4,710
507	Hardware, plumbing, heating equipment, and supplies	3,796	3,955	3,994	4,100	4,107	4,131	4,194	4,126	3,533	3,636	3,684	3,667	3,709
508	Machinery, equipment, and supplies	15,633	15,831	16,235	16,762	16,630	16,677	17,040	17,302	14,824	14,840	14,690	15,086	15,651
51	Nondurable goods, total	24,305	24,677	26,044	27,194	27,111	27,010	26,087	25,908	22,699	23,223	23,195	23,405	23,630
	Total (excluding farm-product raw materials)	19,724	19,875	20,471	21,206	21,283	21,270	21,583	21,589	19,125	19,517	19,333	19,193	19,344
511	Paper and paper products	1,272	1,272	1,327	1,341	1,351	1,349	1,346	1,324	1,237	1,274	1,257	1,272	1,250
512	Drugs, drug proprietaries, and druggists' sundries	1,315	1,324	1,331	1,328	1,382	1,398	1,379	1,388	1,296	1,289	1,315	1,319	1,317
514	Groceries and related products	5,423	5,339	5,587	5,734	5,834	5,960	5,946	5,995	5,385	5,497	5,436	5,311	5,480
517	Petroleum and petroleum products	1,949	1,932	1,995	2,002	2,027	1,894	2,069	2,044	1,973	2,028	1,894	1,944	1,958
518	Beer, wine, and distilled alcoholic beverages	1,984	1,958	2,075	2,155	2,108	2,083	2,202	2,227	2,026	2,036	1,971	1,969	1,898
		Stock-sales ratios based on ADJUSTED data												
	Merchant wholesalers, total	123	122	124	120	118	120	119	117	122	124	123	121	119
	Total (excluding farm-product raw materials)	127	127	128	125	125	127	126	124	128	130	128	126	123
50	Durable goods, total	175	169	171	165	169	170	166	166	174	178	172	170	168
501	Motor vehicles and automotive parts and supplies	148	140	143	142	143	148	151	147	157	155	148	152	142
502	Furniture and home furnishings	153	157	154	154	163	169	155	161	157	158	154	150	142
503	Lumber and other construction materials	119	120	122	109	111	111	113	110	106	109	108	112	110
505	Metals and minerals, except petroleum	175	168	177	164	184	175	167	174	176	175	174	172	165
506	Electrical goods	165	160	161	158	157	164	163	154	170	168	160	156	161
507	Hardware, plumbing, heating equipment, and supplies	190	203	199	190	188	189	186	184	186	198	192	187	183
508	Machinery, equipment, and supplies	223	212	211	201	207	206	208	207	208	221	210	208	212
51	Nondurable goods, total	80	80	83	82	77	78	78	75	79	80	81	78	77
	Total (excluding farm-product raw materials)	79	80	81	81	79	80	80	79	81	82	82	79	77
511	Paper and paper products	92	92	92	89	91	93	94	90	96	98	97	98	88
512	Drugs, drug proprietaries, and druggists' sundries	146	149	140	140	147	147	142	142	141	142	152	144	
514	Groceries and related products	56	53	56	56	56	59	58	58	58	59	59	55	
517	Petroleum and petroleum products	45	48	51	50	45	46	51	48	54	55	51	49	
518	Beer, wine, and distilled alcoholic beverages	94	89	91	99	98	95	98	96	103	101	103	97	93

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]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, June 1978-Aug. 1978 from--			
	Mar. 1978-May 1978 (3 months ago)	Dec. 1977-Feb. 1978 (6 months ago)	Sept. 1977-Nov. 1977 (9 months ago)	June 1977-Aug. 1977 (12 months ago)
Merchant wholesalers, total.....	+3	+12	+18	+19
Durable goods, total.....	+4	+12	+18	+24
Nondurable goods, total.....	+3	+12	+17	+15

Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers: 1972-1978

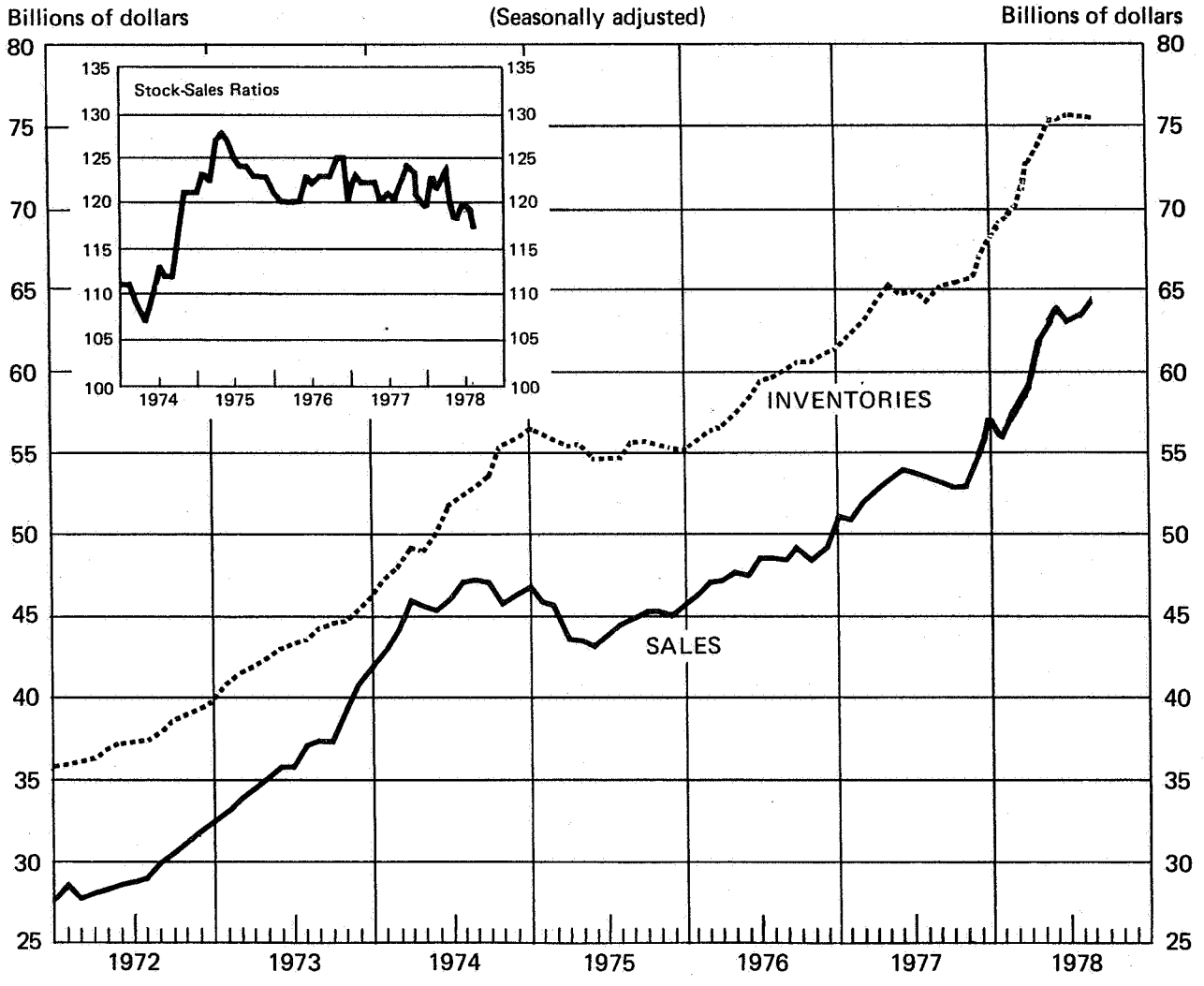


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: August 1978

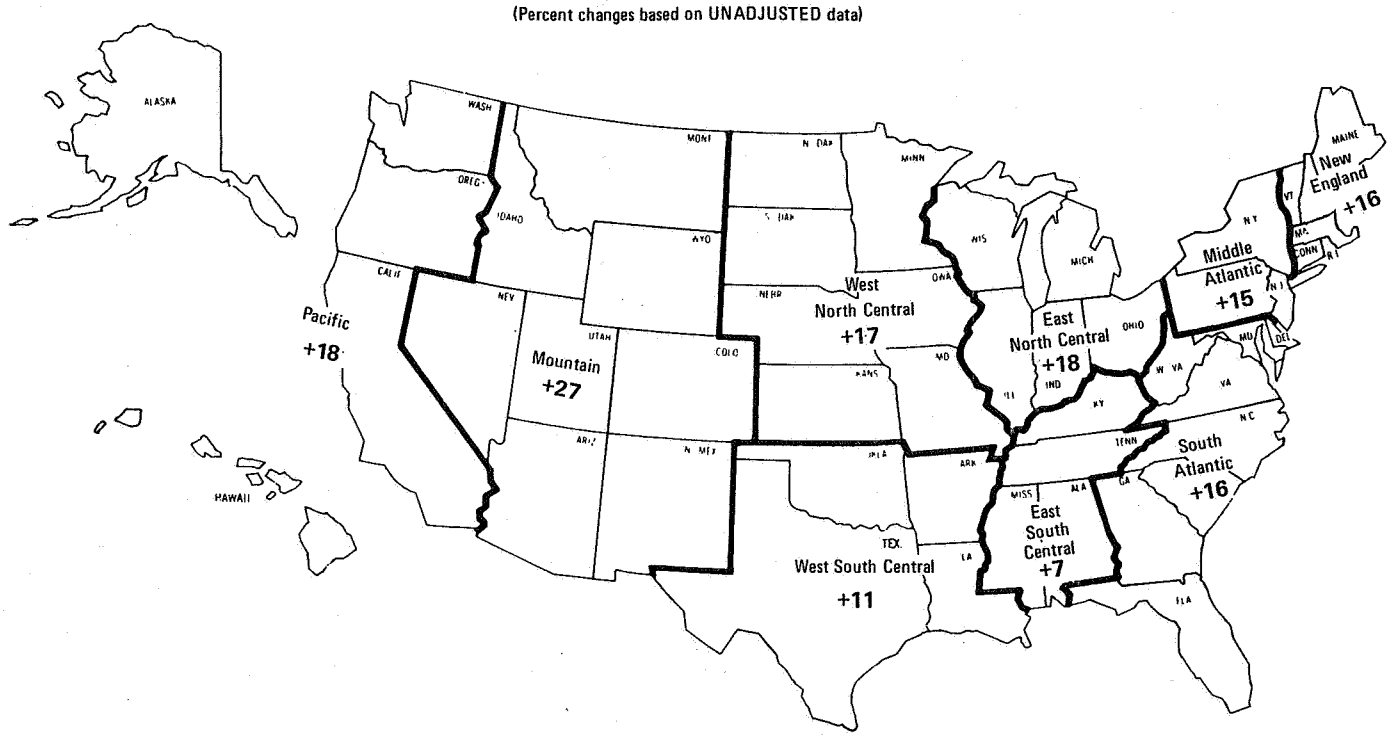
1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		Aug. 1978 from July 1978	Aug. 1978 from Aug. 1977	8 months 1978 from 8 months 1977	Aug. 1978 from July 1978	Aug. 1978 from Aug. 1977	Aug. 1978 from July 1978	Aug. 1978 from Aug. 1977	Aug. 1978 from July 1978	Aug. 1978 from Aug. 1977
	Merchant wholesalers, total	+11	+21	+16	-1	+16	+2	+21	0	+16
	Total (excluding farm-product raw materials)	+12	+20	+17	-1	+16	+1	+19	0	+16
50	Durable goods, total	+12	+24	+23	-1	+17	+1	+23	0	+17
501	Motor vehicles and automotive parts and supplies	+12	+30	+28	-1	+21	+3	+28	+1	+20
5012	Automobiles and other motor vehicles	+7	+33	+27	-3	+39	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	+16	+28	+29	0	+11	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	+15	+25	+27	0	+15	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	+13	+18	+20	-1	+20	-6	+17	-1	+21
5021	Furniture--household and office	+10	+16	+31	0	+20	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	+8	+27	+33	+2	+16	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	+12	+11	+30	-1	+24	(*)	(*)	(*)	(*)
5023	Home furnishings	+15	+19	+15	-2	+20	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	+15	+20	+23	-3	+24	0	+19	-2	+24
5031	Lumber, plywood, and millwork	+13	+17	+22	-3	+17	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c.	+17	+26	+25	-3	+37	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(S)	+12	(S)	-5	+13	(S)	+17	-2	+14
505	Metals and minerals, except petroleum	+13	+17	+24	-2	+15	-5	+16	-1	+15
5051 pt.	Ferrous metals service centers and offices	+12	+18	+28	-1	+10	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	+11	+19	+33	-2	+10	(*)	(*)	(*)	(*)
5051 pt.	Nonferrous metals service centers and offices	+14	+15	+19	-4	+37	(*)	(*)	(*)	(*)
506	Electrical goods	+10	+25	+23	0	+15	+5	+26	-1	+14
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+6	+21	+26	0	+10	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+15	+29	+20	0	+19	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	+15	+14	+10	0	+12	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	+9	+19	+16	-1	+17	-1	+18	-2	+17
5072	Hardware	+14	+10	+10	0	+10	(*)	(*)	(*)	(
5074	Plumbing and heating equipment and supplies (hydronics)	+13	+23	+13	-1	+15	(*)	(*)	(*)	(*)
5075	Warm air heating and air conditioning equipment and supplies	-4	+25	+33	-2	+35	(*)	(*)	(*)	(*)
508	Machinery, equipment, and supplies	+11	+18	+18	0	+17	+2	+17	+2	+17
5081	Commercial machines and equipment	+20	+37	+29	-2	+3	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	+5	+21	+17	+2	+27	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	+8	+20	+18	-1	+12	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	+13	+19	+23	-1	+18	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	+14	+19	+13	0	+24	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	+10	+29	+18	-2	+4	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	+6	+30	+19	-2	+1	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	+17	+27	+17	-4	+11	(*)	(*)	(*)	(*)
51	Nondurable goods, total	+11	+19	+11	0	+13	+2	+19	-1	+14
	Total (excluding farm-product raw materials)	+11	+16	+10	+1	+12	+2	+15	0	+13
511	Paper and paper products	+15	+14	+14	-1	+7	+2	+14	-2	+5
5111,3	Printing, writing, industrial, and personal service paper	+14	+13	+10	-3	+4	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	+14	+8	+4	+1	+7	+1	+7	+1	+7
5122	Drugs, drug proprietaries, and druggists' sundries	+14	+8	+4	+1	+7	(*)	(*)	(*)	(*)
5122 pt.	General-line drugs	+14	+2	+6	0	-2	(*)	(*)	(*)	(*)
514	Groceries and related products	+8	+13	+12	+1	+11	+1	+13	+1	+11
5141	Groceries, general-line	+9	+13	+10	+2	+12	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	+6	+11	+6	0	+7	(*)	(*)	(*)	(*)
5141 pt.	Retailers cooperatives	+10	+12	+11	+3	+14	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	+10	+17	+11	+3	+14	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	+10	+8	+8	-3	+5	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	+9	+15	+12	-1	+5	(*)	(*)	(*)	(*)
5145	Confectionery	+9	+9	+20	+2	+11	(*)	(*)	(*)	(*)
5147	Meats and meat products	+10	+24	+20	+2	+27	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	-7	+11	+25	(S)	+28	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	+8	+37	+12	-5	+19	+5	+38	-4	+23
5152	Cotton	+9	+10	+8	-9	+50	(*)	(*)	(*)	(*)
5153	Grain	+8	+43	+12	-6	+20	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	+9	+16	+4	+3	+3	+5	+16	-1	+4
5171	Petroleum bulk stations and terminals	+7	+9	+2	+5	-5	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	+14	+18	+16	0	+10	+3	+17	+1	+10
5181	Beer and ale	+11	+23	+20	-6	+1	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	+18	+13	+11	+3	+15	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	+9	+15	+4	+2	+16	-2	+15	0	+1
5191	Farm supplies	+3	+14	-7	+3	+21	(*)	(*)	(*)	
5194	Tobacco and tobacco products	+9	+17	+9	+1	+5	(*)	(*)	(*)	
5198	Paints, varnishes, and supplies	+20	+27	+14	-1	+26	(*)	(*)	(*)	(*)
5199 pt.	Books, periodicals, newspapers	+2	+36	+45	-1	+3	(*)	(*)	(*)	(*)

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

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

Sales of Merchant Wholesalers by Geographic Division
8 Months 1978 Compared With 8 Months 1977

(Percent changes based on UNADJUSTED data)



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Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1978 and 1977

(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]	1978								1977					Total 8 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.[P]	Aug.	Sept.	Oct.	Nov.	Dec.	1978	1977	Range[2]	Median
	Merchant wholesalers, total	52,143	52,766	62,900	60,613	66,249	65,834	60,651	67,494	55,597	54,505	54,251	56,034	56,224	488,652	365,492	0.8-0.9	0.9
	New England	2,693	2,657	3,191	2,913	3,231	3,451	3,206	3,594	2,856	2,880	2,919	3,036	3,008	24,936	18,573	5-6	6
	Middle Atlantic	11,846	11,840	14,206	13,114	14,345	14,752	13,281	15,214	12,356	12,428	11,945	12,494	12,924	108,600	81,929	2-2	2
	East North Central	8,929	9,269	10,680	10,708	11,787	11,510	10,461	11,459	9,685	9,431	9,724	9,841	9,596	84,802	61,949	2-3	3
	West North Central	5,566	5,390	6,419	6,522	7,583	6,999	6,513	7,308	5,639	5,509	5,670	5,977	5,617	52,300	39,147	2-3	2
	South Atlantic	5,666	5,686	6,792	6,533	6,858	7,044	6,523	7,220	6,015	5,934	5,854	6,126	6,188	52,323	39,002	2-3	2
	East South Central	2,421	2,534	3,201	3,318	3,453	3,132	2,962	3,184	2,853	2,723	2,813	2,765	2,822	24,206	19,761	4-5	4
	West South Central	5,582	5,843	6,878	6,433	6,857	6,744	6,382	6,877	6,108	5,745	5,644	6,008	6,283	51,597	40,388	3-4	4
	Mountain	1,934	1,900	2,536	2,412	2,537	2,777	2,456	2,704	2,040	2,177	2,027	1,964	2,099	19,255	13,098	5-5	5
	Pacific	7,506	7,649	8,994	8,659	9,600	9,426	8,868	9,932	8,045	7,678	7,655	7,821	7,688	70,635	51,645	2-3	3
50	Durable goods, total	22,869	23,880	28,985	28,784	30,405	30,991	28,701	32,184	25,998	25,461	25,369	25,340	24,797	226,799	158,638	0.8-1.0	0.9
	Middle Atlantic	4,973	5,138	6,295	5,952	6,181	6,464	5,808	6,646	5,354	5,366	5,420	5,477	5,379	47,458	33,267	4-5	4
	East North Central	3,935	4,363	5,081	5,128	5,495	5,407	4,958	5,671	4,771	4,635	4,573	4,549	4,282	40,036	28,413	3-4	4
	West North Central	1,776	1,805	2,228	2,378	2,548	2,446	2,383	2,657	2,083	2,003	2,061	2,075	1,900	18,220	12,985	5-6	5
	South Atlantic	2,809	2,768	3,414	3,455	3,538	3,817	3,480	3,892	3,127	3,113	3,088	3,051	2,971	27,173	19,439	4-5	4
	West South Central	2,413	2,626	3,180	3,097	3,303	3,366	3,135	3,372	2,886	2,673	2,643	2,611	2,729	24,491	17,231	4-4	4
	Mountain	923	893	1,192	1,208	1,247	1,412	1,303	1,478	1,016	1,051	988	900	989	9,656	5,970	6-7	7
	Pacific	4,115	4,283	5,007	4,901	5,316	5,256	5,026	5,596	4,477	4,282	4,210	4,335	4,262	39,500	27,240	2-3	3
51	Nondurable goods, total	29,274	28,886	33,915	31,829	35,844	34,843	31,950	35,310	29,599	29,044	28,882	30,694	31,427	261,854	206,854	1.0-1.2	1.0
	New England	1,735	1,735	2,017	1,747	2,014	2,151	1,988	2,239	1,860	1,843	1,839	1,918	1,918	15,626	12,349	5-7	6
	Middle Atlantic	6,873	6,701	7,912	7,162	8,164	8,288	7,473	8,568	7,002	7,062	6,525	7,017	7,545	61,141	48,662	3-3	3
	East North Central	4,994	4,906	5,599	5,580	6,292	6,103	5,504	5,788	4,914	4,796	5,151	5,292	5,314	44,765	33,536	3-4	3
	West North Central	3,790	3,584	4,191	4,145	5,035	4,554	4,129	4,651	3,556	3,506	3,609	3,902	3,717	34,079	26,162	3-4	3
	South Atlantic	2,857	2,918	3,378	3,078	3,320	3,227	3,044	3,328	2,888	2,821	2,766	3,075	3,217	25,150	19,563	3-5	3
	East South Central	1,453	1,451	1,788	1,819	1,892	1,609	1,572	1,668	1,565	1,422	1,507	1,542	1,626	13,252	11,892	3-4	4
	West South Central	3,169	3,217	3,699	3,336	3,554	3,378	3,248	3,505	3,222	3,072	3,001	3,397	3,554	27,105	23,157	5-5	5
	Pacific	3,392	3,367	3,987	3,757	4,284	4,170	3,842	4,336	3,568	3,396	3,445	3,486	3,426	31,135	24,405	4-5	4

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

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

[1]See map on page 7.

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

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: August 1978

(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[1]			Inventories			
		Aug. 1978 from July 1978	Aug. 1978 from Aug. 1977	8 months 1978 from 8 months 1977	Aug. 1978 from July 1978	Aug. 1978 from Aug. 1977		
		A	B	C[1]	D	E	A	D
	Merchant wholesalers, total	+11	+21	+16	-1	+16	0.4	0.2
	New England	+12	+26	+16	+1	+22	2.0	1.9
	Middle Atlantic	+15	+23	+15	-1	+11	1.1	0.6
	East North Central	+10	+18	+18	-1	+16	1.2	0.8
	West North Central	+12	+30	+17	-1	+15	1.3	1.1
	South Atlantic	+11	+20	+16	-1	+14	1.6	1.0
	East South Central	+7	+12	+7	0	+27	1.7	1.4
	West South Central	+8	+13	+11	-1	+14	1.4	0.8
	Mountain	+10	+33	+27	-3	+15	2.4	1.3
	Pacific	+12	+23	+18	0	+21	1.2	0.5
50	Durable goods, total	+12	+24	+23	-1	+17	0.6	0.3
	New England	+11	+36	+29	0	+19	2.4	1.3
	Middle Atlantic	+14	+24	+23	-2	+13	1.7	1.0
	East North Central	+14	+19	+21	-1	+18	1.9	1.0
	West North Central	+12	+28	+21	-1	+14	3.3	1.7
	South Atlantic	+12	+24	+20	-1	+16	1.9	1.2
	East South Central	+9	+18	+20	+1	+22	3.9	2.5
	West South Central	+8	+17	+22	-1	+19	2.1	1.2
	Mountain	+13	+45	+38	-4	+21	2.9	1.7
	Pacific	+11	+25	+25	-1	+20	1.9	0.7
51	Nondurable goods, total	+11	+19	+11	0	+13	0.6	0.4
	New England	+13	+20	+10	+2	+25	1.9	2.7
	Middle Atlantic	+15	+22	+10	0	+7	1.9	0.9
	East North Central	+5	+18	+16	-2	+13	1.4	1.1
	West North Central	+13	+31	+15	-1	+17	1.6	1.4
	South Atlantic	+9	+15	+12	+1	+9	2.4	1.8
	East South Central	+6	+7	-2	-2	+38	1.7	2.4
	West South Central	+8	+9	+3	-3	+4	2.2	1.3
	Mountain	+6	+20	+18	-3	+2	3.2	1.2
	Pacific	+13	+22	+11	+1	+22	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	+16	+28	+29	0	+11	2	
	New England	+13	+26	+30	-1	+23	7	4
	Middle Atlantic	+17	+41	+55	+1	-7	4	2
	East North Central	+25	+20	+19	-1	+12	7	1
	West North Central	+6	+4	+19	-2	0	5	2
	South Atlantic	+11	+20	+23	-3	+11	4	2
	East South Central	+6	+53	+29	+1	+48	4	3
	West South Central	+13	+25	+20	+1	+2	5	2
	Mountain	+17	+69	+46	-5	+44	7	3
	Pacific	+19	+30	+28	+2	+16	3	2
502	Furniture and home furnishings	+13	+18	+20	-1	+20	2	1
	Middle Atlantic	+22	+28	+14	-1	+30	4	2
	East North Central	+12	+23	+21	0	+15	7	2
	West North Central	+17	+31	+36	-1	+37	5	4
	West South Central	+5	+8	+31	-2	+4	5	7
	Pacific	+16	+14	+26	+1	+13	5	3
503	Lumber and other construction materials	+15	+20	+23	-3	+24	2	1
	New England	+7	-5	+22	-5	+7	4	5
	Middle Atlantic	+14	+26	+29	0	+25	4	2
	East North Central	+17	+8	+25	-4	+19	3	2
	West North Central	+22	+46	+23	0	+54	7	7
	South Atlantic	+18	+26	+36	-2	+22	4	2
	East South Central	+13	+24	+35	-7	+29	4	3
	West South Central	+11	+42	+27	+3	+52	6	5
	Pacific	+11	+7	+6	-7	+6	5	1
5051 pt.	Ferrous metals service centers	+11	+19	+33	-2	+10	2	1
	Middle Atlantic	+5	+10	+29	-1	-8	4	5
	East North Central	+17	+15	+32	0	+14	4	1
	West North Central	+18	+64	+35	-7	+23	4	3
	East South Central	+6	+8	+13	-3	+10	2	4
	West South Central	+9	+7	+25	-4	+16	4	2
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+6	+21	+26	0	+10	2	1
	Middle Atlantic	+3	+7	+22	-1	-7	5	2
	East North Central	+7	+22	+26	-1	+5	3	2
	West North Central	+3	+6	+15	+6	+19	4	1
	South Atlantic	+1	+22	+19	0	+9	3	1
	West South Central	+13	+52	+36	-3	+29	3	6
	Pacific	+8	+19	+26	-1	+13	4	1
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+15	+29	+20	0	+19	3	
	Middle Atlantic	+19	+44	+32	0	+38	3	
	East North Central	+24	+26	+6	+4	+19	4	1
	West North Central	+1	-12	+2	+1	-8	4	4
	South Atlantic	+12	+22	+17	-2	+6	6	4
	West South Central	+22	+30	+19	-5	+14	4	4
	Mountain	+5	+49	(S)	-2	+36	6	3
	Pacific	+8	+40	+36	0	+24	3	2

See footnotes at end of table.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: August 1978—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[1] Aug. 1978 from July 1978	Sales Aug. 1978 from Aug. 1977	Sales 8 months 1978 from 8 months 1977	Inventories Aug. 1978 from July 1978	Inventories Aug. 1978 from Aug. 1977	Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		A	B	C[1]	D	E	A	D
5072	Hardware	+14	+10	+10	0	+10	1	1
	New England	+24	+14	+11	-1	-2	6	3
	Middle Atlantic	+11	-1	+3	0	-5	6	2
	East North Central	+14	+26	+29	+4	+42	4	2
	West North Central	+9	0	+4	+4	+5	3	3
	South Atlantic	+12	-3	-2	+1	+9	4	2
	East South Central	+15	+7	-12	+1	+17	4	1
	Pacific	+15	+9	+8	-3	+6	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	+13	+23	+13	-1	+15	2	1
	Middle Atlantic	+6	+6	0	0	-8	6	3
	East North Central	+24	+37	+23	0	+32	3	3
	South Atlantic	+8	+9	+8	0	-1	3	2
	Mountain	+13	(S)	(S)	-8	+41	7	4
	Pacific	+8	+21	+10	-1	+18	5	4
5084,5	Industrial machinery, equipment, and supplies	+13	+19	+23	-1	+18	2	1
	Middle Atlantic	+6	+3	+15	-2	+10	7	2
	East North Central	+12	+15	+22	+1	+16	3	2
	West South Central	+17	+23	+39	-1	+23	4	3
	Pacific	+20	+36	+38	-2	+30	5	2
512	Drugs, drug proprietaries, and druggists' sundries	+14	+8	+4	+1	+7	1	1
	New England	+13	+8	+2	+5	+9	5	3
	Middle Atlantic	+9	+6	+2	0	-4	3	2
	East North Central	+12	+6	+4	+2	+14	6	3
	West North Central	+26	+7	+4	+7	+2	2	2
	South Atlantic	+12	+28	+18	+1	+10	6	5
	East South Central	+13	+18	+16	0	+27	6	5
	West South Central	+21	-6	-5	+1	+7	3	2
	Mountain	+19	+4	+8	+3	-10	3	2
	Pacific	+14	-5	-5	-2	+8	3	3
5141	Groceries, general-line	+9	+13	+10	+2	+12	1	1
	New England	+4	+30	+21	0	+20	2	1
	Middle Atlantic	+8	+5	+5	+1	+15	1	2
	East North Central	+6	+4	+5	+3	+4	3	1
	West North Central	+4	+7	+11	+1	+11	1	1
	South Atlantic	+12	+26	+16	+5	+10	2	1
	West South Central	+13	+16	+9	-1	+12	2	1
	Mountain	+5	+18	+13	-2	+13	2	2
	Pacific	+17	+26	+14	+7	+19	1	1
5142,3,6,9	Specialty-line groceries	+10	+8	+8	-3	+5	1	1
	Middle Atlantic	+13	+26	+14	-1	+8	4	2
	East North Central	+10	+15	+21	-1	+16	3	2
	West North Central	+2	+1	+31	-3	+1	3	1
	South Atlantic	+6	+3	+16	-4	+8	5	6
	East South Central	+4	+13	(S)	+4	(S)	2	2
5148	Fresh fruits and vegetables	-7	+11	+25	+13	+28	2	4
	Middle Atlantic	-7	+19	+32	+5	+17	7	5
	East North Central	+14	+3	+20	+2	+24	6	6
	West North Central	-16	-6	+12	+8	+18	6	3
	West South Central	+2	+12	+30	+5	+42	5	3
	Pacific	-4	+6	+21	(S)	+32	4	4
5194	Tobacco and tobacco products	+9	+17	+9	+1	+5	1	1
	New England	+17	+16	+3	+9	+13	5	3
	Middle Atlantic	-1	+11	+13	+1	-4	4	3
	East North Central	+6	+33	+13	-6	+6	4	3
	West North Central	+12	0	-8	+8	+5	4	2
	South Atlantic	+10	-2	+4	-4	-5	6	6
	East South Central	+12	+14	0	-5	-8	7	4
	West South Central	+21	+42	+33	+7	+19	7	6
	Mountain	-8	+14	(S)	+9	+38	6	2
	Pacific	+23	+26	+16	+2	+17	2	5

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

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

[1]See map on page 7.

[2]The sampling errors (in percent) shown in columns A and D are based on medians of measurements on data for August, September, and October 1977.

APPENDIX A. Reliability of Data

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

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

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

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

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

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

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

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

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

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

1972 SIC code	Kind of business	Sales						Inventories					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total	0.8-1.1	0.9	0.8-0.9	0.9	0.4-0.5	0.5	0.8-1.0	0.9	0.7-1.0	0.9	0.2-0.5	0.4
	Total (excluding farm-product raw materials)	0.9-1.2	1.1	0.9-1.0	1.0	0.4-0.6	0.5	0.9-1.0	1.0	0.8-1.0	0.9	0.2-0.5	0.3
50	Durable goods, total	1.1-1.3	1.2	0.9-1.0	1.0	0.6-0.6	0.6	1.1-1.2	1.2	1.0-1.2	1.1	0.3-0.7	0.5
501	Motor vehicles and automotive parts and supplies	2.3-3.3	3.1	1.9-2.8	2.2	1.4-1.9	1.7	2.5-3.3	2.9	2.6-3.1	3.0	0.6-1.3	1.0
5012	Automobiles and other motor vehicles	(*)	(*)	(*)	(*)	1.7-3.9	3.1	(*)	(*)	(*)	(*)	1.7-3.0	2.8
5013,4	Automotive parts and supplies, tires and tubes	2.9-3.7	3.1	2.9-3.2	3.1	1.5-2.0	1.6	4.0-4.5	4.3	3.9-4.4	4.0	0.4-1.4	0.7
5013	Automotive parts and supplies	3.3-4.0	3.9	3.1-3.8	3.7	1.9-2.2	2.0	4.7-5.3	5.2	4.7-5.2	5.0	0.5-1.5	0.9
502	Furniture and home furnishings	4.2-5.8	4.6	4.2-4.4	4.3	1.7-2.9	2.0	3.2-4.9	3.7	3.4-4.2	3.7	0.8-2.3	2.0
5021	Furniture--household and office	6.6-7.6	6.9	5.6-7.1	6.9	4.0-5.7	4.3	(*)	(*)	(*)	(*)	1.4-3.4	2.2
5021 pt.	Household furniture	(*)	(*)	(*)	(*)	5.0-5.8	5.1	(*)	(*)	(*)	(*)	1.4-4.3	2.0
5021 pt.	Office furniture	(*)	(*)	(*)	(*)	5.7-8.0	5.9	(*)	(*)	(*)	(*)	0.7-3.7	2.1
5023	Home furnishings	5.1-7.5	6.1	5.1-6.1	5.5	1.6-3.6	2.2	4.8-6.9	5.6	4.9-6.0	5.0	1.0-3.1	2.6
503	Lumber and other construction materials	2.8-4.4	3.1	2.9-3.9	3.1	1.6-2.5	1.9	4.5-6.5	4.9	4.8-5.8	4.9	0.7-1.8	0.9
5031	Lumber, plywood, and millwork	4.1-4.6	4.3	3.3-4.6	4.0	2.1-2.5	2.4	5.9-8.2	6.5	6.0-6.9	6.5	1.0-2.6	1.8
5039	Construction materials, n.e.c.	4.2-7.2	4.9	4.5-5.9	4.9	2.0-3.4	2.2	(*)	(*)	(*)	(*)	1.1-2.0	1.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(*)	(*)	(*)	(*)	2.2-2.4	2.3	(*)	(*)	(*)	(*)	1.0-2.5	1.4
505	Metals and minerals, except petroleum	4.4-6.0	4.7	4.0-5.1	4.0	1.5-3.0	2.8	3.2-3.8	3.7	3.7-4.1	4.0	0.8-1.4	1.3
5051 pt.	Ferrous metals service centers and offices	5.0-5.8	5.7	4.1-5.2	4.7	1.2-3.8	3.1	3.8-4.2	4.1	4.1-4.3	4.2	0.5-1.6	1.4
5051 pt.	Ferrous metals service centers	6.7-8.0	6.8	5.0-6.8	5.8	1.1-5.3	3.5	2.9-4.4	3.4	3.4-4.0	3.5	0.6-2.2	2.1
5051 pt.	Nonferrous metals service centers and offices	(*)	(*)	(*)	(*)	4.5-7.0	6.1	(*)	(*)	(*)	(*)	2.8-5.4	4.7
506	Electrical goods	1.9-2.6	2.3	1.6-2.1	1.7	1.3-1.6	1.4	2.5-2.9	2.6	2.2-2.8	2.4	0.5-1.0	0.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2.2-3.1	2.6	2.3-2.7	2.4	1.4-1.7	1.6	2.9-3.5	3.2	3.0-3.2	3.1	0.6-1.2	0.7
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3.4-4.0	3.8	3.0-3.2	3.1	1.6-2.8	2.5	2.9-4.2	3.2	2.7-3.8	3.0	0.7-1.6	0.9
5064	Electrical appliances, TV and radio sets	3.0-3.8	3.6	2.6-3.7	3.1	1.7-2.7	2.5	(*)	(*)	(*)	(*)	0.9-1.7	1.4
507	Hardware, plumbing, heating equipment, and supplies	2.7-3.0	2.9	2.4-2.6	2.5	1.1-1.9	1.5	2.4-2.8	2.6	2.4-2.9	2.7	0.3-1.4	0.6
5072	Hardware	3.6-4.2	3.8	2.6-3.1	3.0	1.3-2.4	1.9	2.0-4.1	2.7	2.2-3.5	2.8	0.4-2.1	0.8
5074	Plumbing and heating equipment and supplies (hydronics)	4.1-5.3	4.2	3.9-5.1	4.2	1.6-3.8	2.1	5.0-7.0	6.0	4.5-7.1	5.3	0.5-3.1	0.9
5075	Warm air heating and air conditioning equipment and supplies	(*)	(*)	(*)	(*)	2.0-4.4	2.7	(*)	(*)	(*)	(*)	1.1-4.3	1.4
508	Machinery, equipment, and supplies	2.3-2.7	2.6	1.8-2.5	2.1	1.2-1.5	1.4	2.0-2.6	2.3	1.7-2.1	1.9	0.4-1.8	1.1
5081	Commercial machines and equipment	(*)	(*)	(*)	(*)	2.9-4.3	4.1	(*)	(*)	(*)	(*)	1.6-8.5	1.9
5082	Construction and mining machinery and equipment	5.0-7.3	5.8	3.3-5.8	4.9	3.9-4.6	4.4	2.9-7.0	4.0	3.2-4.1	3.3	0.7-5.3	1.0
5083	Farm and garden machinery and equipment	(*)	(*)	(*)	(*)	4.1-6.6	6.0	(*)	(*)	(*)	(*)	1.1-2.9	1.2
5084,5	Industrial machinery, equipment, and supplies	3.1-3.4	3.2	2.8-3.0	2.9	1.1-2.3	1.6	2.4-3.0	2.9	2.4-3.0	2.7	0.5-1.6	0.6
5086	Professional equipment and supplies	3.7-7.5	4.3	4.0-5.5	5.2	1.8-3.3	2.0	(*)	(*)	(*)	(*)	0.6-5.2	0.7
5086 pt.	Surgical, medical, hospital, and supplies	(*)	(*)	(*)	(*)	1.7-3.8	2.5	(*)	(*)	(*)	(*)	0.7-5.4	1.0
5087	Service establishment equipment and supplies	(*)	(*)	(*)	(*)	1.8-11.0	2.9	(*)	(*)	(*)	(*)	1.0-3.4	1.3
5093	Scrap and waste materials	4.6-13.3	9.0	4.6-8.8	5.0	2.2-4.9	2.7	(*)	(*)	(*)	(*)	0.7-3.8	0.9
5093 pt.	Iron and steel scrap	(*)	(*)	(*)	(*)	2.6-3.5	3.1	(*)	(*)	(*)	(*)	0.8-1.4	1.0
5093 pt.	Waste materials	(*)	(*)	(*)	(*)	2.6-8.8	4.8	(*)	(*)	(*)	(*)	1.2-9.1	1.6
51	Nondurable goods, total	1.0-1.3	1.1	1.0-1.1	1.1	0.4-0.7	0.6	1.5-1.7	1.6	1.4-1.6	1.5	0.3-0.7	0.4
	Total (excluding farm-product raw materials)	1.0-1.6	1.2	1.3-1.4	1.4	0.5-0.8	0.6	1.7-2.0	1.9	1.6-1.8	1.7	0.3-0.7	0.4
511	Paper and paper products	2.6-4.0	3.7	2.4-4.1	3.1	1.0-1.4	1.3	2.5-3.4	2.7	2.4-3.2	2.8	0.4-1.5	0.6
5111,3	Printing, writing, industrial, and personal service paper	2.4-3.1	2.7	2.3-2.8	2.4	1.3-1.5	1.4	2.9-3.4	3.1	2.7-3.2	2.8	0.4-1.3	0.9
5112	Stationery supplies	(*)	(*)	(*)	(*)	2.4-3.4	2.5	3.2-6.1	5.8	3.6-5.1	4.4	0.9-4.8	1.4
512	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	5.6-6.3	5.7	5.6-5.7	5.7	0.6-2.2	0.7
5122	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	(*)	(*)	(*)	(*)	0.6-2.2	0.7
5122 pt.	General-line drugs	7.2-9.8	7.9	7.5-8.5	7.6	0.7-3.0	1.0	(*)	(*)	(*)	(*)	05.-3.1	1.0
513	Apparel, piece goods, and notions	8.3-12.4	8.8	8.6-9.3	9.1	2.6-4.0	3.3	(*)	(*)	(*)	(*)	(*)	(*)
514	Groceries and related products	1.7-2.2	2.0	1.6-2.0	1.9	0.4-1.2	0.5	1.5-2.5	1.8	1.8-2.1	1.9	0.4-1.3	0.6
5141	Groceries, general-line	1.9-2.7	2.1	1.7-2.7	2.0	0.4-1.5	0.7	1.8-2.7	2.3	1.7-2.0	1.8	0.3-1.2	0.8
5141 pt.	Voluntary groups	(*)	(*)	(*)	(*)	0.5-1.7	0.6	(*)	(*)	(*)	(*)	0.4-1.7	0.5
5141 pt.	Retailer cooperatives	(*)	(*)	(*)	(*)	0.6-1.6	1.1	(*)	(*)	(*)	(*)	0.4-2.4	0.7
5141 pt.	Other general-lines	(*)	(*)	(*)	(*)	0.9-3.1	1.8	(*)	(*)	(*)	(*)	0.5-1.3	0.7
5142,3,6,9	Specialty-line groceries	(*)	(*)	(*)	(*)	0.7-3.4	1.3	(*)	(*)	(*)	(*)	0.9-2.4	1.0
5144	Poultry and poultry products	3.4-5.5	4.4	4.0-4.4	4.2	0.6-2.2	1.5	(*)	(*)	(*)	(*)	2.1-4.1	2.3
5145	Confectionery	4.7-6.3	4.7	3.6-5.4	4.3	2.0-3.2	2.2	(*)	(*)	(*)	(*)	0.8-2.4	2.3
5147	Meats and meat products	4.5-4.8	4.7	4.6-4.6	4.6	1.4-2.9	1.7	(*)	(*)	(*)	(*)	1.7-3.9	2.2
5148	Fresh fruits and vegetables	4.7-5.4	4.9	3.9-4.1	4.0	1.9-4.2	2.7	(*)	(*)	(*)	(*)	2.9-4.4	3.9
515	Farm-product raw materials	1.8-2.2	2.0	1.6-2.0	1.7	1.1-1.7	1.3	(*)	(*)	(*)	(*)	1.1-2.8	2.4
5152	Cotton	(*)	(*)	(*)	(*)	1.8-4.9	2.8	(*)	(*)	(*)	(*)	1.3-2.9	2.4
5153	Grain	2.4-2.7	2.6	2.2-2.4	2.3	1.0-1.7	1.3	(*)	(*)	(*)	(*)	1.6-3.3	1.9
517	Petroleum and petroleum products	4.0-5.0	4.7	4.2-4.6	4.5	1.1-1.9	1.5	4.1-5.2	5.0	4.4-5.4	4.7	1.6-3.0	2.3
5171	Petroleum bulk stations and terminals	2.8-3.3	2.9	2.8-3.0	2.9	0.9-1.4	1.2	(*)	(*)	(*)	(*)	1.7-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages	3.4-3.9	3.7	3.1-3.7	3.2	0.8-1.8	1.7	3.9-4.2	4.1	4.0-4.3	4.2	1.0-2.0	1.3
5181	Beer and ale	2.2-4.4	3.1	2.8-3.2	2.9	1.0-2.5	2.0	3.6-5.5	3.8	3.6-4.1	3.8	1.7-2.7	2.1
5182	Wines and distilled alcoholic beverages	5.2-6.3	5.4	4.6-5.6	4.7	1.2-3.4	1.7	4.6-5.4	4.8	5.0-5.6	5.3	1.4-2.3	1.6
519	Miscellaneous nondurable goods	2.4-3.2	2.9	2.4-2.7	2.5	1.4-2.3	1.6	(*)	(*)	(*)	(*)	0.8-1.7	1.4
191	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
5198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.8-3.8	3.0	(*)	(*)	(*)	(*)	1.5-3.1	2.9
5199 pt.	Books, magazines, newspapers	(*)	(*)	(*)	(*)	3.2-8.0	5.6	(*)	(*)	(*)	(*)	2.0-6.5	5.1

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

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

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

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

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

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

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1977-December 1978

1972 SIC code	Kind of business	1977											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	91.7	92.1	107.2	99.0	100.6	103.8	95.5	104.5	102.5	100.4	101.1	99.6
	Total (excluding farm-product raw materials)	89.6	91.5	106.3	99.7	101.8	106.0	96.5	105.8	103.6	100.0	100.0	96.9
50	Durable goods, total	87.1	88.2	106.3	101.3	103.7	107.8	96.9	106.5	105.8	101.1	99.3	94.0
501	Motor vehicles and automotive parts and supplies	89.7	89.3	109.5	108.3	107.5	107.2	100.5	105.9	101.1	94.2	95.0	90.0
502	Furniture and home furnishings	82.6	89.5	104.2	97.8	98.8	106.7	90.7	106.4	106.9	110.3	109.2	94.7
503	Lumber and other construction materials	78.4	80.8	101.1	99.8	108.0	112.1	104.6	116.4	108.7	102.4	100.6	85.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.7	89.9	104.1	101.6	101.8	104.0	92.1	106.4	102.0	109.1	110.4	98.2
505	Metals and minerals, except petroleum	94.4	90.9	110.4	99.9	105.3	104.8	92.5	107.5	105.0	96.0	99.5	90.8
506	Electrical goods	87.8	88.6	101.8	97.1	96.0	108.4	98.5	105.9	104.2	106.4	101.9	101.6
507	Hardware, plumbing, heating equipment, and supplies	87.4	87.4	101.2	99.4	102.9	108.3	99.4	108.7	106.9	105.8	100.8	89.9
508	Machinery, equipment, and supplies	86.4	89.0	107.7	102.7	104.4	108.8	95.7	103.5	107.3	102.5	95.5	94.9
509	Miscellaneous durable goods	82.8	89.8	105.7	98.8	100.4	107.7	89.8	105.8	106.7	104.1	104.3	102.0
51	Nondurable goods, total	95.1	95.1	108.4	97.4	98.3	100.7	94.8	102.3	99.7	99.4	102.8	103.9
	Total (excluding farm-product raw materials)	91.7	94.2	106.8	98.1	100.0	104.1	96.3	104.6	101.6	99.0	100.6	100.2
511	Paper and paper products	93.8	92.2	104.3	95.1	96.4	104.2	97.3	108.3	104.7	103.6	103.2	95.7
512	Drugs, drug proprietaries, and druggists' sundries	94.2	92.6	105.1	98.8	97.7	98.7	92.7	103.9	104.4	108.3	101.4	98.9
513	Apparel, piece goods, and notions	89.7	94.6	106.4	95.2	95.2	100.5	95.1	114.9	108.8	105.4	105.6	87.1
514	Groceries and related products	94.2	90.9	103.8	98.5	101.5	106.7	99.1	105.4	100.7	100.1	99.7	98.5
515	Farm-product raw materials[1]	105.1	95.8	112.8	96.9	101.5	88.2	88.5	95.5	93.5	102.2	110.6	108.6
516	Chemicals and allied products	87.1	89.9	107.4	101.2	102.5	106.5	97.0	107.2	103.4	102.0	99.3	94.3
517	Petroleum and petroleum products	94.8	102.6	105.4	98.9	90.9	98.9	100.1	101.9	97.3	102.4	101.4	105.6
518	Beer, wine, and distilled alcoholic beverages	75.8	80.8	101.4	94.1	103.0	113.8	98.1	107.0	100.3	98.8	105.8	120.1
519	Miscellaneous nondurable goods	95.1	101.7	116.8	104.4	101.4	100.9	88.1	96.2	99.6	95.4	96.1	100.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	102.1	101.4	100.9	99.9	98.4	98.4	98.4	98.4	98.6	100.9	102.1	101.1
	Total (excluding farm-product raw materials)	99.8	100.3	100.8	100.1	100.3	100.5	100.1	99.2	99.3	100.0	100.2	99.4
50	Durable goods, total	99.1	100.3	101.1	100.9	101.4	101.8	100.9	99.4	99.1	99.1	98.9	98.9
501	Motor vehicles and automotive parts and supplies	101.4	102.8	102.1	101.4	102.4	100.9	98.9	96.6	97.9	97.8	97.9	100.4
502	Furniture and home furnishings	98.9	99.4	100.1	99.8	99.9	101.4	100.9	101.3	100.9	99.6	100.4	98.1
503	Lumber and other construction materials	97.9	98.4	102.8	102.6	105.4	103.1	102.9	100.6	97.8	95.3	96.4	97.1
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	100.8	99.9	100.9	103.4	107.6	104.6	101.6	100.3	100.6	94.4	89.3
505	Metals and minerals, except petroleum	100.4	98.9	100.9	101.4	100.1	99.4	102.8	101.3	98.1	96.8	99.1	101.4
506	Electrical goods	97.3	97.6	99.1	99.4	100.6	101.9	101.1	101.3	100.4	101.6	101.4	98.8
507	Hardware, plumbing, heating equipment, and supplies	98.1	98.6	101.6	103.1	102.8	101.1	100.9	101.4	98.4	98.3	98.4	97.6
508	Machinery, equipment, and supplies	99.1	101.1	101.9	100.6	101.1	102.3	100.1	97.9	99.1	99.6	99.6	97.8
509	Miscellaneous durable goods	97.1	98.9	96.8	98.4	96.8	101.3	101.9	102.9	101.3	103.1	101.8	100.4
51	Nondurable goods, total	105.4	103.4	100.9	98.1	93.9	93.3	94.8	97.3	97.6	103.9	106.9	105.4
	Total (excluding farm-product raw materials)	100.5	100.2	100.5	99.4	98.2	98.4	98.3	99.0	99.8	101.9	102.7	100.9
511	Paper and paper products	99.1	99.1	98.8	100.4	99.8	101.9	99.6	100.9	100.1	100.3	99.8	100.9
512	Drugs, drug proprietaries, and druggists' sundries	96.4	97.8	100.1	101.4	98.1	100.4	99.3	100.1	102.4	104.4	101.4	98.9
513	Apparel, piece goods, and notions	100.1	99.6	98.4	98.6	101.1	100.4	102.6	101.1	100.4	99.1	99.1	99.9
514	Groceries and related products	99.9	100.9	102.4	99.9	98.4	98.4	98.1	98.1	99.1	101.3	102.9	101.1
515	Farm-product raw materials[1]	121.4	113.9	104.9	92.4	80.8	73.9	84.8	84.8	89.8	108.9	122.1	123.
516	Chemicals and allied products	99.8	100.1	102.1	101.4	101.3	99.9	99.8	99.1	99.6	97.8	99.4	100.
517	Petroleum and petroleum products	104.8	99.8	97.1	93.1	95.1	96.8	96.4	99.3	101.8	106.8	105.6	104.3
518	Beer, wine, and distilled alcoholic beverages	96.9	97.9	97.1	98.9	101.8	103.1	98.6	97.6	100.6	107.6	105.4	95.3
519	Miscellaneous nondurable goods	103.6	104.3	102.9	100.6	96.3	93.3	95.3	98.4	98.1	99.8	103.6	104.4

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1977-December 1978—Continued

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.9	92.2	106.9	96.5	103.5	103.8	95.4	105.1	98.9	102.5	101.4	96.7
	Total (excluding farm-product raw materials)	91.9	91.6	106.4	97.5	104.6	105.9	95.9	106.4	100.9	102.2	98.8	95.1
50	Durable goods, total	89.8	89.0	105.2	98.7	106.3	107.6	96.4	107.1	102.9	104.2	98.4	91.4
501	Motor vehicles and automotive parts and supplies	93.6	89.1	107.0	107.0	107.4	108.0	99.3	107.5	96.9	98.4	92.5	91.4
502	Furniture and home furnishings	84.6	89.1	104.6	95.9	101.6	106.2	89.4	107.2	104.2	112.8	108.3	93.8
503	Lumber and other construction materials	81.6	81.2	101.7	95.3	110.7	112.5	102.4	116.9	104.7	108.0	100.0	82.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.4	90.3	102.8	100.3	109.7	98.1	95.1	104.0	104.7	105.7	108.7	97.3
505	Metals and minerals, except petroleum	98.8	91.0	108.9	97.9	107.9	103.6	90.7	108.4	103.1	100.0	97.4	91.1
506	Electrical goods	89.4	89.1	101.7	95.2	99.2	106.4	100.2	104.9	100.9	107.7	103.3	98.5
507	Hardware, plumbing, heating equipment, and supplies	89.5	87.8	100.8	97.5	105.5	107.8	99.7	109.4	103.4	107.2	101.1	88.0
508	Machinery, equipment, and supplies	88.1	88.8	107.8	99.6	107.3	108.7	95.7	104.3	104.0	103.7	96.9	91.6
509	Miscellaneous durable goods	86.5	89.8	104.7	95.1	101.0	110.6	87.6	108.0	102.4	109.5	105.2	96.2
51	Nondurable goods, total	97.0	95.1	108.7	95.1	101.3	100.9	94.8	102.9	96.9	100.9	102.6	100.7
	Total (excluding farm-product raw materials)	93.9	94.5	107.7	95.7	102.7	104.4	95.6	105.1	98.6	100.5	100.4	97.5
511	Paper and paper products	95.2	92.4	104.5	92.6	101.9	103.0	96.6	108.3	103.7	105.0	100.5	92.7
512	Drugs, drug proprietaries, and druggists' sundries	98.2	92.7	104.9	96.0	100.4	99.8	92.7	104.5	101.4	108.3	100.6	96.9
513	Apparel, piece goods, and notions	91.3	94.8	106.4	92.3	99.6	99.3	93.5	115.1	106.8	108.1	103.9	86.0
514	Groceries and related products	95.0	91.0	104.1	96.4	104.5	106.2	99.1	106.0	100.1	100.3	99.9	94.3
515	Farm-product raw materials[1]	106.8	95.8	112.8	94.4	99.6	89.9	92.3	94.6	92.6	100.5	111.2	104.6
516	Chemicals and allied products	90.0	89.4	106.9	98.2	105.2	106.5	97.0	107.3	99.7	105.5	98.0	94.1
517	Petroleum and petroleum products	96.5	102.1	107.7	96.2	92.8	99.9	98.4	101.7	95.5	102.4	98.7	105.8
518	Beer, wine, and distilled alcoholic beverages	78.7	80.9	100.7	91.2	106.7	113.9	97.3	108.1	96.9	101.9	105.3	115.3
519	Miscellaneous nondurable goods	97.4	101.6	118.1	101.5	104.3	102.9	87.2	96.5	96.0	97.0	96.4	97.4
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	101.9	101.3	101.0	100.1	98.6	98.5	98.4	98.0	98.9	100.6	101.7	100.5
	Total (excluding farm-product raw materials)	99.7	100.3	100.8	100.2	100.2	100.5	100.1	99.1	99.4	100.0	100.3	99.2
50	Durable goods, total	99.1	100.2	100.9	100.6	101.1	101.6	100.8	99.3	99.3	99.0	99.1	98.7
501	Motor vehicles and automotive parts and supplies	101.4	102.6	101.8	101.0	102.1	100.9	98.9	96.8	97.9	97.8	98.1	100.5
502	Furniture and home furnishings	99.4	99.2	99.8	99.5	99.8	101.3	100.6	101.0	101.5	100.5	99.1	98.1
503	Lumber and other construction materials	98.1	98.8	103.0	102.6	105.0	101.6	101.5	100.2	98.9	96.1	96.9	97.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	102.4	99.2	100.5	103.3	107.3	104.4	101.1	100.6	101.2	93.9	89.0
505	Metals and minerals, except petroleum	100.4	98.6	100.5	101.0	99.7	99.2	102.4	101.9	98.6	96.7	99.5	101.5
506	Electrical goods	97.2	97.4	99.0	99.9	100.2	101.8	101.2	101.5	100.4	101.2	101.0	98.8
507	Hardware, plumbing, heating equipment, and supplies	97.8	98.0	101.6	103.2	102.8	101.7	100.5	101.4	98.7	98.6	98.2	97.3
508	Machinery, equipment, and supplies	99.2	101.1	101.7	100.0	101.0	102.3	100.1	98.1	99.3	99.6	99.5	97.8
509	Miscellaneous durable goods	97.1	98.7	96.6	98.2	96.6	101.2	101.8	102.6	101.5	103.1	102.1	100.2
51	Nondurable goods, total	104.8	103.2	101.6	98.3	95.3	93.7	94.6	96.3	98.6	103.3	106.0	103.9
	Total (excluding farm-product raw materials)	100.4	100.2	100.7	99.7	98.5	98.6	98.3	98.6	99.7	101.9	102.5	100.8
511	Paper and paper products	98.7	99.0	98.7	100.6	99.4	102.0	99.6	100.6	99.5	101.5	100.0	100.2
512	Drugs, drug proprietaries, and druggists' sundries	96.3	97.6	99.9	101.3	97.7	100.2	99.2	99.8	102.0	105.0	101.8	98.8
513	Apparel, piece goods, and notions	99.9	99.4	98.6	98.5	101.1	100.0	102.2	101.0	100.0	98.3	100.1	100.6
514	Groceries and related products	99.6	100.7	102.2	100.1	98.6	98.5	98.1	97.8	99.0	101.8	102.1	101.3
515	Farm-product raw materials[1]	120.2	114.0	106.9	93.1	81.5	76.1	84.4	83.5	88.3	108.7	121.4	120.9
516	Chemicals and allied products	99.9	99.9	102.7	101.1	101.3	99.8	99.6	99.4	99.9	96.9	98.7	100.6
517	Petroleum and petroleum products	104.9	100.2	97.9	93.5	95.6	97.0	95.4	99.0	102.5	104.8	104.6	104.2
518	Beer, wine, and distilled alcoholic beverages	96.6	96.5	97.2	99.0	101.3	103.1	98.9	97.6	100.8	107.5	106.5	94.6
519	Miscellaneous nondurable goods	103.4	103.2	105.3	101.1	96.2	92.9	95.1	97.2	98.6	99.7	103.2	104.1

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 ıde. 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.
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 everv 3 months. The increase in the average duration of run from 2.08 for CI to 3.32 for the M moving average indicates that for this series the use of MCD spans reduces the effect of 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.

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 the 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]—Establishment 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 change in 1972. Establishments primarily selling farm supplies and equipment to farmers, and establishments primarily selling

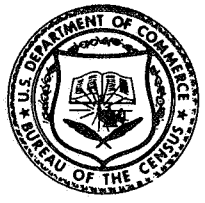
plumbing, heating, and air-conditioning equipment and electrical supplies were classified in wholesale trade rather than retail trade. However, establishments primarily selling lumber and other building materials and paint, glass, and wallpaper were classified in retail trade if they sell to the public,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

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

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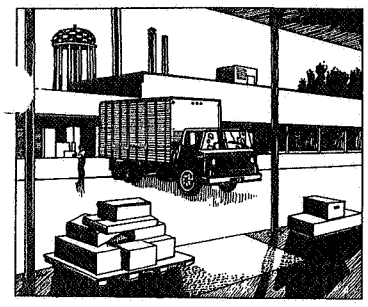
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued November 1978

September 1978

BW-78-9

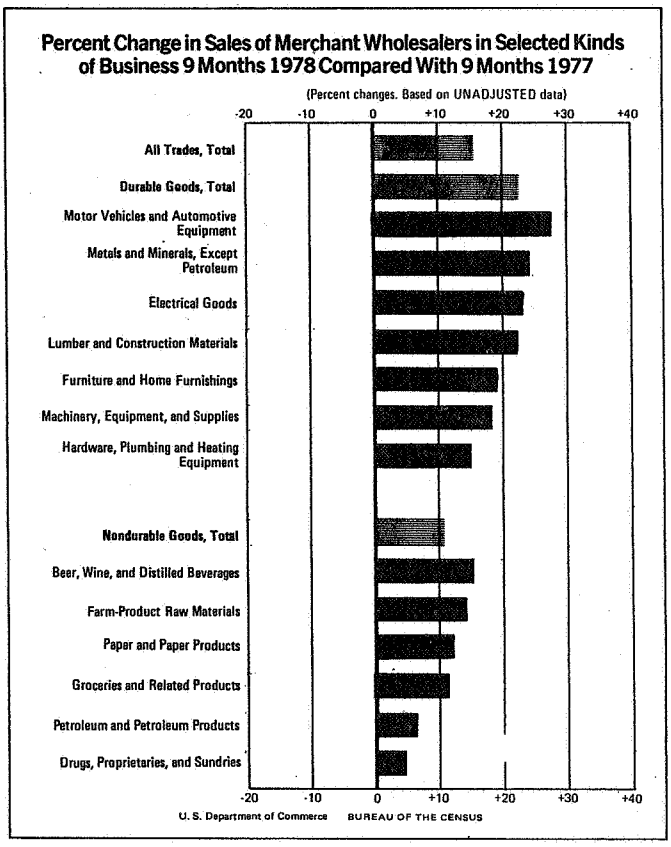
Sales—September 1978 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences, but not for price changes, were $64.3 billion, virtually unchanged from the previous month, but 21 percent above September 1977. Adjusted July-through-September total sales were up 1 percent from the April-through-June period and were 20 percent above the total sales for the comparable months a year ago.

After adjustment, September sales in the durable goods trades remained about the same level as last month but were 24 percent above sales for the same month a year ago. Nondurable goods sales were down 1 percent from August but were 17 percent above September 1977. Total monthly sales in the durable goods group during the July-through-September period were 4 percent above the prior three months and were 25 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were 1 percent below the April-through-June period but were 16 percent above the same period a year ago.

By trade group, comparisons with previous month sales levels showed mixed results with 4 trade groups showing gains, 6 indicating declines, and 5 with no change. The largest increase was shown in lumber and construction materials (4%). The most notable decreases were reported in hardware, plumbing, heating equipment; paper and paper products; and farm-products raw materials, all down 4 percent. Compared with sales of a year ago, all trade groups showed increases, with the sharper increases shown in farm-product raw materials (32%) and motor vehicles and automotive equipment (28%).

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variations, but not for price changes, were valued at $77.4 billion at the end of September, up 1 percent from last month and 17 percent above the same month a year ago. Durable goods stocks were up 1 percent from August and were 18 percent above September 1977. Nondurable goods stocks were up 2 percent from last month and were 15 percent 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 gains, 2 indicating declines, and 5 with no change. The larger increases were shown in paper and paper products; drugs, proprietories and sundries; and groceries and related products all up 5 percent. The two trade groups showing declines were motor vehicles and automotive equipment and furniture and home furnishings both down 1 percent. Compared with year-ago inventories, all trade groups showed increases. The sharper increases were reported in farm-product raw materials (25%) and motor vehicles and automotive equipment (23%).



Stock-Sales Ratio—The September stock-sales ratio for merchant wholesalers, based on seasonally adjusted data was 120, up 2 percent from August but down 4 percent from September 1977. The stock-sales ratio for durable goods was 169, up 2 points from last month, but down 9 points from the year-ago ratio. The ratio for nondurable goods was 78, up 2 points from August, but down 2 points from the September 1977 ratio.

An advance release of the September 1978 data was issued on November 9, 1978.

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: 1978 and 1977

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

1972 SIC code	Kind of business	1978									1977				Total 9 months	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.[P]	Sept.	Oct.	Nov.	Dec.	1978	1977
	Merchant wholesalers, total	52,143	52,766	62,900	60,613	66,249	65,834	60,651	67,702	64,155	54,505	54,251	56,034	56,224	553,016	475,596
	Total (excluding farm-product raw materials)	46,343	47,112	55,848	54,095	58,061	58,658	54,411	60,838	57,681	49,544	49,132	49,762	50,139	493,051	423,020
50	Durable goods, total	22,869	23,880	28,985	28,784	30,405	30,991	28,701	32,279	30,652	25,461	25,369	25,340	24,797	257,549	210,099
501	Motor vehicles and automotive parts and supplies	4,797	5,065	5,870	5,956	6,083	5,929	5,552	6,134	5,595	4,554	4,605	4,721	4,698	50,981	40,022
5013,4	Automotive parts and supplies, tires and tubes	2,517	2,666	3,128	3,217	3,403	3,227	2,935	3,440	3,121	2,538	2,661	2,651	2,551	27,654	21,514
5013	Automotive parts and supplies	2,166	2,286	2,602	2,706	2,828	2,660	2,432	2,872	2,621	2,089	2,227	2,220	2,167	23,172	18,211
502	Furniture and home furnishings	867	921	1,111	1,046	1,077	1,104	1,013	1,133	1,127	998	1,048	1,045	1,025	9,400	7,908
5021	Furniture--household and office	304	311	356	352	368	370	328	366	361	308	320	340	350	3,114	2,400
5023	Home furnishings	564	610	755	695	710	735	685	767	766	689	728	705	676	6,285	5,508
503	Lumber and other construction materials	1,867	1,891	2,368	2,517	2,889	3,067	2,771	3,208	2,986	2,553	2,476	2,334	2,086	23,564	19,286
5031	Lumber, plywood, and millwork	1,290	1,288	1,582	1,676	1,947	2,037	1,845	2,105	1,938	1,681	1,637	1,540	1,389	15,708	12,991
5039	Construction materials, n.e.c	576	603	786	841	942	1,031	927	1,103	1,048	872	839	794	697	7,857	6,295
505	Metals and minerals, except petroleum	2,505	2,557	3,040	2,942	3,153	3,169	2,817	3,306	3,122	2,709	2,437	2,592	2,423	26,612	21,548
5051 pt.	Ferrous metals service centers and offices	1,922	1,970	2,344	2,190	2,360	2,380	2,158	2,515	2,373	2,083	1,845	1,869	1,774	20,213	15,948
5051 pt.	Ferrous metals service centers	1,386	1,443	1,713	1,629	1,755	1,778	1,580	1,833	1,712	1,478	1,385	1,359	1,282	14,829	11,271
506	Electrical goods	2,541	2,627	3,096	2,980	3,239	3,385	3,193	3,540	3,351	2,846	2,998	2,973	2,964	27,952	22,810
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,262	1,354	1,561	1,556	1,698	1,725	1,663	1,812	1,723	1,369	1,436	1,436	1,379	14,353	11,363
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,279	1,273	1,535	1,424	1,541	1,660	1,530	1,728	1,628	1,477	1,562	1,537	1,585	13,599	11,447
5064	Electrical appliances, TV and radio sets	763	762	939	841	931	994	912	1,064	1,044	979	1,011	989	1,003	8,250	7,527
507	Hardware, plumbing, heating equipment, and supplies	1,790	1,708	2,021	2,102	2,306	2,360	2,247	2,412	2,189	1,961	2,027	1,974	1,820	19,136	16,583
5072	Hardware	693	679	793	797	856	836	760	864	785	750	750	768	676	7,063	6,456
5074	Plumbing and heating equipment and supplies (hydronics)	726	675	801	834	904	902	916	988	939	802	846	791	753	7,686	6,7[illegible]
508	Machinery, equipment, and supplies	6,190	6,632	8,301	8,296	8,616	8,790	7,827	8,757	8,715	7,217	7,163	6,941	7,019	72,123	60,9[illegible]
5082	Construction and mining machinery and equipment	825	875	1,130	1,254	1,276	1,229	1,122	1,196	1,131	1,002	1,006	1,025	1,006	10,039	8,602
5084,5	Industrial machinery, equipment, and supplies	2,545	2,790	3,294	3,077	3,388	3,505	3,049	3,532	3,494	2,771	2,750	2,858	2,861	28,675	23,239
5086	Professional equipment, supplies[1]	710	732	863	816	873	952	888	990	946	805	808	773	805	7,770	6,961
5093	Scrap and waste materials	757	815	979	958	1,058	1,057	940	1,073	982	810	807	812	779	8,618	7,234
51	Nondurable goods, total	29,274	28,886	33,915	31,829	35,844	34,843	31,950	35,423	33,503	29,044	28,882	30,694	31,427	295,468	265,497
	Total (excluding farm-product raw materials)	23,474	23,232	26,863	25,311	27,656	27,667	25,710	28,559	27,027	24,084	23,763	24,422	25,342	235,502	212,921
511	Paper and paper products	1,316	1,284	1,506	1,395	1,508	1,498	1,384	1,581	1,460	1,366	1,341	1,335	1,358	12,933	11,449
5111,3	Printing, writing, industrial, and personal service paper	950	926	1,100	1,032	1,126	1,125	1,046	1,177	1,086	1,032	1,007	988	995	9,567	8,809
512	Drugs, drug proprietaries, and druggists' sundries	887	824	994	912	943	950	902	1,026	981	948	939	926	922	8,419	8,081
5122	Drugs, drug proprietaries, and druggists' sundries	887	824	994	912	943	950	902	1,026	981	948	939	926	922	8,419	8,081
5122 pt.	General-line drugs	423	393	470	423	447	448	409	482	468	455	438	452	444	3,964	3,730
513	Apparel, piece goods, and notions[2]	1,620	1,615	2,063	1,818	2,099	2,066	2,036	2,658	2,442	1,815	1,919	1,837	1,617	18,416	14,222
514	Groceries and related products	9,261	9,093	10,398	9,916	10,873	10,685	10,237	11,002	10,413	9,433	9,289	9,591	9,798	91,879	82,022
5141	Groceries, general-line	3,426	3,333	3,740	3,547	3,791	3,724	3,649	3,965	3,765	3,396	3,360	3,579	3,587	32,939	30,084
5144	Poultry and poultry products	402	397	486	468	507	503	482	539	510	432	419	458	454	4,292	3,941
5145	Confectionery	154	163	191	173	191	189	171	187	191	172	183	194	188	1,610	1,356
5147	Meats and meat products	1,460	1,462	1,651	1,688	1,871	1,826	1,800	1,974	1,839	1,486	1,498	1,525	1,510	15,571	12,941
5148	Fresh fruits and vegetables	839	824	986	1,035	1,184	1,198	1,044	1,005	897	810	836	886	889	9,012	7,284
515	Farm-product raw materials	5,800	5,654	7,052	6,518	8,188	7,176	6,240	6,864	6,474	4,960	5,119	6,272	6,085	59,966	52,576
5153	Grain	4,549	4,503	5,718	5,358	6,890	6,078	5,317	5,760	5,391	4,005	4,069	4,968	4,730	49,566	43,507
517	Petroleum and petroleum products	4,209	4,085	4,249	3,830	4,178	4,111	4,000	4,441	4,183	3,612	3,839	3,983	4,355	37,285	35,244
5171	Petroleum bulk stations and terminals	2,387	2,293	2,384	2,188	2,425	2,358	2,190	2,378	2,246	2,103	2,195	2,266	2,523	20,849	20,302
518	Beer, wine, and distilled alcoholic beverages	1,654	1,770	2,299	1,993	2,295	2,506	2,191	2,463	2,231	2,018	1,884	2,143	2,444	19,401	16,899
5181	Beer and ale	795	839	1,094	998	1,219	1,372	1,217	1,328	1,098	1,012	888	938	1,020	9,960	8,389
5182	Wines and distilled alcoholic beverages	859	931	1,204	996	1,076	1,134	974	1,134	1,133	1,005	995	1,204	1,424	9,441	8,510
519	Miscellaneous nondurable goods	3,723	3,782	4,434	4,568	4,730	4,819	4,040	4,297	4,266	4,055	3,722	3,749	4,028	38,660	37,264
5194	Tobacco and tobacco products	721	692	782	765	812	849	838	871	805	751	748	705	819	7,137	6,597

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

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

[1]The professional equipment, supplies group is subject to a sampling variability of 8 percent for September 1978.
[2]The apparel piece goods and notions group is subject to a sampling variability of 12 percent for September 1978.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978									1977			
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.P	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	69,596	71,156	73,931	74,635	74,634	74,882	74,874	74,943	76,423	65,291	66,530	68,082	68,555
	Total (excluding farm-product raw materials)	64,090	65,682	67,973	69,060	69,883	70,513	71,073	71,138	72,393	61,963	62,324	62,939	63,245
50	Durable goods, total	44,287	45,757	47,275	47,957	48,918	49,627	49,900	49,841	50,253	42,484	42,627	43,252	43,676
501	Motor vehicles and automotive parts and supplies	7,709	8,189	7,995	7,973	8,246	8,218	8,367	8,378	8,389	6,842	7,089	7,376	7,424
5013,4	Automotive parts and supplies, tires and tubes	4,743	4,962	4,856	4,901	5,149	5,035	5,034	5,206	5,368	4,496	4,438	4,669	4,607
5013	Automotive parts and supplies	3,953	4,163	4,041	4,171	4,382	4,241	4,288	4,415	4,553	3,663	3,639	3,912	3,790
502	Furniture and home furnishings	1,560	1,606	1,633	1,669	1,730	1,781	1,764	1,760	1,746	1,493	1,455	1,444	1,512
5023	Home furnishings	1,137	1,184	1,182	1,233	1,279	1,305	1,305	1,306	1,303	1,085	1,057	1,054	1,099
503	Lumber and other construction materials	2,676	2,761	2,919	2,966	3,030	3,071	3,095	3,007	3,013	2,510	2,489	2,513	2,602
5031	Lumber, plywood, and millwork	1,715	1,775	1,870	1,882	1,963	1,949	1,967	1,929	1,941	1,659	1,629	1,643	1,671
505	Metals and minerals, except petroleum	4,449	4,660	4,953	4,976	5,356	5,307	5,305	5,437	5,433	4,434	4,277	4,444	4,459
5051 pt.	Ferrous metals service centers and offices	3,471	3,591	3,820	3,823	4,116	4,108	4,104	4,232	4,222	3,689	3,511	3,514	3,568
5051 pt.	Ferrous metals service centers	2,633	2,760	3,039	2,971	3,220	3,268	3,191	3,308	3,323	2,874	2,686	2,738	2,768
506	Electrical goods	4,563	4,594	4,867	4,951	5,129	5,312	5,266	5,264	5,414	4,599	4,591	4,611	4,653
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,114	2,214	2,226	2,286	2,417	2,358	2,283	2,367	2,441	2,069	2,025	2,100	2,121
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,449	2,380	2,640	2,665	2,712	2,954	2,983	2,899	2,973	2,530	2,566	2,511	2,533
507	Hardware, plumbing, heating equipment, and supplies	3,712	3,876	4,058	4,231	4,222	4,201	4,215	4,117	4,037	3,578	3,621	3,608	3,620
5072	Hardware	1,366	1,384	1,421	1,428	1,445	1,423	1,410	1,369	1,356	1,296	1,319	1,320	1,358
5074	Plumbing and heating equipment and supplies (hydronics)[1]	1,590	1,678	1,784	1,861	1,815	1,818	1,839	1,800	1,781	1,579	1,566	1,562	1,555
508	Machinery, equipment, and supplies	15,508	16,005	16,511	16,762	16,796	17,061	17,057	17,183	17,420	14,706	14,631	15,026	15,307
5082	Construction and mining machinery and equipment	3,281	3,396	3,505	3,516	3,589	3,636	3,637	3,793	3,933	3,110	3,083	3,202	3,261
5084,5	Industrial machinery, equipment, and supplies	4,816	4,912	4,996	5,055	5,160	5,328	5,301	5,317	5,475	4,503	4,534	4,555	4,742
51	Nondurable goods, total	25,309	25,399	26,656	26,678	25,716	25,255	24,974	25,102	26,170	22,807	23,903	24,830	24,879
	Total (excluding farm-product raw materials)	19,803	19,925	20,699	21,103	20,966	20,887	21,173	21,297	22,140	19,479	19,697	19,687	19,569
511	Paper and paper products	1,255	1,259	1,310	1,349	1,343	1,376	1,341	1,361	1,419	1,275	1,261	1,269	1,261
5111,3	Printing, writing, industrial, and personal service paper	868	877	910	911	929	955	938	921	955	880	878	865	873
512	Drugs, drug proprietaries, and druggists' sundries	1,266	1,292	1,330	1,345	1,350	1,401	1,368	1,410	1,511	1,320	1,373	1,337	1,303
514	Groceries and related products	5,401	5,376	5,710	5,740	5,752	5,871	5,833	5,803	6,151	5,448	5,507	5,465	5,540
5141	Groceries, general-line	2,350	2,366	2,562	2,500	2,495	2,512	2,480	2,505	2,654	2,363	2,446	2,441	2,473
517	Petroleum and petroleum products	2,045	1,936	1,953	1,872	1,938	1,837	1,974	2,093	2,171	2,064	2,023	2,053	2,042
518	Beer, wine, and distilled alcoholic beverages	1,917	1,889	2,017	2,133	2,135	2,148	2,178	2,158	2,237	2,048	2,121	2,075	1,809
5181	Beer and ale[2]	611	641	707	758	730	717	709	679	726	673	658	632	581
5182	Wines and distilled alcoholic beverages	1,305	1,248	1,311	1,375	1,405	1,431	1,469	1,480	1,511	1,375	1,462	1,443	1,228

See footnotes below table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978									1977			
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.P	Sept.	Oct.	Nov.	Dec.
	Merchant wholesalers, total	133	135	118	123	113	114	123	111	119	120	123	122	122
	Total (excluding farm-product raw materials)	138	139	122	128	120	120	131	117	126	125	127	126	126
50	Durable goods, total	194	192	163	167	161	160	174	154	164	167	168	171	176
501	Motor vehicles and automotive parts and supplies	161	162	136	134	136	139	151	137	150	150	154	156	158
5013,4	Automotive parts and supplies, tires and tubes	188	186	155	152	151	156	172	151	172	177	167	176	181
5013	Automotive parts and supplies	183	182	155	154	155	159	176	154	174	175	163	176	175
502	Furniture and home furnishings	180	174	147	159	161	161	174	155	155	150	139	138	147
5023	Home furnishings	202	194	157	178	180	178	190	170	170	157	145	150	163
503	Lumber and other construction materials	143	146	123	118	105	100	112	94	101	98	101	108	125
5031	Lumber, plywood, and millwork	133	138	118	112	101	96	107	92	100	99	100	107	120
505	Metals and minerals, except petroleum	178	182	163	169	170	167	188	164	174	164	176	171	184
5051 pt.	Ferrous metals service centers and offices	181	182	163	175	174	173	190	168	178	177	190	188	201
5051 pt.	Ferrous metals service centers	190	191	177	182	184	184	202	181	194	194	194	201	216
506	Electrical goods	180	175	157	166	158	157	165	149	162	162	153	155	157
5063	Electrical apparatus and equipment, wiring supplies and construction materials	168	163	143	147	142	137	137	131	142	151	141	146	154
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	191	187	172	187	176	178	195	168	183	171	164	163	160
507	Hardware, plumbing, heating equipment, and supplies	207	227	201	201	183	178	188	171	184	182	179	183	199
5072	Hardware	197	204	179	179	169	170	185	158	173	173	176	172	201
5074	Plumbing and heating equipment and supplies (hydronics)	219	249	223	223	201	202	201	182	190	197	185	197	206
508	Machinery, equipment, and supplies	251	241	199	202	195	194	218	196	200	204	204	216	218
5082	Construction and mining machinery and equipment	398	388	310	280	281	296	324	317	348	310	306	312	324
5084,5	Industrial machinery, equipment, and supplies	189	176	152	164	152	152	174	151	157	163	165	159	166
51	Nondurable goods, total	86	88	79	84	72	72	78	71	78	79	83	81	79
	Total (excluding farm-product raw materials)	84	86	77	83	76	75	82	75	82	81	83	81	77
511	Paper and paper products	95	98	87	97	89	92	97	86	97	93	94	95	93
5111,3	Printing, writing, industrial, and personal service paper	91	95	83	88	82	85	90	78	88	85	87	88	88
512	Drugs, drug proprietaries, and druggists' sundries	143	157	134	147	143	147	152	137	154	139	146	144	141
	Groceries and related products	58	59	55	58	53	55	57	53	59	58	59	57	57
	Groceries, general-line	69	71	68	70	66	67	68	63	71	70	73	68	69
517	Petroleum and petroleum products	49	47	46	49	46	45	49	47	52	57	53	52	47
518	Beer, wine, and distilled alcoholic beverages	116	107	88	107	93	86	99	88	100	102	113	97	74
5181	Beer and ale	77	76	65	76	60	52	58	51	66	66	74	67	57
5182	Wines and distilled alcoholic beverages	152	134	109	138	131	126	151	130	133	137	147	120	86

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

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

[1]The plumbing and heating equipment and supplies (hydronics) group is subject to a sampling variability of 9 percent for September 1978.
[2]The beer and ale group is subject to a sampling variability of 8 percent for September 1978.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.P	1977 Sept.	Oct.	Nov.	Dec.
	Sales ADJUSTED for seasonal variations and trading-day differences													
	Merchant wholesalers, total	55,985	57,635	58,877	62,152	64,011	63,235	63,404	64,573	64,257	53,307	53,639	55,558	57,266
	Total (excluding farm-product raw materials)	50,554	51,733	52,625	55,247	55,790	55,253	56,643	57,317	57,266	48,018	48,630	49,887	51,663
50	Durable goods, total	25,568	26,976	27,466	28,974	28,692	28,738	29,831	30,072	30,019	24,150	24,997	25,601	26,488
501	Motor vehicles and automotive parts and supplies	5,125	5,685	5,486	5,566	5,664	5,490	5,591	5,706	5,774	4,504	4,889	4,969	5,220
502	Furniture and home furnishings	1,025	1,034	1,062	1,091	1,060	1,040	1,133	1,057	1,082	934	950	957	1,082
503	Lumber and other construction materials	2,288	2,329	2,328	2,641	2,610	2,726	2,706	2,744	2,852	2,349	2,418	2,320	2,443
505	Metals and minerals, except petroleum	2,535	2,810	2,792	3,005	2,922	3,059	3,106	3,050	3,028	2,580	2,539	2,605	2,669
506	Electrical goods	2,842	2,948	3,044	3,130	3,265	3,181	3,187	3,375	3,321	2,731	2,818	2,918	2,917
507	Hardware, plumbing, heating equipment, and supplies	2,000	1,945	2,005	2,156	2,186	2,189	2,254	2,205	2,117	1,834	1,916	1,958	2,024
508	Machinery, equipment, and supplies	7,026	7,468	7,700	8,329	8,030	8,086	8,179	8,396	8,380	6,726	6,988	7,268	7,396
51	Nondurable goods, total	30,417	30,659	31,411	33,178	35,319	34,497	33,573	34,501	34,238	29,157	28,642	29,957	30,778
	Total (excluding farm-product raw materials)	24,986	24,757	25,159	26,273	27,098	26,515	26,812	27,245	27,247	23,852	23,633	24,286	25,175
511	Paper and paper products	1,382	1,390	1,441	1,506	1,480	1,454	1,433	1,460	1,408	1,305	1,294	1,294	1,419
512	Drugs, drug proprietaries, and druggists' sundries	903	889	948	950	939	952	973	982	967	908	867	913	932
513	Apparel, piece goods, and notions	1,774	1,704	1,939	1,970	2,107	2,081	2,178	2,309	2,287	1,668	1,821	1,740	1,856
514	Groceries and related products	9,748	9,992	9,988	10,286	10,405	10,061	10,330	10,379	10,403	9,367	9,280	9,620	9,947
515	Farm-product raw materials[1]	5,431	5,902	6,252	6,905	8,221	7,982	6,761	7,256	6,991	5,305	5,009	5,671	5,603
517	Petroleum and petroleum products	4,362	4,001	3,945	3,981	4,502	4,115	4,065	4,367	4,380	3,712	3,749	3,928	4,124
518	Beer, wine, and distilled alcoholic beverages	2,102	2,188	2,283	2,185	2,151	2,200	2,252	2,278	2,302	2,012	1,907	2,026	2,035
519	Miscellaneous nondurable goods	3,822	3,722	3,754	4,500	4,535	4,683	4,633	4,453	4,444	4,071	3,901	3,901	3,992
	Inventories ADJUSTED for seasonal variations													
	Merchant wholesalers, total	68,991	70,361	72,882	74,867	75,474	75,820	75,664	76,253	77,354	66,119	66,209	67,047	67,998
	Total (excluding farm-product raw materials)	64,410	65,559	67,309	68,879	69,646	70,080	71,160	71,696	72,790	62,413	62,347	62,835	63,712
50	Durable goods, total	44,686	45,684	46,838	47,673	48,363	48,810	49,577	50,101	50,618	42,896	43,014	43,642	44,
501	Motor vehicles and automotive parts and supplies	7,603	7,981	7,854	7,894	8,076	8,145	8,460	8,655	8,569	6,989	7,248	7,534	7,394
502	Furniture and home furnishings	1,569	1,619	1,636	1,677	1,733	1,758	1,753	1,743	1,720	1,480	1,461	1,438	1,541
503	Lumber and other construction materials	2,728	2,795	2,834	2,891	2,886	3,023	3,049	3,001	3,047	2,566	2,612	2,607	2,680
505	Metals and minerals, except petroleum	4,431	4,726	4,928	4,927	5,372	5,350	5,181	5,336	5,510	4,520	4,418	4,484	4,397
506	Electrical goods	4,694	4,717	4,916	4,956	5,119	5,218	5,204	5,186	5,392	4,581	4,519	4,547	4,710
507	Hardware, plumbing, heating equipment, and supplies	3,796	3,955	3,994	4,100	4,107	4,131	4,194	4,060	4,090	3,636	3,684	3,667	3,709
508	Machinery, equipment, and supplies	15,633	15,831	16,235	16,762	16,630	16,677	17,040	17,516	17,543	14,840	14,690	15,086	15,651
51	Nondurable goods, total	24,305	24,677	26,044	27,194	27,111	27,010	26,087	26,152	26,736	23,223	23,195	23,405	23,630
	Total (excluding farm-product raw materials)	19,724	19,875	20,471	21,206	21,283	21,270	21,583	21,595	22,172	19,517	19,333	19,193	19,344
511	Paper and paper products	1,272	1,272	1,327	1,341	1,351	1,349	1,346	1,353	1,426	1,274	1,257	1,272	1,250
512	Drugs, drug proprietaries, and druggists' sundries	1,315	1,324	1,331	1,328	1,382	1,398	1,379	1,413	1,481	1,289	1,315	1,319	1,317
514	Groceries and related products	5,423	5,339	5,587	5,734	5,834	5,960	5,946	5,934	6,213	5,497	5,436	5,311	5,480
517	Petroleum and petroleum products	1,949	1,932	1,995	2,002	2,027	1,894	2,069	2,114	2,118	2,028	1,894	1,944	1,958
518	Beer, wine, and distilled alcoholic beverages	1,984	1,958	2,075	2,155	2,108	2,083	2,202	2,211	2,219	2,036	1,971	1,969	1,898
	Stock-sales ratios based on ADJUSTED data													
	Merchant wholesalers, total	123	122	124	120	118	120	119	118	120	124	123	121	119
	Total (excluding farm-product raw materials)	127	127	128	125	125	127	126	125	127	130	128	126	123
50	Durable goods, total	175	169	171	165	169	170	166	167	169	178	172	170	168
501	Motor vehicles and automotive parts and supplies	148	140	143	142	143	148	151	152	148	155	148	152	142
502	Furniture and home furnishings	153	157	154	154	163	169	155	165	159	158	154	150	142
503	Lumber and other construction materials	119	120	122	109	111	111	113	109	107	109	108	112	110
505	Metals and minerals, except petroleum	175	168	177	164	184	175	167	175	182	175	174	172	165
506	Electrical goods	165	160	161	158	157	164	163	154	162	168	160	156	161
507	Hardware, plumbing, heating equipment, and supplies	190	203	199	190	188	189	186	184	193	198	192	187	183
508	Machinery, equipment, and supplies	223	212	211	201	207	206	208	209	209	221	210	208	212
51	Nondurable goods, total	80	80	83	82	77	78	78	76	78	80	81	78	77
	Total (excluding farm-product raw materials)	79	80	81	81	79	80	80	79	81	82	82	79	77
511	Paper and paper products	92	92	92	89	91	93	94	93	101	98	97	98	88
512	Drugs, drug proprietaries, and druggists' sundries	146	149	140	140	147	147	142	144	153	142	152	144	
514	Groceries and related products	56	53	56	56	56	59	58	57	60	59	59	55	
517	Petroleum and petroleum products	45	48	51	50	45	46	51	48	48	55	51	49	47
518	Beer, wine, and distilled alcoholic beverages	94	89	91	99	98	95	98	97	96	101	103	97	93

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

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

(Based on seasonally-adjusted data)

Item	3 month period, July 1978-Sept. 1978 from--			
	Apr. 1978-June 1978 (3 months ago)	Jan. 1978-Mar. 1978 (6 months ago)	Oct. 1977-Dec. 1977 (9 months ago)	July 1977-Sept. 1977 (12 months ago)
Merchant wholesalers, total	+1	+11	+15	+20
Durable goods, total	+4	+12	+17	+25
Nondurable goods, total	-1	+11	+14	+16

Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers: 1972-1978

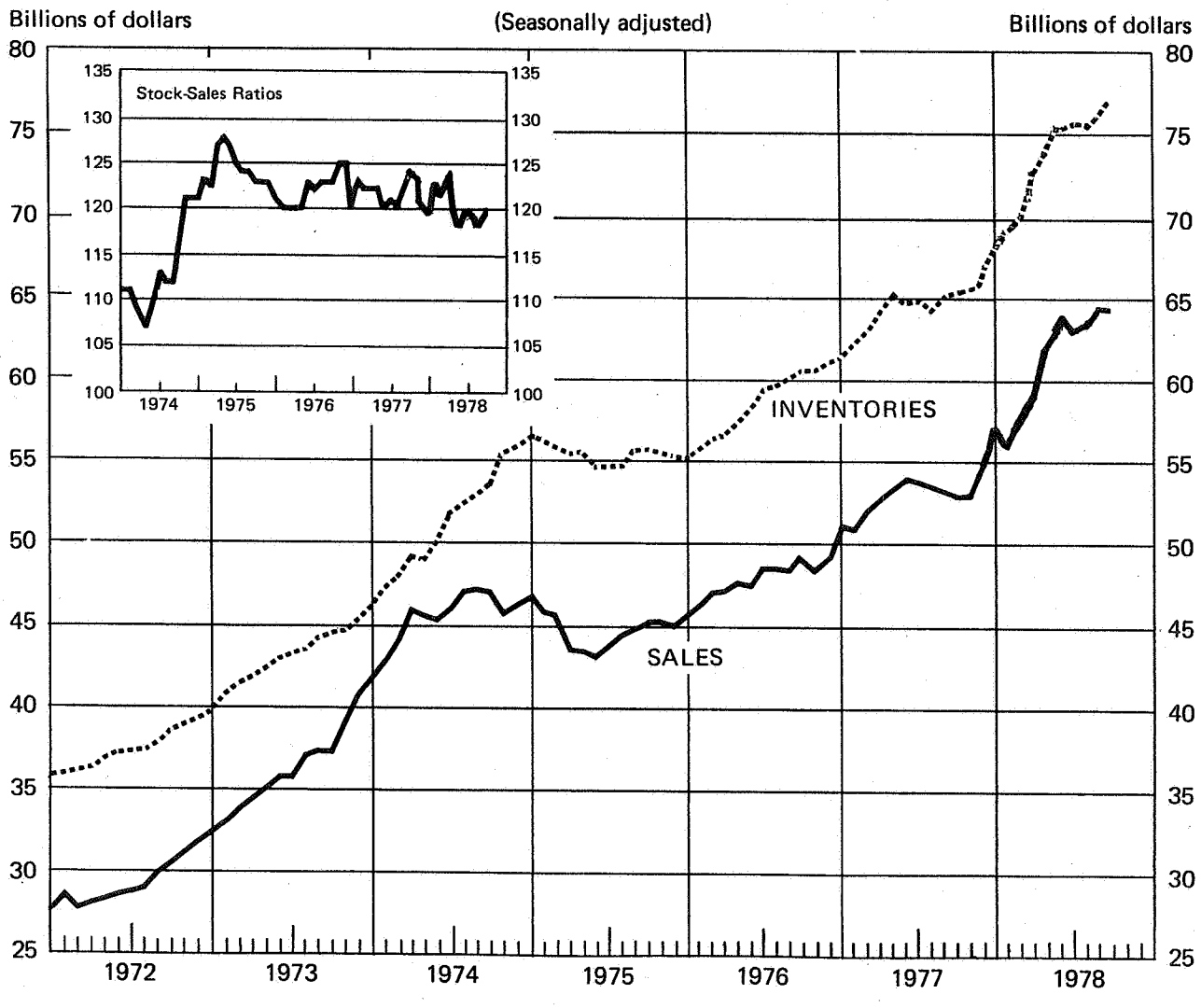


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: September 1978

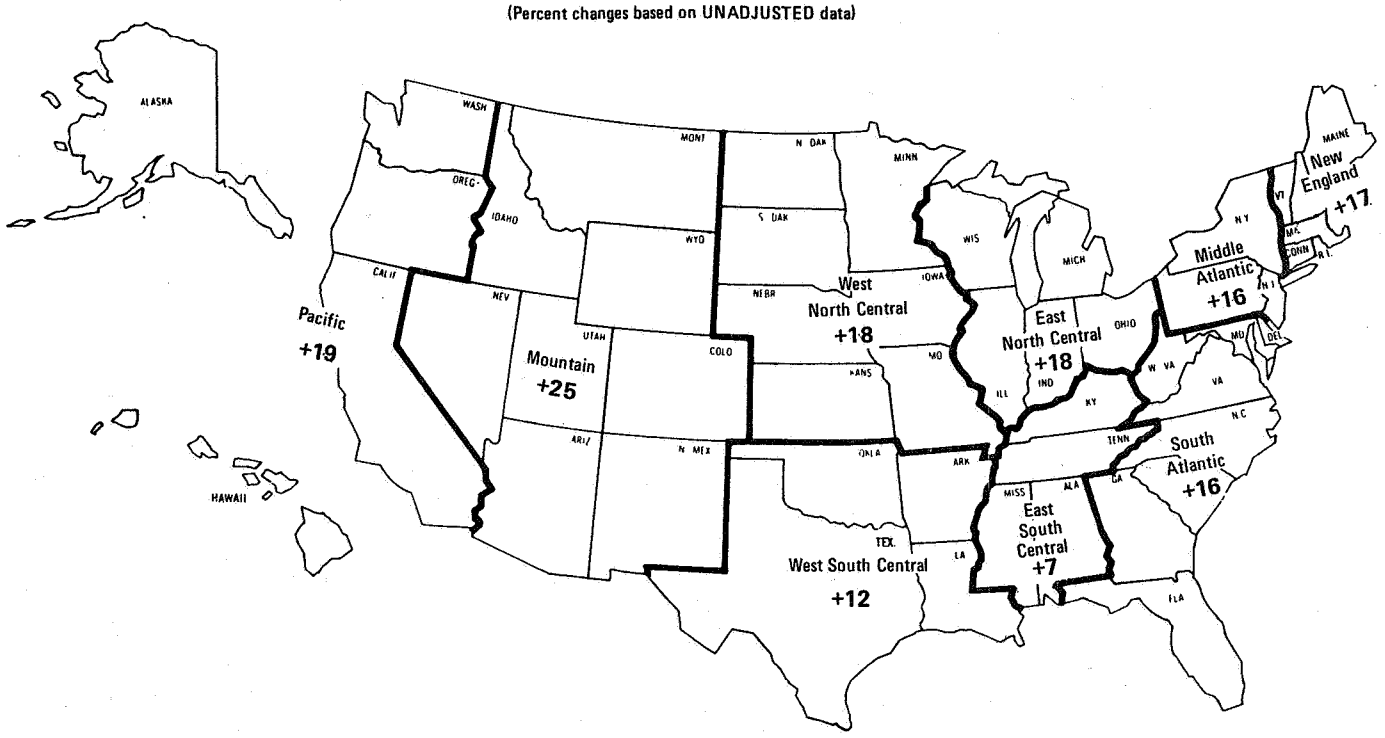
1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		Sept. 1978 from Aug. 1978	Sept. 1978 from Sept. 1977	9 months 1978 from 9 months 1977	Sept. 1978 from Aug. 1978	Sept. 1978 from Sept. 1977	Sept. 1978 from Aug. 1978	Sept. 1978 from Sept. 1977	Sept. 1978 from Aug. 1978	Sept. 1978 from Sept. 1977
	Merchant wholesalers, total	-5	+18	+16	+2	+17	0	+21	+1	+17
	Total (excluding farm-product raw materials)	-5	+16	+17	+2	+17	0	+19	+2	+17
50	Durable goods, total	-5	+20	+23	+1	+18	0	+24	+1	+18
501	Motor vehicles and automotive parts and supplies	-9	+23	+27	0	+23	+1	+28	-1	+23
5012	Automobiles and other motor vehicles	-8	+23	+26	-5	+28	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	-9	+23	+29	+3	+19	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	-9	+26	+27	+3	+24	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	-1	+13	+19	-1	+17	+2	+16	-1	+16
5021	Furniture--household and office	-1	+17	+30	-2	+9	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	+4	+36	+34	-3	+5	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	-4	+8	+28	-2	+11	(*)	(*)	(*)	(*)
5023	Home furnishings	0	+11	+14	0	+20	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	-7	+17	+22	0	+20	+4	+21	+2	+19
5031	Lumber, plywood, and millwork	-8	+15	+21	+1	+17	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c.	-5	+20	+25	0	+26	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	0	+11	(S)	+1	+10	0	+8	+1	+10
505	Metals and minerals, except petroleum	-6	+15	+24	0	+23	-1	+17	+3	+22
5051 pt.	Ferrous metals service centers and offices	-6	+14	+27	0	+14	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	-7	+16	+32	0	+16	(*)	(*)	(*)	(*)
5051 pt.	Nonferrous metals service centers and offices	-3	+35	+22	0	+62	(*)	(*)	(*)	(*)
506	Electrical goods	-5	+18	+23	+3	+18	-2	+22	+4	+18
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-5	+26	+26	+3	+18	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-6	+10	+19	+3	+18	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	-2	+7	+10	+2	+11	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	-9	+12	+15	-2	+13	-4	+15	+1	+12
5072	Hardware	-9	+5	+9	-1	+5	(*)	(*)	(*)	(
5074	Plumbing and heating equipment and supplies (hydronics)	-5	+17	+13	-1	+13	(*)	(*)	(*)	(.
5075	Warm air heating and air conditioning equipment and supplies	-21	+11	+31	-6	+30	(*)	(*)	(*)	(*)
508	Machinery, equipment, and supplies	0	+21	+18	+1	+18	0	+25	0	+18
5081	Commercial machines and equipment	+5	(S)	+29	+4	+6	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	-5	+13	+17	+4	+26	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	+4	+23	+19	-4	+9	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	-1	+26	+23	+3	+22	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	-4	+17	+13	+2	+33	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	-9	+21	+19	+2	+10	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	-8	+25	+20	+3	+10	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	-10	+15	+18	+1	+10	(*)	(*)	(*)	(*)
51	Nondurable goods, total	-5	+15	+11	+4	+15	-1	+17	+2	+15
	Total (excluding farm-product raw materials)	-5	+12	+11	+4	+14	0	+14	+3	+14
511	Paper and paper products	-8	+7	+13	+4	+11	-4	+8	+5	+12
5111,3	Printing, writing, industrial, and personal service paper	-8	+5	+9	+4	+9	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	-4	+3	+4	+7	+14	-2	+6	+5	+15
5122	Drugs, drug proprietaries, and druggists' sundries	-4	+3	+4	+7	+14	(*)	(*)	(*)	(*)
5122 pt.	General-line drugs	-3	+3	+6	+8	+12	(*)	(*)	(*)	(*)
514	Groceries and related products	-5	+10	+12	+6	+13	0	+11	+5	+13
5141	Groceries, general-line	-5	+11	+9	+6	+12	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	-6	+7	+6	+6	+11	(*)	(*)	(*)	(*)
5141 pt.	Retailers cooperatives	-5	+15	+11	+6	+14	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	-4	+11	+11	+6	+13	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	-4	+2	+7	+6	+6	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	-5	+31	+12	+4	+17	(*)	(*)	(*)	(*)
5145	Confectionery	+2	+11	+19	+3	+20	(*)	(*)	(*)	(*)
5147	Meats and meat products	-7	+24	+20	+7	+33	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	-11	+11	+24	+6	+32	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	-6	+31	+14	+6	+21	-4	+32	0	+25
5152	Cotton	-10	+14	+9	-7	+49	(*)	(*)	(*)	(*)
5153	Grain	-6	+35	+14	+8	+23	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	-6	+16	+6	+4	+5	0	+18	0	+4
5171	Petroleum bulk stations and terminals	-6	+7	+3	+5	-3	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	-9	+11	+15	+4	+9	+1	+14	0	+9
5181	Beer and ale	-17	+8	+19	+7	+8	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	0	+13	+11	+2	+10	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	-1	+5	+4	+2	+10	0	+9	0	+11
5191	Farm supplies	(S)	+18	-5	+2	+13	(*)	(*)	(*)	
5194	Tobacco and tobacco products	-8	+7	+8	-1	+5	(*)	(*)	(*)	
5198	Paints, varnishes, and supplies	-9	+18	+14	+3	+29	(*)	(*)	(*)	(*
5199 pt.	Books, periodicals, newspapers	-8	+12	+40	+3	+6	(*)	(*)	(*)	(*)

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

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

Sales of Merchant Wholesalers by Geographic Division
9 Months 1978 Compared With 9 Months 1977

(Percent changes based on UNADJUSTED data)



UNITED STATES +16

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Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1978 and 1977

(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]	1978									1977				Total 9 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.[P]	Sept.	Oct.	Nov.	Dec.	1978	1977	Range[2]	Median
	Merchant wholesalers, total	52,143	52,766	62,900	60,613	66,249	65,834	60,651	67,702	64,155	54,505	54,251	56,034	56,224	553,016	475,596	0.8-0.9	0.9
	New England	2,693	2,657	3,191	2,913	3,231	3,451	3,206	3,654	3,459	2,880	2,919	3,036	3,008	28,455	24,308	5-6	6
	Middle Atlantic	11,846	11,840	14,206	13,114	14,345	14,752	13,281	15,382	14,588	12,428	11,945	12,494	12,924	123,355	106,716	2-2	2
	East North Central	8,929	9,269	10,680	10,708	11,787	11,510	10,461	11,636	10,899	9,431	9,724	9,841	9,596	95,905	81,066	2-3	3
	West North Central	5,566	5,390	6,419	6,522	7,583	6,999	6,513	7,373	6,976	5,509	5,670	5,977	5,617	59,281	50,295	2-3	2
	South Atlantic	5,666	5,686	6,792	6,533	6,858	7,044	6,523	7,139	6,774	5,934	5,854	6,126	6,188	59,015	50,950	2-3	2
	East South Central	2,421	2,534	3,201	3,318	3,453	3,132	2,962	3,127	2,940	2,723	2,813	2,765	2,822	27,089	25,337	4-5	4
	West South Central	5,582	5,843	6,878	6,433	6,857	6,744	6,382	6,890	6,767	5,745	5,644	6,008	6,283	58,377	52,241	3-4	4
	Mountain	1,934	1,900	2,536	2,412	2,537	2,777	2,456	2,620	2,507	2,177	2,027	1,964	2,099	21,678	17,314	5-5	5
	Pacific	7,506	7,649	8,994	8,659	9,600	9,426	8,868	9,881	9,244	7,678	7,655	7,821	7,688	79,860	67,369	2-3	3
50	Durable goods, total	22,869	23,880	28,985	28,784	30,405	30,991	28,701	32,279	30,652	25,461	25,369	25,340	24,797	257,549	210,099	0.8-1.0	0.9
	Middle Atlantic	4,973	5,138	6,295	5,952	6,181	6,464	5,808	6,765	6,377	5,366	5,420	5,477	5,379	53,954	43,989	4-5	4
	East North Central	3,935	4,363	5,081	5,128	5,495	5,407	4,958	5,793	5,494	4,635	4,573	4,549	4,282	45,724	37,819	3-4	4
	West North Central	1,776	1,805	2,228	2,378	2,548	2,446	2,383	2,695	2,668	2,003	2,061	2,075	1,900	20,926	17,071	5-6	5
	South Atlantic	2,809	2,768	3,414	3,455	3,538	3,817	3,480	3,738	3,652	3,113	3,088	3,051	2,971	30,671	25,679	4-5	4
	West South Central	2,413	2,626	3,180	3,097	3,303	3,366	3,135	3,403	3,203	2,673	2,643	2,611	2,729	27,725	10,458	4-4	4
	Mountain	923	893	1,192	1,208	1,247	1,412	1,303	1,372	1,270	1,051	988	900	989	10,821	8,037	6-7	7
	Pacific	4,115	4,283	5,007	4,901	5,316	5,256	5,026	5,641	5,231	4,282	4,210	4,335	4,262	44,775	36,000	2-3	3
51	Nondurable goods, total	29,274	28,886	33,915	31,829	35,844	34,843	31,950	35,423	33,503	29,044	28,882	30,694	31,427	295,468	265,497	1.0-1.2	1.0
	New England	1,735	1,735	2,017	1,747	2,014	2,151	1,988	2,293	2,119	1,843	1,839	1,918	1,918	17,799	16,052	5-7	6
	Middle Atlantic	6,873	6,701	7,912	7,162	8,164	8,288	7,473	8,617	8,211	7,062	6,525	7,017	7,545	69,401	62,727	3-3	3
	East North Central	4,994	4,906	5,599	5,580	6,292	6,103	5,504	5,843	5,405	4,796	5,151	5,292	5,314	50,182	43,248	3-4	3
	West North Central	3,790	3,584	4,191	4,145	5,035	4,554	4,129	4,678	4,309	3,506	3,609	3,902	3,717	38,355	33,224	3-4	3
	South Atlantic	2,857	2,918	3,378	3,078	3,320	3,227	3,044	3,400	3,122	2,821	2,766	3,075	3,217	28,344	25,272	3-5	3
	East South Central	1,453	1,451	1,788	1,819	1,892	1,609	1,572	1,616	1,522	1,422	1,507	1,542	1,626	14,721	14,879	3-4	4
	West South Central	3,169	3,217	3,699	3,336	3,554	3,378	3,248	3,487	3,564	3,072	3,001	3,397	3,554	30,651	29,451	5-5	5
	Pacific	3,392	3,367	3,987	3,757	4,284	4,170	3,842	4,241	4,012	3,396	3,445	3,486	3,426	35,084	31,369	4-5	4

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

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

[1]See map on page 7.

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

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: September 1978

(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: September 1978 from August 1978	Sales: September 1978 from September 1977	Sales: 9 months 1978 from 9 months 1977	Inventories: September 1978 from August 1978	Inventories: September 1978 from September 1977	Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		A	B	C[1]	D	E	A	D
	Merchant wholesalers, total	-5	+18	+16	+2	+17	0.4	0.2
	New England	-5	+20	+17	+1	+13	2.0	1.9
	Middle Atlantic	-5	+17	+16	+1	+13	1.1	0.6
	East North Central	-6	+16	+18	+1	+19	1.2	0.8
	West North Central	-5	+27	+18	0	+16	1.3	1.1
	South Atlantic	-5	+14	+16	0	+10	1.6	1.0
	East South Central	-6	+8	+7	+1	+23	1.7	1.4
	West South Central	-2	+18	+12	0	+14	1.4	0.8
	Mountain	-4	+15	+25	0	+4	2.4	1.3
	Pacific	-6	+20	+19	+2	+25	1.2	0.5
50	Durable goods, total	-5	+20	+23	+1	+18	0.6	0.3
	New England	-1	+29	+29	-1	+15	2.4	1.3
	Middle Atlantic	-6	+19	+23	0	+15	1.7	1.0
	East North Central	-5	+19	+21	0	+21	1.9	1.0
	West North Central	-1	+33	+23	-2	+16	3.3	1.7
	South Atlantic	-2	+17	+19	-1	+10	1.9	1.2
	East South Central	-6	+9	+18	0	+19	3.9	2.5
	West South Central	-6	+20	+22	-1	+17	2.1	1.2
	Mountain	-7	+21	+35	-1	+8	2.9	1.7
	Pacific	-7	+22	+24	+2	+28	1.9	0.7
51	Nondurable goods, total	-5	+15	+11	+4	+15	0.6	0.4
	New England	-8	+15	+11	+3	+12	1.9	2.7
	Middle Atlantic	-5	+16	+11	+2	+11	1.9	0.9
	East North Central	-8	+13	+16	+3	+15	1.4	1.1
	West North Central	-8	+23	+15	+2	+15	1.6	1.4
	South Atlantic	-8	+11	+12	+3	+8	2.4	1.8
	East South Central	-6	+7	-1	+3	+32	1.7	2.4
	West South Central	+2	+16	+4	+4	+7	2.2	1.3
	Mountain	-1	+10	+17	0	-4	3.2	1.2
	Pacific	-5	+18	+12	+2	+21	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	-9	+23	+29	+3	+19	2	
	New England	-4	+28	+30	+1	+25	7	4
	Middle Atlantic	-20	+24	+52	+2	+6	4	2
	East North Central	-11	+16	+19	+5	+20	7	1
	West North Central	-3	+28	+23	0	+21	5	2
	South Atlantic	-8	+14	+22	0	+16	4	2
	East South Central	-12	+26	+28	-1	+30	4	3
	West South Central	-8	+14	+19	+2	+5	5	2
	Mountain	-10	+16	+39	-2	-5	7	3
	Pacific	-5	+35	+29	+4	+45	3	2
502	Furniture and home furnishings	-1	+13	+19	-1	+17	2	1
	Middle Atlantic	+5	+37	+17	-2	+34	4	2
	East North Central	-8	+11	+20	-1	+4	7	2
	West North Central	+6	+7	+31	-6	+5	5	4
	West South Central	-4	+26	+31	-2	+23	5	7
	Pacific	-8	(S)	+20	0	+5	5	3
503	Lumber and other construction materials	-7	+17	+22	0	+20	2	1
	New England	+6	+18	+14	-8	-11	4	5
	Middle Atlantic	-6	+21	+27	-4	+21	4	2
	East North Central	-12	+16	+26	+4	+30	3	2
	West North Central	-13	+21	+21	-4	+36	7	7
	South Atlantic	-5	+33	+36	+1	+29	4	2
	East South Central	-8	+5	+30	-2	+16	4	3
	West South Central	-10	+8	+23	-3	+37	6	5
	Pacific	-4	+7	+6	+1	+2	5	1
5051 pt.	Ferrous metals service centers	-7	+16	+32	0	+16	2	1
	New England	+4	+18	+40	0	+2	6	2
	Middle Atlantic	-6	+6	+27	0	-8	5	2
	East North Central	-8	+10	+31	-1	+17	3	2
	West North Central	-11	+35	+34	+3	+31	5	2
	South Atlantic	+2	+6	+27	-3	+11	3	2
	East South Central	-7	+24	+15	-4	+18	4	4
	West South Central	+2	+33	+27	-4	+30	4	2
	Mountain	-21	(S)	(S)	+3	+32	2	2
	Pacific	-18	+42	+58	+7	(S)	2	3
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-5	+26	+26	+3	+18	2	1
	New England	0	+21	+24	-1	+4	3	2
	Middle Atlantic	-5	+9	+21	+2	-1	5	2
	East North Central	0	+24	+25	0	+12	3	2
	West North Central	-9	+22	+17	+6	(S)	5	3
	South Atlantic	-6	+22	+20	+2	+14	3	2
	East South Central	-3	+34	+53	+6	+28	3	
	West South Central	-14	+50	+38	+7	+31	4	
	Mountain	+4	+40	+26	-4	+2	4	2
	Pacific	-5	+34	+28	+1	+30	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: September 1978—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: September 1978 from August 1978	Sales: September 1978 from September 1977	Sales: 9 months 1978 from 9 months 1977	Inventories: September 1978 from August 1978	Inventories: September 1978 from September 1977	Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		A	B	C[1]	D	E	A	D
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-6	+10	+19	+3	+18	3	1
	Middle Atlantic	-6	+17	+29	+2	+31	3	2
	East North Central	-10	-1	+4	-4	+11	4	1
	West North Central	-3	+5	+4	+6	+18	4	4
	South Atlantic	0	+13	+16	+2	+6	6	4
	West South Central	-21	-4	+16	-1	+4	4	4
	Mountain	-9	(S)	(S)	-1	-9	6	3
	Pacific	-6	+15	+33	+2	+14	3	2
5072	Hardware	-9	+5	+9	-1	+5	1	1
	New England	-11	+43	+15	+4	+35	6	3
	Middle Atlantic	-4	-5	+2	+1	-7	6	2
	East North Central	-7	+12	+26	-4	+18	4	2
	West North Central	-12	+12	+6	0	+13	3	3
	South Atlantic	-8	-7	-2	-7	-12	4	2
	East South Central	-19	-14	-13	-1	-17	4	1
	Pacific	-11	-2	+7	-6	-3	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	-5	+17	+13	-1	+13	2	1
	Middle Atlantic	+2	+4	+1	-1	-13	6	3
	East North Central	-6	(S)	+26	0	+40	3	3
	South Atlantic	-4	+13	+8	-1	+3	3	2
	Mountain	-6	+9	(S)	-6	-23	7	4
	Pacific	-8	+14	+10	-3	+11	5	4
5084,5	Industrial machinery, equipment, and supplies	-1	+26	+23	+3	+22	2	1
	Middle Atlantic	-3	+8	+14	+2	+7	7	2
	East North Central	-7	+18	+22	0	+22	3	2
	West South Central	+7	+50	+41	+2	+28	4	3
	Pacific	-9	+36	+38	+6	+42	5	2
2	Drugs, drug proprietaries, and druggists' sundries	-4	+3	+4	+7	+14	1	1
	New England	-8	-7	+1	+1	-4	5	3
	Middle Atlantic	-6	+7	+2	+6	+4	3	2
	East North Central	-5	-5	+2	+5	+7	6	3
	West North Central	-6	+11	+6	+3	+12	2	2
	South Atlantic	-7	0	+16	+6	+8	6	5
	East South Central	0	+40	+18	+8	+66	6	5
	West South Central	+2	+22	0	+6	(S)	3	2
	Mountain	-2	+23	+9	+4	+22	3	2
	Pacific	-1	-13	-6	+6	+5	3	3
5141	Groceries, general-line	-5	+11	+9	+6	+12	1	1
	New England	-7	+17	+20	+5	+15	2	1
	Middle Atlantic	-3	+13	+6	+3	+6	1	2
	East North Central	-2	+7	+6	+5	+9	3	1
	West North Central	-7	+5	+10	+4	+11	1	1
	South Atlantic	-7	+15	+16	+3	+16	2	1
	West South Central	-6	+6	+8	+7	+10	2	1
	Mountain	-11	+6	+12	-1	-1	2	2
	Pacific	-3	+28	+15	+2	+18	1	1
5142,3,6,9	Specialty-line groceries	-4	+2	+7	+6	+6	1	1
	Middle Atlantic	-1	+8	+13	+11	+5	4	2
	East North Ceatral	-5	+7	+19	-1	+20	3	2
	West North Central	-4	-7	+25	-4	-15	3	1
	South Atlantic	-9	+2	+14	+6	+26	5	6
	East South Central	-8	-8	(S)	+1	(S)	2	2
5148	Fresh fruits and vegetables	-11	+11	+24	+6	+32	2	4
	Middle Atlantic	-21	+10	+30	-2	+36	7	5
	East North Central	-18	-6	+17	+3	+19	6	6
	West North Central	-16	-11	+11	+6	+27	6	3
	West South Central	-7	+15	+26	+12	+41	5	3
	Pacific	-4	+5	+19	+7	+16	4	4
5194	Tobacco and tobacco products	-8	+7	+8	-1	+5	1	1
	New England	-21	-15	-1	-18	(S)	5	3
	Middle Atlantic	-3	+20	+13	+4	+23	4	3
	East North Central	-10	0	+11	-1	-14	4	3
	West North Central	-4	-17	-11	-6	+1	4	2
	South Atlantic	-2	(S)	+10	+3	+30	6	6
	East South Central	-11	-8	-3	-2	-16	7	4
	West South Central	-6	(S)	+34	0	(S)	7	6
	Mountain	-7	-13	(S)	-6	+6	6	2
	Pacific	-10	+6	+14	-8	-1	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 a high sampling error, it may be desirable to use the United States total trends for the kinds of business rather than the geographic division trends.

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

[1]See map on page 7.

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

APPENDIX A. Reliability of Data

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

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

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

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

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

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

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

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

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

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

1972 SIC code	Kind of business	Sales						Inventories					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total	0.8-1.1	0.9	0.8-0.9	0.9	0.4-0.5	0.5	0.8-1.0	0.9	0.7-1.0	0.9	0.2-0.5	0.4
	Total (excluding farm-product raw materials)	0.9-1.2	1.1	0.9-1.0	1.0	0.4-0.6	0.5	0.9-1.0	1.0	0.8-1.0	0.9	0.2-0.5	0.3
50	Durable goods, total	1.1-1.3	1.2	0.9-1.0	1.0	0.6-0.6	0.6	1.1-1.2	1.2	1.0-1.2	1.1	0.3-0.7	0.5
501	Motor vehicles and automotive parts and supplies	2.3-3.3	3.1	1.9-2.8	2.2	1.4-1.9	1.7	2.5-3.3	2.9	2.6-3.1	3.0	0.6-1.3	1.0
5012	Automobiles and other motor vehicles	(*)	(*)	(*)	(*)	1.7-3.9	3.1	(*)	(*)	(*)	(*)	1.7-3.0	2.8
5013,4	Automotive parts and supplies, tires and tubes	2.9-3.7	3.1	2.9-3.2	3.1	1.5-2.0	1.6	4.0-4.5	4.3	3.9-4.4	4.0	0.4-1.4	0.7
5013	Automotive parts and supplies	3.3-4.0	3.9	3.1-3.8	3.7	1.9-2.2	2.0	4.7-5.3	5.2	4.7-5.2	5.0	0.5-1.5	0.9
502	Furniture and home furnishings	4.2-5.8	4.6	4.2-4.4	4.3	1.7-2.9	2.0	3.2-4.9	3.7	3.4-4.2	3.7	0.8-2.3	2.0
5021	Furniture--household and office	6.6-7.6	6.9	5.6-7.1	6.9	4.0-5.7	4.3	(*)	(*)	(*)	(*)	1.4-3.4	2.2
5021 pt.	Household furniture	(*)	(*)	(*)	(*)	5.0-5.8	5.1	(*)	(*)	(*)	(*)	1.4-4.3	2.0
5021 pt.	Office furniture	(*)	(*)	(*)	(*)	5.7-8.0	5.9	(*)	(*)	(*)	(*)	0.7-3.7	2.1
5023	Home furnishings	5.1-7.5	6.1	5.1-6.1	5.5	1.6-3.6	2.2	4.8-6.9	5.6	4.9-6.0	5.0	1.0-3.1	2.6
503	Lumber and other construction materials	2.8-4.4	3.1	2.9-3.9	3.1	1.6-2.5	1.9	4.5-6.5	4.9	4.8-5.8	4.9	0.7-1.8	0.9
5031	Lumber, plywood, and millwork	4.1-4.6	4.3	3.3-4.6	4.0	2.1-2.5	2.4	5.9-8.2	6.5	6.0-6.9	6.5	1.0-2.6	1.8
5039	Construction materials, n.e.c.	4.2-7.2	4.9	4.5-5.9	4.9	2.0-3.4	2.2	(*)	(*)	(*)	(*)	1.1-2.0	1.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(*)	(*)	(*)	(*)	2.2-2.4	2.3	(*)	(*)	(*)	(*)	1.0-2.5	1.4
505	Metals and minerals, except petroleum	4.4-6.0	4.7	4.0-5.1	4.0	1.5-3.0	2.8	3.2-3.8	3.7	3.7-4.1	4.0	0.8-1.4	1.3
5051 pt.	Ferrous metals service centers and offices	5.0-5.8	5.7	4.1-5.2	4.7	1.2-3.8	3.1	3.8-4.2	4.1	4.1-4.3	4.2	0.5-1.6	1.4
5051 pt.	Ferrous metals service centers	6.7-8.0	6.8	5.0-6.8	5.8	1.1-5.3	3.5	2.9-4.4	3.4	3.4-4.0	3.5	0.6-2.2	2.1
5051 pt.	Nonferrous metals service centers and offices	(*)	(*)	(*)	(*)	4.5-7.0	6.1	(*)	(*)	(*)	(*)	2.8-5.4	4.7
506	Electrical goods	1.9-2.6	2.3	1.6-2.1	1.7	1.3-1.6	1.4	2.5-2.9	2.6	2.2-2.8	2.4	0.5-1.0	0.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2.2-3.1	2.6	2.3-2.7	2.4	1.4-1.7	1.6	2.9-3.5	3.2	3.0-3.2	3.1	0.6-1.2	0.7
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3.4-4.0	3.8	3.0-3.2	3.1	1.6-2.8	2.5	2.9-4.2	3.2	2.7-3.8	3.0	0.7-1.6	0.9
5064	Electrical appliances, TV and radio sets	3.0-3.8	3.6	2.6-3.7	3.1	1.7-2.7	2.5	(*)	(*)	(*)	(*)	0.9-1.7	1.4
507	Hardware, plumbing, heating equipment, and supplies	2.7-3.0	2.9	2.4-2.6	2.5	1.1-1.9	1.5	2.4-2.8	2.6	2.4-2.9	2.7	0.3-1.4	0.6
5072	Hardware	3.6-4.2	3.8	2.6-3.1	3.0	1.3-2.4	1.9	2.0-4.1	2.7	2.2-3.5	2.8	0.4-2.1	0.8
5074	Plumbing and heating equipment and supplies (hydronics)	4.1-5.3	4.2	3.9-5.1	4.2	1.6-3.8	2.1	5.0-7.0	6.0	4.5-7.1	5.3	0.5-3.1	0.9
5075	Warm air heating and air conditioning equipment and supplies	(*)	(*)	(*)	(*)	2.0-4.4	2.7	(*)	(*)	(*)	(*)	1.1-4.3	1.4
508	Machinery, equipment, and supplies	2.3-2.7	2.6	1.8-2.5	2.1	1.2-1.5	1.4	2.0-2.6	2.3	1.7-2.1	1.9	0.4-1.8	1.1
5081	Commercial machines and equipment	(*)	(*)	(*)	(*)	2.9-4.3	4.1	(*)	(*)	(*)	(*)	1.6-8.5	1.9
5082	Construction and mining machinery and equipment	5.0-7.3	5.8	3.3-5.8	4.9	3.9-4.6	4.4	2.9-7.0	4.0	3.2-4.1	3.3	0.7-5.3	1.0
5083	Farm and garden machinery and equipment	(*)	(*)	(*)	(*)	4.1-6.6	6.0	(*)	(*)	(*)	(*)	1.1-2.9	1.2
5084,5	Industrial machinery, equipment, and supplies	3.1-3.4	3.2	2.8-3.0	2.9	1.1-2.3	1.6	2.4-3.0	2.9	2.4-3.0	2.7	0.5-1.6	0.6
5086	Professional equipment and supplies	3.7-7.5	4.3	4.0-5.5	5.2	1.8-3.3	2.0	(*)	(*)	(*)	(*)	0.6-5.2	0.7
5086 pt.	Surgical, medical, hospital, and supplies	(*)	(*)	(*)	(*)	1.7-3.8	2.5	(*)	(*)	(*)	(*)	0.7-5.4	1.0
5087	Service establishment equipment and supplies	(*)	(*)	(*)	(*)	1.8-11.0	2.9	(*)	(*)	(*)	(*)	1.0-3.4	1.3
5093	Scrap and waste materials	4.6-13.3	9.0	4.6-8.8	5.0	2.2-4.9	2.7	(*)	(*)	(*)	(*)	0.7-3.8	0.9
5093 pt.	Iron and steel scrap	(*)	(*)	(*)	(*)	2.6-3.5	3.1	(*)	(*)	(*)	(*)	0.8-1.4	1.0
5093 pt.	Waste materials	(*)	(*)	(*)	(*)	2.6-8.8	4.8	(*)	(*)	(*)	(*)	1.2-9.1	1.6
51	Nondurable goods, total	1.0-1.3	1.1	1.0-1.1	1.1	0.4-0.7	0.6	1.5-1.7	1.6	1.4-1.6	1.5	0.3-0.7	0.4
	Total (excluding farm-product raw materials)	1.0-1.6	1.2	1.3-1.4	1.4	0.5-0.8	0.6	1.7-2.0	1.9	1.6-1.8	1.7	0.3-0.7	0.4
511	Paper and paper products	2.6-4.0	3.7	2.4-4.1	3.1	1.0-1.4	1.3	2.5-3.4	2.7	2.4-3.2	2.8	0.4-1.5	0.6
5111,3	Printing, writing, industrial, and personal service paper	2.4-3.1	2.7	2.3-2.8	2.4	1.3-1.5	1.4	2.9-3.4	3.1	2.7-3.2	2.8	0.4-1.3	0.9
5112	Stationery supplies	(*)	(*)	(*)	(*)	2.4-3.4	2.5	3.2-6.1	5.8	3.6-5.1	4.4	0.9-4.8	1.4
512	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	5.6-6.3	5.7	5.6-5.7	5.7	0.6-2.2	0.7
5122	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	(*)	(*)	(*)	(*)	0.6-2.2	0.7
5122 pt.	General-line drugs	7.2-9.8	7.9	7.5-8.5	7.6	0.7-3.0	1.0	(*)	(*)	(*)	(*)	05.-3.1	1.0
513	Apparel, piece goods, and notions	8.3-12.4	8.8	8.6-9.3	9.1	2.6-4.0	3.3	(*)	(*)	(*)	(*)	(*)	(*)
514	Groceries and related products	1.7-2.2	2.0	1.6-2.0	1.9	0.4-1.2	0.5	1.5-2.5	1.8	1.8-2.1	1.9	0.4-1.3	0.6
5141	Groceries, general-line	1.9-2.7	2.1	1.7-2.7	2.0	0.4-1.5	0.7	1.8-2.7	2.3	1.7-2.0	1.8	0.3-1.2	0.8
5141 pt.	Voluntary groups	(*)	(*)	(*)	(*)	0.5-1.7	0.6	(*)	(*)	(*)	(*)	0.4-1.7	0.5
5141 pt.	Retailer cooperatives	(*)	(*)	(*)	(*)	0.6-1.6	1.1	(*)	(*)	(*)	(*)	0.4-2.4	0.7
5141 pt.	Other general-lines	(*)	(*)	(*)	(*)	0.9-3.1	1.8	(*)	(*)	(*)	(*)	0.5-1.3	0.7
5142,3,6,9	Specialty-line groceries	(*)	(*)	(*)	(*)	0.7-3.4	1.3	(*)	(*)	(*)	(*)	0.9-2.4	1.0
5144	Poultry and poultry products	3.4-5.5	4.4	4.0-4.4	4.2	0.6-2.2	1.5	(*)	(*)	(*)	(*)	2.1-4.1	2.3
5145	Confectionery	4.7-6.3	4.7	3.6-5.4	4.3	2.0-3.2	2.2	(*)	(*)	(*)	(*)	0.8-2.4	2.3
5147	Meats and meat products	4.5-4.8	4.7	4.6-4.6	4.6	1.4-2.9	1.7	(*)	(*)	(*)	(*)	1.7-3.9	2.2
5148	Fresh fruits and vegetables	4.7-5.4	4.9	3.9-4.1	4.0	1.9-4.2	2.7	(*)	(*)	(*)	(*)	2.9-4.4	3.9
515	Farm-product raw materials	1.8-2.2	2.0	1.6-2.0	1.7	1.1-1.7	1.3	(*)	(*)	(*)	(*)	1.1-2.8	2.4
5152	Cotton	(*)	(*)	(*)	(*)	1.8-4.9	2.8	(*)	(*)	(*)	(*)	1.3-2.9	2.4
5153	Grain	2.4-2.7	2.6	2.2-2.4	2.3	1.0-1.7	1.3	(*)	(*)	(*)	(*)	1.6-3.3	1.9
517	Petroleum and petroleum products	4.0-5.0	4.7	4.2-4.6	4.5	1.1-1.9	1.5	4.1-5.2	5.0	4.4-5.4	4.7	1.6-3.0	2.3
5171	Petroleum bulk stations and terminals	2.8-3.3	2.9	2.8-3.0	2.9	0.9-1.4	1.2	(*)	(*)	(*)	(*)	1.7-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages	3.4-3.9	3.7	3.1-3.7	3.2	0.8-1.8	1.7	3.9-4.2	4.1	4.0-4.3	4.2	1.0-2.0	1.3
5181	Beer and ale	2.2-4.4	3.1	2.8-3.2	2.9	1.0-2.5	2.0	3.6-5.5	3.8	3.6-4.1	3.8	1.7-2.7	2.1
5182	Wines and distilled alcoholic beverages	5.2-6.3	5.4	4.6-5.6	4.7	1.2-3.4	1.7	4.6-5.4	4.8	5.0-5.6	5.3	1.4-2.3	1.6
519	Miscellaneous nondurable goods	2.4-3.2	2.9	2.4-2.7	2.5	1.4-2.3	1.6	(*)	(*)	(*)	(*)	0.8-1.7	1.4
191	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
5198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.8-3.8	3.0	(*)	(*)	(*)	(*)	1.5-3.1	2.9
5199 pt.	Books, magazines, newspapers	(*)	(*)	(*)	(*)	3.2-8.0	5.6	(*)	(*)	(*)	(*)	2.0-6.5	5.1

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

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

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

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

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

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

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1977-December 1978

1972 SIC code	Kind of business	1977											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	91.7	92.1	107.2	99.0	100.6	103.8	95.5	104.5	102.5	100.4	101.1	99.6
	Total (excluding farm-product raw materials)	89.6	91.5	106.3	99.7	101.8	106.0	96.5	105.8	103.6	100.0	100.0	96.9
50	Durable goods, total	87.1	88.2	106.3	101.3	103.7	107.8	96.9	106.5	105.8	101.1	99.3	94.0
501	Motor vehicles and automotive parts and supplies	89.7	89.3	109.5	108.3	107.5	107.2	100.5	105.9	101.1	94.2	95.0	90.0
502	Furniture and home furnishings	82.6	89.5	104.2	97.8	98.8	106.7	90.7	106.4	106.9	110.3	109.2	94.7
503	Lumber and other construction materials	78.4	80.8	101.1	99.8	108.0	112.1	104.6	116.4	108.7	102.4	100.6	85.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.7	89.9	104.1	101.6	101.8	104.0	92.1	106.4	102.0	109.1	110.4	98.2
505	Metals and minerals, except petroleum	94.4	90.9	110.4	99.9	105.3	104.8	92.5	107.5	105.0	96.0	99.5	90.8
506	Electrical goods	87.8	88.6	101.8	97.1	96.0	108.4	98.5	105.9	104.2	106.4	101.9	101.6
507	Hardware, plumbing, heating equipment, and supplies	87.4	87.4	101.2	99.4	102.9	108.3	99.4	108.7	106.9	105.8	100.8	89.9
508	Machinery, equipment, and supplies	86.4	89.0	107.7	102.7	104.4	108.8	95.7	103.5	107.3	102.5	95.5	94.9
509	Miscellaneous durable goods	82.8	89.8	105.7	98.8	100.4	107.7	89.8	105.8	106.7	104.1	104.3	102.0
51	Nondurable goods, total	95.1	95.1	108.4	97.4	98.3	100.7	94.8	102.3	99.7	99.4	102.8	103.9
	Total (excluding farm-product raw materials)	91.7	94.2	106.8	98.1	100.0	104.1	96.3	104.6	101.6	99.0	100.6	100
511	Paper and paper products	93.8	92.2	104.3	95.1	96.4	104.2	97.3	108.3	104.7	103.6	103.2	95.7
512	Drugs, drug proprietaries, and druggists' sundries	94.2	92.6	105.1	98.8	97.7	98.7	92.7	103.9	104.4	108.3	101.4	98.9
513	Apparel, piece goods, and notions	89.7	94.6	106.4	95.2	95.2	100.5	95.1	114.9	108.8	105.4	105.6	87.1
514	Groceries and related products	94.2	90.9	103.8	98.5	101.5	106.7	99.1	105.4	100.7	100.1	99.7	98.5
515	Farm-product raw materials[1]	105.1	95.8	112.8	96.9	101.5	88.2	88.5	95.5	93.5	102.2	110.6	108.6
516	Chemicals and allied products	87.1	89.9	107.4	101.2	102.5	106.5	97.0	107.2	103.4	102.0	99.3	94.3
517	Petroleum and petroleum products	94.8	102.6	105.4	98.9	90.9	98.9	100.1	101.9	97.3	102.4	101.4	105.6
518	Beer, wine, and distilled alcoholic beverages	75.8	80.8	101.4	94.1	103.0	113.8	98.1	107.0	100.3	98.8	105.8	120.1
519	Miscellaneous nondurable goods	95.1	101.7	116.8	104.4	101.4	100.9	88.1	96.2	99.6	95.4	96.1	100.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	102.1	101.4	100.9	99.9	98.4	98.4	98.4	98.4	98.6	100.9	102.1	101.1
	Total (excluding farm-product raw materials)	99.8	100.3	100.8	100.1	100.3	100.5	100.1	99.2	99.3	100.0	100.2	99.4
50	Durable goods, total	99.1	100.3	101.1	100.9	101.4	101.8	100.9	99.4	99.1	99.1	98.9	98.9
501	Motor vehicles and automotive parts and supplies	101.4	102.8	102.1	101.4	102.4	100.9	98.9	96.6	97.9	97.8	97.9	100.4
502	Furniture and home furnishings	98.9	99.4	100.1	99.8	99.9	101.4	100.9	101.3	100.9	99.6	100.4	98.1
503	Lumber and other construction materials	97.9	98.4	102.8	102.6	105.4	103.1	102.9	100.6	97.8	95.3	96.4	97.1
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	100.8	99.9	100.9	103.4	107.6	104.6	101.6	100.3	100.6	94.4	89.3
505	Metals and minerals, except petroleum	100.4	98.9	100.9	101.4	100.1	99.4	102.8	101.3	98.1	96.8	99.1	101.4
506	Electrical goods	97.3	97.6	99.1	99.4	100.6	101.9	101.1	101.3	100.4	101.6	101.4	98.8
507	Hardware, plumbing, heating equipment, and supplies	98.1	98.6	101.6	103.1	102.8	101.1	100.9	101.4	98.4	98.3	98.4	97.6
508	Machinery, equipment, and supplies	99.1	101.1	101.9	100.6	101.1	102.3	100.1	97.9	99.1	99.6	99.6	97.8
509	Miscellaneous durable goods	97.1	98.9	96.8	98.4	96.8	101.3	101.9	102.9	101.3	103.1	101.8	100.4
51	Nondurable goods, total	105.4	103.4	100.9	98.1	93.9	93.3	94.8	97.3	97.6	103.9	106.9	105.4
	Total (excluding farm-product raw materials)	100.5	100.2	100.5	99.4	98.2	98.4	98.3	99.0	99.8	101.9	102.7	100.9
511	Paper and paper products	99.1	99.1	98.8	100.4	99.8	101.9	99.6	100.9	100.1	100.3	99.8	100.9
512	Drugs, drug proprietaries, and druggists' sundries	96.4	97.8	100.1	101.4	98.1	100.4	99.3	100.1	102.4	104.4	101.4	98.9
513	Apparel, piece goods, and notions	100.1	99.6	98.4	98.6	101.1	100.4	102.6	101.1	100.4	99.1	99.1	99.9
514	Groceries and related products	99.9	100.9	102.4	99.9	98.4	98.4	98.1	98.1	99.1	101.3	102.9	101.1
515	Farm-product raw materials[1]	121.4	113.9	104.9	92.4	80.8	73.9	84.8	84.8	89.8	108.9	122.1	12?
516	Chemicals and allied products	99.8	100.1	102.1	101.4	101.3	99.9	99.8	99.1	99.6	97.8	99.4	10(
517	Petroleum and petroleum products	104.8	99.8	97.1	93.1	95.1	96.8	96.4	99.3	101.8	106.8	105.6	104.3
518	Beer, wine, and distilled alcoholic beverages	96.9	97.9	97.1	98.9	101.8	103.1	98.6	97.6	100.6	107.6	105.4	95.3
519	Miscellaneous nondurable goods	103.6	104.3	102.9	100.6	96.3	93.3	95.3	98.4	98.1	99.8	103.6	104.4

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1977-December 1978—Continued

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.9	92.2	106.9	96.5	103.5	103.8	95.4	105.1	98.9	102.5	101.4	96.7
	Total (excluding farm-product raw materials)	91.9	91.6	106.4	97.5	104.6	105.9	95.9	106.4	100.9	102.2	98.8	95.1
50	Durable goods, total	89.8	89.0	105.2	98.7	106.3	107.6	96.4	107.1	102.9	104.2	98.4	91.4
501	Motor vehicles and automotive parts and supplies	93.6	89.1	107.0	107.0	107.4	108.0	99.3	107.5	96.9	98.4	92.5	91.4
502	Furniture and home furnishings	84.6	89.1	104.6	95.9	101.6	106.2	89.4	107.2	104.2	112.8	108.3	93.8
503	Lumber and other construction materials	81.6	81.2	101.7	95.3	110.7	112.5	102.4	116.9	104.7	108.0	100.0	82.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.4	90.3	102.8	100.3	109.7	98.1	95.1	104.0	104.7	105.7	108.7	97.3
505	Metals and minerals, except petroleum	98.8	91.0	108.9	97.9	107.9	103.6	90.7	108.4	103.1	100.0	97.4	91.1
506	Electrical goods	89.4	89.1	101.7	95.2	99.2	106.4	100.2	104.9	100.9	107.7	103.3	98.5
507	Hardware, plumbing, heating equipment, and supplies	89.5	87.8	100.8	97.5	105.5	107.8	99.7	109.4	103.4	107.2	101.1	88.0
508	Machinery, equipment, and supplies	88.1	88.8	107.8	99.6	107.3	108.7	95.7	104.3	104.0	103.7	96.9	91.6
509	Miscellaneous durable goods	86.5	89.8	104.7	95.1	101.0	110.6	87.6	108.0	102.4	109.5	105.2	96.2
51	Nondurable goods, total	97.0	95.1	108.7	95.1	101.3	100.9	94.8	102.9	96.9	100.9	102.6	100.7
	Total (excluding farm-product raw materials)	93.9	94.5	107.7	95.7	102.7	104.4	95.6	105.1	98.6	100.5	100.4	97.5
511	Paper and paper products	95.2	92.4	104.5	92.6	101.9	103.0	96.6	108.3	103.7	105.0	100.5	92.7
512	Drugs, drug proprietaries, and druggists' sundries	98.2	92.7	104.9	96.0	100.4	99.8	92.7	104.5	101.4	108.3	100.6	96.9
513	Apparel, piece goods, and notions	91.3	94.8	106.4	92.3	99.6	99.3	93.5	115.1	106.8	108.1	103.9	86.0
514	Groceries and related products	95.0	91.0	104.1	96.4	104.5	106.2	99.1	106.0	100.1	100.3	99.9	94.3
515	Farm-product raw materials[1]	106.8	95.8	112.8	94.4	99.6	89.9	92.3	94.6	92.6	100.5	111.2	104.6
516	Chemicals and allied products	90.0	89.4	106.9	98.2	105.2	106.5	97.0	107.3	99.7	105.5	98.0	94.1
517	Petroleum and petroleum products	96.5	102.1	107.7	96.2	92.8	99.9	98.4	101.7	95.5	102.4	98.7	105.8
518	Beer, wine, and distilled alcoholic beverages	78.7	80.9	100.7	91.2	106.7	113.9	97.3	108.1	96.9	101.9	105.3	115.3
519	Miscellaneous nondurable goods	97.4	101.6	118.1	101.5	104.3	102.9	87.2	96.5	96.0	97.0	96.4	97.4
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	101.9	101.3	101.0	100.1	98.6	98.5	98.4	98.0	98.9	100.6	101.7	100.5
	Total (excluding farm-product raw materials)	99.7	100.3	100.8	100.2	100.2	100.5	100.1	99.1	99.4	100.0	100.3	99.2
50	Durable goods, total	99.1	100.2	100.9	100.6	101.1	101.6	100.8	99.3	99.3	99.0	99.1	98.7
501	Motor vehicles and automotive parts and supplies	101.4	102.6	101.8	101.0	102.1	100.9	98.9	96.8	97.9	97.8	98.1	100.5
502	Furniture and home furnishings	99.4	99.2	99.8	99.5	99.8	101.3	100.6	101.0	101.5	100.5	99.1	98.1
503	Lumber and other construction materials	98.1	98.8	103.0	102.6	105.0	101.6	101.5	100.2	98.9	96.1	96.9	97.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	102.4	99.2	100.5	103.3	107.3	104.4	101.1	100.6	101.2	93.9	89.0
505	Metals and minerals, except petroleum	100.4	98.6	100.5	101.0	99.7	99.2	102.4	101.9	98.6	96.7	99.5	101.5
506	Electrical goods	97.2	97.4	99.0	99.9	100.2	101.8	101.2	101.5	100.4	101.2	101.0	98.8
507	Hardware, plumbing, heating equipment, and supplies	97.8	98.0	101.6	103.2	102.8	101.7	100.5	101.4	98.7	98.6	98.2	97.3
508	Machinery, equipment, and supplies	99.2	101.1	101.7	100.0	101.0	102.3	100.1	98.1	99.3	99.6	99.5	97.8
509	Miscellaneous durable goods	97.1	98.7	96.6	98.2	96.6	101.2	101.8	102.6	101.5	103.1	102.1	100.2
51	Nondurable goods, total	104.8	103.2	101.6	98.3	95.3	93.7	94.6	96.3	98.6	103.3	106.0	103.9
	Total (excluding farm-product raw materials)	100.4	100.2	100.7	99.7	98.5	98.6	98.3	98.6	99.7	101.9	102.5	100.8
511	Paper and paper products	98.7	99.0	98.7	100.6	99.4	102.0	99.6	100.6	99.5	101.5	100.0	100.2
512	Drugs, drug proprietaries, and druggists' sundries	96.3	97.6	99.9	101.3	97.7	100.2	99.2	99.8	102.0	105.0	101.8	98.8
513	Apparel, piece goods, and notions	99.9	99.4	98.6	98.5	101.1	100.0	102.2	101.0	100.0	98.3	100.1	100.6
514	Groceries and related products	99.6	100.7	102.2	100.1	98.6	98.5	98.1	97.8	99.0	101.8	102.1	101.3
515	Farm-product raw materials[1]	120.2	114.0	106.9	93.1	81.5	76.1	84.4	83.5	88.3	108.7	121.4	120.9
516	Chemicals and allied products	99.9	99.9	102.7	101.1	101.3	99.8	99.6	99.4	99.9	96.9	98.7	100.6
517	Petroleum and petroleum products	104.9	100.2	97.9	93.5	95.6	97.0	95.4	99.0	102.5	104.8	104.6	104.2
518	Beer, wine, and distilled alcoholic beverages	96.6	96.5	97.2	99.0	101.3	103.1	98.9	97.6	100.8	107.5	106.5	94.6
519	Miscellaneous nondurable goods	103.4	103.2	105.3	101.1	96.2	92.9	95.1	97.2	98.6	99.7	103.2	104.1

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	4.2[illegible]
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	3.6[illegible]
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 eve[illegible] 3 months. The increase in the average duration of run from 2.08 for CI to 3.32 for the M moving average indicates that for this series the use of MCD spans reduces the effect of t[illegible] 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

amework 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 ar 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 thei 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.

/omen'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.*

ozen 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

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

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

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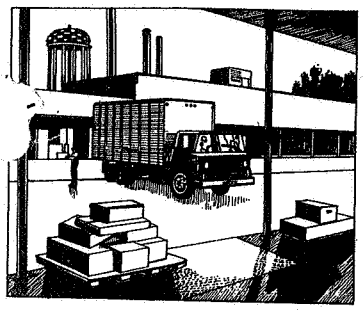
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued December 1978

October 1978

BW-78-10

Sales--October 1978 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences, but not for price changes, were $66.7 billion, up 4 percent from last month and 24 percent above October 1977. Adjusted August-through-October total sales were up 2 percent from the May-through-July period and were 22 percent above the total sales for the comparable months a year ago.

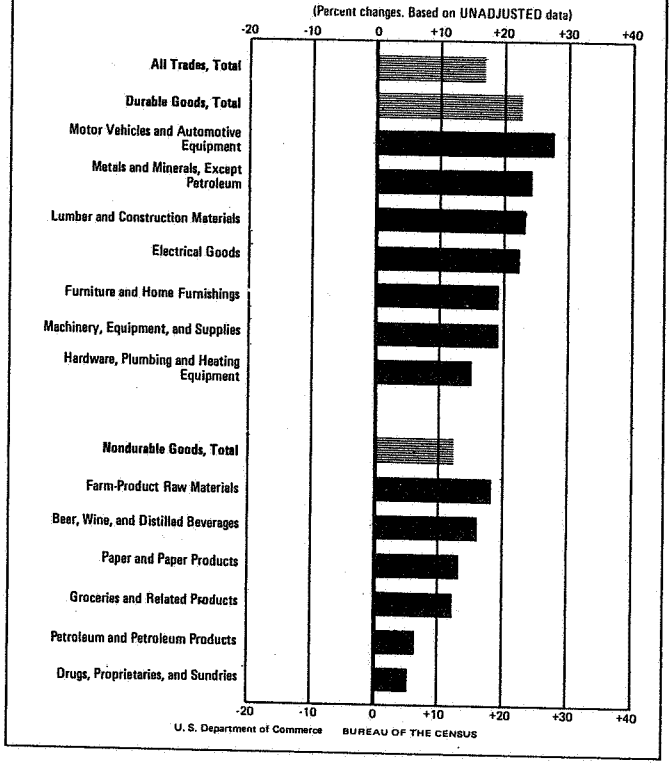
After adjustment, October sales in the durable goods trades were up 4 percent from the previous month and were 23 percent above sales for the same month a year ago. Nondurable goods sales were up 5 percent from September and were 25 percent above October 1977. Total monthly sales in the durable goods group during the August-through-October period were 4 percent above the prior three months and were 23 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were 1 percent above the May-through-July period and were 21 percent above the same period a year ago.

Based on adjusted data, most trade groups showed increases om their previous month sales levels with the most substantial increases shown in metals and minerals, except petroleum (10%) and farm-product raw materials (9%). The largest decrease was reported in furniture, home furnishings (-3%). Compared with sales of a year ago, all trade groups showed increases. Among the sharper increases were farm-product raw materials (55%) and metals and minerals, except petroleum (28%).

Inventories--Total inventories of merchant wholesalers, after adjustment for seasonal variation, but not for price changes, were valued at $78.6 billion at the end of October, up 2 percent from the previous month, and 19 percent above the same month a year ago. Durable goods stocks were up 1 percent above September and were 18 percent above October 1977. Nondurable goods stocks were up 4 percent from last month and were 19 percent above stocks on hand a year ago.

Based on adjusted data, all trade groups showed increases from their previous month inventory level, with the exception of sporting goods, toys, and hobby goods, (-3%) and machinery, equipment and supplies; and drug, proprietaries and sundries both with no change. The largest increase was reported in farm-product raw materials (7%). Compared with year-ago inventories, all trade groups reported increases. The sharper increases were noted in farm-product raw materials (38%) and furniture, home furnishings (25%).

Percent Change in Sales of Merchant Wholesalers in Selected Kinds of Business 10 Months 1978 Compared With 10 Months 1977



Stock-Sales Ratio--The October stock-sales ratio for merchant wholesalers, based on seasonally-adjusted data, was 118, down 2 points from September and down 5 points from October 1977. The stock-sales ratio for durable goods was 165, down 4 points from last month, and down 7 points from the year-ago ratio. The ratio for nondurable goods was 77, down 1 point from September, and down 4 points from the October 1977 ratio.

An advanced release of the October 1978 data was issued on December 13, 1978.

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: 1978 and 1977

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

1972 SIC code	Kind of business	1978										1977			Total 10 months	
		Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.P	Oct.	Nov.	Dec.	1978	1977
	Merchant wholesalers, total....	52,143	52,766	62,900	60,613	66,249	65,834	60,651	67,702	63,933	68,520	54,251	56,034	56,224	621,315	529,857
	Total (excluding farm-product raw materials).....	46,343	47,112	55,848	54,095	58,061	58,658	54,411	60,838	57,342	60,715	49,132	49,762	50,139	553,427	472,162
50	Durable goods, total.....	22,869	23,880	28,985	28,784	30,405	30,991	28,701	32,279	30,404	32,163	25,369	25,340	24,797	289,474	235,468
501	Motor vehicles and automotive parts and supplies.....	4,797	5,065	5,870	5,956	6,083	5,929	5,552	6,134	5,381	5,850	4,605	4,721	4,698	56,617	44,626
5013,4	Automotive parts and supplies, tires and tubes.....	2,517	2,666	3,128	3,217	3,403	3,227	2,935	3,440	2,998	3,264	2,661	2,651	2,551	30,796	24,175
5013	Automotive parts and supplies.....	2,166	2,286	2,602	2,706	2,828	2,660	2,432	2,872	2,496	2,692	2,227	2,220	2,167	25,739	20,438
502	Furniture and home furnishings.....	867	921	1,111	1,046	1,077	1,104	1,013	1,133	1,162	1,224	1,048	1,045	1,025	10,659	8,956
5021	Furniture--household and office.....	304	311	356	352	368	370	328	366	379	395	320	340	350	3,527	2,720
5023	Home furnishings.....	564	610	755	695	710	735	685	767	783	830	728	705	676	7,132	6,236
503	Lumber and other construction materials.....	1,867	1,891	2,368	2,517	2,889	3,067	2,771	3,208	3,056	3,210	2,476	2,334	2,086	26,844	21,762
5031	Lumber, plywood, and millwork.....	1,290	1,288	1,582	1,676	1,947	2,037	1,845	2,105	1,949	2,072	1,637	1,540	1,389	17,790	14,628
5039	Construction materials, n.e.c.....	576	603	786	841	942	1,031	927	1,103	1,107	1,138	839	794	697	9,054	7,134
505	Metals and minerals, except petroleum..	2,505	2,557	3,040	2,942	3,153	3,169	2,817	3,306	3,037	3,239	2,437	2,592	2,423	29,767	23,985
5051 pt.	Ferrous metals service centers and offices.....	1,922	1,970	2,344	2,190	2,360	2,380	2,158	2,515	2,339	2,491	1,845	1,869	1,774	22,669	17,794
5051 pt.	Ferrous metals service centers.....	1,386	1,443	1,713	1,629	1,755	1,778	1,580	1,833	1,721	1,882	1,385	1,359	1,282	16,720	12,656
506	Electrical goods.....	2,541	2,627	3,096	2,980	3,239	3,385	3,193	3,540	3,338	3,548	2,998	2,973	2,964	31,487	25,808
5063	Electrical apparatus and equipment, wiring supplies, and construction materials.....	1,262	1,354	1,561	1,556	1,698	1,725	1,663	1,812	1,663	1,835	1,436	1,436	1,379	16,128	12,799
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment.....	1,279	1,273	1,535	1,424	1,541	1,660	1,530	1,728	1,675	1,713	1,562	1,537	1,585	15,359	13,009
5064	Electrical appliances, TV and radio sets.....	763	762	939	841	931	994	912	1,064	1,057	1,033	1,011	989	1,003	9,295	8,538
507	Hardware, plumbing, heating equipment, and supplies.....	1,790	1,708	2,021	2,102	2,306	2,360	2,247	2,412	2,159	2,374	2,027	1,974	1,820	21,480	18,610
5072	Hardware.....	693	679	793	797	856	836	760	864	771	835	750	768	676	7,884	7,206
5074	Plumbing and heating equipment and supplies (hydronics).....	726	675	801	834	904	902	916	988	928	1,011	846	791	753	8,686	7,645
508	Machinery, equipment, and supplies.....	6,190	6,632	8,301	8,296	8,616	8,790	7,827	8,757	8,655	9,028	7,163	6,941	7,019	81,090	68,0/
5082	Construction and mining machinery and equipment.....	825	875	1,130	1,254	1,276	1,229	1,122	1,196	1,115	1,138	1,006	1,025	1,006	11,161	9,60
5084,5	Industrial machinery, equipment, and supplies.....	2,545	2,790	3,294	3,077	3,388	3,505	3,049	3,532	3,450	3,650	2,750	2,858	2,861	32,280	25,989
5086	Professional equipment, supplies	710	732	863	816	873	952	888	990	949	945	808	773	805	8,717	7,669
5093	Scrap and waste materials.....	757	815	979	958	1,058	1,057	940	1,073	978	1,004	807	812	779	9,618	8,040
51	Nondurable goods, total.....	29,274	28,886	33,915	31,829	35,844	34,843	31,950	35,423	33,529	36,357	28,882	30,694	31,427	331,709	294,389
	Total (excluding farm-product raw materials).....	23,474	23,232	26,863	25,311	27,656	27,667	25,710	28,559	26,937	28,552	23,763	24,422	25,342	263,965	236,694
511	Paper and paper products.....	1,316	1,284	1,506	1,395	1,508	1,498	1,384	1,581	1,456	1,593	1,341	1,335	1,358	14,522	12,789
5111,3	Printing, writing, industrial, and personal service paper.....	950	926	1,100	1,032	1,126	1,125	1,046	1,177	1,088	1,191	1,007	988	995	10,761	9,816
512	Drugs, drug proprietaries, and druggists' sundries.....	887	824	994	912	943	950	902	1,026	973	1,083	939	926	922	9,495	9,020
5122	Drugs, drug proprietaries, and druggists' sundries.....	887	824	994	912	943	950	902	1,026	973	1,083	939	926	922	9,495	9,020
5122 pt.	General-line drugs.....	423	393	470	423	447	448	409	482	464	511	438	452	444	4,471	4,168
513	Apparel, piece goods, and notions[1].....	1,620	1,615	2,063	1,818	2,099	2,066	2,036	2,658	2,313	2,400	1,919	1,837	1,617	20,688	16,150
514	Groceries and related products.....	9,261	9,093	10,398	9,916	10,873	10,685	10,237	11,002	10,489	11,072	9,289	9,591	9,798	103,026	91,311
5141	Groceries, general-line.....	3,426	3,333	3,740	3,547	3,791	3,724	3,649	3,965	3,767	3,966	3,360	3,579	3,587	36,908	33,444
5144	Poultry and poultry products.....	402	397	486	468	507	503	482	539	505	524	419	458	454	4,812	4,260
5145	Confectionery.....	154	163	191	173	191	189	171	187	190	219	183	194	188	1,828	1,539
5147	Meats and meat products.....	1,460	1,462	1,651	1,688	1,871	1,826	1,800	1,974	1,840	1,916	1,498	1,525	1,510	17,489	14,440
5148	Fresh fruits and vegetables.....	839	824	986	1,035	1,184	1,198	1,044	1,005	909	977	836	886	889	10,001	8,120
515	Farm-product raw materials.....	5,800	5,654	7,052	6,518	8,188	7,176	6,240	6,864	6,591	7,805	5,119	6,272	6,085	67,888	57,694
5153	Grain.....	4,549	4,503	5,718	5,358	6,890	6,078	5,317	5,760	5,448	6,491	4,069	4,968	4,730	56,114	47,577
517	Petroleum and petroleum products.....	4,209	4,085	4,249	3,830	4,178	4,111	4,000	4,441	4,136	4,341	3,839	3,983	4,355	41,579	39,083
5171	Petroleum bulk stations and terminals.....	2,387	2,293	2,384	2,188	2,425	2,358	2,190	2,378	2,280	2,465	2,195	2,266	2,523	23,348	22,497
518	Beer, wine, and distilled alcoholic beverages.....	1,654	1,770	2,299	1,993	2,295	2,506	2,191	2,463	2,254	2,354	1,884	2,143	2,444	21,778	18,783
5181	Beer and ale.....	795	839	1,094	998	1,219	1,372	1,217	1,328	1,119	1,118	888	938	1,020	11,099	9,277
5182	Wines and distilled alcoholic beverages.....	859	931	1,204	996	1,076	1,134	974	1,134	1,135	1,235	995	1,204	1,424	10,679	9,506
519	Miscellaneous nondurable goods.....	3,723	3,782	4,434	4,568	4,730	4,819	4,040	4,297	4,311	4,469	3,722	3,749	4,028	43,174	40,986
5194	Tobacco and tobacco products.....	721	692	782	765	812	849	838	871	814	820	748	705	819	7,966	7,345

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

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

[1]The apparel piece goods and notions group is subject to a sampling variability of 13 percent for October 1978.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978										1977		
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.P	Oct.	Nov.	Dec.
	Merchant wholesalers, total	69,596	71,156	73,931	74,635	74,634	74,882	74,874	74,943	76,074	78,982	66,530	68,082	68,555
	Total (excluding farm-product raw materials)	64,090	65,682	67,973	69,060	69,883	70,513	71,073	71,138	71,889	73,458	62,324	62,939	63,245
50	Durable goods, total	44,287	45,757	47,275	47,957	48,918	49,627	49,900	49,841	49,944	50,475	42,627	43,252	43,676
501	Motor vehicles and automotive parts and supplies	7,709	8,189	7,995	7,973	8,246	8,218	8,367	8,378	8,099	8,421	7,089	7,376	7,424
5013,4	Automotive parts and supplies, tires and tubes	4,743	4,962	4,856	4,901	5,149	5,035	5,034	5,206	5,172	5,168	4,438	4,669	4,607
5013	Automotive parts and supplies	3,953	4,163	4,041	4,171	4,382	4,241	4,288	4,415	4,345	4,328	3,639	3,912	3,790
502	Furniture and home furnishings	1,560	1,606	1,633	1,669	1,730	1,781	1,764	1,760	1,810	1,828	1,455	1,444	1,512
5023	Home furnishings	1,137	1,184	1,182	1,233	1,279	1,305	1,305	1,306	1,326	1,336	1,057	1,054	1,099
503	Lumber and other construction materials	2,676	2,761	2,919	2,966	3,030	3,071	3,095	3,007	3,076	3,098	2,489	2,513	2,602
5031	Lumber, plywood, and millwork	1,715	1,775	1,870	1,882	1,963	1,949	1,967	1,929	1,932	1,934	1,629	1,643	1,671
505	Metals and minerals, except petroleum	4,449	4,660	4,953	4,976	5,356	5,307	5,305	5,437	5,285	5,230	4,277	4,444	4,459
5051 pt.	Ferrous metals service centers and offices	3,471	3,591	3,820	3,823	4,116	4,108	4,104	4,232	4,148	4,103	3,511	3,514	3,568
5051 pt.	Ferrous metals service centers	2,633	2,760	3,039	2,971	3,220	3,268	3,191	3,308	3,299	3,285	2,686	2,738	2,768
506	Electrical goods	4,563	4,594	4,867	4,951	5,129	5,312	5,266	5,264	5,416	5,586	4,591	4,611	4,653
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,114	2,214	2,226	2,286	2,417	2,358	2,283	2,367	2,356	2,388	2,025	2,100	2,121
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,449	2,380	2,640	2,665	2,712	2,954	2,983	2,899	3,059	3,198	2,566	2,511	2,533
507	Hardware, plumbing, heating equipment, and supplies	3,712	3,876	4,058	4,231	4,222	4,201	4,215	4,117	4,032	4,049	3,621	3,608	3,620
5072	Hardware	1,366	1,384	1,421	1,428	1,445	1,423	1,410	1,369	1,417	1,381	1,319	1,320	1,358
5074	Plumbing and heating equipment and supplies (hydronics)[1]	1,590	1,678	1,784	1,861	1,815	1,818	1,839	1,800	1,805	1,713	1,566	1,562	1,555
508	Machinery, equipment, and supplies	15,508	16,005	16,511	16,762	16,796	17,061	17,057	17,183	17,405	17,521	14,631	15,026	15,307
5082	Construction and mining machinery and equipment	3,281	3,396	3,505	3,516	3,589	3,636	3,637	3,793	3,899	3,969	3,083	3,202	3,261
5084,5	Industrial machinery, equipment, and supplies	4,816	4,912	4,996	5,055	5,160	5,328	5,301	5,317	5,519	5,601	4,534	4,555	4,742
51	Nondurable goods, total	25,309	25,399	26,656	26,678	25,716	25,255	24,974	25,102	26,130	28,507	23,903	24,830	24,879
	Total (excluding farm-product raw materials)	19,803	19,925	20,699	21,103	20,966	20,887	21,173	21,297	21,946	22,983	19,697	19,687	19,569
511	Paper and paper products	1,255	1,259	1,310	1,349	1,343	1,376	1,341	1,361	1,414	1,470	1,261	1,269	1,261
5111,3	Printing, writing, industrial, and personal service paper	868	877	910	911	929	955	938	921	976	997	878	865	873
512	Drugs, drug proprietaries, and druggists' sundries	1,266	1,292	1,330	1,345	1,350	1,401	1,368	1,410	1,489	1,530	1,373	1,337	1,303
514	Groceries and related products	5,401	5,376	5,710	5,740	5,752	5,871	5,833	5,803	6,186	6,550	5,507	5,465	5,540
5141	Groceries, general-line	2,350	2,366	2,562	2,500	2,495	2,512	2,480	2,505	2,641	2,808	2,446	2,441	2,473
517	Petroleum and petroleum products	2,045	1,936	1,953	1,872	1,938	1,837	1,974	2,093	2,098	2,160	2,023	2,053	2,042
518	Beer, wine, and distilled alcoholic beverages	1,917	1,889	2,017	2,133	2,135	2,148	2,178	2,158	2,221	2,406	2,121	2,075	1,809
5181	Beer and ale[2]	611	641	707	758	730	717	709	679	720	771	658	632	581
5182	Wines and distilled alcoholic beverages	1,305	1,248	1,311	1,375	1,405	1,431	1,469	1,480	1,501	1,635	1,462	1,443	1,228

See footnotes below table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978										1977		
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.P	Oct.	Nov.	Dec.
	Merchant wholesalers, total	133	135	118	123	113	114	123	111	119	115	123	122	122
	Total (excluding farm-product raw materials)	138	139	122	128	120	120	131	117	125	121	127	126	126
50	Durable goods, total	194	192	163	167	161	160	174	154	164	157	168	171	176
501	Motor vehicles and automotive parts and supplies	161	162	136	134	136	139	151	137	151	144	154	156	158
5013,4	Automotive parts and supplies, tires and tubes	188	186	155	152	151	156	172	151	173	158	167	176	181
5013	Automotive parts and supplies	183	182	155	154	155	159	176	154	174	161	163	176	175
502	Furniture and home furnishings	180	174	147	159	161	161	174	155	156	149	139	138	147
5023	Home furnishings	202	194	157	178	180	178	190	170	169	161	145	150	163
503	Lumber and other construction materials	143	146	123	118	105	100	112	94	101	97	101	108	125
5031	Lumber, plywood, and millwork	133	138	118	112	101	96	107	92	99	93	100	107	120
505	Metals and minerals, except petroleum	178	182	163	169	170	167	188	164	174	161	176	171	184
5051 pt.	Ferrous metals service centers and offices	181	182	163	175	174	173	190	168	177	165	190	188	201
5051 pt.	Ferrous metals service centers	190	191	177	182	184	184	202	181	192	175	194	201	216
506	Electrical goods	180	175	157	166	158	157	165	149	162	157	153	155	157
5063	Electrical apparatus and equipment, wiring supplies and construction materials	168	163	143	147	142	137	137	131	142	130	141	146	154
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	191	187	172	187	176	178	195	168	183	187	164	163	160
507	Hardware, plumbing, heating equipment, and supplies	207	227	201	201	183	178	188	171	187	171	179	183	199
5072	Hardware	197	204	179	179	169	170	185	158	179	170	176	172	201
5074	Plumbing and heating equipment and supplies (hydronics)	219	249	223	223	201	202	201	182	188	170	185	197	206
508	Machinery, equipment, and supplies	251	241	199	202	195	194	218	196	201	194	204	216	218
5082	Construction and mining machinery and equipment	398	388	310	280	281	296	324	317	350	349	306	312	324
5084,5	Industrial machinery, equipment, and supplies	189	176	152	164	152	152	174	151	160	153	165	159	166
51	Nondurable goods, total	86	88	79	84	72	72	78	71	78	78	83	81	79
	Total (excluding farm-product raw materials)	84	86	77	83	76	75	82	75	81	80	83	81	77
511	Paper and paper products	95	98	87	97	89	92	97	86	97	92	94	95	93
5111,3	Printing, writing, industrial, and personal service paper	91	95	83	88	82	85	90	78	90	84	87	88	88
512	Drugs, drug proprietaries, and druggists' sundries	143	157	134	147	143	147	152	137	153	141	146	144	141
514	Groceries and related products	58	59	55	58	53	55	57	53	59	59	59	57	57
5141	Groceries, general-line	69	71	68	70	66	67	68	63	70	71	73	68	69
517	Petroleum and petroleum products	49	47	46	49	46	45	49	47	51	50	53	52	47
8	Beer, wine, and distilled alcoholic beverages	116	107	88	107	93	86	99	88	99	102	113	97	74
.81	Beer and ale	77	76	65	76	60	52	58	51	64	69	74	67	57
5182	Wines and distilled alcoholic beverages	152	134	109	138	131	126	151	130	132	132	147	120	86

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

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

[1] The plumbing and heating equipment and supplies (hydronics) group is subject to a sampling variability of 9 percent for October 1978.
[2] The beer and ale group is subject to a sampling variability of 10 percent for October 1978.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978										1977		
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.[p]	Oct.	Nov.	Dec.
		Sales ADJUSTED for seasonal variations and trading-day differences												
	Merchant wholesalers, total	55,985	57,635	58,877	62,152	64,011	63,235	63,404	64,573	64,045	66,728	53,639	55,558	57,266
	Total (excluding farm-product raw materials)	50,554	51,733	52,625	55,247	55,790	55,253	56,643	57,317	56,927	58,962	48,630	49,887	51,663
50	Durable goods, total	25,568	26,976	27,466	28,974	28,692	28,738	29,831	30,072	29,763	30,854	24,997	25,601	26,488
501	Motor vehicles and automotive parts and supplies	5,125	5,685	5,486	5,566	5,664	5,490	5,591	5,706	5,553	5,945	4,889	4,969	5,220
502	Furniture and home furnishings	1,025	1,034	1,062	1,091	1,060	1,040	1,133	1,057	1,115	1,085	950	957	1,082
503	Lumber and other construction materials	2,288	2,329	2,328	2,641	2,610	2,726	2,706	2,744	2,919	2,972	2,418	2,320	2,443
505	Metals and minerals, except petroleum	2,535	2,810	2,792	3,005	2,922	3,059	3,106	3,050	2,946	3,239	2,539	2,605	2,669
506	Electrical goods	2,842	2,948	3,044	3,130	3,265	3,181	3,187	3,375	3,308	3,294	2,818	2,918	2,917
507	Hardware, plumbing, heating equipment, and supplies	2,000	1,945	2,005	2,156	2,186	2,189	2,254	2,205	2,088	2,215	1,916	1,958	2,024
508	Machinery, equipment, and supplies	7,026	7,468	7,700	8,329	8,030	8,086	8,179	8,396	8,322	8,706	6,988	7,268	7,396
51	Nondurable goods, total	30,417	30,659	31,411	33,178	35,319	34,497	33,573	34,501	34,282	35,874	28,642	29,957	30,778
	Total (excluding farm-product raw materials)	24,986	24,757	25,159	26,273	27,098	26,515	26,812	27,245	27,164	28,108	23,633	24,286	25,175
511	Paper and paper products	1,382	1,390	1,441	1,506	1,480	1,454	1,433	1,460	1,404	1,517	1,294	1,294	1,419
512	Drugs, drug proprietaries, and druggists' sundries	903	889	948	950	939	952	973	982	960	1,000	867	913	932
513	Apparel, piece goods, and notions	1,774	1,704	1,939	1,970	2,107	2,081	2,178	2,309	2,166	2,220	1,821	1,740	1,856
514	Groceries and related products	9,748	9,992	9,988	10,286	10,405	10,061	10,330	10,379	10,479	11,039	9,280	9,620	9,947
515	Farm-product raw materials[1]	5,431	5,902	6,252	6,905	8,221	7,982	6,761	7,256	7,118	7,766	5,009	5,671	5,603
517	Petroleum and petroleum products	4,362	4,001	3,945	3,981	4,502	4,115	4,065	4,367	4,331	4,239	3,749	3,928	4,124
518	Beer, wine, and distilled alcoholic beverages	2,102	2,188	2,283	2,185	2,151	2,200	2,252	2,278	2,326	2,310	1,907	2,026	2,035
519	Miscellaneous nondurable goods	3,822	3,722	3,754	4,500	4,535	4,683	4,633	4,453	4,491	4,607	3,901	3,901	3,992
		Inventories ADJUSTED for seasonal variations												
	Merchant wholesalers, total	68,991	70,361	72,882	74,867	75,474	75,820	75,664	76,253	77,020	78,599	66,209	67,047	67,998
	Total (excluding farm-product raw materials)	64,410	65,559	67,309	68,879	69,646	70,080	71,160	71,696	72,280	73,517	62,347	62,835	63,712
50	Durable goods, total	44,686	45,684	46,838	47,673	48,363	48,810	49,577	50,101	50,300	50,912	43,014	43,642	44,368
501	Motor vehicles and automotive parts and supplies	7,603	7,981	7,854	7,894	8,076	8,145	8,460	8,655	8,273	8,610	7,248	7,534	7,394
502	Furniture and home furnishings	1,569	1,619	1,636	1,677	1,733	1,758	1,753	1,743	1,783	1,819	1,461	1,438	1,541
503	Lumber and other construction materials	2,728	2,795	2,834	2,891	2,886	3,023	3,049	3,001	3,110	3,224	2,612	2,607	2,680
505	Metals and minerals, except petroleum	4,431	4,726	4,928	4,927	5,372	5,350	5,181	5,336	5,360	5,407	4,418	4,484	4,397
506	Electrical goods	4,694	4,717	4,916	4,956	5,119	5,218	5,204	5,186	5,394	5,519	4,519	4,547	4,710
507	Hardware, plumbing, heating equipment, and supplies	3,796	3,955	3,994	4,100	4,107	4,131	4,194	4,060	4,085	4,106	3,684	3,667	3,709
508	Machinery, equipment, and supplies	15,633	15,831	16,235	16,762	16,630	16,677	17,040	17,516	17,528	17,591	14,690	15,086	15,651
51	Nondurable goods, total	24,305	24,677	26,044	27,194	27,111	27,010	26,087	26,152	26,720	27,687	23,195	23,405	23,630
	Total (excluding farm-product raw materials)	19,724	19,875	20,471	21,206	21,283	21,270	21,583	21,595	21,980	22,605	19,333	19,193	19,344
511	Paper and paper products	1,272	1,272	1,327	1,341	1,351	1,349	1,346	1,353	1,421	1,449	1,257	1,272	1,250
512	Drugs, drug proprietaries, and druggists' sundries	1,315	1,324	1,331	1,328	1,382	1,398	1,379	1,413	1,460	1,457	1,315	1,319	1,317
514	Groceries and related products	5,423	5,339	5,587	5,734	5,834	5,960	5,946	5,934	6,248	6,435	5,436	5,311	5,480
517	Petroleum and petroleum products	1,949	1,932	1,995	2,002	2,027	1,894	2,069	2,114	2,047	2,061	1,894	1,944	1,958
518	Beer, wine, and distilled alcoholic beverages	1,984	1,958	2,075	2,155	2,108	2,083	2,202	2,211	2,203	2,238	1,971	1,969	1,898
		Stock-sales ratios based on ADJUSTED data												
	Merchant wholesalers, total	123	122	124	120	118	120	119	118	120	118	123	121	119
	Total (excluding farm-product raw materials)	127	127	128	125	125	127	126	125	127	125	128	126	123
50	Durable goods, total	175	169	171	165	169	170	166	167	169	165	172	170	168
501	Motor vehicles and automotive parts and supplies	148	140	143	142	143	148	151	152	149	145	148	152	142
502	Furniture and home furnishings	153	157	154	154	163	169	155	165	160	168	154	150	142
503	Lumber and other construction materials	119	120	122	109	111	111	113	109	107	108	108	112	110
505	Metals and minerals, except petroleum	175	168	177	164	184	175	167	175	182	167	174	172	165
506	Electrical goods	165	160	161	158	157	164	163	154	163	168	160	156	161
507	Hardware, plumbing, heating equipment, and supplies	190	203	199	190	188	189	186	184	196	185	192	187	183
508	Machinery, equipment, and supplies	223	212	211	201	207	206	208	209	211	202	210	208	212
51	Nondurable goods, total	80	80	83	82	77	78	78	76	78	77	81	78	77
	Total (excluding farm-product raw materials)	79	80	81	81	79	80	80	79	81	80	82	79	77
511	Paper and paper products	92	92	92	89	91	93	94	93	101	96	97	98	88
512	Drugs, drug proprietaries, and druggists' sundries	146	149	140	140	147	147	142	144	152	146	152	144	141
514	Groceries and related products	56	53	56	56	56	59	58	57	60	58	59	55	55
517	Petroleum and petroleum products	45	48	51	50	45	46	51	48	47	49	51	49	47
518	Beer, wine, and distilled alcoholic beverages	94	89	91	99	98	95	98	97	95	97	103	97	9

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, Aug. 1978-Oct. 1978 from--			
	May 1978-July 1978 (3 months ago)	Feb. 1978-Apr. 1978 (6 months ago)	Nov. 1977-Jan. 1978 (9 months ago)	Aug. 1977-Oct. 1977 (12 months ago)
Merchant wholesalers, total.....	+2	+9	+16	+22
Durable goods, total.....	+4	+9	+17	+23
Nondurable goods, total.....	+1	+10	+15	+21

Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers: 1972-1978

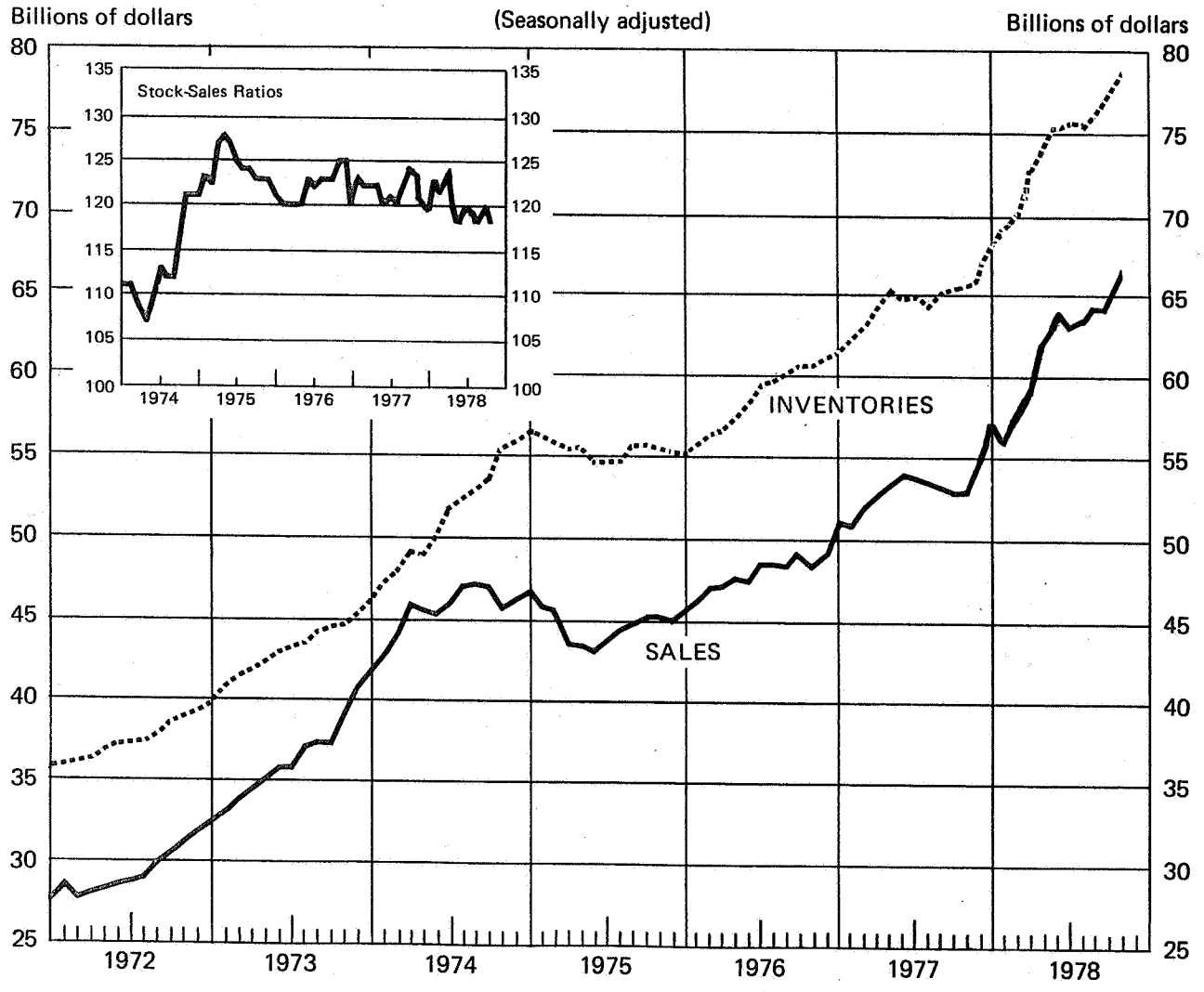


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: October 1978

1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-mont (at cost)	
		Oct. 1978 from Sept. 1978	Oct. 1978 from Oct. 1977	10 months 1978 from 10 months 1977	Oct. 1978 from Sept. 1978	Oct. 1978 from Oct. 1977	Oct. 1978 from Sept. 1978	Oct. 1978 from Oct. 1977	Oct. 1978 from Sept. 1978	Oct. 1978 from Oct. 1977
	Merchant wholesalers, total	+7	+26	+17	+4	+19	+4	+24	+2	+19
	Total (excluding farm-product raw materials)	+6	+24	+17	+2	+18	+4	+21	+2	+18
50	Durable goods, total	+6	+27	+23	+1	+18	+4	+23	+1	+18
501	Motor vehicles and automotive parts and supplies	+9	+27	+27	+4	+19	+7	+22	+4	+19
5012	Automobiles and other motor vehicles	+9	+33	+26	+11	+23	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	+9	+23	+27	0	+16	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	+8	+21	+26	0	+19	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	+5	+17	+19	+1	+26	-3	+14	+2	+25
5021	Furniture--household and office	+4	+23	+30	+2	+23	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	+3	+31	+33	0	+17	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	+5	+20	+28	+3	+28	(*)	(*)	(*)	(*)
5023	Home furnishings	+6	+14	+14	+1	+26	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	+5	+30	+23	+1	+24	+2	+23	+4	+23
5031	Lumber, plywood, and millwork	+6	+27	+22	0	+19	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c.	+3	+36	+27	+2	+35	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	+3	+17	(S)	-2	+8	+2	+21	-3	+8
505	Metals and minerals, except petroleum	+7	+33	+24	-1	+22	+10	+28	+1	+22
5051 pt.	Ferrous metals service centers and offices	+6	+35	+27	-1	+17	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	+9	+36	+32	0	+22	(*)	(*)	(*)	(*)
5051 pt.	Nonferrous metals service centers and offices	+6	+36	+22	0	+50	(*)	(*)	(*)	(*)
506	Electrical goods	+6	+18	+22	+3	+22	0	+17	+2	+22
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+10	+28	+26	+1	+18	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+2	+10	+18	+5	+25	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	-2	+2	+9	+4	+16	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	+10	+17	+15	0	+12	+6	+16	+1	+11
5072	Hardware	+8	+11	+9	+2	+7	(*)	(*)	(*)	(*)
5074	Plumbing and heating equipment and supplies (hydronics)	+9	+19	+14	-2	+9	(*)	(*)	(*)	(*
5075	Warm air heating and air conditioning equipment and supplies	+19	+21	+30	+2	+24	(*)	(*)	(*)	(*
508	Machinery, equipment, and supplies	+4	+26	+19	+1	+20	+5	+25	0	+20
5081	Commercial machines and equipment	-4	+27	+28	-1	+7	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	+2	+13	+16	+2	+29	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	+9	+33	+21	-2	+13	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	+6	+33	+24	+2	+24	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	0	+17	+14	+1	+20	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	+3	+24	+20	-1	+7	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	-1	+26	+21	-1	+8	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	+8	+23	+18	0	+4	(*)	(*)	(*)	(*)
51	Nondurable goods, total	+8	+26	+13	+9	+19	+5	+25	+4	+19
	Total (excluding farm-product raw materials)	+6	+20	+12	+5	+18	+3	+19	+3	+17
511	Paper and paper products	+9	+19	+14	+4	+17	+8	+17	+2	+15
5111,3	Printing, writing, industrial, and personal service paper	+9	+18	+10	+1	+14	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	+11	+15	+5	+3	+11	+4	+15	0	+11
5122	Drugs, drug proprietaries, and druggists' sundries	+11	+15	+5	+3	+11	(*)	(*)	(*)	(*)
5122 pt.	General-line drugs	+10	+17	+7	+2	+12	(*)	(*)	(*)	(*)
514	Groceries and related products	+6	+19	+13	+6	+19	+5	+19	+3	+18
5141	Groceries, general-line	+5	+18	+10	+6	+15	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	+4	+11	+6	+6	+13	(*)	(*)	(*)	(*)
5141 pt.	Retailers cooperatives	+5	+19	+12	+7	+15	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	+7	+24	+13	+6	+16	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	+6	+16	+8	+4	+16	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	+4	+25	+13	+14	+23	(*)	(*)	(*)	(*)
5145	Confectionery	+15	+19	+19	+5	+19	(*)	(*)	(*)	(*)
5147	Meats and meat products	+4	+28	+21	+8	+36	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	+7	+17	+23	+10	+46	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	+18	+52	+18	+32	+31	+9	+55	+7	+38
5152	Cotton	+6	+22	+11	+40	+45	(*)	(*)	(*)	(*)
5153	Grain	+19	+60	+18	+31	+32	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	+5	+13	+6	+3	+7	-2	+13	+1	+9
5171	Petroleum bulk stations and terminals	+8	+12	+4	+6	+8	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	+4	+25	+16	+8	+13	-1	+21	+2	+14
5181	Beer and ale	0	+26	+20	+7	+17	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	+9	+24	+12	+9	+12	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	+4	+20	+5	+5	+12	+3	+18	+4	+8
5191	Farm supplies	+10	+35	-2	+11	+12	(*)	(*)	(*)	(*)
5194	Tobacco and tobacco products	+1	+10	+8	+4	+12	(*)	(*)	(*)	(*)
5198	Paints, varnishes, and supplies	+5	+35	+16	+3	+38	(*)	(*)	(*)	(*)
5199 pt.	Books, periodicals, newspapers	+8	+28	+39	+4	+4	(*)	(*)	(*)	(*)

*Adjusted data are available only for summary group totals.

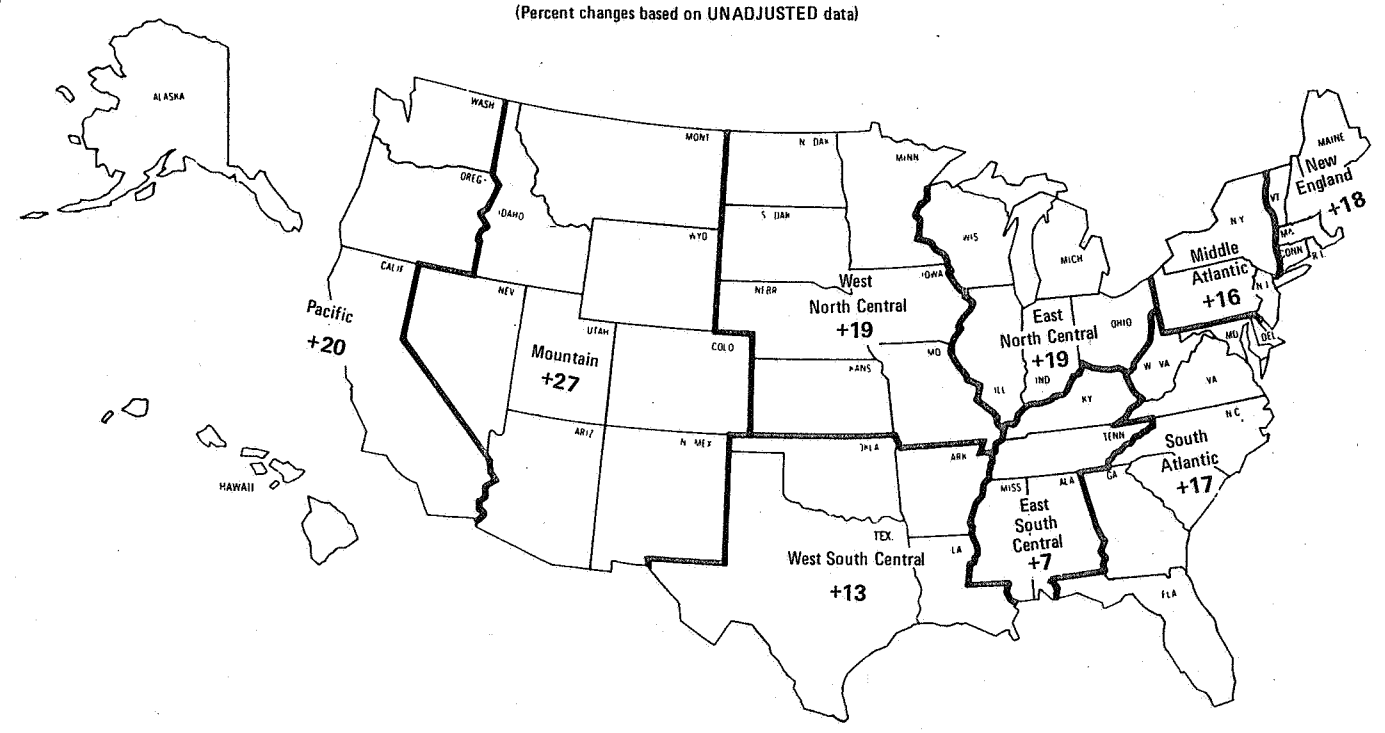
S Does not meet publication standards because of extreme variability or high nonresponse rate.

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

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

Sales of Merchant Wholesalers by Geographic Division
10 Months 1978 Compared With 10 Months 1977

(Percent changes based on UNADJUSTED data)



UNITED STATES +17

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Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1978 and 1977

(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]	1978										1977			Total 10 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.[p]	Oct.	Nov.	Dec.	1978	1977	Range[2]	Median
	Merchant wholesalers, total	52,143	52,766	62,900	60,613	66,249	65,834	60,651	67,702	63,933	68,520	54,251	56,034	56,224	621,315	529,857	0.8-0.9	0.9
	New England	2,693	2,657	3,191	2,913	3,231	3,451	3,206	3,654	3,472	3,694	2,919	3,036	3,008	32,162	27,227	5-6	6
	Middle Atlantic	11,846	11,840	14,206	13,114	14,345	14,752	13,281	15,382	14,387	15,049	11,945	12,494	12,924	138,203	118,670	2-2	2
	East North Central	8,929	9,269	10,680	10,708	11,787	11,510	10,461	11,636	10,821	12,117	9,724	9,841	9,596	107,918	90,790	2-3	3
	West North Central	5,566	5,390	6,419	6,522	7,583	6,999	6,513	7,373	6,836	7,610	5,670	5,977	5,617	66,810	55,965	2-3	2
	South Atlantic	5,666	5,686	6,792	6,533	6,858	7,044	6,523	7,139	6,877	7,357	5,854	6,126	6,188	66,476	56,804	2-3	2
	East South Central	2,421	2,534	3,201	3,318	3,453	3,132	2,962	3,127	2,938	3,115	2,813	2,765	2,822	30,202	28,150	4-5	4
	West South Central	5,582	5,843	6,878	6,433	6,857	6,744	6,382	6,890	6,717	6,947	5,644	6,008	6,283	65,273	57,885	3-4	4
	Mountain	1,934	1,900	2,536	2,412	2,537	2,777	2,456	2,620	2,693	2,741	2,027	1,964	2,099	24,606	19,341	5-5	5
	Pacific	7,506	7,649	8,994	8,659	9,600	9,426	8,868	9,881	9,191	9,889	7,655	7,821	7,688	89,665	75,024	2-3	3
50	Durable goods, total	22,869	23,880	28,985	28,784	30,405	30,991	28,701	32,279	30,404	32,163	25,369	25,340	24,797	289,474	235,468	0.8-1.0	0.9
	Middle Atlantic	4,973	5,138	6,295	5,952	6,181	6,464	5,808	6,765	6,303	6,632	5,420	5,477	5,379	60,512	49,409	4-5	4
	East North Central	3,935	4,363	5,081	5,128	5,495	5,407	4,958	5,793	5,342	5,793	4,573	4,549	4,282	51,294	42,392	3-4	4
	West North Central	1,776	1,805	2,228	2,378	2,548	2,446	2,383	2,695	2,504	2,758	2,061	2,075	1,900	23,521	19,132	5-6	5
	South Atlantic	2,809	2,768	3,414	3,455	3,538	3,817	3,480	3,738	3,689	3,883	3,088	3,051	2,971	34,591	28,767	4-5	4
	West South Central	2,413	2,626	3,180	3,097	3,303	3,366	3,135	3,403	3,224	3,368	2,643	2,611	2,729	31,114	25,433	4-4	4
	Mountain	923	893	1,192	1,208	1,247	1,412	1,303	1,372	1,340	1,323	988	900	989	12,213	9,024	6-7	7
	Pacific	4,115	4,283	5,007	4,901	5,316	5,256	5,026	5,641	5,214	5,492	4,210	4,335	4,262	50,250	40,210	2-3	3
51	Nondurable goods, total	29,274	28,886	33,915	31,829	35,844	34,843	31,950	35,423	33,529	36,357	28,882	30,694	31,427	331,709	294,389	1.0-1.2	1.0
	New England	1,735	1,735	2,017	1,747	2,014	2,151	1,988	2,293	2,117	2,299	1,839	1,918	1,918	20,096	17,890	5-7	6
	Middle Atlantic	6,873	6,701	7,912	7,162	8,164	8,288	7,473	8,617	8,084	8,417	6,525	7,017	7,545	77,691	69,261	3-3	3
	East North Central	4,994	4,906	5,599	5,580	6,292	6,103	5,504	5,843	5,479	6,324	5,151	5,292	5,314	56,624	48,398	3-4	3
	West North Central	3,790	3,584	4,191	4,145	5,035	4,554	4,129	4,678	4,331	4,852	3,609	3,902	3,717	43,289	36,833	3-4	3
	South Atlantic	2,857	2,918	3,378	3,078	3,320	3,227	3,044	3,400	3,188	3,474	2,766	3,075	3,217	31,885	28,037	3-5	3
	East South Central	1,453	1,451	1,788	1,819	1,892	1,609	1,572	1,616	1,505	1,597	1,507	1,542	1,626	16,301	16,386	3-4	4
	West South Central	3,169	3,217	3,699	3,336	3,554	3,378	3,248	3,487	3,493	3,579	3,001	3,397	3,554	34,159	32,452	5-5	5
	Pacific	3,392	3,367	3,987	3,757	4,284	4,170	3,842	4,241	3,978	4,397	3,445	3,486	3,426	39,415	34,814	4-5	4

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

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

[1]See map on page 7.

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

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: October 1978

(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			
		October 1978 from September 1978	October 1978 from October 1977	10 months 1978 from 10 months 1977	October 1978 from September 1978	October 1978 from October 1977		
		A	B	C[1]	D	E	A	D
	Merchant wholesalers, total	+7	+26	+17	+4	+19	0.4	0.2
	New England	+6	+27	+18	+4	+19	2.0	1.9
	Middle Atlantic	+5	+26	+16	+1	+14	1.1	0.6
	East North Central	+12	+25	+19	+4	+19	1.2	0.8
	West North Central	+11	+34	+19	+6	+15	1.3	1.1
	South Atlantic	+7	+26	+17	+3	+13	1.6	1.0
	East South Central	+6	+11	+7	+4	+29	1.7	1.4
	West South Central	+3	+23	+13	+5	+18	1.4	0.8
	Mountain	+2	+35	+27	+2	+23	2.4	1.3
	Pacific	+8	+29	+20	+3	+24	1.2	0.5
50	Durable goods, total	+6	+27	+23	+1	+18	0.6	0.3
	New England	+3	+29	+29	+2	+20	2.4	1.3
	Middle Atlantic	+5	+22	+22	0	+14	1.7	1.0
	East North Central	+8	+27	+21	0	+18	1.9	1.0
	West North Central	+10	+34	+23	+1	+9	3.3	1.7
	South Atlantic	+5	+26	+20	+1	+14	1.9	1.2
	East South Central	+6	+16	+18	-2	+27	3.9	2.5
	West South Central	+4	+27	+22	+3	+22	2.1	1.2
	Mountain	-1	+34	+35	+3	+27	2.9	1.7
	Pacific	+5	+30	+25	+1	+26	1.9	0.7
51	Nondurable goods, total	+8	+26	+13	+9	+19	0.6	0.4
	New England	+9	+25	+12	+7	+17	1.9	2.7
	Middle Atlantic	+4	+29	+12	+3	+15	1.9	0.9
	East North Central	+15	+23	+17	+13	+22	1.4	1.1
	West North Central	+12	+34	+17	+11	+22	1.6	1.4
	South Atlantic	+9	+26	+14	+7	+13	2.4	1.8
	East South Central	+6	+6	-1	+16	+33	1.7	2.4
	West South Central	+2	+19	+5	+9	+10	2.2	1.3
	Mountain	+5	+36	+20	0	+15	3.2	1.2
	Pacific	+11	+28	+13	+7	+21	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	+9	+23	+27	0	+16	2	1
	New England	+3	+4	+26	-2	+4	7	
	Middle Atlantic	+15	+8	+46	+1	+12	4	
	East North Central	+11	+25	+19	-1	+17	7	1
	West North Central	+5	+35	+24	0	+25	5	2
	South Atlantic	+5	+28	+23	+1	+24	4	2
	East South Central	+5	+34	+29	+1	+38	4	3
	West South Central	+12	+20	+18	-3	0	5	2
	Mountain	+15	+46	+42	+4	+30	7	3
	Pacific	+7	+22	+27	-1	+12	3	2
502	Furniture and home furnishings	+5	+17	+19	+1	+26	2	1
	Middle Atlantic	+3	+19	+17	0	+42	4	2
	East North Central	+10	+55	+26	+3	+37	7	2
	West North Central	+7	+18	+29	+10	+15	5	4
	West South Central	+5	+4	+26	-2	+3	5	7
	Pacific	+2	+4	+20	-5	+9	5	3
503	Lumber and other construction materials	+5	+30	+23	+1	+24	2	1
	New England	+3	+11	+20	+5	+8	4	5
	Middle Atlantic	+6	+27	+28	-4	+14	4	2
	East North Central	+3	+23	+25	0	+25	3	2
	West North Central	+3	+51	+25	-3	+28	7	7
	South Atlantic	+4	+41	+36	-1	+20	4	2
	East South Central	+7	+24	+29	-5	+25	4	3
	West South Central	+7	+32	+26	+2	+36	6	5
	Pacific	+7	+27	+9	+6	+30	5	1
5051 pt.	Ferrous metals service centers	+9	+36	+32	0	+22	2	1
	New England	-11	+9	+38	-5	+27	6	2
	Middle Atlantic	+16	+28	+27	+2	+3	5	2
	East North Central	+10	+35	+32	-2	+19	3	2
	West North Central	+5	+54	+36	-5	+28	5	2
	South Atlantic	+24	+43	+30	+4	+47	3	2
	East South Central	+12	+54	+19	-2	+26	4	4
	West South Central	+5	+45	+27	+2	+45	4	2
	Mountain	(S)	(S)	(S)	-3	(S)	2	2
	Pacific	+18	+62	+57	-3	(S)	2	3
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	+10	+28	+26	+1	+18	2	1
	New England	+10	+11	+22	0	-1	3	2
	Middle Atlantic	+12	+20	+21	-1	-2	5	2
	East North Central	+15	+43	+27	+3	+21	3	2
	West North Central	+9	(S)	+13	-2	+13	5	3
	South Atlantic	+9	+28	+21	+3	+30	3	2
	East South Central	+5	+47	+52	0	+40	3	5
	West South Central	+10	+36	+37	0	+26	4	2
	Mountain	+9	+31	+25	+1	-6	4	2
	Pacific	+7	+29	+28	+2	+29	4	2

See footnotes at end of table.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: October 1978—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: October 1978 from September 1978	Sales: October 1978 from October 1977	Sales: 10 months 1978 from 10 months 1977	Inventories: October 1978 from September 1978	Inventories: October 1978 from October 1977	Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		A	B	C[1]	D	E	A	D
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	+2	+10	+18	+5	+25	3	1
	Middle Atlantic	+4	+10	+27	+3	+31	3	2
	East North Central	-1	-5	+3	+5	+14	4	1
	West North Central	+1	+3	+4	-1	+14	4	4
	South Atlantic	+5	+14	+16	+3	+20	6	4
	West South Central	+8	+11	+17	+6	+25	4	4
	Mountain	+7	(S)	(S)	+2	+23	6	3
	Pacific	-3	+15	+32	+9	+28	3	2
5072	Hardware	+8	+11	+9	+2	+7	1	1
	New England	+2	-7	+10	+1	-5	6	3
	Middle Atlantic	+1	+5	+3	+1	0	6	2
	East North Central	+15	+13	+24	+8	+20	4	2
	West North Central	+2	+1	+5	+1	-5	3	3
	South Atlantic	+15	+16	0	+1	0	4	2
	East South Central	+10	+10	-11	+3	+2	4	1
	Pacific	+10	+20	+9	+1	+14	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	+9	+19	+14	-2	+9	2	1
	Middle Atlantic	+15	+13	+3	-1	-3	6	3
	East North Central	+7	(S)	+23	-4	+9	3	3
	South Atlantic	+2	+5	+8	-1	-2	3	2
	Mountain	-11	(S)	(S)	-1	+22	7	4
	Pacific	+6	+35	+14	+1	+33	5	4
5084,5	Industrial machinery, equipment, and supplies	+6	+33	+24	+2	+24	2	1
	Middle Atlantic	+6	+15	+15	+1	+9	7	2
	East North Central	+8	+21	+21	-1	+5	3	2
	West South Central	+6	+59	+43	+4	+34	4	3
	Pacific	0	+38	+38	-3	+43	5	2
512	Drugs, drug proprietaries, and druggists' sundries	+11	+15	+5	+3	+11	1	1
	New England	+13	+29	+5	-7	+17	5	3
	Middle Atlantic	+11	+12	+3	-1	-5	3	2
	East North Central	+19	+9	+4	+9	+22	6	3
	West North Central	+11	+18	+6	+3	+17	2	2
	South Atlantic	+9	+29	+17	-2	+9	6	5
	East South Central	+15	+20	+17	-2	+20	6	5
	West South Central	+4	+15	0	+1	(S)	3	2
	Mountain	+11	+25	+11	+7	+25	3	2
	Pacific	+6	+4	-4	+5	+6	3	3
5141	Groceries, general-line	+5	+18	+10	+6	+15	1	1
	New England	+4	+11	+19	+7	+20	2	1
	Middle Atlantic	+9	+30	+8	+6	+18	1	2
	East North Central	+6	+14	+7	+5	+12	3	1
	West North Central	+3	+1	+9	+2	-1	1	1
	South Atlantic	+5	+27	+17	+5	+21	2	1
	West South Central	+5	+12	+9	+5	+6	2	1
	Mountain	+7	+30	+15	0	+24	2	2
	Pacific	+2	+30	+16	+7	+18	1	1
5142,3,6,9	Specialty-line groceries	+6	+16	+8	+4	+16	1	1
	Middle Atlantic	+6	+25	+14	+4	+32	4	2
	East North Central	+6	+18	+19	-5	+12	3	2
	West North Central	+9	+8	+24	+15	+18	3	1
	South Atlantic	-9	-2	+14	-3	+21	5	6
	East South Central	+11	+3	(S)	+2	(S)	2	2
5148	Fresh fruits and vegetables	+7	+17	+23	+10	+46	2	4
	Middle Atlantic	+9	+21	+29	0	+31	7	5
	East North Central	+6	-5	+14	+1	+17	6	6
	West North Central	+13	+37	+16	-2	+67	6	3
	West South Central	+8	+24	+29	+1	+59	5	3
	Pacific	+7	+12	+18	+28	+46	4	4
5194	Tobacco and tobacco products	+1	+10	+8	+4	+12	1	1
	New England	+6	-6	-2	+3	(S)	5	3
	Middle Atlantic	0	+6	+12	+3	+22	4	3
	East North Central	-2	+19	+13	+7	+19	4	3
	West North Central	+5	-7	-11	-3	-2	4	2
	South Atlantic	+2	(S)	+15	+1	(S)	6	6
	East South Central	-3	-18	-3	+4	-12	7	4
	West South Central	-5	(S)	+25	-4	-14	7	6
	Mountain	+2	-26	(S)	+4	-17	6	2
	Pacific	+5	+24	+15	+3	+8	2	5

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

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

[1]See map on page 7.

[2]The sampling errors (in percent) shown in columns A and D are based on medians of measurements on data for August, September, and October 1977. For SIC's 5051 pt., and 5063 e 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 t 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 b does not measure any systematic biases in the data. Bias ... the difference, averaged over all possible samples of the same size and design, between the estimate and the true value being estimated. The accuracy of the tabulated data is determined by the joint effects of the sampling and nonsampling errors.

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

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

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

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

1972 SIC code	Kind of business	Sales						Inventories					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total	0.8-1.1	0.9	0.8-0.9	0.9	0.4-0.5	0.5	0.8-1.0	0.9	0.7-1.0	0.9	0.2-0.5	0.4
	Total (excluding farm-product raw materials)	0.9-1.2	1.1	0.9-1.0	1.0	0.4-0.6	0.5	0.9-1.0	1.0	0.8-1.0	0.9	0.2-0.5	0.3
50	Durable goods, total	1.1-1.3	1.2	0.9-1.0	1.0	0.6-0.6	0.6	1.1-1.2	1.2	1.0-1.2	1.1	0.3-0.7	0.5
501	Motor vehicles and automotive parts and supplies	2.3-3.3	3.1	1.9-2.8	2.2	1.4-1.9	1.7	2.5-3.3	2.9	2.6-3.1	3.0	0.6-1.3	1.0
5012	Automobiles and other motor vehicles	(*)	(*)	(*)	(*)	1.7-3.9	3.1	(*)	(*)	(*)	(*)	1.7-3.0	2.8
5013,4	Automotive parts and supplies, tires and tubes	2.9-3.7	3.1	2.9-3.2	3.1	1.5-2.0	1.6	4.0-4.5	4.3	3.9-4.4	4.0	0.4-1.4	0.7
5013	Automotive parts and supplies	3.3-4.0	3.9	3.1-3.8	3.7	1.9-2.2	2.0	4.7-5.3	5.2	4.7-5.2	5.0	0.5-1.5	0.9
502	Furniture and home furnishings	4.2-5.8	4.6	4.2-4.4	4.3	1.7-2.9	2.0	3.2-4.9	3.7	3.4-4.2	3.7	0.8-2.3	2.0
5021	Furniture--household and office	6.6-7.6	6.9	5.6-7.1	6.9	4.0-5.7	4.3	(*)	(*)	(*)	(*)	1.4-3.4	2.2
5021 pt.	Household furniture	(*)	(*)	(*)	(*)	5.0-5.8	5.1	(*)	(*)	(*)	(*)	1.4-4.3	2.0
5021 pt.	Office furniture	(*)	(*)	(*)	(*)	5.7-8.0	5.9	(*)	(*)	(*)	(*)	0.7-3.7	2.1
5023	Home furnishings	5.1-7.5	6.1	5.1-6.1	5.5	1.6-3.6	2.2	4.8-6.9	5.6	4.9-6.0	5.0	1.0-3.1	2.6
503	Lumber and other construction materials	2.8-4.4	3.1	2.9-3.9	3.1	1.6-2.5	1.9	4.5-6.5	4.9	4.8-5.8	4.9	0.7-1.8	0.9
5031	Lumber, plywood, and millwork	4.1-4.6	4.3	3.3-4.6	4.0	2.1-2.5	2.4	5.9-8.2	6.5	6.0-6.9	6.5	1.0-2.6	1.8
5039	Construction materials, n.e.c.	4.2-7.2	4.9	4.5-5.9	4.9	2.0-3.4	2.2	(*)	(*)	(*)	(*)	1.1-2.0	1.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(*)	(*)	(*)	(*)	2.2-2.4	2.3	(*)	(*)	(*)	(*)	1.0-2.5	1.4
505	Metals and minerals, except petroleum	4.4-6.0	4.7	4.0-5.1	4.0	1.5-3.0	2.8	3.2-3.8	3.7	3.7-4.1	4.0	0.8-1.4	1.3
5051 pt.	Ferrous metals service centers and offices	5.0-5.8	5.7	4.1-5.2	4.7	1.2-3.8	3.1	3.8-4.2	4.1	4.1-4.3	4.2	0.5-1.6	1.4
5051 pt.	Ferrous metals service centers	6.7-8.0	6.8	5.0-6.8	5.8	1.1-5.3	3.5	2.9-4.4	3.4	3.4-4.0	3.5	0.6-2.2	2.1
5051 pt.	Nonferrous metals service centers and offices	(*)	(*)	(*)	(*)	4.5-7.0	6.1	(*)	(*)	(*)	(*)	2.8-5.4	4.7
506	Electrical goods	1.9-2.6	2.3	1.6-2.1	1.7	1.3-1.6	1.4	2.5-2.9	2.6	2.2-2.8	2.4	0.5-1.0	0.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2.2-3.1	2.6	2.3-2.7	2.4	1.4-1.7	1.6	2.9-3.5	3.2	3.0-3.2	3.1	0.6-1.2	0.7
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3.4-4.0	3.8	3.0-3.2	3.1	1.6-2.8	2.5	2.9-4.2	3.2	2.7-3.8	3.0	0.7-1.6	0.9
5064	Electrical appliances, TV and radio sets	3.0-3.8	3.6	2.6-3.7	3.1	1.7-2.7	2.5	(*)	(*)	(*)	(*)	0.9-1.7	1.4
507	Hardware, plumbing, heating equipment, and supplies	2.7-3.0	2.9	2.4-2.6	2.5	1.1-1.9	1.5	2.4-2.8	2.6	2.4-2.9	2.7	0.3-1.4	0.6
5072	Hardware	3.6-4.2	3.8	2.6-3.1	3.0	1.3-2.4	1.9	2.0-4.1	2.7	2.2-3.5	2.8	0.4-2.1	0.8
5074	Plumbing and heating equipment and supplies (hydronics)	4.1-5.3	4.2	3.9-5.1	4.2	1.6-3.8	2.1	5.0-7.0	6.0	4.5-7.1	5.3	0.5-3.1	0.9
5075	Warm air heating and air conditioning equipment and supplies	(*)	(*)	(*)	(*)	2.0-4.4	2.7	(*)	(*)	(*)	(*)	1.1-4.3	1.4
	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
1	Commercial machines and equipment	(*)	(*)	(*)	(*)	2.9-4.3	4.1	(*)	(*)	(*)	(*)	1.6-8.5	1.9
~82	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
5111,9	Printing, writing, industrial, and personal service paper	2.4-3.1	2.7	2.3-2.8	2.4	1.3-1.5	1.4	2.9-3.4	3.1	2.7-3.2	2.8	0.4-1.3	0.9
5112	Stationery supplies	(*)	(*)	(*)	(*)	2.4-3.4	2.5	3.2-6.1	5.8	3.6-5.1	4.4	0.9-4.8	1.4
512	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	5.6-6.3	5.7	5.6-5.7	5.7	0.6-2.2	0.7
5122	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	(*)	(*)	(*)	(*)	0.6-2.2	0.7
5122 pt.	General-line drugs	7.2-9.8	7.9	7.5-8.5	7.6	0.7-3.0	1.0	(*)	(*)	(*)	(*)	05.-3.1	1.0
513	Apparel, piece goods, and notions	8.3-12.4	8.8	8.6-9.3	9.1	2.6-4.0	3.3	(*)	(*)	(*)	(*)	(*)	(*)
514	Groceries and related products	1.7-2.2	2.0	1.6-2.0	1.9	0.4-1.2	0.5	1.5-2.5	1.8	1.8-2.1	1.9	0.4-1.3	0.6
5141	Groceries, general-line	1.9-2.7	2.1	1.7-2.7	2.0	0.4-1.5	0.7	1.8-2.7	2.3	1.7-2.0	1.8	0.3-1.2	0.8
5141 pt.	Voluntary groups	(*)	(*)	(*)	(*)	0.5-1.7	0.6	(*)	(*)	(*)	(*)	0.4-1.7	0.5
5141 pt.	Retailer cooperatives	(*)	(*)	(*)	(*)	0.6-1.6	1.1	(*)	(*)	(*)	(*)	0.4-2.4	0.7
5141 pt.	Other general-lines	(*)	(*)	(*)	(*)	0.9-3.1	1.8	(*)	(*)	(*)	(*)	0.5-1.3	0.7
5142,3,6,9	Specialty-line groceries	(*)	(*)	(*)	(*)	0.7-3.4	1.3	(*)	(*)	(*)	(*)	0.9-2.4	1.0
5144	Poultry and poultry products	3.4-5.5	4.4	4.0-4.4	4.2	0.6-2.2	1.5	(*)	(*)	(*)	(*)	2.1-4.1	2.3
5145	Confectionery	4.7-6.3	4.7	3.6-5.4	4.3	2.0-3.2	2.2	(*)	(*)	(*)	(*)	0.8-2.4	2.3
5147	Meats and meat products	4.5-4.8	4.7	4.6-4.6	4.6	1.4-2.9	1.7	(*)	(*)	(*)	(*)	1.7-3.9	2.2
5148	Fresh fruits and vegetables	4.7-5.4	4.9	3.9-4.1	4.0	1.9-4.2	2.7	(*)	(*)	(*)	(*)	2.9-4.4	3.9
515	Farm-product raw materials	1.8-2.2	2.0	1.6-2.0	1.7	1.1-1.7	1.3	(*)	(*)	(*)	(*)	1.1-2.8	2.4
5152	Cotton	(*)	(*)	(*)	(*)	1.8-4.9	2.8	(*)	(*)	(*)	(*)	1.3-2.9	2.4
5153	Grain	2.4-2.7	2.6	2.2-2.4	2.3	1.0-1.7	1.3	(*)	(*)	(*)	(*)	1.6-3.3	1.9
517	Petroleum and petroleum products	4.0-5.0	4.7	4.2-4.6	4.5	1.1-1.9	1.5	4.1-5.2	5.0	4.4-5.4	4.7	1.6-3.0	2.3
5171	Petroleum bulk stations and terminals	2.8-3.3	2.9	2.8-3.0	2.9	0.9-1.4	1.2	(*)	(*)	(*)	(*)	1.7-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages	3.4-3.9	3.7	3.1-3.7	3.2	0.8-1.8	1.7	3.9-4.2	4.1	4.0-4.3	4.2	1.0-2.0	1.3
5181	Beer and ale	2.2-4.4	3.1	2.8-3.2	2.9	1.0-2.5	2.0	3.6-5.5	3.8	3.6-4.1	3.8	1.7-2.7	2.1
5182	Wines and distilled alcoholic beverages	5.2-6.3	5.4	4.6-5.6	4.7	1.2-3.4	1.7	4.6-5.4	4.8	5.0-5.6	5.3	1.4-2.3	1.6
519	Miscellaneous nondurable goods	2.4-3.2	2.9	2.4-2.7	2.5	1.4-2.3	1.6	(*)	(*)	(*)	(*)	0.8-1.7	1.4
5191	Farm supplies	(*)	(*)	(*)	(*)	3.2-3.6	3.3	(*)	(*)	(*)	(*)	1.7-3.9	2.0
5194	Tobacco and tobacco products	4.0-5.2	4.1	3.4-4.5	4.2	1.3-2.4	1.7	(*)	(*)	(*)	(*)	0.8-4.3	1.0
5198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.8-3.8	3.0	(*)	(*)	(*)	(*)	1.5-3.1	2.9
59 pt.	Books, magazines, newspapers	(*)	(*)	(*)	(*)	3.2-8.0	5.6	(*)	(*)	(*)	(*)	2.0-6.5	5.1

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

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

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

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

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

A description of trading-day adjustment factors may be found in **Estimating Trading-Day Variation in Monthly Economic Time Series**, Bureau of the Census Technical Paper No. 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 1977-December 1978

1972 SIC code	Kind of business	1977											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	91.7	92.1	107.2	99.0	100.6	103.8	95.5	104.5	102.5	100.4	101.1	99.6
	Total (excluding farm-product raw materials)	89.6	91.5	106.3	99.7	101.8	106.0	96.5	105.8	103.6	100.0	100.0	96.9
50	Durable goods, total	87.1	88.2	106.3	101.3	103.7	107.8	96.9	106.5	105.8	101.1	99.3	94.0
501	Motor vehicles and automotive parts and supplies	89.7	89.3	109.5	108.3	107.5	107.2	100.5	105.9	101.1	94.2	95.0	90.0
502	Furniture and home furnishings	82.6	89.5	104.2	97.8	98.8	106.7	90.7	106.4	106.9	110.3	109.2	94.7
503	Lumber and other construction materials	78.4	80.8	101.1	99.8	108.0	112.1	104.6	116.4	108.7	102.4	100.6	85.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.7	89.9	104.1	101.6	101.8	104.0	92.1	106.4	102.0	109.1	110.4	98.2
505	Metals and minerals, except petroleum	94.4	90.9	110.4	99.9	105.3	104.8	92.5	107.5	105.0	96.0	99.5	90.8
506	Electrical goods	87.8	88.6	101.8	97.1	96.0	108.4	98.5	105.9	104.2	106.4	101.9	101.6
507	Hardware, plumbing, heating equipment, and supplies	87.4	87.4	101.2	99.4	102.9	108.3	99.4	108.7	106.9	105.8	100.8	89.9
508	Machinery, equipment, and supplies	86.4	89.0	107.7	102.7	104.4	108.8	95.7	103.5	107.3	102.5	95.5	94.9
509	Miscellaneous durable goods	82.8	89.8	105.7	98.8	100.4	107.7	89.8	105.8	106.7	104.1	104.3	102.0
51	Nondurable goods, total	95.1	95.1	108.4	97.4	98.3	100.7	94.8	102.3	99.7	99.4	102.8	103.9
	Total (excluding farm-product raw materials)	91.7	94.2	106.8	98.1	100.0	104.1	96.3	104.6	101.6	99.0	100.6	100
511	Paper and paper products	93.8	92.2	104.3	95.1	96.4	104.2	97.3	108.3	104.7	103.6	103.2	95.7
512	Drugs, drug proprietaries, and druggists' sundries	94.2	92.6	105.1	98.8	97.7	98.7	92.7	103.9	104.4	108.3	101.4	98.9
513	Apparel, piece goods, and notions	89.7	94.6	106.4	95.2	95.2	100.5	95.1	114.9	108.8	105.4	105.6	87.1
514	Groceries and related products	94.2	90.9	103.8	98.5	101.5	106.7	99.1	105.4	100.7	100.1	99.7	98.5
515	Farm-product raw materials[1]	105.1	95.8	112.8	96.9	101.5	88.2	88.5	95.5	93.5	102.2	110.6	108.6
516	Chemicals and allied products	87.1	89.9	107.4	101.2	102.5	106.5	97.0	107.2	103.4	102.0	99.3	94.3
517	Petroleum and petroleum products	94.8	102.6	105.4	98.9	90.9	98.9	100.1	101.9	97.3	102.4	101.4	105.6
518	Beer, wine, and distilled alcoholic beverages	75.8	80.8	101.4	94.1	103.0	113.8	98.1	107.0	100.3	98.8	105.8	120.1
519	Miscellaneous nondurable goods	95.1	101.7	116.8	104.4	101.4	100.9	88.1	96.2	99.6	95.4	96.1	100.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	102.1	101.4	100.9	99.9	98.4	98.4	98.4	98.4	98.6	100.9	102.1	101.1
	Total (excluding farm-product raw materials)	99.8	100.3	100.8	100.1	100.3	100.5	100.1	99.2	99.3	100.0	100.2	99.4
50	Durable goods, total	99.1	100.3	101.1	100.9	101.4	101.8	100.9	99.4	99.1	99.1	98.9	98.9
501	Motor vehicles and automotive parts and supplies	101.4	102.8	102.1	101.4	102.4	100.9	98.9	96.6	97.9	97.8	97.9	100.4
502	Furniture and home furnishings	98.9	99.4	100.1	99.8	99.9	101.4	100.9	101.3	100.9	99.6	100.4	98.1
503	Lumber and other construction materials	97.9	98.4	102.8	102.6	105.4	103.1	102.9	100.6	97.8	95.3	96.4	97.1
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	100.8	99.9	100.9	103.4	107.6	104.6	101.6	100.3	100.6	94.4	89.3
505	Metals and minerals, except petroleum	100.4	98.9	100.9	101.4	100.1	99.4	102.8	101.3	98.1	96.8	99.1	101.4
506	Electrical goods	97.3	97.6	99.1	99.4	100.6	101.9	101.1	101.3	100.4	101.6	101.4	98.8
507	Hardware, plumbing, heating equipment, and supplies	98.1	98.6	101.6	103.1	102.8	101.1	100.9	101.4	98.4	98.3	98.4	97.6
508	Machinery, equipment, and supplies	99.1	101.1	101.9	100.6	101.1	102.3	100.1	97.9	99.1	99.6	99.6	97.8
509	Miscellaneous durable goods	97.1	98.9	96.8	98.4	96.8	101.3	101.9	102.9	101.3	103.1	101.8	100.4
51	Nondurable goods, total	105.4	103.4	100.9	98.1	93.9	93.3	94.8	97.3	97.6	103.9	106.9	105.4
	Total (excluding farm-product raw materials)	100.5	100.2	100.5	99.4	98.2	98.4	98.3	99.0	99.8	101.9	102.7	100.9
511	Paper and paper products	99.1	99.1	98.8	100.4	99.8	101.9	99.6	100.9	100.1	100.3	99.8	100.9
512	Drugs, drug proprietaries, and druggists' sundries	96.4	97.8	100.1	101.4	98.1	100.4	99.3	100.1	102.4	104.4	101.4	98.9
513	Apparel, piece goods, and notions	100.1	99.6	98.4	98.6	101.1	100.4	102.6	101.1	100.4	99.1	99.1	99.9
514	Groceries and related products	99.9	100.9	102.4	99.9	98.4	98.4	98.1	98.1	99.1	101.3	102.9	101.1
515	Farm-product raw materials[1]	121.4	113.9	104.9	92.4	80.8	73.9	84.8	84.8	89.8	108.9	122.1	123.9
516	Chemicals and allied products	99.8	100.1	102.1	101.4	101.3	99.9	99.8	99.1	99.6	97.8	99.4	100.1
517	Petroleum and petroleum products	104.8	99.8	97.1	93.1	95.1	96.8	96.4	99.3	101.8	106.8	105.6	104
518	Beer, wine, and distilled alcoholic beverages	96.9	97.9	97.1	98.9	101.8	103.1	98.6	97.6	100.6	107.6	105.4	9
519	Miscellaneous nondurable goods	103.6	104.3	102.9	100.6	96.3	93.3	95.3	98.4	98.1	99.8	103.6	104

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1977-December 1978—Continued

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.9	92.2	106.9	96.5	103.5	103.8	95.4	105.1	98.9	102.5	101.4	96.7
	Total (excluding farm-product raw materials)	91.9	91.6	106.4	97.5	104.6	105.9	95.9	106.4	100.9	102.2	98.8	95.1
50	Durable goods, total	89.8	89.0	105.2	98.7	106.3	107.6	96.4	107.1	102.9	104.2	98.4	91.4
501	Motor vehicles and automotive parts and supplies	93.6	89.1	107.0	107.0	107.4	108.0	99.3	107.5	96.9	98.4	92.5	91.4
502	Furniture and home furnishings	84.6	89.1	104.6	95.9	101.6	106.2	89.4	107.2	104.2	112.8	108.3	93.8
503	Lumber and other construction materials	81.6	81.2	101.7	95.3	110.7	112.5	102.4	116.9	104.7	108.0	100.0	82.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.4	90.3	102.8	100.3	109.7	98.1	95.1	104.0	104.7	105.7	108.7	97.3
505	Metals and minerals, except petroleum	98.8	91.0	108.9	97.9	107.9	103.6	90.7	108.4	103.1	100.0	97.4	91.1
506	Electrical goods	89.4	89.1	101.7	95.2	99.2	106.4	100.2	104.9	100.9	107.7	103.3	98.5
507	Hardware, plumbing, heating equipment, and supplies	89.5	87.8	100.8	97.5	105.5	107.8	99.7	109.4	103.4	107.2	101.1	88.0
508	Machinery, equipment, and supplies	88.1	88.8	107.8	99.6	107.3	108.7	95.7	104.3	104.0	103.7	96.9	91.6
509	Miscellaneous durable goods	86.5	89.8	104.7	95.1	101.0	110.6	87.6	108.0	102.4	109.5	105.2	96.2
51	Nondurable goods, total	97.0	95.1	108.7	95.1	101.3	100.9	94.8	102.9	96.9	100.9	102.6	100.7
	Total (excluding farm-product raw materials)	93.9	94.5	107.7	95.7	102.7	104.4	95.6	105.1	98.6	100.5	100.4	97.5
511	Paper and paper products	95.2	92.4	104.5	92.6	101.9	103.0	96.6	108.3	103.7	105.0	100.5	92.7
512	Drugs, drug proprietaries, and druggists' sundries	98.2	92.7	104.9	96.0	100.4	99.8	92.7	104.5	101.4	108.3	100.6	96.9
513	Apparel, piece goods, and notions	91.3	94.8	106.4	92.3	99.6	99.3	93.5	115.1	106.8	108.1	103.9	86.0
514	Groceries and related products	95.0	91.0	104.1	96.4	104.5	106.2	99.1	106.0	100.1	100.3	99.9	94.3
515	Farm-product raw materials[1]	106.8	95.8	112.8	94.4	99.6	89.9	92.3	94.6	92.6	100.5	111.2	104.6
516	Chemicals and allied products	90.0	89.4	106.9	98.2	105.2	106.5	97.0	107.3	99.7	105.5	98.0	94.1
517	Petroleum and petroleum products	96.5	102.1	107.7	96.2	92.8	99.9	98.4	101.7	95.5	102.4	98.7	105.8
518	Beer, wine, and distilled alcoholic beverages	78.7	80.9	100.7	91.2	106.7	113.9	97.3	108.1	96.9	101.9	105.3	115.3
519	Miscellaneous nondurable goods	97.4	101.6	118.1	101.5	104.3	102.9	87.2	96.5	96.0	97.0	96.4	97.4
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	101.9	101.3	101.0	100.1	98.6	98.5	98.4	98.0	98.9	100.6	101.7	100.5
	Total (excluding farm-product raw materials)	99.7	100.3	100.8	100.2	100.2	100.5	100.1	99.1	99.4	100.0	100.3	99.2
50	Durable goods, total	99.1	100.2	100.9	100.6	101.1	101.6	100.8	99.3	99.3	99.0	99.1	98.7
501	Motor vehicles and automotive parts and supplies	101.4	102.6	101.8	101.0	102.1	100.9	98.9	96.8	97.9	97.8	98.1	100.5
502	Furniture and home furnishings	99.4	99.2	99.8	99.5	99.8	101.3	100.6	101.0	101.5	100.5	99.1	98.1
503	Lumber and other construction materials	98.1	98.8	103.0	102.6	105.0	101.6	101.5	100.2	98.9	96.1	96.9	97.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	102.4	99.2	100.5	103.3	107.3	104.4	101.1	100.6	101.2	93.9	89.0
505	Metals and minerals, except petroleum	100.4	98.6	100.5	101.0	99.7	99.2	102.4	101.9	98.6	96.7	99.5	101.5
506	Electrical goods	97.2	97.4	99.0	99.9	100.2	101.8	101.2	101.5	100.4	101.2	101.0	98.8
507	Hardware, plumbing, heating equipment, and supplies	97.8	98.0	101.6	103.2	102.8	101.7	100.5	101.4	98.7	98.6	98.2	97.3
508	Machinery, equipment, and supplies	99.2	101.1	101.7	100.0	101.0	102.3	100.1	98.1	99.3	99.6	99.5	97.8
509	Miscellaneous durable goods	97.1	98.7	96.6	98.2	96.6	101.2	101.8	102.6	101.5	103.1	102.1	100.2
51	Nondurable goods, total	104.8	103.2	101.6	98.3	95.3	93.7	94.6	96.3	98.6	103.3	106.0	103.9
	Total (excluding farm-product raw materials)	100.4	100.2	100.7	99.7	98.5	98.6	98.3	98.6	99.7	101.9	102.5	100.8
511	Paper and paper products	98.7	99.0	98.7	100.6	99.4	102.0	99.6	100.6	99.5	101.5	100.0	100.2
512	Drugs, drug proprietaries, and druggists' sundries	96.3	97.6	99.9	101.3	97.7	100.2	99.2	99.8	102.0	105.0	101.8	98.8
513	Apparel, piece goods, and notions	99.9	99.4	98.6	98.5	101.1	100.0	102.2	101.0	100.0	98.3	100.1	100.6
514	Groceries and related products	99.6	100.7	102.2	100.1	98.6	98.5	98.1	97.8	99.0	101.8	102.1	101.3
515	Farm-product raw materials[1]	120.2	114.0	106.9	93.1	81.5	76.1	84.4	83.5	88.3	108.7	121.4	120.9
516	Chemicals and allied products	99.9	99.9	102.7	101.1	101.3	99.8	99.6	99.4	99.9	96.9	98.7	100.6
517	Petroleum and petroleum products	104.9	100.2	97.9	93.5	95.6	97.0	95.4	99.0	102.5	104.8	104.6	104.2
518	Beer, wine, and distilled alcoholic beverages	96.6	96.5	97.2	99.0	101.3	103.1	98.9	97.6	100.8	107.5	106.5	94.6
519	Miscellaneous nondurable goods	103.4	103.2	105.3	101.1	96.2	92.9	95.1	97.2	98.6	99.7	103.2	104.1

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 t 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 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 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.

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 chang 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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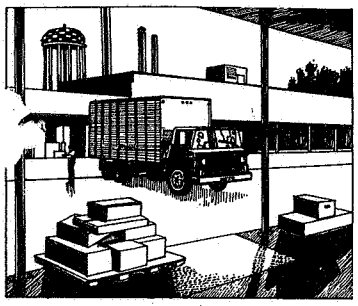
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Monthly Wholesale Trade

SALES AND INVENTORIES

Issued January 1979

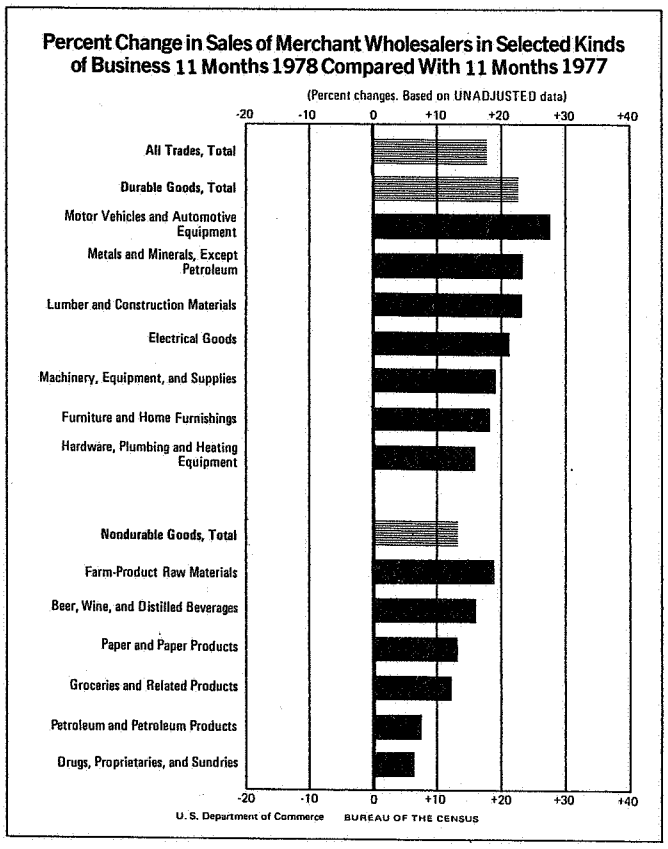
November 1978

BW-78-11

Sales—November 1978 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences, but not for price changes, were $67.5 billion, virtually unchanged from the previous month but 21 percent above November 1977. Adjusted September-through-November total sales were up 4 percent from the June-through-August period and 22 percent above the total sales for the comparable months a year ago.

After adjustment, November sales in the durable goods trades were up 1 percent from the previous month and were 22 percent above sales for the same month a year ago. Nondurable goods sales were vitrually unchanged from October but were 21 percent above November 1977. Total monthly sales in the durable goods group during the September-through-November period were 4 percent above the prior three months and were 23 percent above the comparable period a year ago. Three-month total sales for the nondurable goods group were 4 percent above the June-through-August period and were 22 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 more substantial increases shown in furniture and home furnishings and petroleum and petroleum products both up 7 percent. The largest decrease was reported in farm-product raw materials (-11%). Compared with sales of a year ago, all trade groups showed increases. Among the sharper increases were motor vehicles and automotive equipment (31%) and sporting goods, toys, and hobby goods (25%).



Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were valued at $79.0 billion at the end of November, up 1 percent from the previous month, and 18 percent above the same month a year ago. Both durable and nondurable goods stocks increased 1 percent from October and were 18 percent above the November 1977 level.

Based on adjusted data, most trade groups showed increases from their previous month inventory levels, with the larger increases reported in beer, wine, and distilled beverages (7%) and motor vehicles and automotive equipment (6%). The largest decrease was noted in metals, and minerals except petroleum (-4%). Compared with year-ago inventories, all trade groups reported increases. The sharper increases were shown in furniture and home furnishings (26%) and motor vehicle and automotive equipment (25%).

Stock-Sales Ratio—The November stock-sales ratio for merchant wholesalers, based on seasonally-adjusted data, was 117, up 1 point from October but down 4 points from November 1977. The stock-sales ratio for durable goods was 164, down 1 point from last month and down 6 points from the year-ago ratio. The ratio for nondurable goods was 76, up 1 point from October, but down 2 points from the November 1977 ratio.

An advanced release of the November 1978 data was issued on January 11, 1979.

U.S. Department of Commerce
BUREAU OF THE CENSUS

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

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Table 1. Estimated Monthly Sales of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978											1977		Total 11 months	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.P	Nov.	Dec.	1978	1977
	Merchant wholesalers, total	52,143	52,766	62,900	60,613	66,249	65,834	60,651	67,702	63,933	69,086	67,834	56,034	56,224	689,714	585,888
	Total (excluding farm-product raw materials)	46,343	47,112	55,848	54,095	58,061	58,658	54,411	60,838	57,342	61,033	59,934	49,762	50,139	613,678	521,921
50	Durable goods, total	22,869	23,880	28,985	28,784	30,405	30,991	28,701	32,279	30,404	32,242	30,877	25,340	24,797	320,429	260,807
501	Motor vehicles and automotive parts and supplies	4,797	5,065	5,870	5,956	6,083	5,929	5,552	6,134	5,381	6,009	6,013	4,721	4,698	62,789	49,347
5013,4	Automotive parts and supplies, tires and tubes	2,517	2,666	3,128	3,217	3,403	3,227	2,935	3,440	2,998	3,344	3,217	2,651	2,551	34,093	26,826
5013	Automotive parts and supplies	2,166	2,286	2,602	2,706	2,828	2,660	2,432	2,872	2,496	2,761	2,693	2,220	2,167	28,501	22,658
502	Furniture and home furnishings	867	921	1,111	1,046	1,077	1,104	1,013	1,133	1,162	1,174	1,211	1,045	1,025	11,819	10,001
5021	Furniture--household and office	304	311	356	352	368	370	328	366	379	379	395	340	350	3,906	3,059
5023	Home furnishings	564	610	755	695	710	735	685	767	783	795	816	705	676	7,913	6,941
503	Lumber and other construction materials	1,867	1,891	2,368	2,517	2,889	3,067	2,771	3,208	3,056	3,173	2,880	2,334	2,086	29,687	24,096
5031	Lumber, plywood, and millwork	1,290	1,288	1,582	1,676	1,947	2,037	1,845	2,105	1,949	2,083	1,935	1,540	1,389	19,736	16,167
5039	Construction materials, n.e.c.	576	603	786	841	942	1,031	927	1,103	1,107	1,089	945	794	697	9,951	7,927
505	Metals and minerals, except petroleum	2,505	2,557	3,040	2,942	3,153	3,169	2,817	3,306	3,037	3,186	3,089	2,592	2,423	32,802	26,577
5051 pt.	Ferrous metals service centers and offices	1,922	1,970	2,344	2,190	2,360	2,380	2,158	2,515	2,339	2,446	2,360	1,869	1,774	24,985	19,662
5051 pt.	Ferrous metals service centers	1,386	1,443	1,713	1,629	1,755	1,778	1,580	1,833	1,721	1,801	1,670	1,359	1,282	18,301	14,015
506	Electrical goods	2,541	2,627	3,096	2,980	3,239	3,385	3,193	3,540	3,338	3,590	3,402	2,973	2,964	34,931	28,781
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,262	1,354	1,561	1,556	1,698	1,725	1,663	1,812	1,663	1,832	1,641	1,436	1,379	17,767	14,235
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,279	1,273	1,535	1,424	1,541	1,660	1,530	1,728	1,675	1,758	1,760	1,537	1,585	17,164	14,545
5064	Electrical appliances, TV and radio sets	763	762	939	841	931	994	912	1,064	1,057	1,040	1,069	989	1,003	10,371	9,527
507	Hardware, plumbing, heating equipment, and supplies	1,790	1,708	2,021	2,102	2,306	2,360	2,247	2,412	2,159	2,455	2,283	1,974	1,820	23,844	20,584
5072	Hardware	693	679	793	797	856	836	760	864	771	859	829	768	676	8,737	7,974
5074	Plumbing and heating equipment and supplies (hydronics)	726	675	801	834	904	902	916	988	928	1,047	957	791	753	9,678	8,436
508	Machinery, equipment, and supplies	6,190	6,632	8,301	8,296	8,616	8,790	7,827	8,757	8,655	8,909	8,401	6,941	7,019	89,373	74,98
5082	Construction and mining machinery and equipment	825	875	1,130	1,254	1,276	1,229	1,122	1,196	1,115	1,155	1,097	1,025	1,006	12,275	10,6
5084,5	Industrial machinery, equipment, and supplies	2,545	2,790	3,294	3,077	3,388	3,505	3,049	3,532	3,450	3,573	3,437	2,858	2,861	35,641	28,846
5086	Professional equipment, supplies	710	732	863	816	873	952	888	990	949	941	958	773	805	9,670	8,442
5093	Scrap and waste materials	757	815	979	958	1,058	1,057	940	1,073	978	1,007	1,033	812	779	10,654	8,852
51	Nondurable goods, total	29,274	28,886	33,915	31,829	35,844	34,843	31,950	35,423	33,529	36,844	36,957	30,694	31,427	369,298	325,081
	Total (excluding farm-product raw materials)	23,474	23,232	26,863	25,311	27,656	27,667	25,710	28,559	26,937	28,791	29,057	24,422	25,342	293,362	261,115
511	Paper and paper products	1,316	1,284	1,506	1,395	1,508	1,498	1,384	1,581	1,456	1,598	1,570	1,335	1,358	16,098	14,124
5111,3	Printing, writing, industrial, and personal service paper	950	926	1,100	1,032	1,126	1,125	1,046	1,177	1,088	1,191	1,188	988	995	11,948	10,804
512	Drugs, drug proprietaries, and druggists' sundries	887	824	994	912	943	950	902	1,026	973	1,094	1,025	926	922	10,530	9,946
5122	Drugs, drug proprietaries, and druggists' sundries	887	824	994	912	943	950	902	1,026	973	1,094	1,025	926	922	10,530	9,946
5122 pt.	General-line drugs	423	393	470	423	447	448	409	482	464	506	467	452	444	4,932	4,619
513	Apparel, piece goods, and notions[1]	1,620	1,615	2,063	1,818	2,099	2,066	2,036	2,658	2,313	2,443	2,330	1,837	1,617	23,061	16,150
514	Groceries and related products	9,261	9,093	10,398	9,916	10,873	10,685	10,237	11,002	10,489	11,150	11,172	9,591	9,798	114,277	100,902
5141	Groceries, general-line	3,426	3,333	3,740	3,547	3,791	3,724	3,649	3,965	3,767	3,999	4,132	3,579	3,587	41,073	37,023
5144	Poultry and poultry products	402	397	486	468	507	503	482	539	505	525	553	458	454	5,365	4,717
5145	Confectionery	154	163	191	173	191	189	171	187	190	218	207	194	188	2,035	1,733
5147	Meats and meat products	1,460	1,462	1,651	1,688	1,871	1,826	1,800	1,974	1,840	1,928	1,898	1,525	1,510	19,399	15,964
5148	Fresh fruits and vegetables	839	824	986	1,035	1,184	1,198	1,044	1,005	909	980	979	886	889	10,983	9,005
515	Farm-product raw materials	5,800	5,654	7,052	6,518	8,188	7,176	6,240	6,864	6,591	8,053	7,900	6,272	6,085	75,976	63,966
5153	Grain	4,549	4,503	5,718	5,358	6,890	6,078	5,317	5,760	5,448	6,623	6,439	4,968	4,730	62,659	52,544
517	Petroleum and petroleum products	4,209	4,085	4,249	3,830	4,178	4,111	4,000	4,441	4,136	4,431	4,558	3,983	4,355	46,227	43,088
5171	Petroleum bulk stations and terminals	2,387	2,293	2,384	2,188	2,425	2,358	2,190	2,378	2,280	2,449	2,512	2,266	2,523	25,844	24,762
518	Beer, wine, and distilled alcoholic beverages	1,654	1,770	2,299	1,993	2,295	2,506	2,191	2,463	2,254	2,347	2,570	2,143	2,444	24,342	20,926
5181	Beer and ale	795	839	1,094	998	1,219	1,372	1,217	1,328	1,119	1,105	1,098	938	1,020	12,184	10,215
5182	Wines and distilled alcoholic beverages	859	931	1,204	996	1,076	1,134	974	1,134	1,135	1,242	1,473	1,204	1,424	12,158	10,709
519	Miscellaneous nondurable goods	3,723	3,782	4,434	4,568	4,730	4,819	4,040	4,297	4,311	4,510	4,675	3,749	4,028	47,802	44,735
5194	Tobacco and tobacco products	721	692	782	765	812	849	838	871	814	848	855	705	819	8,849	8,049

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

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

[1]The apparel piece goods and notions group is subject to a sampling variability of 12 percent for November 1978.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 C code	Kind of business	1978											1977	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.P	Nov.	Dec.
	Merchant wholesalers, total	69,596	71,156	73,931	74,635	74,634	74,882	74,874	74.943	76,074	78,715	80,145	68,082	68,555
	Total (excluding farm-product raw materials)	64,090	65,682	67,973	69,060	69,883	70,513	71,073	71.138	71,889	73,327	74,178	62,939	63,245
50	Durable goods, total	44,287	45,757	47,275	47,957	48,918	49,627	49,900	49,841	49,944	50,462	50,907	43,252	43,676
501	Motor vehicles and automotive parts and supplies	7,709	8,189	7,995	7,973	8,246	8,218	8,367	8.378	8,099	8,701	9,248	7,376	7,424
5013,4	Automotive parts and supplies, tires and tubes	4,743	4,962	4,856	4,901	5,149	5,035	5,034	5,206	5,172	5,298	5,508	4,669	4,607
5013	Automotive parts and supplies	3,953	4,163	4,041	4,171	4,382	4,241	4,288	4,415	4,345	4,489	4,684	3,912	3,790
502	Furniture and home furnishings	1,560	1,606	1,633	1,669	1,730	1,781	1,764	1,760	1,810	1,799	1,790	1,444	1,512
5023	Home furnishings	1,137	1,184	1,182	1,233	1,279	1,305	1,305	1,306	1,326	1,334	1,325	1,054	1,099
503	Lumber and other construction materials	2,676	2,761	2,919	2,966	3,030	3,071	3,095	3,007	3,076	3,076	3,106	2,513	2,602
5031	Lumber, plywood, and millwork	1,715	1,775	1,870	1,882	1,963	1,949	1,967	1,929	1,932	1,946	1,971	1,643	1,671
505	Metals and minerals, except petroleum	4,449	4,660	4,953	4,976	5,356	5,307	5,305	5,437	5,285	5,095	5,007	4,444	4,459
5051 pt.	Ferrous metals service centers and offices	3,471	3,591	3,820	3,823	4,116	4,108	4,104	4,232	4,148	3,976	3,971	3,514	3,568
5051 pt.	Ferrous metals service centers	2,633	2,760	3,039	2,971	3,220	3,268	3,191	3.308	3,299	3,098	3,084	2,738	2,768
506	Electrical goods	4,563	4,594	4,867	4,951	5,129	5,312	5,266	5,264	5,416	5,500	5,551	4,611	4,653
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,114	2,214	2,226	2,286	2,417	2,358	2,283	2,367	2,356	2,399	2,487	2,100	2,121
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,449	2,380	2,640	2,665	2,712	2,954	2,983	2,899	3,059	3,101	3,064	2,511	2,533
507	Hardware, plumbing, heating equipment, and supplies	3,712	3,876	4,058	4,231	4,222	4,201	4,215	4,117	4,032	4,152	4,074	3,608	3,620
5072	Hardware	1,366	1,384	1,421	1,428	1,445	1,423	1,410	1,369	1,417	1,466	1,425	1,320	1,358
5074	Plumbing and heating equipment and supplies (hydronics)[1]	1,590	1,678	1,784	1,861	1,815	1,818	1,839	1,800	1,805	1,738	1,728	1,562	1,555
508	Machinery, equipment, and supplies	15,508	16,005	16,511	16,762	16,796	17,061	17,057	17,183	17,405	17,352	17,381	15,026	15,307
5082	Construction and mining machinery and equipment	3,281	3,396	3,505	3,516	3,589	3,636	3,637	3,793	3,899	3,937	4,011	3,202	3,261
5084,5	Industrial machinery, equipment, and supplies	4,816	4,912	4,996	5,055	5,160	5,328	5,301	5,317	5,519	5,508	5,594	4,555	4,742
51	Nondurable goods, total	25,309	25,399	26,656	26,678	25,716	25,255	24,974	25,102	26,130	28,253	29,238	24,830	24,879
	Total (excluding farm-product raw materials)	19,803	19,925	20,699	21,103	20,966	20,887	21,173	21,297	21,946	22,865	23,271	19,687	19,569
511	Paper and paper products	1,255	1,259	1,310	1,349	1,343	1,376	1,341	1,361	1,414	1,419	1,435	1,269	1,261
5111,3	Printing, writing, industrial, and personal service paper	868	877	910	911	929	955	938	921	976	969	965	865	873
512	Drugs, drug proprietaries, and druggists' sundries	1,266	1,292	1,330	1,345	1,350	1,401	1,368	1,410	1,489	1,525	1,514	1,337	1,303
514	Groceries and related products	5,401	5,376	5,710	5,740	5,752	5,871	5,833	5,803	6,186	6,469	6,558	5,465	5,540
5141	Groceries, general-line	2,350	2,366	2,562	2,500	2,495	2,512	2,480	2,505	2,641	2,811	2,881	2,441	2,473
517	Petroleum and petroleum products	2,045	1,936	1,953	1,872	1,938	1,837	1,974	2,093	2,098	2,151	2,137	2,053	2,042
518	Beer, wine, and distilled alcoholic beverages	1,917	1,889	2,017	2,133	2,135	2,148	2,178	2,158	2,221	2,453	2,608	2,075	1,809
5181	Beer and ale[2]	611	641	707	758	730	717	709	679	720	769	795	632	581
5182	Wines and distilled alcoholic beverages	1,305	1,248	1,311	1,375	1,405	1,431	1,469	1,480	1,501	1,684	1,813	1,443	1,228

See footnotes below table 3.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978											1977	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.P	Nov.	Dec.
	Merchant wholesalers, total	133	135	118	123	113	114	123	111	119	114	118	122	122
	Total (excluding farm-product raw materials)	138	139	122	128	120	120	131	117	125	120	124	126	126
50	Durable goods, total	194	192	163	167	161	160	174	154	164	157	165	171	176
501	Motor vehicles and automotive parts and supplies	161	162	136	134	136	139	151	137	151	145	154	156	158
5013,4	Automotive parts and supplies, tires and tubes	188	186	155	152	151	156	172	151	173	158	171	176	181
5013	Automotive parts and supplies	183	182	155	154	155	159	176	154	174	163	174	176	175
502	Furniture and home furnishings	180	174	147	159	161	161	174	155	156	153	148	138	147
5023	Home furnishings	202	194	157	178	180	178	190	170	169	168	162	150	163
503	Lumber and other construction materials	143	146	123	118	105	100	112	94	101	97	108	108	125
5031	Lumber, plywood, and millwork	133	138	118	112	101	96	107	92	99	93	102	107	120
505	Metals and minerals, except petroleum	178	182	163	169	170	167	188	164	174	160	162	171	184
5051 pt.	Ferrous metals service centers and offices	181	182	163	175	174	173	190	168	177	163	168	188	201
5051 pt.	Ferrous metals service centers	190	191	177	182	184	184	202	181	192	172	185	201	216
506	Electrical goods	180	175	157	166	158	157	165	149	162	153	163	155	157
5063	Electrical apparatus and equipment, wiring supplies and construction materials	168	163	143	147	142	137	137	131	142	131	152	146	154
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	191	187	172	187	176	178	195	168	183	176	174	163	160
507	Hardware, plumbing, heating equipment, and supplies	207	227	201	201	183	178	188	171	187	169	178	183	199
5072	Hardware	197	204	179	179	169	170	185	158	179	171	172	172	201
5074	Plumbing and heating equipment and supplies (hydronics)	219	249	223	223	201	202	201	182	188	166	181	197	206
508	Machinery, equipment, and supplies	251	241	199	202	195	194	218	196	201	195	207	216	218
5082	Construction and mining machinery and equipment	398	388	310	280	281	296	324	317	350	341	366	312	324
5084,5	Industrial machinery, equipment, and supplies	189	176	152	164	152	152	174	151	160	154	163	159	166
51	Nondurable goods, total	86	88	79	84	72	72	78	71	78	77	79	81	79
	Total (excluding farm-product raw materials)	84	86	77	83	76	75	82	75	81	79	80	81	77
511	Paper and paper products	95	98	87	97	89	92	97	86	97	89	91	95	93
5111,3	Printing, writing, industrial, and personal service paper	91	95	83	88	82	85	90	78	90	81	81	88	88
512	Drugs, drug proprietaries, and druggists' sundries	143	157	134	147	143	147	152	137	153	139	148	144	141
514	Groceries and related products	58	59	55	58	53	55	57	53	59	58	59	57	57
5141	Groceries, general-line	69	71	68	70	66	67	68	63	70	70	70	68	69
517	Petroleum and petroleum products	49	47	46	49	46	45	49	47	51	49	47	52	47
	Beer, wine, and distilled alcoholic beverages	116	107	88	107	93	86	99	88	99	105	101	97	74
	Beer and ale	77	76	65	76	60	52	58	51	64	70	72	67	57
	Wines and distilled alcoholic beverages	152	134	109	138	131	126	151	130	132	136	123	120	86

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

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

[1]The plumbing and heating equipment and supplies (hydronics) group is subject to a sampling variability of 9 percent for November 1978.
[2]The beer and ale group is subject to a sampling variability of 10 percent for November 1978.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978											1977	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.P	Nov.	Dec.
		Sales ADJUSTED for seasonal variations and trading-day differences												
	Merchant wholesalers, total	55,985	57,635	58,877	62,152	64,011	63,235	63,404	64,573	64,045	67,292	67,483	55,558	57,266
	Total (excluding farm-product raw materials)	50,554	51,733	52,625	55,247	55,790	55,253	56,643	57,317	56,927	59,279	60,379	49,887	51,663
50	Durable goods, total	25,568	26,976	27,466	28,974	28,692	28,738	29,831	30,072	29,763	30,936	31,282	25,601	26,488
501	Motor vehicles and automotive parts and supplies	5,125	5,685	5,486	5,566	5,664	5,490	5,591	5,706	5,553	6,107	6,501	4,969	5,220
502	Furniture and home furnishings	1,025	1,034	1,062	1,091	1,060	1,040	1,133	1,057	1,115	1,041	1,118	957	1,082
503	Lumber and other construction materials	2,288	2,329	2,328	2,641	2,610	2,726	2,706	2,744	2,919	2,938	2,880	2,320	2,443
505	Metals and minerals, except petroleum	2,535	2,810	2,792	3,005	2,922	3,059	3,106	3,050	2,946	3,186	3,171	2,605	2,669
506	Electrical goods	2,842	2,948	3,044	3,130	3,265	3,181	3,187	3,375	3,308	3,333	3,293	2,918	2,917
507	Hardware, plumbing, heating equipment, and supplies	2,000	1,945	2,005	2,156	2,186	2,189	2,254	2,205	2,088	2,290	2,258	1,958	2,024
508	Machinery, equipment, and supplies	7,026	7,468	7,700	8,329	8,030	8,086	8,179	8,396	8,322	8,591	8,670	7,268	7,396
51	Nondurable goods, total	30,417	30,659	31,411	33,178	35,319	34,497	33,573	34,501	34,282	36,356	36,201	29,957	30,778
	Total (excluding farm-product raw materials)	24,986	24,757	25,159	26,273	27,098	26,515	26,812	27,245	27,164	28,343	29,097	24,286	25,175
511	Paper and paper products	1,382	1,390	1,441	1,506	1,480	1,454	1,433	1,460	1,404	1,522	1,562	1,294	1,419
512	Drugs, drug proprietaries, and druggists' sundries	903	889	948	950	939	952	973	982	960	1,010	1,019	913	932
513	Apparel, piece goods, and notions	1,774	1,704	1,939	1,970	2,107	2,081	2,178	2,309	2,166	2,260	2,243	1,740	1,856
514	Groceries and related products	9,748	9,992	9,988	10,286	10,405	10,061	10,330	10,379	10,479	11,117	11,183	9,620	9,947
515	Farm-product raw materials[1]	5,431	5,902	6,252	6,905	8,221	7,982	6,761	7,256	7,118	8,013	7,104	5,671	5,603
517	Petroleum and petroleum products	4,362	4,001	3,945	3,981	4,502	4,115	4,065	4,367	4,331	4,327	4,618	3,928	4,124
518	Beer, wine, and distilled alcoholic beverages	2,102	2,188	2,283	2,185	2,151	2,200	2,252	2,278	2,326	2,303	2,441	2,026	2,035
519	Miscellaneous nondurable goods	3,822	3,722	3,754	4,500	4,535	4,683	4,633	4,453	4,491	4,649	4,850	3,901	3,992
		Inventories ADJUSTED for seasonal variations												
	Merchant wholesalers, total	68,991	70,361	72,882	74,867	75,474	75,820	75,664	76,253	77,020	78,346	79,024	67,047	67,998
	Total (excluding farm-product raw materials)	64,410	65,559	67,309	68,879	69,646	70,080	71,160	71,696	72,280	73,389	74,109	62,835	63,712
50	Durable goods, total	44,686	45,684	46,838	47,673	48,363	48,810	49,577	50,101	50,300	50,903	51,392	43,642	44,368
501	Motor vehicles and automotive parts and supplies	7,603	7,981	7,854	7,894	8,076	8,145	8,460	8,655	8,273	8,897	9,427	7,534	7,[illegible]
502	Furniture and home furnishings	1,569	1,619	1,636	1,677	1,733	1,758	1,753	1,743	1,783	1,790	1,806	1,438	1,5[illegible]
503	Lumber and other construction materials	2,728	2,795	2,834	2,891	2,886	3,023	3,049	3,001	3,110	3,201	3,205	2,607	2,680
505	Metals and minerals, except petroleum	4,431	4,726	4,928	4,927	5,372	5,350	5,181	5,336	5,360	5,269	5,032	4,484	4,397
506	Electrical goods	4,694	4,717	4,916	4,956	5,119	5,218	5,204	5,186	5,394	5,435	5,496	4,547	4,710
507	Hardware, plumbing, heating equipment, and supplies	3,796	3,955	3,994	4,100	4,107	4,131	4,194	4,060	4,085	4,211	4,149	3,667	3,709
508	Machinery, equipment, and supplies	15,633	15,831	16,235	16,762	16,630	16,677	17,040	17,516	17,528	17,422	17,468	15,086	15,651
51	Nondurable goods, total	24,305	24,677	26,044	27,194	27,111	27,010	26,087	26,152	26,720	27,443	27,632	23,405	23,630
	Total (excluding farm-product raw materials)	19,724	19,875	20,471	21,206	21,283	21,270	21,583	21,595	21,980	22,486	22,717	19,193	19,344
511	Paper and paper products	1,272	1,272	1,327	1,341	1,351	1,349	1,346	1,353	1,421	1,398	1,435	1,272	1,250
512	Drugs, drug proprietaries, and druggists' sundries	1,315	1,324	1,331	1,328	1,382	1,398	1,379	1,413	1,460	1,452	1,487	1,319	1,317
514	Groceries and related products	5,423	5,339	5,587	5,734	5,834	5,960	5,946	5,934	6,248	6,355	6,423	5,311	5,480
517	Petroleum and petroleum products	1,949	1,932	1,995	2,002	2,027	1,894	2,069	2,114	2,047	2,052	2,043	1,944	1,958
518	Beer, wine, and distilled alcoholic beverages	1,984	1,958	2,075	2,155	2,108	2,083	2,202	2,211	2,203	2,282	2,449	1,969	1,898
		Stock-sales ratios based on ADJUSTED data												
	Merchant wholesalers, total	123	122	124	120	118	120	119	118	120	116	117	121	119
	Total (excluding farm-product raw materials)	127	127	128	125	125	127	126	125	127	124	123	126	123
50	Durable goods, total	175	169	171	165	169	170	166	167	169	165	164	170	168
501	Motor vehicles and automotive parts and supplies	148	140	143	142	143	148	151	152	149	146	145	152	142
502	Furniture and home furnishings	153	157	154	154	163	169	155	165	160	172	162	150	142
503	Lumber and other construction materials	119	120	122	109	111	111	113	109	107	109	111	112	110
505	Metals and minerals, except petroleum	175	168	177	164	184	175	167	175	182	165	159	172	165
506	Electrical goods	165	160	161	158	157	164	163	154	163	163	167	156	161
507	Hardware, plumbing, heating equipment, and supplies	190	203	199	190	188	189	186	184	196	184	184	187	183
508	Machinery, equipment, and supplies	223	212	211	201	207	206	208	209	211	203	201	208	212
51	Nondurable goods, total	80	80	83	82	77	78	78	76	78	75	76	78	77
	Total (excluding farm-product raw materials)	79	80	81	81	79	80	80	79	81	79	78	79	77
511	Paper and paper products	92	92	92	89	91	93	94	93	101	92	92	98	88
512	Drugs, drug proprietaries, and druggists' sundries	146	149	140	140	147	147	142	144	152	144	146	144	141
514	Groceries and related products	56	53	56	56	56	59	58	57	60	57	57	55	55
517	Petroleum and petroleum products	45	48	51	50	45	46	51	48	47	47	44	49	47
518	Beer, wine, and distilled alcoholic beverages	94	89	91	99	98	95	98	97	95	99	100	97	

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

NA Not available. PPreliminary 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, Sept. 1978-Nov. 1978 from--			
	June 1978-Aug. 1978 (3 months ago)	Mar. 1978-May 1978 (6 months ago)	Dec. 1977-Feb. 1978 (9 months ago)	Sept. 1977-Nov. 1977 (12 months ago)
Merchant wholesalers, total	+4	+7	+16	+22
Durable goods, total	+4	+8	+16	+23
Nondurable goods, total	+4	+7	+16	+22

Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers: 1972-1978

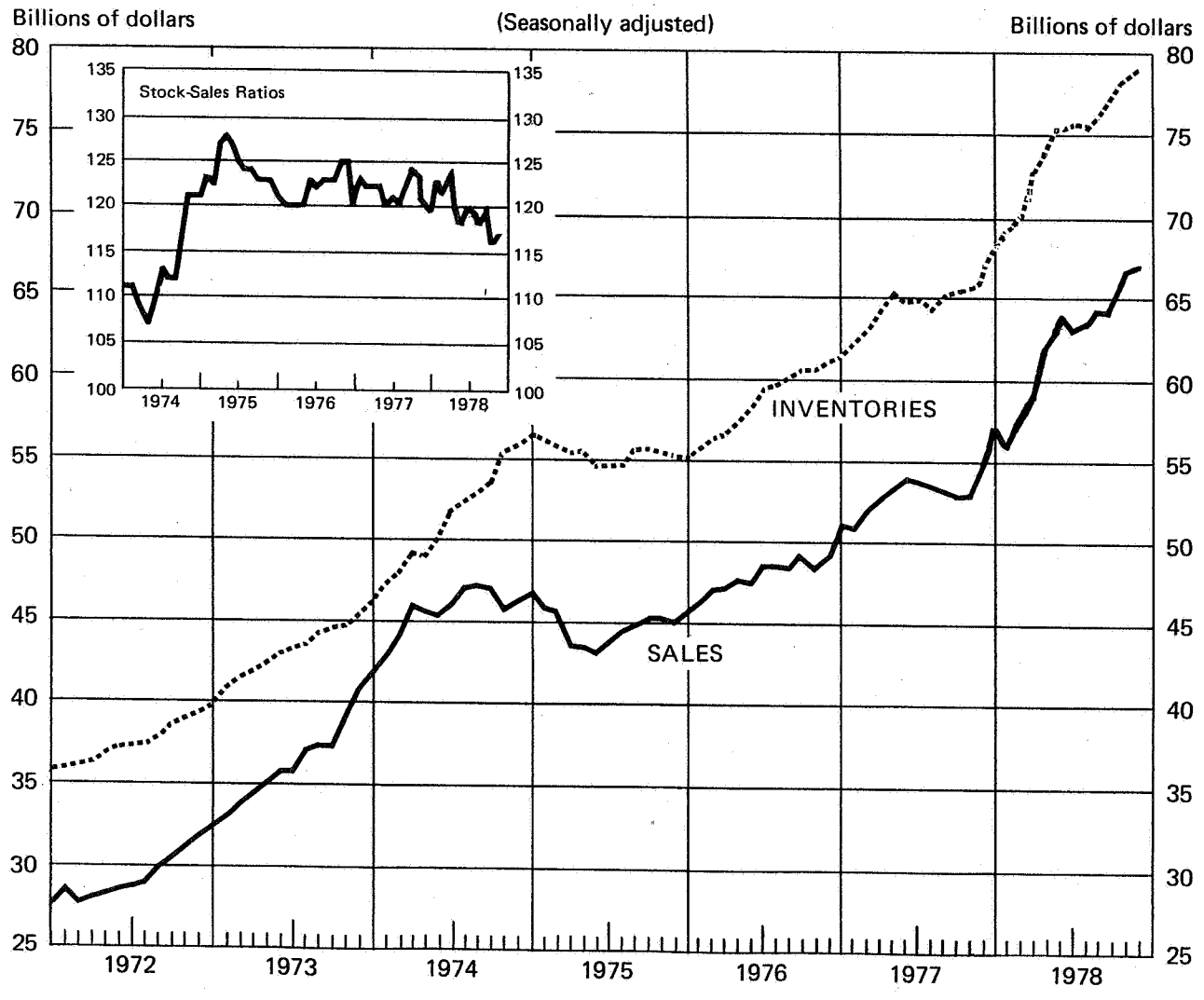


Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: October 1978

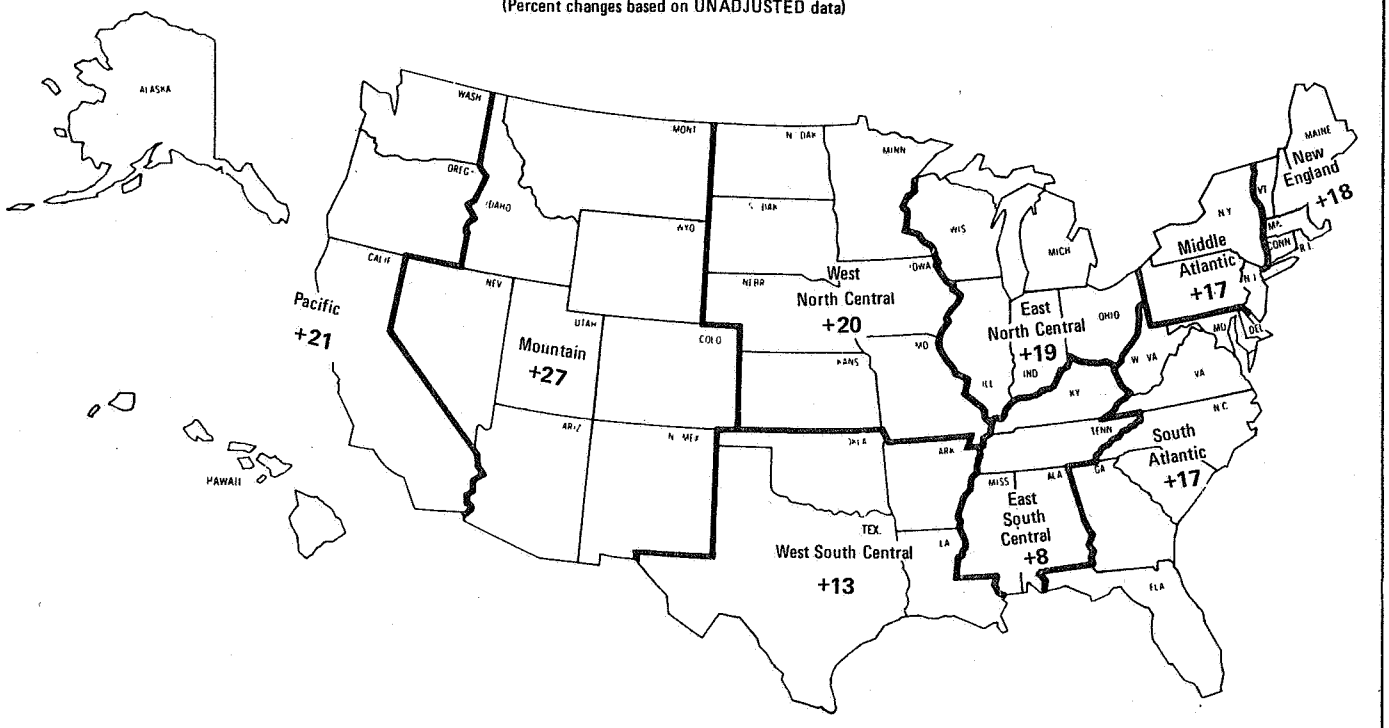
1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-mor (at cost)	
		Nov. 1978 from Oct. 1978	Nov. 1978 from Nov. 1977	11 months 1978 from 11 months 1977	Nov. 1978 from Oct. 1978	Nov. 1978 from Nov. 1977	Nov. 1978 from Oct. 1978	Nov. 1978 from Nov. 1977	Nov. 1978 from Oct. 1978	Nov. 1978 from Nov. 1977
	Merchant wholesalers, total	-2	+21	+18	+2	+18	0	+21	+1	+18
	Total (excluding farm-product raw materials)	-2	+20	+18	+1	+18	+2	+21	+1	+18
50	Durable goods, total	-4	+22	+23	+1	+18	+1	+22	+1	+18
501	Motor vehicles and automotive parts and supplies	0	+27	+27	+6	+25	+6	+31	+6	+25
5012	Automobiles and other motor vehicles	+5	+35	+27	+10	+38	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	-4	+21	+27	+4	+18	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	-2	+21	+26	+4	+20	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	+3	+16	+18	-1	+24	+7	+17	+1	+26
5021	Furniture--household and office	+4	+16	+28	-2	+19	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	+15	+22	+32	-5	+18	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	-2	+13	+26	+1	+20	(*)	(*)	(*)	(*)
5023	Home furnishings	+3	+27	+14	-1	+26	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	-9	+23	+23	+1	+24	-2	+24	0	+23
5031	Lumber, plywood, and millwork	-7	+26	+22	+1	+20	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c	-13	+19	+26	+1	+31	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	+7	+23	(S)	-3	+14	+4	+25	+5	+15
505	Metals and minerals, except petroleum	-3	+19	+23	-2	+13	0	+22	-4	+12
5051 pt.	Ferrous metals service centers and offices	-4	+26	+27	0	+13	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	-7	+23	+31	0	+13	(*)	(*)	(*)	(*)
5051 pt.	Nonferrous metals service centers and offices	-2	+4	+20	+7	+14	(*)	(*)	(*)	(*)
506	Electrical goods	-5	+14	+21	+1	+20	-1	+13	+1	+21
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-10	+14	+25	+4	+18	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	0	+15	+18	-1	+22	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	+3	+8	+9	-2	+19	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	-7	+16	+16	-2	+13	-1	+15	-1	+13
5072	Hardware	-4	+8	+10	-3	+8	(*)	(*)	(*)	(*)
5074	Plumbing and heating equipment and supplies (hydronics)	-9	+21	+15	+1	+11	(*)	(*)	(*)	(*)
5075	Warm air heating and air conditioning equipment and supplies	-13	+15	+29	-3	+27	(*)	(*)	(*)	
508	Machinery, equipment, and supplies	-6	+21	+19	0	+16	+1	+19	0	+16
5081	Commercial machines and equipment	+2	+17	+26	+2	+2	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	-5	+7	+15	+2	+25	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	-17	+44	+22	-5	+2	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	-4	+20	+24	+2	+23	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	+2	+24	+14	+3	+22	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	+3	+27	+20	-2	+5	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	+4	+32	+22	-2	+2	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	0	+21	+18	-1	+14	(*)	(*)	(*)	(*)
51	Nondurable goods, total	0	+20	+14	+4	+18	0	+21	+1	+18
	Total (excluding farm-product raw materials)	r+1	+19	+12	+2	+18	+3	+20	+1	+18
511	Paper and paper products	-2	+18	+14	+1	+13	+3	+21	+3	+13
5111,3	Printing, writing, industrial, and personal service paper	0	+20	+11	0	+12	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	-6	+11	+6	-1	+13	+1	+12	+2	+13
5122	Drugs, drug proprietaries, and druggists' sundries	-6	+11	+6	-1	+13	(*)	(*)	(*)	(*)
5122 pt.	General-line drugs	-8	+3	+7	0	+12	(*)	(*)	(*)	(*)
514	Groceries and related products	0	+16	+13	+1	+20	+1	+16	+1	+21
5141	Groceries, general-line	+3	+15	+11	+2	+18	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	+6	+13	+7	+3	+17	(*)	(*)	(*)	(*)
5141 pt.	Retailers cooperatives	+5	+17	+13	+1	+17	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	-1	+17	+13	+3	+20	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	-3	+13	+9	0	+17	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	+5	+21	+14	-1	+14	(*)	(*)	(*)	(*)
5145	Confectionery	-5	+7	+17	-1	+14	(*)	(*)	(*)	(*)
5147	Meats and meat products	-2	+24	+22	+5	+44	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	0	+10	+22	-6	+24	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	-2	+26	+19	+11	+16	-11	+24	-1	+22
5152	Cotton	+37	+13	+11	+36	+28	(*)	(*)	(*)	(*)
5153	Grain	-3	+28	+19	+7	+19	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	+3	+14	+7	-1	+4	+7	+18	0	+5
5171	Petroleum bulk stations and terminals	+3	+11	+4	-1	+2	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	+10	+20	+16	+6	+26	+6	+20	+7	+24
5181	Beer and ale	-1	+17	+19	+3	+26	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	+19	+22	+14	+8	+26	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	+4	+25	+7	+1	+14	+4	+23	-1	+16
5191	Farm supplies	-5	+20	-1	+4	+9	(*)	(*)	(*)	(*)
5194	Tobacco and tobacco products	+1	+21	+10	+2	+12	(*)	(*)	(*)	(*)
5198	Paints, varnishes, and supplies	-8	+21	+17	-3	+25	(*)	(*)	(*)	(*)
5199 pt.	Books, periodicals, newspapers	+3	+25	+37	-1	+9	(*)	(*)	(*)	(*)

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

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

Sales of Merchant Wholesalers by Geographic Division
11 Months 1978 Compared With 11 Months 1977

(Percent changes based on UNADJUSTED data)



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Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1978 and 1977

(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]	1978											1977		Total 11 months		Sampling error of the estimate	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.P	Nov.	Dec.	1978	1977	Range[2]	Median
	Merchant wholesalers, total	52,143	52,766	62,900	60,613	66,249	65,834	60,651	67,702	63,933	69,086	67,834	56,034	56,224	689,714	585,888	0.8-0.9	0.9
	New England	2,693	2,657	3,191	2,913	3,231	3,451	3,206	3,654	3,472	3,638	3,588	3,036	3,008	35,693	30,263	5-6	6
	Middle Atlantic	11,846	11,840	14,206	13,114	14,345	14,752	13,281	15,382	14,387	15,123	15,372	12,494	12,924	153,649	131,163	2-2	2
	East North Central	8,929	9,269	10,680	10,708	11,787	11,510	10,461	11,636	10,821	12,195	11,659	9,841	9,596	119,655	100,631	2-3	3
	West North Central	5,566	5,390	6,419	6,522	7,583	6,999	6,513	7,373	6,836	7,790	7,546	5,977	5,617	74,536	61,941	2-3	2
	South Atlantic	5,666	5,686	6,792	6,533	6,858	7,044	6,523	7,139	6,877	7,449	7,236	6,126	6,188	73,804	62,930	2-3	2
	East South Central	2,421	2,534	3,201	3,318	3,453	3,132	2,962	3,127	2,938	3,213	3,095	2,765	2,822	33,396	30,916	4-5	4
	West South Central	5,582	5,843	6,878	6,433	6,857	6,744	6,382	6,890	6,717	7,036	6,804	6,008	6,283	72,167	63,894	3-4	4
	Mountain	1,934	1,900	2,536	2,412	2,537	2,777	2,456	2,620	2,693	2,583	2,547	1,964	2,099	26,995	21,304	5-5	5
	Pacific	7,506	7,649	8,994	8,659	9,600	9,426	8,868	9,881	9,191	10,058	9,989	7,821	7,688	99.823	82,845	2-3	3
50	Durable goods, total	22,869	23,880	28,985	28,784	30,405	30,991	28,701	32,279	30,404	32,242	30,877	25,340	24,797	320,429	260,807	0.8-1.0	0.9
	Middle Atlantic	4,973	5,138	6,295	5,952	6,181	6,464	5,808	6,765	6,303	6,618	6,484	5,477	5,379	66,982	54,886	4-5	4
	East North Central	3,935	4,363	5,081	5,128	5,495	5,407	4,958	5,793	5,342	5,801	5,570	4,549	4,282	56.871	46,941	3-4	4
	West North Central	1,776	1,805	2,228	2,378	2,548	2,446	2,383	2,695	2,504	2,740	2,627	2,075	1,900	26,131	21,206	5-6	5
	South Atlantic	2,809	2,768	3,414	3,455	3,538	3,817	3,480	3,738	3,689	3,869	3,701	3,051	2,971	38,278	31,818	4-5	4
	West South Central	2,413	2,626	3,180	3,097	3,303	3,366	3,135	3,403	3,224	3,438	3,101	2,611	2,729	34,284	28,044	4-4	4
	Mountain	923	893	1,192	1,208	1,247	1,412	1,303	1,372	1,340	1,283	1,245	900	989	13,419	9,925	6-7	7
	Pacific	4,115	4,283	5,007	4,901	5,316	5,256	5,026	5,641	5,214	5,597	5,478	4,335	4,262	55,832	44,545	2-3	3
51	Nondurable goods, total	29,274	28,886	33,915	31,829	35,844	34,843	31,950	35,423	33,529	36,844	36,957	30,694	31,427	369.298	325,081	1.0-1.2	1.0
	New England	1,735	1,735	2,017	1,747	2,014	2,151	1,988	2,293	2,117	2,245	2,254	1,918	1,918	22,297	19,808	5-7	6
	Middle Atlantic	6,873	6,701	7,912	7,162	8,164	8,288	7,473	8,617	8,084	8,505	8,888	7,017	7,545	86,667	76,278	3-3	3
	East North Central	4,994	4,906	5,599	5,580	6,292	6,103	5,504	5,843	5,479	6,394	6,090	5,292	5,314	62,740	53,690	3-4	3
	West North Central	3,790	3,584	4,191	4,145	5,035	4,554	4,129	4,678	4,331	5,050	4,916	3,902	3,717	48,406	40,735	3-4	3
	South Atlantic	2,857	2,918	3,378	3,078	3,320	3,227	3,044	3,400	3,188	3,580	3,535	3,075	3,217	35,526	31,113	3-5	3
	East South Central	1,453	1,451	1,788	1,819	1,892	1,609	1,572	1,616	1,505	1,710	1,757	1,542	1,626	18,172	17,928	3-4	4
	West South Central	3,169	3,217	3,699	3,336	3,554	3,378	3,248	3,487	3,493	3,598	3,703	3,397	3,554	37,882	35,849	5-5	5
	Pacific	3,392	3,367	3,987	3,757	4,284	4,170	3,842	4,241	3,978	4,461	4,512	3,486	3,426	43,990	38,300	4-5	4

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

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

[1]See map on page 7.

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

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: November 1978

(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			
		November 1978 from October 1978	November 1978 from November 1977	11 months 1978 from 11 months 1977	November 1978 from October 1978	November 1978 from November 1977		
		A	B	C[1]	D	E	A	D
	Merchant wholesalers, total	-2	+21	+18	+2	+18	0.4	0.2
	New England	-1	+18	+18	-1	+18	2.0	1.9
	Middle Atlantic	+2	+23	+17	-1	+12	1.1	0.6
	East North Central	-4	+18	+19	-1	+16	1.2	0.8
	West North Central	-3	+26	+20	0	+14	1.3	1.1
	South Atlantic	-3	+18	+17	+2	+15	1.6	1.0
	East South Central	-4	+12	+8	+1	+24	1.7	1.4
	West South Central	-3	+13	+13	+3	+16	1.4	0.8
	Mountain	-1	+30	+27	-1	+17	2.4	1.3
	Pacific	-1	+28	+21	+2	+23	1.2	0.5
50	Durable goods, total	-4	+22	+23	+1	+18	0.6	0.3
	New England	-4	+19	+28	-3	+16	2.4	1.3
	Middle Atlantic	-2	+18	+22	-1	+13	1.7	1.0
	East North Central	-4	+22	+21	-2	+15	1.9	1.0
	West North Central	-4	+27	+23	0	+11	3.3	1.7
	South Atlantic	-4	+21	+20	+2	+18	1.9	1.2
	East South Central	-11	+9	+17	-4	+13	3.9	2.5
	West South Central	-10	+19	+22	+1	+18	2.1	1.2
	Mountain	-3	+38	+35	-1	+21	2.9	1.7
	Pacific	-2	+26	+25	+2	+25	1.9	0.7
51	Nondurable goods, total	0	+20	+14	+4	+18	0.6	0.4
	New England	0	+18	+13	0	+20	1.9	2.7
	Middle Atlantic	+4	+27	+14	0	+12	1.9	0.9
	East North Central	-5	+15	+17	+1	+17	1.4	1.1
	West North Central	-3	+26	+19	0	+18	1.6	1.4
	South Atlantic	-1	+15	+14	+3	+9	2.4	1.8
	East South Central	+3	+14	+1	+10	+42	1.7	2.4
	West South Central	+3	+9	+6	+6	+12	2.2	1.3
	Mountain	0	+22	+19	0	+8	3.2	1.2
	Pacific	+1	+29	+15	+2	+18	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	-4	+21	+27	+4	+18	2	1
	New England	+5	+36	+29	+6	+39	7	
	Middle Atlantic	-7	+5	+42	+2	-1	4	
	East North Central	-1	+29	+20	+3	+13	7	
	West North Central	-5	(S)	+19	+1	(S)	5	2
	South Atlantic	-4	+24	+24	+1	+18	4	2
	East South Central	-8	+30	+29	-2	+19	4	3
	West South Central	-2	+23	+19	+3	+16	5	2
	Mountain	-8	+50	+41	0	+31	7	3
	Pacific	-4	+28	+28	+7	+38	3	2
502	Furniture and home furnishings	+3	+16	+18	-1	+24	2	1
	Middle Atlantic	-1	+28	+18	+2	+38	4	2
	East North Central	-1	+38	+25	-5	+16	7	2
	West North Central	+20	+8	+24	-9	+13	5	4
	West South Central	0	+4	+25	-10	-8	5	7
	Pacific	+9	+11	+19	-1	+11	5	3
503	Lumber and other construction materials	-9	+23	+23	+1	+24	2	1
	New England	-13	-8	+16	0	+3	4	5
	Middle Atlantic	-9	+25	+27	0	+18	4	2
	East North Central	-16	+3	+23	0	+10	3	2
	West North Central	-6	+54	+28	-1	+44	7	7
	South Atlantic	-7	+37	+37	+4	+30	4	2
	East South Central	-12	+14	+28	+2	+38	4	3
	West South Central	-5	+43	+27	0	+54	6	5
	Pacific	-9	+24	+10	-3	+13	5	1
5051 pt.	Ferrous metals service centers	-7	+23	+31	0	+13	2	1
	New England	-6	+8	+33	-11	-3	6	2
	Middle Atlantic	-4	+28	+26	-2	-1	5	2
	East North Central	-4	+23	+30	+2	+12	3	2
	West North Central	-9	+38	+36	-3	+9	5	2
	South Atlantic	-16	+13	+27	-9	+35	3	2
	East South Central	-12	+17	+18	-10	+1	4	4
	West South Central	-12	+25	+28	0	+40	4	2
	Mountain	-5	(S)	+39	-7	+22	2	2
	Pacific	-10	+25	+54	+2	+8	2	3
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-10	+14	+25	+4	+18	2	1
	New England	-1	+38	+26	+5	+29	3	2
	Middle Atlantic	-8	+2	+19	+3	+2	5	2
	East North Central	-10	+29	+27	+1	+20	3	2
	West North Central	-15	(S)	+13	+1	+22	5	3
	South Atlantic	-10	+13	+19	+2	+15	3	2
	East South Central	-9	+7	+46	-3	+15	3	5
	West South Central	-25	+24	+37	+8	+36	4	2
	Mountain	-18	+17	+25	+5	+13	4	2
	Pacific	-7	+13	+26	+3	+19	4	2

See footnotes at end of table.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: November 1978—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: November 1978 from October 1978	Sales: November 1978 from November 1977	Sales: 11 months 1978 from 11 months 1977	Inventories: November 1978 from October 1978	Inventories: November 1978 from November 1977	Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		A	B	C[1]	D	E	A	D
5064.5	Electrical appliances, TV and radio sets, and electronic parts and equipment	0	+15	+18	-1	+22	3	1
	Middle Atlantic	+6	+31	+28	-1	+42	3	2
	East North Central	-2	+18	+6	-6	+9	4	1
	West North Central	+1	(S)	-1	-8	-22	4	4
	South Atlantic	-16	-1	+15	+2	+19	6	4
	West South Central	+8	+33	+19	-3	+20	4	4
	Mountain	+1	(S)	(S)	-4	+40	6	3
	Pacific	-1	+17	+30	+2	+31	3	2
5072	Hardware	-4	+8	+10	-3	+8	1	1
	New England	+2	+7	+12	-5	-3	6	3
	Middle Atlantic	-3	-2	+2	0	+2	6	2
	East North Central	-2	+19	+24	-1	(S)	4	2
	West North Central	+3	+7	+6	-6	-1	3	3
	South Atlantic	-1	+9	+1	-4	-3	4	2
	East South Central	-12	+1	-10	-16	+3	4	1
	Pacific	-8	+2	+8	-6	+3	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	-9	+21	+15	+1	+11	2	1
	Middle Atlantic	-16	+12	+3	-2	-4	6	3
	East North Central	-7	+8	+22	0	+19	3	2
	South Atlantic	0	+22	+10	-3	-3	3	2
	Mountain	-6	(S)	(S)	+1	+48	7	4
	Pacific	-6	+25	+15	-4	+10	5	4
5084,5	Industrial machinery, equipment, and supplies	-4	+20	+24	+2	+23	2	1
	Middle Atlantic	+3	+14	+14	-1	+15	7	2
	East North Central	-1	+22	+22	+3	+23	3	2
	West South Central	-5	+39	+42	+2	+30	4	3
	Pacific	-5	+16	+36	-1	+28	5	2
512	Drugs, drug proprietaries, and druggists' sundries	-6	+11	+6	-1	+13	1	1
	New England	-9	+13	+4	-7	-3	5	3
	Middle Atlantic	-7	+9	+4	+2	+7	3	2
	East North Central	-5	+24	+6	-7	+28	6	3
	West North Central	-19	(S)	+3	-4	-4	2	2
	South Atlantic	-5	+17	+17	0	+10	6	5
	East South Central	0	+25	+18	-3	+21	6	5
	West South Central	-2	+4	0	-3	+6	3	2
	Mountain	+3	+27	+12	+1	+20	3	2
	Pacific	-7	+6	-3	+1	+15	3	3
5141	Groceries, general-line	+3	+15	+11	+2	+18	1	1
	New England	+6	+18	+19	+1	+20	2	1
	Middle Atlantic	+6	+30	+10	+4	+21	1	2
	East North Central	-2	+6	+7	0	+9	3	1
	West North Central	+4	+13	+10	+1	+19	1	1
	South Atlantic	+2	+20	+17	+2	+19	2	1
	West South Central	+9	+17	+10	0	+12	2	1
	Mountain	+2	+13	+14	+5	+22	2	2
	Pacific	+6	+31	+18	+1	+20	1	1
5142,3,6,9	Specialty-line groceries	-3	+13	+9	0	+17	1	1
	Middle Atlantic	-5	+23	+15	-2	+20	4	2
	East North Central	+5	+28	+20	-2	+22	3	2
	West North Central	0	+1	+21	-8	+9	3	1
	South Atlantic	-5	-5	+13	-2	+19	5	6
	East South Central	-3	+28	(S)	+14	+22	2	2
5148	Fresh fruits and vegetables	0	+10	+22	-6	+24	2	4
	Middle Atlantic	+5	+17	+28	-5	+1	7	5
	East North Central	-2	-8	+13	+6	+17	6	6
	West North Central	-11	0	+13	-7	+33	6	3
	West South Central	-4	+14	+27	-6	+45	5	3
	Pacific	-5	+11	+18	-8	+29	4	4
5194	Tobacco and tobacco products	+1	+21	+10	+2	+12	1	1
	New England	+2	+27	+1	+9	(S)	5	3
	Middle Atlantic	-5	+13	+13	+1	+7	4	3
	East North Central	+1	+28	+14	-2	+17	4	3
	West North Central	-2	+29	-6	+10	+22	4	2
	South Atlantic	+4	+14	+14	-4	-4	6	6
	East South Central	-1	+13	-2	-2	0	7	4
	West South Central	-2	(S)	+23	+6	+8	7	6
	Mountain	+1	-5	-6	-10	(S)	6	2
	Pacific	+13	+49	+18	+2	+30	2	5

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

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

[1]See map on page 7.

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

APPENDIX A. Reliability of Data

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

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

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

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

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

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

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

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

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

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

1972 SIC code	Kind of business	Sales						Inventories					
		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate		Preliminary sampling error of the monthly dollar estimates		Final sampling error of the monthly dollar estimates		Sampling error of the ratio of preliminary estimate to final estimate	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total	0.8-1.1	0.9	0.8-0.9	0.9	0.4-0.5	0.5	0.8-1.0	0.9	0.7-1.0	0.9	0.2-0.5	0.4
	Total (excluding farm-product raw materials)	0.9-1.2	1.1	0.9-1.0	1.0	0.4-0.6	0.5	0.9-1.0	1.0	0.8-1.0	0.9	0.2-0.5	0.3
50	Durable goods, total	1.1-1.3	1.2	0.9-1.0	1.0	0.6-0.6	0.6	1.1-1.2	1.2	1.0-1.2	1.1	0.3-0.7	0.5
501	Motor vehicles and automotive parts and supplies	2.3-3.3	3.1	1.9-2.8	2.2	1.4-1.9	1.7	2.5-3.3	2.9	2.6-3.1	3.0	0.6-1.3	1.0
5012	Automobiles and other motor vehicles	(*)	(*)	(*)	(*)	1.7-3.9	3.1	(*)	(*)	(*)	(*)	1.7-3.0	2.8
5013,4	Automotive parts and supplies, tires and tubes	2.9-3.7	3.1	2.9-3.2	3.1	1.5-2.0	1.6	4.0-4.5	4.3	3.9-4.4	4.0	0.4-1.4	0.7
5013	Automotive parts and supplies	3.3-4.0	3.9	3.1-3.8	3.7	1.9-2.2	2.0	4.7-5.3	5.2	4.7-5.2	5.0	0.5-1.5	0.9
502	Furniture and home furnishings	4.2-5.8	4.6	4.2-4.4	4.3	1.7-2.9	2.0	3.2-4.9	3.7	3.4-4.2	3.7	0.8-2.3	2.0
5021	Furniture--household and office	6.6-7.6	6.9	5.6-7.1	6.9	4.0-5.7	4.3	(*)	(*)	(*)	(*)	1.4-3.4	2.2
5021 pt.	Household furniture	(*)	(*)	(*)	(*)	5.0-5.8	5.1	(*)	(*)	(*)	(*)	1.4-4.3	2.0
5021 pt.	Office furniture	(*)	(*)	(*)	(*)	5.7-8.0	5.9	(*)	(*)	(*)	(*)	0.7-3.7	2.1
5023	Home furnishings	5.1-7.5	6.1	5.1-6.1	5.5	1.6-3.6	2.2	4.8-6.9	5.6	4.9-6.0	5.0	1.0-3.1	2.6
503	Lumber and other construction materials	2.8-4.4	3.1	2.9-3.9	3.1	1.6-2.5	1.9	4.5-6.5	4.9	4.8-5.8	4.9	0.7-1.8	0.9
5031	Lumber, plywood, and millwork	4.1-4.6	4.3	3.3-4.6	4.0	2.1-2.5	2.4	5.9-8.2	6.5	6.0-6.9	6.5	1.0-2.6	1.8
5039	Construction materials, n.e.c.	4.2-7.2	4.9	4.5-5.9	4.9	2.0-3.4	2.2	(*)	(*)	(*)	(*)	1.1-2.0	1.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	(*)	(*)	(*)	(*)	2.2-2.4	2.3	(*)	(*)	(*)	(*)	1.0-2.5	1.4
505	Metals and minerals, except petroleum	4.4-6.0	4.7	4.0-5.1	4.0	1.5-3.0	2.8	3.2-3.8	3.7	3.7-4.1	4.0	0.8-1.4	1.3
5051 pt.	Ferrous metals service centers and offices	5.0-5.8	5.7	4.1-5.2	4.7	1.2-3.8	3.1	3.8-4.2	4.1	4.1-4.3	4.2	0.5-1.6	1.4
5051 pt.	Ferrous metals service centers	6.7-8.0	6.8	5.0-6.8	5.8	1.1-5.3	3.5	2.9-4.4	3.4	3.4-4.0	3.5	0.6-2.2	2.1
5051 pt.	Nonferrous metals service centers and offices	(*)	(*)	(*)	(*)	4.5-7.0	6.1	(*)	(*)	(*)	(*)	2.8-5.4	4.7
506	Electrical goods	1.9-2.6	2.3	1.6-2.1	1.7	1.3-1.6	1.4	2.5-2.9	2.6	2.2-2.8	2.4	0.5-1.0	0.8
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	2.2-3.1	2.6	2.3-2.7	2.4	1.4-1.7	1.6	2.9-3.5	3.2	3.0-3.2	3.1	0.6-1.2	0.7
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	3.4-4.0	3.8	3.0-3.2	3.1	1.6-2.8	2.5	2.9-4.2	3.2	2.7-3.8	3.0	0.7-1.6	0.9
5064	Electrical appliances, TV and radio sets	3.0-3.8	3.6	2.6-3.7	3.1	1.7-2.7	2.5	(*)	(*)	(*)	(*)	0.9-1.7	1.4
507	Hardware, plumbing, heating equipment, and supplies	2.7-3.0	2.9	2.4-2.6	2.5	1.1-1.9	1.5	2.4-2.8	2.6	2.4-2.9	2.7	0.3-1.4	0.6
5072	Hardware	3.6-4.2	3.8	2.6-3.1	3.0	1.3-2.4	1.9	2.0-4.1	2.7	2.2-3.5	2.8	0.4-2.1	0.8
5074	Plumbing and heating equipment and supplies (hydronics)	4.1-5.3	4.2	3.9-5.1	4.2	1.6-3.8	2.1	5.0-7.0	6.0	4.5-7.1	5.3	0.5-3.1	0.9
5075	Warm air heating and air conditioning equipment and supplies	(*)	(*)	(*)	(*)	2.0-4.4	2.7	(*)	(*)	(*)	(*)	1.1-4.3	1.4
508	Machinery, equipment, and supplies	2.3-2.7	2.6	1.8-2.5	2.1	1.2-1.5	1.4	2.0-2.6	2.3	1.7-2.1	1.9	0.4-1.8	1.1
081	Commercial machines and equipment	(*)	(*)	(*)	(*)	2.9-4.3	4.1	(*)	(*)	(*)	(*)	1.6-8.5	1.9
082	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
083	Farm and garden machinery and equipment	(*)	(*)	(*)	(*)	4.1-6.6	6.0	(*)	(*)	(*)	(*)	1.1-2.9	1.2
5084,5	Industrial machinery, equipment, and supplies	3.1-3.4	3.2	2.8-3.0	2.9	1.1-2.3	1.6	2.4-3.0	2.9	2.4-3.0	2.7	0.5-1.6	0.6
5086	Professional equipment and supplies	3.7-7.5	4.3	4.0-5.5	5.2	1.8-3.3	2.0	(*)	(*)	(*)	(*)	0.6-5.2	0.7
5086 pt.	Surgical, medical, hospital, and supplies	(*)	(*)	(*)	(*)	1.7-3.8	2.5	(*)	(*)	(*)	(*)	0.7-5.4	1.0
5087	Service establishment equipment and supplies	(*)	(*)	(*)	(*)	1.8-11.0	2.9	(*)	(*)	(*)	(*)	1.0-3.4	1.3
5093	Scrap and waste materials	4.6-13.3	9.0	4.6-8.8	5.0	2.2-4.9	2.7	(*)	(*)	(*)	(*)	0.7-3.8	0.9
5093 pt.	Iron and steel scrap	(*)	(*)	(*)	(*)	2.6-3.5	3.1	(*)	(*)	(*)	(*)	0.8-1.4	1.0
5093 pt.	Waste materials	(*)	(*)	(*)	(*)	2.6-8.8	4.8	(*)	(*)	(*)	(*)	1.2-9.1	1.6
51	Nondurable goods, total	1.0-1.3	1.1	1.0-1.1	1.1	0.4-0.7	0.6	1.5-1.7	1.6	1.4-1.6	1.5	0.3-0.7	0.4
	Total (excluding farm-product raw materials)	1.0-1.6	1.2	1.3-1.4	1.4	0.5-0.8	0.6	1.7-2.0	1.9	1.6-1.8	1.7	0.3-0.7	0.4
511	Paper and paper products	2.6-4.0	3.7	2.4-4.1	3.1	1.0-1.4	1.3	2.5-3.4	2.7	2.4-3.2	2.8	0.4-1.5	0.6
5111,3	Printing, writing, industrial, and personal service paper	2.4-3.1	2.7	2.3-2.8	2.4	1.3-1.5	1.4	2.9-3.4	3.1	2.7-3.2	2.8	0.4-1.3	0.9
5112	Stationery supplies	(*)	(*)	(*)	(*)	2.4-3.4	2.5	3.2-6.1	5.8	3.6-5.1	4.4	0.9-4.8	1.4
512	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	5.6-6.3	5.7	5.6-5.7	5.7	0.6-2.2	0.7
5122	Drugs, drug proprietaries, and druggists' sundries	3.8-4.9	4.4	4.2-4.6	4.4	1.3-2.8	1.4	(*)	(*)	(*)	(*)	0.6-2.2	0.7
5122 pt.	General-line drugs	7.2-9.8	7.9	7.5-8.5	7.6	0.7-3.0	1.0	(*)	(*)	(*)	(*)	05.-3.1	1.0
513	Apparel, piece goods, and notions	8.3-12.4	8.8	8.6-9.3	9.1	2.6-4.0	3.3	(*)	(*)	(*)	(*)	(*)	(*)
514	Groceries and related products	1.7-2.2	2.0	1.6-2.0	1.9	0.4-1.2	0.5	1.5-2.5	1.8	1.8-2.1	1.9	0.4-1.3	0.6
5141	Groceries, general-line	1.9-2.7	2.1	1.7-2.7	2.0	0.4-1.5	0.7	1.8-2.7	2.3	1.7-2.0	1.8	0.3-1.2	0.8
5141 pt.	Voluntary groups	(*)	(*)	(*)	(*)	0.5-1.7	0.6	(*)	(*)	(*)	(*)	0.4-1.7	0.5
5141 pt.	Retailer cooperatives	(*)	(*)	(*)	(*)	0.6-1.6	1.1	(*)	(*)	(*)	(*)	0.4-2.4	0.7
5141 pt.	Other general-lines	(*)	(*)	(*)	(*)	0.9-3.1	1.8	(*)	(*)	(*)	(*)	0.5-1.3	0.7
5142,3,6,9	Specialty-line groceries	(*)	(*)	(*)	(*)	0.7-3.4	1.3	(*)	(*)	(*)	(*)	0.9-2.4	1.0
5144	Poultry and poultry products	3.4-5.5	4.4	4.0-4.4	4.2	0.6-2.2	1.5	(*)	(*)	(*)	(*)	2.1-4.1	2.3
5145	Confectionery	4.7-6.3	4.7	3.6-5.4	4.3	2.0-3.2	2.2	(*)	(*)	(*)	(*)	0.8-2.4	2.3
5147	Meats and meat products	4.5-4.8	4.7	4.6-4.6	4.6	1.4-2.9	1.7	(*)	(*)	(*)	(*)	1.7-3.9	2.2
5148	Fresh fruits and vegetables	4.7-5.4	4.9	3.9-4.1	4.0	1.9-4.2	2.7	(*)	(*)	(*)	(*)	2.9-4.4	3.9
515	Farm-product raw materials	1.8-2.2	2.0	1.6-2.0	1.7	1.1-1.7	1.3	(*)	(*)	(*)	(*)	1.1-2.8	2.4
5152	Cotton	(*)	(*)	(*)	(*)	1.8-4.9	2.8	(*)	(*)	(*)	(*)	1.3-2.9	2.4
5153	Grain	2.4-2.7	2.6	2.2-2.4	2.3	1.0-1.7	1.3	(*)	(*)	(*)	(*)	1.6-3.3	1.9
517	Petroleum and petroleum products	4.0-5.0	4.7	4.2-4.6	4.5	1.1-1.9	1.5	4.1-5.2	5.0	4.4-5.4	4.7	1.6-3.0	2.3
5171	Petroleum bulk stations and terminals	2.8-3.3	2.9	2.8-3.0	2.9	0.9-1.4	1.2	(*)	(*)	(*)	(*)	1.7-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages	3.4-3.9	3.7	3.1-3.7	3.2	0.8-1.8	1.7	3.9-4.2	4.1	4.0-4.3	4.2	1.0-2.0	1.3
5181	Beer and ale	2.2-4.4	3.1	2.8-3.2	2.9	1.0-2.5	2.0	3.6-5.5	3.8	3.6-4.1	3.8	1.7-2.7	2.1
5182	Wines and distilled alcoholic beverages	5.2-6.3	5.4	4.6-5.6	4.7	1.2-3.4	1.7	4.6-5.4	4.8	5.0-5.6	5.3	1.4-2.3	1.6
519	Miscellaneous nondurable goods	2.4-3.2	2.9	2.4-2.7	2.5	1.4-2.3	1.6	(*)	(*)	(*)	(*)	0.8-1.7	1.4
5191	Farm supplies	(*)	(*)	(*)	(*)	3.2-3.6	3.3	(*)	(*)	(*)	(*)	1.7-3.9	2.0
5194	Tobacco and tobacco products	4.0-5.2	4.1	3.4-4.5	4.2	1.3-2.4	1.7	(*)	(*)	(*)	(*)	0.8-4.3	1.0
5198	Paints, varnishes, and supplies	(*)	(*)	(*)	(*)	2.8-3.8	3.0	(*)	(*)	(*)	(*)	1.5-3.1	2.9
5199 pt.	Books, magazines, newspapers	(*)	(*)	(*)	(*)	3.2-8.0	5.6	(*)	(*)	(*)	(*)	2.0-6.5	5.1

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

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

APPENDIX B. Adjustment for Seasonal and Trading-Day Variations

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

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

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

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1977-December 1978

1972 SIC code	Kind of business	1977											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	91.7	92.1	107.2	99.0	100.6	103.8	95.5	104.5	102.5	100.4	101.1	99.6
	Total (excluding farm-product raw materials)	89.6	91.5	106.3	99.7	101.8	106.0	96.5	105.8	103.6	100.0	100.0	96.9
50	Durable goods, total	87.1	88.2	106.3	101.3	103.7	107.8	96.9	106.5	105.8	101.1	99.3	94.0
501	Motor vehicles and automotive parts and supplies	89.7	89.3	109.5	108.3	107.5	107.2	100.5	105.9	101.1	94.2	95.0	90.0
502	Furniture and home furnishings	82.6	89.5	104.2	97.8	98.8	106.7	90.7	106.4	106.9	110.3	109.2	94.7
503	Lumber and other construction materials	78.4	80.8	101.1	99.8	108.0	112.1	104.6	116.4	108.7	102.4	100.6	85.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.7	89.9	104.1	101.6	101.8	104.0	92.1	106.4	102.0	109.1	110.4	98.2
505	Metals and minerals, except petroleum	94.4	90.9	110.4	99.9	105.3	104.8	92.5	107.5	105.0	96.0	99.5	90.8
506	Electrical goods	87.8	88.6	101.8	97.1	96.0	108.4	98.5	105.9	104.2	106.4	101.9	101.6
507	Hardware, plumbing, heating equipment, and supplies	87.4	87.4	101.2	99.4	102.9	108.3	99.4	108.7	106.9	105.8	100.8	89.9
508	Machinery, equipment, and supplies	86.4	89.0	107.7	102.7	104.4	108.8	95.7	103.5	107.3	102.5	95.5	94.9
509	Miscellaneous durable goods	82.8	89.8	105.7	98.8	100.4	107.7	89.8	105.8	106.7	104.1	104.3	102.0
51	Nondurable goods, total	95.1	95.1	108.4	97.4	98.3	100.7	94.8	102.3	99.7	99.4	102.8	103.9
	Total (excluding farm-product raw materials)	91.7	94.2	106.8	98.1	100.0	104.1	96.3	104.6	101.6	99.0	100.6	100.
511	Paper and paper products	93.8	92.2	104.3	95.1	96.4	104.2	97.3	108.3	104.7	103.6	103.2	95.7
512	Drugs, drug proprietaries, and druggists' sundries	94.2	92.6	105.1	98.8	97.7	98.7	92.7	103.9	104.4	108.3	101.4	98.9
513	Apparel, piece goods, and notions	89.7	94.6	106.4	95.2	95.2	100.5	95.1	114.9	108.8	105.4	105.6	87.1
514	Groceries and related products	94.2	90.9	103.8	98.5	101.5	106.7	99.1	105.4	100.7	100.1	99.7	98.5
515	Farm-product raw materials[1]	105.1	95.8	112.8	96.9	101.5	88.2	88.5	95.5	93.5	102.2	110.6	108.6
516	Chemicals and allied products	87.1	89.9	107.4	101.2	102.5	106.5	97.0	107.2	103.4	102.0	99.3	94.3
517	Petroleum and petroleum products	94.8	102.6	105.4	98.9	90.9	98.9	100.1	101.9	97.3	102.4	101.4	105.6
518	Beer, wine, and distilled alcoholic beverages	75.8	80.8	101.4	94.1	103.0	113.8	98.1	107.0	100.3	98.8	105.8	120.1
519	Miscellaneous nondurable goods	95.1	101.7	116.8	104.4	101.4	100.9	88.1	96.2	99.6	95.4	96.1	100.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	102.1	101.4	100.9	99.9	98.4	98.4	98.4	98.4	98.6	100.9	102.1	101.1
	Total (excluding farm-product raw materials)	99.8	100.3	100.8	100.1	100.3	100.5	100.1	99.2	99.3	100.0	100.2	99.4
50	Durable goods, total	99.1	100.3	101.1	100.9	101.4	101.8	100.9	99.4	99.1	99.1	98.9	98.9
501	Motor vehicles and automotive parts and supplies	101.4	102.8	102.1	101.4	102.4	100.9	98.9	96.6	97.9	97.8	97.9	100.4
502	Furniture and home furnishings	98.9	99.4	100.1	99.8	99.9	101.4	100.9	101.3	100.9	99.6	100.4	98.1
503	Lumber and other construction materials	97.9	98.4	102.8	102.6	105.4	103.1	102.9	100.6	97.8	95.3	96.4	97.1
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	100.8	99.9	100.9	103.4	107.6	104.6	101.6	100.3	100.6	94.4	89.3
505	Metals and minerals, except petroleum	100.4	98.9	100.9	101.4	100.1	99.4	102.8	101.3	98.1	96.8	99.1	101.4
506	Electrical goods	97.3	97.6	99.1	99.4	100.6	101.9	101.1	101.3	100.4	101.6	101.4	98.8
507	Hardware, plumbing, heating equipment, and supplies	98.1	98.6	101.6	103.1	102.8	101.1	100.9	101.4	98.4	98.3	98.4	97.6
508	Machinery, equipment, and supplies	99.1	101.1	101.9	100.6	101.1	102.3	100.1	97.9	99.1	99.6	99.6	97.8
509	Miscellaneous durable goods	97.1	98.9	96.8	98.4	96.8	101.3	101.9	102.9	101.3	103.1	101.8	100.4
51	Nondurable goods, total	105.4	103.4	100.9	98.1	93.9	93.3	94.8	97.3	97.6	103.9	106.9	105.4
	Total (excluding farm-product raw materials)	100.5	100.2	100.5	99.4	98.2	98.4	98.3	99.0	99.8	101.9	102.7	100.9
511	Paper and paper products	99.1	99.1	98.8	100.4	99.8	101.9	99.6	100.9	100.1	100.3	99.8	100.9
512	Drugs, drug proprietaries, and druggists' sundries	96.4	97.8	100.1	101.4	98.1	100.4	99.3	100.1	102.4	104.4	101.4	98.9
513	Apparel, piece goods, and notions	100.1	99.6	98.4	98.6	101.1	100.4	102.6	101.1	100.4	99.1	99.1	99.9
514	Groceries and related products	99.9	100.9	102.4	99.9	98.4	98.4	98.1	98.1	99.1	101.3	102.9	101.1
515	Farm-product raw materials[1]	121.4	113.9	104.9	92.4	80.8	73.9	84.8	84.8	89.8	108.9	122.1	123
516	Chemicals and allied products	99.8	100.1	102.1	101.4	101.3	99.9	99.8	99.1	99.6	97.8	99.4	100
517	Petroleum and petroleum products	104.8	99.8	97.1	93.1	95.1	96.8	96.4	99.3	101.8	106.8	105.6	104.
518	Beer, wine, and distilled alcoholic beverages	96.9	97.9	97.1	98.9	101.8	103.1	98.6	97.6	100.6	107.6	105.4	95.3
519	Miscellaneous nondurable goods	103.6	104.3	102.9	100.6	96.3	93.3	95.3	98.4	98.1	99.8	103.6	104.4

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1977-December 1978—Continued

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.9	92.2	106.9	96.5	103.5	103.8	95.4	105.1	98.9	102.5	101.4	96.7
	Total (excluding farm-product raw materials)	91.9	91.6	106.4	97.5	104.6	105.9	95.9	106.4	100.9	102.2	98.8	95.1
50	Durable goods, total	89.8	89.0	105.2	98.7	106.3	107.6	96.4	107.1	102.9	104.2	98.4	91.4
501	Motor vehicles and automotive parts and supplies	93.6	89.1	107.0	107.0	107.4	108.0	99.3	107.5	96.9	98.4	92.5	91.4
502	Furniture and home furnishings	84.6	89.1	104.6	95.9	101.6	106.2	89.4	107.2	104.2	112.8	108.3	93.8
503	Lumber and other construction materials	81.6	81.2	101.7	95.3	110.7	112.5	102.4	116.9	104.7	108.0	100.0	82.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.4	90.3	102.8	100.3	109.7	98.1	95.1	104.0	104.7	105.7	108.7	97.3
505	Metals and minerals, except petroleum	98.8	91.0	108.9	97.9	107.9	103.6	90.7	108.4	103.1	100.0	97.4	91.1
506	Electrical goods	89.4	89.1	101.7	95.2	99.2	106.4	100.2	104.9	100.9	107.7	103.3	98.5
507	Hardware, plumbing, heating equipment, and supplies	89.5	87.8	100.8	97.5	105.5	107.8	99.7	109.4	103.4	107.2	101.1	88.0
508	Machinery, equipment, and supplies	88.1	88.8	107.8	99.6	107.3	108.7	95.7	104.3	104.0	103.7	96.9	91.6
509	Miscellaneous durable goods	86.5	89.8	104.7	95.1	101.0	110.6	87.6	108.0	102.4	109.5	105.2	96.2
51	Nondurable goods, total	97.0	95.1	108.7	95.1	101.3	100.9	94.8	102.9	96.9	100.9	102.6	100.7
	Total (excluding farm-product raw materials)	93.9	94.5	107.7	95.7	102.7	104.4	95.6	105.1	98.6	100.5	100.4	97.5
511	Paper and paper products	95.2	92.4	104.5	92.6	101.9	103.0	96.6	108.3	103.7	105.0	100.5	92.7
512	Drugs, drug proprietaries, and druggists' sundries	98.2	92.7	104.9	96.0	100.4	99.8	92.7	104.5	101.4	108.3	100.6	96.9
513	Apparel, piece goods, and notions	91.3	94.8	106.4	92.3	99.6	99.3	93.5	115.1	106.8	108.1	103.9	86.0
514	Groceries and related products	95.0	91.0	104.1	96.4	104.5	106.2	99.1	106.0	100.1	100.3	99.9	94.3
515	Farm-product raw materials[1]	106.8	95.8	112.8	94.4	99.6	89.9	92.3	94.6	92.6	100.5	111.2	104.6
516	Chemicals and allied products	90.0	89.4	106.9	98.2	105.2	106.5	97.0	107.3	99.7	105.5	98.0	94.1
517	Petroleum and petroleum products	96.5	102.1	107.7	96.2	92.8	99.9	98.4	101.7	95.5	102.4	98.7	105.8
518	Beer, wine, and distilled alcoholic beverages	78.7	80.9	100.7	91.2	106.7	113.9	97.3	108.1	96.9	101.9	105.3	115.3
519	Miscellaneous nondurable goods	97.4	101.6	118.1	101.5	104.3	102.9	87.2	96.5	96.0	97.0	96.4	97.4
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	101.9	101.3	101.0	100.1	98.6	98.5	98.4	98.0	98.9	100.6	101.7	100.5
	Total (excluding farm-product raw materials)	99.7	100.3	100.8	100.2	100.2	100.5	100.1	99.1	99.4	100.0	100.3	99.2
50	Durable goods, total	99.1	100.2	100.9	100.6	101.1	101.6	100.8	99.3	99.3	99.0	99.1	98.7
501	Motor vehicles and automotive parts and supplies	101.4	102.6	101.8	101.0	102.1	100.9	98.9	96.8	97.9	97.8	98.1	100.5
502	Furniture and home furnishings	99.4	99.2	99.8	99.5	99.8	101.3	100.6	101.0	101.5	100.5	99.1	98.1
503	Lumber and other construction materials	98.1	98.8	103.0	102.6	105.0	101.6	101.5	100.2	98.9	96.1	96.9	97.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	102.4	99.2	100.5	103.3	107.3	104.4	101.1	100.6	101.2	93.9	89.0
505	Metals and minerals, except petroleum	100.4	98.6	100.5	101.0	99.7	99.2	102.4	101.9	98.6	96.7	99.5	101.5
506	Electrical goods	97.2	97.4	99.0	99.9	100.2	101.8	101.2	101.5	100.4	101.2	101.0	98.8
507	Hardware, plumbing, heating equipment, and supplies	97.8	98.0	101.6	103.2	102.8	101.7	100.5	101.4	98.7	98.6	98.2	97.3
508	Machinery, equipment, and supplies	99.2	101.1	101.7	100.0	101.0	102.3	100.1	98.1	99.3	99.6	99.5	97.8
509	Miscellaneous durable goods	97.1	98.7	96.6	98.2	96.6	101.2	101.8	102.6	101.5	103.1	102.1	100.2
51	Nondurable goods, total	104.8	103.2	101.6	98.3	95.3	93.7	94.6	96.3	98.6	103.3	106.0	103.9
	Total (excluding farm-product raw materials)	100.4	100.2	100.7	99.7	98.5	98.6	98.3	98.6	99.7	101.9	102.5	100.8
511	Paper and paper products	98.7	99.0	98.7	100.6	99.4	102.0	99.6	100.6	99.5	101.5	100.0	100.2
512	Drugs, drug proprietaries, and druggists' sundries	96.3	97.6	99.9	101.3	97.7	100.2	99.2	99.8	102.0	105.0	101.8	98.8
513	Apparel, piece goods, and notions	99.9	99.4	98.6	98.5	101.1	100.0	102.2	101.0	100.0	98.3	100.1	100.6
514	Groceries and related products	99.6	100.7	102.2	100.1	98.6	98.5	98.1	97.8	99.0	101.8	102.1	101.3
515	Farm-product raw materials[1]	120.2	114.0	106.9	93.1	81.5	76.1	84.4	83.5	88.3	108.7	121.4	120.9
516	Chemicals and allied products	99.9	99.9	102.7	101.1	101.3	99.8	99.6	99.4	99.9	96.9	98.7	100.6
517	Petroleum and petroleum products	104.9	100.2	97.9	93.5	95.6	97.0	95.4	99.0	102.5	104.8	104.6	104.2
518	Beer, wine, and distilled alcoholic beverages	96.6	96.5	97.2	99.0	101.3	103.1	98.9	97.6	100.8	107.5	106.5	94.6
519	Miscellaneous nondurable goods	103.4	103.2	105.3	101.1	96.2	92.9	95.1	97.2	98.6	99.7	103.2	104.1

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	3.6
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.

V. 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 i 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 offic 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 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 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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Official Business

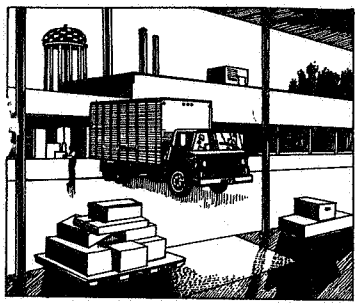
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CURRENT BUSINESS REPORTS

Monthly Wholesale Trade

SALES AND INVENTORIES

Issued February 1979

December 1978

BW-78-12

Annual Sales—Annual 1978 sales of merchant wholesalers were estimated at $754.4 billion, up $112.3 billion (17%) from 1977 sales. The durable goods trades with sales of $350.2 billion in 1978, were up $64.6 billion (23%) from the 1977 level. Nondurable goods trades, with sales of $404.3 billion, were up $47.8 billion (13%) for the same period. Compared with year-ago annualized sales all trade groups showed increases. The larger increases were reported in motor vehicles and automotive equipment (27%) and metals and minerals except petroleum (24%).

Annual sales and year-end inventories by major kind-of-business groups from 1968 to 1978 are included on page 2. Sales for all merchant wholesalers increased 202 percent between 1968 and 1978. Durable goods trades showed an increase of 216 percent in the same period, while nondurable goods trades were up 190 percent. The principal gain between 1968 and 1978 was registered by motor vehicles and automotive equipment (307%). The smallest increase was in drugs, proprietories and sundries (124%). These data have not been adjusted for price changes.

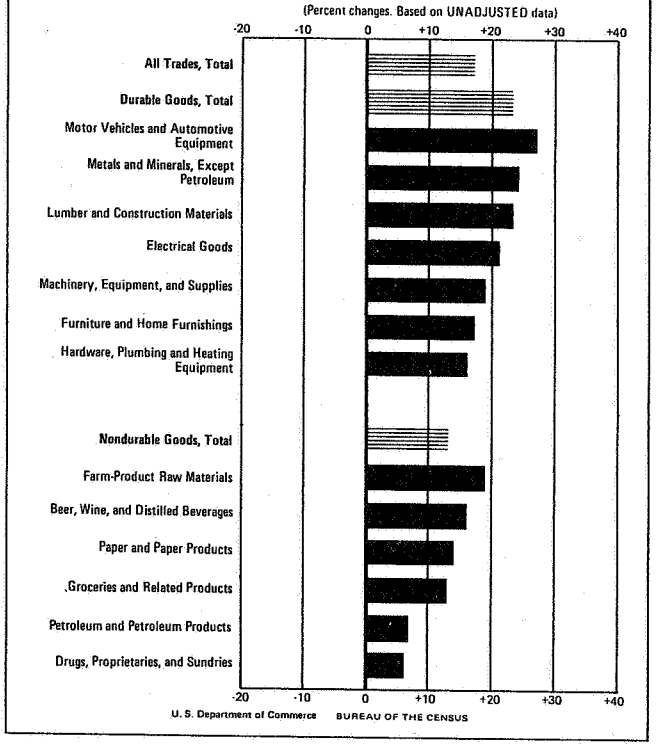
December Sales—December 1978 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences, but not for price changes, were $67.9 billion, up 1 percent from the previous month and 19 percent above December 1977. Adjusted October-through-December total sales were up 5 percent from the July-through-September period, and were 22 percent above the total sales for the comparable months a year ago.

After adjustment, December sales in durable goods trades were up 3 percent from the previous month and were 22 percent above December 1977. Nondurable goods sales were down 1 percent from last month, but were 16 percent above December 1977.

Inventories—Total inventories of merchant wholesalers, after adjustment for seasonal variations, but not for price changes, were valued at $80.5 billion at the end of December, up 2 percent from last month and 18 percent above the same month a year ago. Both durable and nondurable goods stocks were up 2 percent from November and were 18 and 19 percent respectively above the December 1977 level.

Based on adjusted data, most trade groups showed increases from their previous month inventory levels, with the larger increases reported in machinery, equipment, and supplies, and sporting goods, toys, and hobby goods, both up 4 percent. The most substantial decrease was shown in farm-product raw materials (-5%). Compared with year-ago inventories, all trade groups reported increases. The sharper increases were shown in beer, wine, and distilled beverages (28%) and motor vehicles and automotive equipment (27%).

Percent Change in Sales of Merchant Wholesalers in Selected Kinds of Business 12 Months 1978 Compared With 12 Months 1977



Stock-Sales Ratio—The December stock-sales ratio for merchant wholesalers, based on seasonally adjusted data, was 119, up 2 points from November, but unchanged from December 1977. The stock-sales ratio for durable goods was 163, down 1 point from last month and down 5 points from the year-ago ratio. The ratio for nondurable goods was 79, up 2 points from both the previous month and the December 1977 ratios.

An advance release of the December 1978 data was issued on February 8, 1979.

U.S. Department of Commerce
BUREAU OF THE CENSUS

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

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Table 1A. Estimated Annual Sales, Year-End Inventories, and Stock-Sales Ratios of Merchant Wholesalers for Selected Kinds of Business for the United States: 1968-1978

(Millions of dollars)

1972 SIC code	Kind of business	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978[P]
		Annual sales[1]										
	Merchant wholesalers, total	250,147	271,304	287,310	315,086	355,013	441,861	550,036	535,596	580,894	642,104	754,400
	Total (excluding farm-product raw materials)	228,036	248,417	262,468	287,436	321,057	382,809	470,863	461,422	508,201	572,052	671,236
50	Durable goods, total	110,861	122,240	127,214	140,941	161,088	195,869	237,044	220,094	246,732	285,605	350,159
501	Motor vehicles and automotive parts and supplies	16,810	19,133	21,401	26,632	29,909	34,341	38,266	38,951	44,889	54,046	68,451
502	Furniture and home furnishings	4,848	5,472	5,524	6,427	6,788	7,625	8,288	8,136	9,594	11,026	12,954
503	Lumber and other construction materials	11,087	12,515	11,550	13,876	16,914	20,064	18,789	16,576	20,920	26,181	32,187
505	Metals and minerals, except petroleum	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	29,000	35,958
506	Electrical goods	13,339	14,469	14,963	16,257	18,848	22,574	25,405	23,546	27,868	31,745	38,340
507	Hardware, plumbing, heating equipment, and supplies	9,654	10,586	10,489	11,658	13,328	15,602	18,106	16,814	19,174	22,404	25,903
508	Machinery, equipment, and supplies	30,121	32,771	33,836	37,038	42,497	51,371	63,047	65,911	71,378	82,003	97,922
51	Nondurable goods, total	139,286	149,064	160,096	174,145	193,925	245,992	312,992	315,502	334,162	356,498	404,254
	Total (excluding farm-product raw materials)	117,175	126,177	135,254	146,495	159,969	186,940	233,819	241,328	261,469	286,448	321,089
511	Paper and paper products	6,886	7,463	7,416	7,655	8,216	9,686	12,338	11,498	13,444	15,482	17,595
512	Drugs, drug proprietaries, and druggists' sundries	5,154	5,434	5,633	5,888	6,536	7,261	8,600	9,284	10,144	10,868	11,528
513	Apparel, piece goods, and notions	9,510	9,705	10,206	11,923	13,433	14,515	15,315	15,715	17,567	19,595	25,187
514	Groceries and related products	46,108	50,893	54,405	58,687	64,083	76,221	88,786	95,022	99,791	110,766	125,041
515	Farm-product raw materials	22,111	22,887	24,842	27,650	33,956	59,052	79,173	74,174	72,693	70,051	83,165
517	Petroleum and petroleum products	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	47,421	50,841
518	Beer, wine, and distilled alcoholic beverages	11,169	12,068	13,103	14,412	15,424	16,256	18,133	20,055	21,587	23,371	27,003
519	Miscellaneous nondurable goods	22,983	23,811	25,880	26,787	29,495	36,606	47,252	44,203	45,492	48,762	52,125
		Year-end inventories										
	Merchant wholesalers, total	26,897	29,439	33,317	36,198	40,457	47,273	57,526	55,727	62,056	68,555	80,971
	Total (excluding farm-product raw materials)	23,866	26,320	29,013	32,544	35,228	40,089	50,734	50,699	56,334	63,245	75,128
50	Durable goods, total	16,075	17,699	19,464	21,746	23,975	26,597	33,651	34,123	37,628	43,676	51,713
501	Motor vehicles and automotive parts and supplies	2,411	2,686	2,893	3,994	4,270	4,541	6,649	6,160	6,664	7,424	9,457
502	Furniture and home furnishings	572	641	692	720	839	964	1,149	1,127	1,305	1,512	1,727
503	Lumber and other construction materials	1,085	1,160	1,178	1,310	1,586	1,830	1,778	1,824	2,061	2,602	3,050
505	Metals and minerals, except petroleum	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	4,459	5,289
506	Electrical goods	1,782	2,088	2,277	2,464	2,721	3,247	3,710	3,443	3,901	4,653	5,593
507	Hardware, plumbing, heating equipment, and supplies	1,481	1,577	1,686	1,825	2,129	2,440	2,891	2,799	3,139	3,620	4,101
508	Machinery, equipment, and supplies	5,494	6,056	6,714	7,139	7,614	8,311	10,258	11,765	12,738	15,307	17,850
51	Nondurable goods, total	10,822	11,740	13,854	14,453	16,482	20,676	23,875	21,604	24,429	24,879	29,258
	Total (excluding farm-product raw materials)	7,790	8,621	9,550	10,798	11,254	13,492	17,083	16,576	18,707	19,569	23,415
511	Paper and paper products	610	653	679	673	743	873	1,097	1,072	1,192	1,261	1,477
512	Drugs, drug proprietaries, and druggists' sundries	602	642	647	710	752	859	1,054	1,079	1,224	1,303	1,514
514	Groceries and related products	2,128	2,305	2,445	2,625	2,999	3,924	4,517	4,326	5,109	5,540	6,433
517	Petroleum and petroleum products	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	2,042	2,200
518	Beer, wine, and distilled alcoholic beverages	938	988	1,110	1,213	1,276	1,380	1,609	1,755	1,889	1,809	2,292
		Stock-sales ratios based on monthly average sales[2]										
	Merchant wholesalers, total	129	130	139	138	137	128	126	125	128	128	129
	Total (excluding farm-product raw materials)	126	127	133	136	132	126	129	132	133	133	134
50	Durable goods, total	174	174	184	185	179	163	170	186	183	184	177
501	Motor vehicles and automotive parts and supplies	172	169	162	180	171	159	208	190	178	165	166
502	Furniture and home furnishings	142	141	150	134	148	152	166	166	163	165	160
503	Lumber and other construction materials	117	111	122	113	113	109	114	132	118	119	114
505	Metals and minerals, except petroleum	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	184	177
506	Electrical goods	160	173	183	182	173	173	175	175	168	176	175
507	Hardware, plumbing, heating equipment, and supplies	184	179	193	188	192	188	192	200	196	194	190
508	Machinery, equipment, and supplies	219	222	238	231	215	194	195	214	214	224	219
51	Nondurable goods, total	93	95	104	100	102	101	92	82	88	84	87
	Total (excluding farm-product raw materials)	80	82	85	88	84	87	88	82	86	82	88
511	Paper and paper products	106	105	110	105	108	108	107	112	106	98	101
512	Drugs, drug proprietaries, and druggists' sundries	140	142	138	145	138	142	147	139	145	144	158
514	Groceries and related products	55	54	54	54	56	62	61	55	61	60	62
517	Petroleum and petroleum products	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	52	52
518	Beer, wine, and distilled alcoholic beverages	101	98	102	101	99	102	106	105	105	93	102

Note: Merchant wholesalers total and group totals include data for some kinds of business not shown separately. Detail may not add to totals due to rounding and minor revisions. These data have not been adjusted for seasonal variation nor for price change.

NA Not available. [P]Preliminary estimate.

[1]Annual total includes preliminary estimate for December 1978 sales.

[2]Stock-sales ratios computed on a basis of average sales and year-end inventories.

Sales of Merchant Wholesalers by Kind of Bussiness: 1968 and 1978

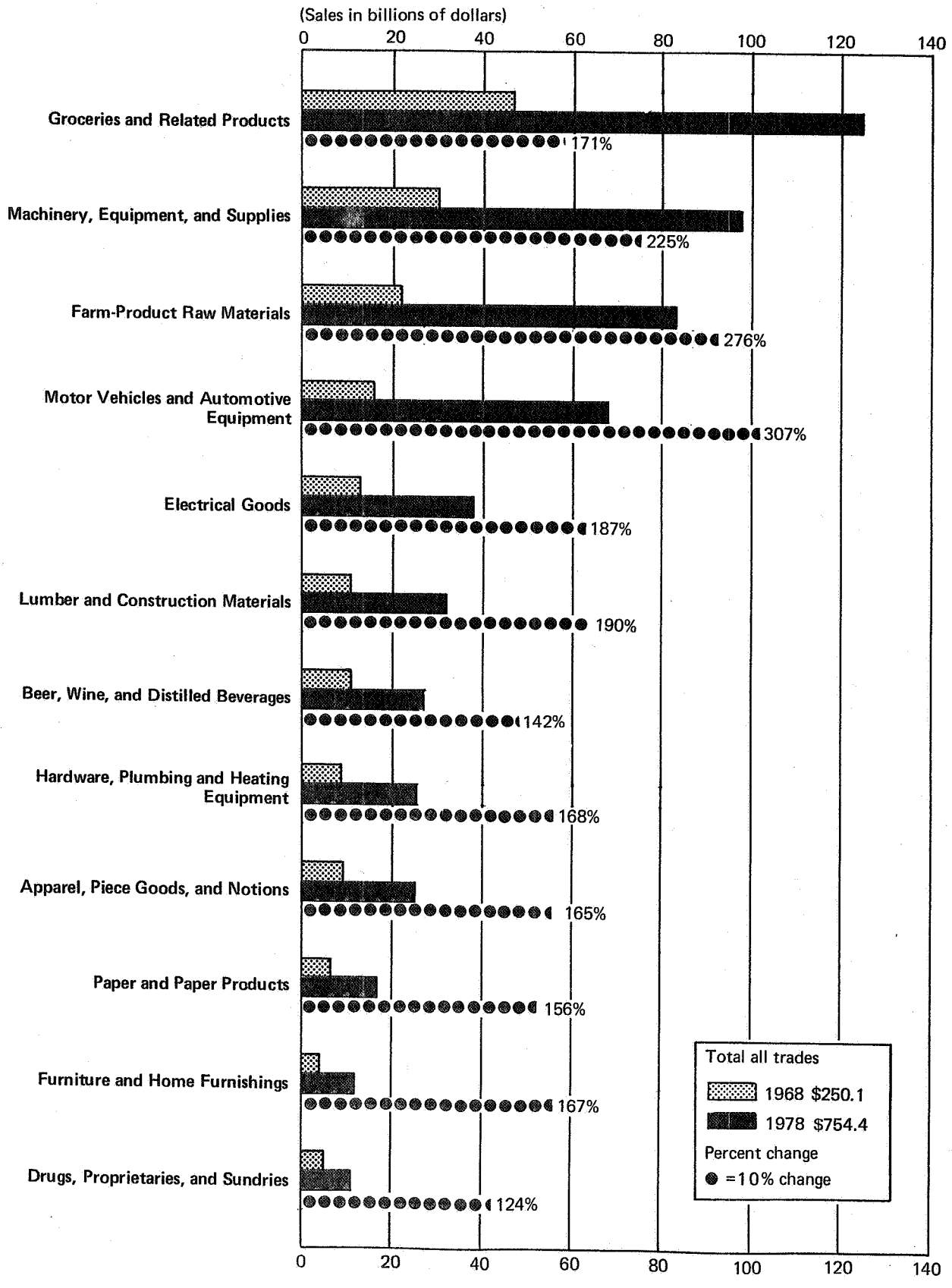


Table 1B. Estimated Monthly Sales of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978												Total 12 months 1978
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.[p]	
	Merchant wholesalers, total	52,143	52,766	62,900	60,613	66,249	65,834	60,651	67,702	63,933	69,086	67,699	64,821	754,400
	Total (excluding farm-product raw materials)	46,343	47,112	55,848	54,095	58,061	58,658	54,411	60,838	57,342	61,033	59,923	57,569	671,236
50	Durable goods, total	22,869	23,880	28,985	28,784	30,405	30,991	28,701	32,279	30,404	32,242	31,037	29,569	350,159
501	Motor vehicles and automotive parts and supplies	4,797	5,065	5,870	5,956	6,083	5,929	5,552	6,134	5,381	6,009	6,013	5,663	68,451
5013,4	Automotive parts and supplies, tires and tubes	2,517	2,666	3,128	3,217	3,403	3,227	2,935	3,440	2,998	3,344	3,298	3,068	37,241
5013	Automotive parts and supplies	2,166	2,286	2,602	2,706	2,828	2,660	2,432	2,872	2,496	2,761	2,752	2,552	31,112
502	Furniture and home furnishings	867	921	1,111	1,046	1,077	1,104	1,013	1,133	1,162	1,174	1,218	1,127	12,954
5021	Furniture--household and office	304	311	356	352	368	370	328	366	379	379	411	398	4,320
5023	Home furnishings	564	610	755	695	710	735	685	767	783	795	807	730	8,634
503	Lumber and other construction materials	1,867	1,891	2,368	2,517	2,889	3,067	2,771	3,208	3,056	3,173	2,874	2,505	32,187
5031	Lumber, plywood, and millwork	1,290	1,288	1,582	1,676	1,947	2,037	1,845	2,105	1,949	2,083	1,915	1,683	21,400
5039	Construction materials, n.e.c	576	603	786	841	942	1,031	927	1,103	1,107	1,089	959	822	10,787
505	Metals and minerals, except petroleum	2,505	2,557	3,040	2,942	3,153	3,169	2,817	3,306	3,037	3,186	3,209	3,036	35,958
5051 pt.	Ferrous metals service centers and offices	1,922	1,970	2,344	2,190	2,360	2,380	2,158	2,515	2,339	2,446	2,448	2,317	27,390
5051 pt.	Ferrous metals service centers	1,386	1,443	1,713	1,629	1,755	1,778	1,580	1,833	1,721	1,801	1,768	1,673	20,081
506	Electrical goods	2,541	2,627	3,096	2,980	3,239	3,385	3,193	3,540	3,338	3,590	3,474	3,336	38,340
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,262	1,354	1,561	1,556	1,698	1,725	1,663	1,812	1,663	1,832	1,722	1,685	19,533
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,279	1,273	1,535	1,424	1,541	1,660	1,530	1,728	1,675	1,758	1,751	1,651	18,807
5064	Electrical appliances, TV and radio sets	763	762	939	841	931	994	912	1,064	1,057	1,040	1,090	1,006	11,398
507	Hardware, plumbing, heating equipment, and supplies	1,790	1,708	2,021	2,102	2,306	2,360	2,247	2,412	2,159	2,455	2,250	2,092	25,903
5072	Hardware	693	679	793	797	856	836	760	864	771	859	830	734	9,471
5074	Plumbing and heating equipment and supplies (hydronics)	726	675	801	834	904	902	916	988	928	1,047	918	863	10,503
508	Machinery, equipment, and supplies	6,190	6,632	8,301	8,296	8,616	8,790	7,827	8,757	8,655	8,909	8,421	8,529	97,922
5082	Construction and mining machinery and equipment	825	875	1,130	1,254	1,276	1,229	1,122	1,196	1,115	1,155	1,126	1,129	13,433
5084,5	Industrial machinery, equipment, and supplies	2,545	2,790	3,294	3,077	3,388	3,505	3,049	3,532	3,450	3,573	3,474	3,654	39,332
5086	Professional equipment, supplies	710	732	863	816	873	952	888	990	949	941	949	970	10,632
5093	Scrap and waste materials	757	815	979	958	1,058	1,057	940	1,073	978	1,007	1,103	1,087	11,812
51	Nondurable goods, total	29,274	28,886	33,915	31,829	35,844	34,843	31,950	35,423	33,529	36,844	36,662	35,252	404,254
	Total (excluding farm-product raw materials)	23,474	23,232	26,863	25,311	27,656	27,667	25,710	28,559	26,937	28,791	28,885	28,000	321,089
511	Paper and paper products	1,316	1,284	1,506	1,395	1,508	1,498	1,384	1,581	1,456	1,598	1,569	1,498	17,595
5111,3	Printing, writing, industrial, and personal services paper	950	926	1,100	1,032	1,126	1,125	1,046	1,177	1,088	1,191	1,177	1,143	13,081
512	Drugs, drug proprietaries, and druggists' sundries	887	824	994	912	943	950	902	1,026	973	1,094	1,036	987	11,528
5122	Drugs, drug proprietaries, and druggists' sundries	887	824	994	912	943	950	902	1,026	973	1,094	1,036	987	11,528
5122 pt.	General-line drugs	423	393	470	423	447	448	409	482	464	506	484	468	5,417
513	Apparel, piece goods, and notions[1]	1,620	1,615	2,063	1,818	2,099	2,066	2,036	2,658	2,313	2,443	2,369	2,087	25,187
514	Groceries and related products	9,261	9,093	10,398	9,916	10,873	10,685	10,237	11,002	10,489	11,150	11,155	10,780	125,041
5141	Groceries, general-line	3,426	3,333	3,740	3,547	3,791	3,724	3,649	3,965	3,767	3,999	4,120	3,915	44,975
5144	Poultry and poultry products	402	397	486	468	507	503	482	539	505	525	569	555	5,936
5145	Confectionery	154	163	191	173	191	189	171	187	190	218	211	196	2,234
5147	Meats and meat products	1,460	1,462	1,651	1,688	1,871	1,826	1,800	1,974	1,840	1,928	1,911	1,909	21,321
5148	Fresh fruits and vegetables	839	824	986	1,035	1,184	1,198	1,044	1,005	909	980	974	977	11,955
515	Farm-product raw materials	5,800	5,654	7,052	6,518	8,188	7,176	6,240	6,864	6,591	8,053	7,777	7,251	83,165
5153	Grain	4,549	4,503	5,718	5,358	6,890	6,078	5,317	5,760	5,448	6,623	6,391	5,932	68,568
517	Petroleum and petroleum products	4,209	4,085	4,249	3,830	4,178	4,111	4,000	4,441	4,136	4,431	4,554	4,618	50,841
5171	Petroleum bulk stations and terminals	2,387	2,293	2,384	2,188	2,425	2,358	2,190	2,378	2,280	2,449	2,507	2,645	28,482
518	Beer, wine, and distilled alcoholic beverages	1,654	1,770	2,299	1,993	2,295	2,506	2,191	2,463	2,254	2,347	2,547	2,684	27,003
5181	Beer and ale	795	839	1,094	998	1,219	1,372	1,217	1,328	1,119	1,105	1,088	1,087	13,261
5182	Wine and distilled alcoholic beverages	859	931	1,204	996	1,076	1,134	974	1,134	1,135	1,242	1,459	1,597	13,742
519	Miscellaneous nondurable goods	3,723	3,782	4,434	4,568	4,730	4,819	4,040	4,297	4,311	4,510	4,486	4,425	52,125
5194	Tobacco and tobacco products	721	692	782	765	812	849	838	871	814	848	831	842	9,666

See footnotes at end of table.

Table 1B. Estimated Monthly Sales of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977—Continued

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

1972 SIC code	Kind of business	1977											Total 12 mos. 1977
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
	Merchant wholesalers, total	46,352	47,683	56,383	53,357	54,633	55,794	51,290	55,597	54,505	54,251	56,034	56,224	642,104
	Total (excluding farm-product raw materials)	40,266	41,918	49,806	47,066	47,931	49,990	45,838	50,659	49,544	49,132	49,762	50,139	572,052
50	Durable goods, total	18,895	20,013	24,008	23,356	24,159	25,292	22,915	25,998	25,461	25,369	25,340	24,797	285,605
501	Motor vehicles and automotive parts and supplies	3,605	3,716	4,598	4,663	4,866	4,795	4,463	4,762	4,554	4,605	4,721	4,698	54,046
5013,4	Automotive parts and supplies, tires and tubes	2,015	2,052	2,363	2,415	2,482	2,597	2,395	2,657	2,538	2,661	2,651	2,551	29,377
5013	Automotive parts and supplies	1,722	1,782	2,013	2,018	2,111	2,221	2,027	2,229	2,089	2,227	2,220	2,167	24,826
502	Furniture and home furnishings	729	763	911	860	891	968	816	972	998	1,048	1,045	1,025	11,026
5021	Furniture--household and office	220	216	269	262	272	291	251	310	308	320	340	350	3,409
5023	Home furnishings	509	547	642	598	619	677	565	662	689	728	705	676	7,617
503	Lumber and other construction materials	1,504	1,624	2,068	2,043	2,222	2,343	2,271	2,657	2,553	2,476	2,334	2,086	26,181
5031	Lumber, plywood, and millwork	1,072	1,119	1,389	1,343	1,513	1,571	1,511	1,792	1,681	1,637	1,540	1,389	17,557
5039	Construction materials, n.e.c	432	505	679	700	709	772	760	866	872	839	794	697	8,625
505	Metals and minerals, except petroleum	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	2,731	2,709	2,437	2,592	2,423	29,000
5051 pt.	Ferrous metals service centers and offices	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	2,039	2,083	1,845	1,869	1,774	21,437
5051 pt.	Ferrous metals service centers	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	1,480	1,478	1,385	1,359	1,282	15,297
506	Electrical goods	2,127	2,196	2,552	2,469	2,391	2,761	2,647	2,821	2,846	2,998	2,973	2,964	31,745
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	1,048	1,130	1,241	1,183	1,222	1,390	1,324	1,456	1,369	1,436	1,436	1,379	15,614
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	1,079	1,066	1,311	1,286	1,169	1,371	1,323	1,365	1,477	1,562	1,537	1,585	16,131
5064	Electrical appliances, TV and radio sets	689	689	836	831	731	940	914	919	979	1,011	989	1,003	10,531
507	Hardware, plumbing, heating equipment, and supplies	1,515	1,544	1,817	1,838	1,925	2,017	1,898	2,068	1,961	2,027	1,974	1,820	22,404
5072	Hardware	616	612	758	769	721	740	700	790	750	750	768	676	8,650
5074	Plumbing and heating equipment and supplies (hydronics)	590	635	708	747	824	852	799	842	802	846	791	753	9,189
508	Machinery, equipment, and supplies	5,494	6,009	7,126	6,806	7,034	7,349	6,465	7,380	7,217	7,163	6,941	7,019	82,003
5082	Construction and mining machinery and equipment	712	875	1,042	1,022	1,044	1,059	876	971	1,002	1,006	1,025	1,006	11,640
5084,5	Industrial machinery, equipment, and supplies	2,251	2,463	2,652	2,376	2,520	2,821	2,494	2,891	2,771	2,750	2,858	2,861	31,708
5086	Professional equipment, supplies	640	667	779	747	779	840	757	846	805	808	773	805	9,246
5093	Scrap and waste materials	668	764	844	895	869	903	679	802	810	807	812	779	9,632
51	Nondurable goods, total	27,457	27,670	32,375	30,001	30,474	30,502	28,375	29,599	29,044	28,882	30,694	31,427	356,498
	Total (excluding farm-product raw materials)	21,371	21,905	25,798	23,710	23,772	24,698	22,923	24,661	24,084	23,763	24,422	25,342	286,448
511	Paper and paper products	1,134	1,194	1,327	1,222	1,261	1,348	1,208	1,388	1,366	1,341	1,335	1,358	15,482
5111,3	Printing, writing, industrial, and personal service paper	861	906	1,011	959	991	1,054	935	1,060	1,032	1,007	988	995	11,799
512	Drugs, drug proprietaries, and druggists' sundries	842	832	964	891	897	907	848	952	948	939	926	922	10,868
5122	Drugs, drug proprietaries, and druggists' sundries	842	832	964	891	897	907	848	952	948	939	926	922	10,868
5122 pt.	General-line drugs	399	379	428	397	415	410	388	459	455	438	452	444	5,064
513	Apparel, piece goods, and notions [1]	1,332	1,404	1,667	1,446	1,510	1,589	1,521	1,938	1,815	1,919	1,837	1,617	19,595
514	Groceries and related products	8,286	8,029	9,559	9,094	9,359	9,414	9,132	9,716	9,433	9,289	9,591	9,798	110,766
5141	Groceries, general-line	3,192	3,034	3,545	3,278	3,387	3,412	3,347	3,493	3,396	3,360	3,579	3,587	40,610
5144	Poultry and poultry products	402	434	419	400	438	448	412	456	432	419	458	454	5,172
5145	Confectionery	124	129	167	147	150	150	146	171	172	183	194	188	1,921
5147	Meats and meat products	1,279	1,248	1,508	1,404	1,469	1,513	1,444	1,591	1,486	1,498	1,525	1,510	17,475
5148	Fresh fruits and vegetables	696	674	834	858	849	852	834	877	810	836	886	889	9,895
515	Farm-product raw materials	6,086	5,765	6,577	6,291	6,702	5,084	5,452	4,938	4,960	5,119	6,272	6,085	70,051
5153	Grain	4,957	4,761	5,430	5,344	5,589	4,830	4,580	4,011	4,005	4,069	4,968	4,730	57,274
517	Petroleum and petroleum products	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	3,752	3,612	3,839	3,983	4,355	47,421
5171	Petroleum bulk stations and terminals	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	2,160	2,103	2,195	2,266	2,523	27,286
518	Beer, wine, and distilled alcoholic beverages	1,337	1,504	1,929	1,842	1,978	2,233	1,951	2,108	2,018	1,884	2,143	2,444	23,371
5181	Beer and ale	645	707	850	902	1,043	1,126	1,010	1,093	1,012	888	938	1,020	11,234
5182	Wines and distilled alcoholic beverages	692	797	1,079	940	935	1,107	941	1,014	1,005	995	1,204	1,424	12,133
519	Miscellaneous nondurable goods	3,862	4,088	4,851	4,463	4,398	4,186	3,539	3,822	4,055	3,722	3,749	4,028	48,762
5194	Tobacco and tobacco products	664	669	751	717	743	787	734	780	751	748	705	819	8,868

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

NA Not available. [p]Preliminary estimate. See p. 21, Sample Design and Estimation Procedures.

[1]The apparel, piece goods, and notions group is subject to a sampling variability of 13 percent for December 1978.

Table 2. Estimated Monthly Inventories of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.[P]
		1978											
	Merchant wholesalers, total	69,596	71,156	73,931	74,635	74,634	74,882	74,874	74,943	76,074	78,715	80,100	80,971
	Total (excluding farm-product raw materials)	64,090	65,682	67,973	69,060	69,883	70,513	71,073	71,138	71,889	73,327	73,947	75,128
50	Durable goods, total	44,287	45,757	47,275	47,957	49,918	49,627	49,900	49,841	49,944	50,462	50,971	51,713
501	Motor vehicles and automotive parts and supplies	7,709	8,189	7,995	7,973	8,246	8,218	8,367	8,378	8,099	8,701	9,326	9,457
5013,4	Automotive parts and supplies, tires and tubes	4,743	4,962	4,856	4,901	5,149	5,035	5,034	5,206	5,172	5,298	5,635	5,742
5013	Automotive parts and supplies	3,953	4,163	4,041	4,171	4,382	4,241	4,288	4,415	4,345	4,489	4,792	4,882
502	Furniture and home furnishings	1,560	1,606	1,633	1,669	1,730	1,781	1,764	1,760	1,810	1,799	1,807	1,727
5023	Home furnishings[1]	1,137	1,184	1,182	1,233	1,279	1,305	1,305	1,306	1,326	1,334	1,338	1,271
503	Lumber and other construction materials	2,676	2,761	2,919	2,966	3,030	3,071	3,095	3,007	3,076	3,076	2,995	3,050
5031	Lumber, plywood, and millwork	1,715	1,775	1,870	1,882	1,963	1,949	1,967	1,929	1,932	1,946	1,918	1,970
505	Metals and minerals, except petroleum	4,449	4,660	4,953	4,976	5,356	5,307	5,305	5,437	5,285	5,095	5,208	5,289
5051 pt.	Ferrous metals service centers and offices	3,471	3,591	3,820	3,823	4,116	4,108	4,104	4,232	4,148	3,976	4,150	4,262
5051 pt.	Ferrous metals service centers	2,633	2,760	3,039	2,971	3,220	3,268	3,191	3,308	3,299	3,098	3,236	3,370
506	Electrical goods	4,563	4,594	4,867	4,951	5,129	5,312	5,266	5,264	5,416	5,500	5,526	5,593
5063	Electrical apparatus and equipment, wiring supplies and construction materials	2,114	2,214	2,226	2,286	2,417	2,358	2,283	2,367	2,356	2,399	2,534	2,651
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,449	2,380	2,640	2,665	2,712	2,954	2,983	2,899	3,059	3,101	3,016	2,942
507	Hardware, plumbing, heating equipment, and supplies	3,712	3,876	4,058	4,231	4,222	4,201	4,215	4,117	4,032	4,152	4,033	4,101
5072	Hardware	1,366	1,384	1,421	1,428	1,445	1,423	1,410	1,369	1,417	1,466	1,382	1,413
5074	Plumbing and heating equipment and supplies (hydronics)[2]	1,590	1,678	1,784	1,861	1,815	1,818	1,839	1,800	1,805	1,738	1,737	1,783
508	Machinery, equipment, and supplies	15,508	16,005	16,511	16,762	16,796	17,061	17,057	17,183	17,405	17,352	17,428	17,850
5082	Construction and mining machinery and equipment	3,281	3,396	3,505	3,516	3,589	3,636	3,637	3,793	3,899	3,937	4,002	4,080
5084,5	Industrial machinery, equipment, and supplies	4,816	4,912	4,996	5,055	5,160	5,328	5,301	5,317	5,519	5,508	5,570	5,669
51	Nondurable goods, total	25,309	25,399	26,656	26,678	25,716	25,255	24,974	25,102	26,130	28,253	29,129	29,258
	Total (excluding farm-product raw materials)	19,803	19,925	20,699	21,103	20,966	20,887	21,173	21,297	21,946	22,865	22,976	23,415
511	Paper and paper products	1,225	1,259	1,310	1,349	1,343	1,376	1,341	1,361	1,414	1,419	1,441	1,477
5111,3	Printing, writing, industrial, and personal service paper	868	877	910	911	929	955	938	921	976	969	967	1,004
512	Drugs, drug proprietaries, and druggists' sundries	1,266	1,292	1,330	1,345	1,350	1,401	1,368	1,410	1,489	1,525	1,518	1,514
514	Groceries and related products	5,401	5,376	5,710	5,740	5,752	5,871	5,833	5,803	6,186	6,469	6,412	6,433
5141	Groceries, general-line	2,350	2,366	2,562	2,500	2,495	2,512	2,480	2,505	2,641	2,811	2,814	2,789
517	Petroleum and petroleum products	2,045	1,936	1,953	1,872	1,938	1,837	1,974	2,093	2,098	2,151	2,151	2,200
518	Beer, wine, and distilled alcoholic beverages	1,917	1,889	2,017	2,133	2,135	2,148	2,178	2,158	2,221	2,453	2,513	2,292
5181	Beer and ale[3]	611	641	707	758	730	717	709	679	720	769	777	720
5182	Wines and distilled alcoholic beverages	1,305	1,248	1,311	1,375	1,405	1,431	1,469	1,480	1,501	1,684	1,736	1,573
		1977											
	Merchant wholesalers, total	62,910	63,985	65,097	65,042	64,088	64,117	63,666	64,105	65,291	66,530	68,082	68,555
	Total (excluding farm-product raw materials)	57,077	58,209	59,355	59,475	59,833	60,612	60,642	61,074	61,963	62,324	62,939	63,245
50	Durable goods, total	38,455	39,362	39,965	40,168	40,763	41,593	41,738	42,142	42,484	42,627	43,252	43,676
501	Motor vehicles and automotive parts and supplies	6,754	6,929	6,853	6,796	6,963	6,932	6,864	6,831	6,842	7,089	7,376	7,424
5013,4	Automotive parts and supplies, tires and tubes	3,822	3,995	4,070	4,061	4,219	4,333	4,304	4,512	4,496	4,438	4,669	4,607
5013	Automotive parts and supplies	3,188	3,372	3,396	3,338	3,481	3,616	3,534	3,712	3,663	3,639	3,912	3,790
502	Furniture and home furnishing	1,336	1,337	1,356	1,349	1,392	1,407	1,409	1,451	1,493	1,455	1,444	1,512
5023	Home furnishings	955	969	987	960	988	1,022	1,026	1,069	1,085	1,057	1,054	1,099
503	Lumber and other construction materials	2,115	2,191	2,399	2,323	2,340	2,309	2,353	2,429	2,510	2,489	2,513	2,602
5031	Lumber, plywood, and millwork	1,433	1,492	1,639	1,548	1,578	1,559	1,588	1,632	1,659	1,629	1,643	1,671
505	Metals and minerals, except petroleum	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	4,519	4,434	4,277	4,444	4,459
5051 pt.	Ferrous metals service centers and offices	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	3,692	3,689	3,511	3,514	3,568
5051 pt.	Ferrous metals service centers	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	2,858	2,874	2,686	2,738	2,768
506	Electrical goods	3,884	3,946	4,074	4,209	4,334	4,406	4,392	4,580	4,599	4,591	4,611	4,653
5063	Electrical apparatus and equipment, wiring supplies and construction materials	1,779	1,909	1,876	1,916	2,006	2,084	1,987	2,088	2,069	2,025	2,100	2,121
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	2,105	2,037	2,197	2,293	2,328	2,322	2,405	2,493	2,530	2,566	2,511	2,533
507	Hardware, plumbing, heating equipment, and supplies	3,223	3,277	3,443	3,679	3,599	3,639	3,704	3,582	3,578	3,621	3,608	3,620
5072	Hardware	1,141	1,177	1,254	1,183	1,237	1,256	1,286	1,282	1,296	1,319	1,320	1,358
5074	Plumbing and heating equipment and supplies (hydronics)	1,415	1,438	1,493	1,763	1,588	1,619	1,669	1,588	1,579	1,566	1,562	1,555
508	Machinery, equipment, and supplies	13,227	13,703	13,861	13,717	14,007	14,574	14,417	14,513	14,706	14,631	15,026	15,307
5082	Construction and mining machinery and equipment	2,508	2,609	2,713	2,701	2,727	2,864	2,865	2,928	3,110	3,083	3,202	3,261
5084,5	Industrial machinery, equipment, and supplies	4,305	4,357	4,279	4,180	4,395	4,621	4,478	4,447	4,503	4,534	4,555	4,742
51	Nondurable goods, total	24,455	24,624	25,131	24,874	23,324	22,523	21,928	21,963	22,807	23,903	24,830	24,879
	Total (excluding farm-product raw materials)	18,621	18,847	19,390	19,307	19,069	19,018	18,904	18,932	19,479	19,697	19,687	19,569
511	Paper and paper products	[r]1,166	[r]1,190	[r]1,208	[r]1,238	[r]1,273	1,293	1,268	1,248	1,275	1,261	1,269	1,261
5111,3	Printing, writing, industrial, and personal service paper	830	829	841	877	900	905	887	877	880	878	865	873
512	Drugs, drug proprietaries, and druggists' sundries	1,161	1,194	1,255	1,261	1,223	1,268	1,285	1,297	1,320	1,373	1,337	1,303
514	Groceries and related products	5,003	5,205	5,340	5,353	5,349	5,307	5,283	5,283	5,448	5,507	5,465	5,540
5141	Groceries, general-line	2,115	2,257	2,336	2,387	2,382	2,371	2,268	2,265	2,363	2,446	2,441	2,473
517	Petroleum and petroleum products	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	1,959	2,064	2,023	2,053	2,042
518	Beer, wine, and distilled alcoholic beverages	1,807	1,853	1,952	2,015	2,094	2,114	2,074	1,977	2,048	2,121	2,075	1,809
5181	Beer and ale	544	555	614	679	726	709	675	660	673	658	632	581
5182	Wines and distilled alcoholic beverages	1,263	1,298	1,338	1,336	1,368	1,405	1,399	1,317	1,375	1,462	1,443	1,228

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

NA Not available. [P]Preliminary estimate. See p. 21, Sample Design and Estimation Procedures. [r]Revised.

[1]The home furnishings group is subject to a sampling variability of 9 percent for December 1978.
[2]The plumbing and heating equipment and supplies (hydronics) group is subject to a sampling variability of 9 percent for December 1978.
[3]The beer and ale group is subject to a sampling variability of 11 percent for December 1978.

Table 3. Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Unadjusted: 1978 and 1977

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

1972 SIC code	Kind of business	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.[P]
		1978											
	Merchant wholesalers, total	133	135	118	123	113	114	123	111	119	114	118	125
	Total (excluding farm-product raw materials)	138	139	122	128	120	120	131	117	125	120	123	130
50	Durable goods, total	194	192	163	167	161	160	174	154	164	157	164	175
501	Motor vehicles and automotive parts and supplies	161	162	136	134	136	139	151	137	151	145	155	167
5013,4	Automotive parts and supplies, tires and tubes	188	186	155	152	151	156	172	151	173	158	171	187
5013	Automotive parst and supplies	183	182	155	154	155	159	176	154	174	163	174	191
502	Furniture and home furnishings	180	174	147	159	161	161	174	155	156	153	148	153
5023	Home furnishings	202	194	157	178	180	178	190	170	169	168	166	174
503	Lumber and other construction materials	143	146	123	118	105	100	112	94	101	97	104	122
5031	Lumber, plywood, and millwork	133	138	118	112	101	96	107	92	99	93	100	117
505	Metals and minerals, except petroleum	178	182	163	169	170	167	188	164	174	160	162	174
5051 pt.	Ferrous metals service centers and offices	181	182	163	175	174	173	190	168	177	163	170	184
5051 pt.	Ferrous metals service centers	190	191	177	182	184	184	202	181	192	172	183	201
506	Electrical goods	180	175	157	166	158	157	165	149	162	153	159	168
5063	Electrical apparatus and equipment, wiring supplies and construction materials	168	163	143	147	142	137	137	131	142	131	147	157
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	191	187	172	187	176	178	195	168	183	176	171	178
507	Hardware, plumbing, heating equipment, and supplies	207	227	201	201	183	178	188	171	187	169	179	196
5072	Hardware	197	204	179	179	169	170	185	158	179	171	167	193
5074	Plumbing and heating equipment and supplies (hydronics)	219	249	223	223	201	202	201	182	188	166	189	207
508	Machinery, equipment, and supplies	251	241	199	202	195	194	218	196	201	195	207	209
5082	Construction and mining machinery and equipment	398	388	310	280	281	296	324	317	350	341	356	361
5084,5	Industrial machinery, equipment, and supplies	189	176	152	164	152	152	174	151	160	154	160	155
51	Nondurable goods, total	86	88	79	84	72	72	78	71	78	77	79	84
	Total (excluding farm-product raw materials)	84	86	77	83	76	75	82	75	81	79	80	83
511	Paper and paper products	95	98	87	97	89	92	97	86	97	89	92	99
5111,3	Printing, writing, industrial, and personal service paper	91	95	83	88	82	85	90	78	90	81	82	88
512	Drugs, drug proprietaries, and druggists' sundries	143	157	134	147	143	147	152	137	153	139	146	153
514	Groceries and related products	58	59	55	58	53	55	57	53	59	58	57	60
5141	Groceries, general-line	69	71	68	70	66	67	68	63	70	70	68	71
517	Petroleum and petroleum products	49	47	46	49	46	45	49	47	51	49	47	48
518	Beer, wine, and distilled alcoholic beverages	116	107	88	107	93	86	99	88	99	105	99	85
5181	Beer and ale	77	76	65	76	60	52	58	51	64	70	71	66
5182	Wines and distilled alcoholic beverages	152	134	109	138	131	126	151	130	132	136	119	98
		1977											
	Merchant wholesalers, total	136	134	115	122	117	115	124	115	120	123	122	122
	Total (excluding farm-product raw materials)	142	139	119	126	125	121	132	121	125	127	126	126
50	Durable goods, total	204	197	166	172	169	164	182	162	167	168	171	176
501	Motor vehicles and automotive parts and supplies	187	186	149	146	143	145	154	143	150	154	156	158
5013,4	Automotive parts and supplies, tires and tubes	190	195	172	168	170	167	180	170	177	167	176	181
5013	Automotive parts and supplies	185	189	169	165	165	163	174	167	175	163	176	175
502	Furniture and home furnishings	183	175	149	157	156	145	173	149	150	139	138	147
5023	Home furnishings	188	177	154	161	160	151	182	162	157	145	150	163
503	Lumber and other construction materials	141	135	116	114	105	99	104	91	98	101	108	125
5031	Lumber, plywood, and millwork	134	133	118	115	104	99	105	91	99	100	107	120
505	Metals and minerals, except petroleum	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	165	164	176	171	184
5051 pt.	Ferrous metals service centers and offices	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	181	177	190	188	201
5051 pt.	Ferrous metals service centers	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	193	194	194	201	216
506	Electrical goods	183	180	160	170	181	160	166	162	162	153	155	157
5063	Electrical apparatus and equipment, wiring supplies and construction materials	170	169	151	162	164	150	150	143	151	141	146	154
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	195	191	168	178	199	169	182	183	171	164	163	160
507	Hardware, plumbing, heating equipment, and supplies	213	212	189	200	187	180	195	173	182	179	183	199
5072	Hardware	185	192	165	154	172	170	184	162	173	176	172	201
5074	Plumbing and heating equipment and supplies (hydronics)	240	226	211	236	193	190	209	189	197	185	197	206
508	Machinery, equipment, and supplies	241	228	195	202	199	198	223	197	204	204	216	218
5082	Construction and mining machinery and equipment	352	298	260	264	261	270	327	302	310	306	312	324
5084,5	Industrial machinery, equipment, and supplies	191	177	161	176	174	164	180	154	163	165	159	166
51	Nondurable goods, total	89	89	78	83	77	74	77	74	79	83	81	79
	Total (excluding farm-product raw materials)	87	86	75	81	80	77	82	77	81	83	81	77
511	Paper and paper products	[r]103	[r]100	[r]91	[r]101	[r]101	96	105	90	93	94	95	93
5111,3	Printing, writing, industrial, and personal service paper	96	92	83	91	91	86	95	83	85	87	88	88
512	Drugs, drug proprietaries, and druggists' sundries	138	144	130	141	136	140	152	136	139	146	144	141
514	Groceries and related products	60	65	56	59	57	56	58	54	58	59	57	57
5141	Groceries, general-line	66	74	66	73	70	69	68	65	70	73	68	69
517	Petroleum and petroleum products	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	52	57	53	52	47
518	Beer, wine, and distilled alcoholic beverages	135	123	101	109	106	95	106	94	102	113	97	74
5181	Beer and ale	84	78	72	75	70	63	67	60	66	74	67	57
5182	Wines and distilled alcoholic beverages	183	163	124	142	146	127	149	130	137	147	120	86

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

NA Not available. [P]Preliminary estimate. See p. 21, Sample Design and Estimation Procedures. [r]Revised.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1978 and 1977

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

1972 SIC code	Kind of business	1978 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.[p]
	Sales ADJUSTED for seasonal variations and trading-day differences												
	Merchant wholesalers, total	55,985	57,635	58,877	62,152	64,011	63,235	63,404	64,573	64,045	67,292	67,359	67,876
	Total (excluding farm-product raw materials)	50,554	51,733	52,625	55,247	55,790	55,253	56,643	57,317	56,927	59,279	60,365	60,944
50	Durable goods, total	25,568	26,976	27,466	28,974	28,692	28,738	29,831	30,072	29,763	30,936	31,448	32,235
501	Motor vehicles and automotive parts and supplies	5,125	5,685	5,486	5,566	5,664	5,490	5,591	5,706	5,553	6,107	6,501	6,196
502	Furniture and home furnishings	1,025	1,034	1,062	1,091	1,060	1,040	1,133	1,057	1,115	1,041	1,125	1,201
503	Lumber and other construction materials	2,288	2,329	2,328	2,641	2,610	2,726	2,706	2,744	2,919	2,938	2,874	3,029
505	Metals and minerals, except petroleum	2,535	2,810	2,792	3,005	2,922	3,059	3,106	3,050	2,946	3,186	3,295	3,333
506	Electrical goods	2,842	2,948	3,044	3,130	3,265	3,181	3,187	3,375	3,308	3,333	3,363	3,387
507	Hardware, plumbing, heating equipment, and supplies	2,000	1,945	2,005	2,156	2,186	2,189	2,254	2,205	2,088	2,290	2,226	2,377
508	Machinery, equipment, and supplies	7,026	7,468	7,700	8,329	8,030	8,086	8,179	8,396	8,322	8,591	8,690	9,311
51	Nondurable goods, total	30,417	30,659	31,411	33,178	35,319	34,497	33,573	34,501	34,282	36,356	35,911	35,641
	Total (excluding farm-product raw materials)	24,986	24,757	25,159	26,273	27,098	26,515	26,812	27,245	27,164	28,343	28,917	28,709
511	Paper and paper products	1,382	1,390	1,441	1,506	1,480	1,454	1,433	1,460	1,404	1,522	1,561	1,616
512	Drugs, drug proprietaries, and druggists' sundries	903	889	948	950	939	952	973	982	960	1,010	1,030	1,019
513	Apparel, piece goods, and notions	1,774	1,704	1,939	1,970	2,107	2,081	2,178	2,309	2,166	2,260	2,280	2,427
514	Groceries and related products	9,748	9,992	9,988	10,286	10,405	10,061	10,330	10,379	10,479	11,117	11,166	11,432
515	Farm-product raw materials[1]	5,431	5,902	6,252	6,905	8,221	7,982	6,761	7,256	7,118	8,013	6,994	6,932
517	Petroleum and petroleum products	4,362	4,001	3,945	3,981	4,502	4,115	4,065	4,367	4,331	4,327	4,614	4,365
518	Beer, wine, and distilled alcoholic beverages	2,102	2,188	2,283	2,185	2,151	2,200	2,252	2,278	2,326	2,303	2,419	2,328
519	Miscellaneous nondurable goods	3,822	3,722	3,754	4,500	4,535	4,683	4,633	4,453	4,491	4,649	4,654	4,543
	Inventories ADJUSTED for seasonal variations												
	Merchant wholesalers, total	68,991	70,361	72,882	74,867	75,474	75,820	75,664	76,253	77,020	78,346	78,958	80,507
	Total (excluding farm-product raw materials)	64,410	65,559	67,309	68,879	69,646	70,080	71,160	71,696	72,280	73,389	73,890	75,674
50	Durable goods, total	44,686	45,684	46,838	47,673	48,363	48,810	49,577	50,101	50,300	50,903	51,457	52,504
501	Motor vehicles and automotive parts and supplies	7,603	7,981	7,854	7,894	8,076	8,145	8,460	8,655	8,273	8,897	9,507	9,410
502	Furniture and home furnishings	1,569	1,619	1,636	1,677	1,733	1,758	1,753	1,743	1,783	1,790	1,823	1,760
503	Lumber and other construction materials	2,728	2,795	2,834	2,891	2,886	3,023	3,049	3,001	3,110	3,201	3,091	3,135
505	Metals and minerals, except petroleum	4,431	4,726	4,928	4,927	5,372	5,350	5,181	5,336	5,360	5,269	5,234	5,211
506	Electrical goods	4,694	4,717	4,916	4,956	5,119	5,218	5,204	5,186	5,394	5,435	5,471	5,661
507	Hardware, plumbing, heating equipment, and supplies	3,796	3,955	3,994	4,100	4,107	4,131	4,194	4,060	4,085	4,211	4,107	4,215
508	Machinery, equipment, and supplies	15,633	15,831	16,235	16,762	16,630	16,677	17,040	17,516	17,528	17,422	17,516	18,252
51	Nondurable goods, total	24,305	24,677	26,044	27,194	27,111	27,010	26,087	26,152	26,720	27,443	27,501	28,003
	Total (excluding farm-product raw materials)	19,724	19,875	20,471	21,206	21,283	21,270	21,583	21,595	21,980	22,486	22,433	23,170
511	Paper and paper products	1,272	1,272	1,327	1,341	1,351	1,349	1,346	1,353	1,421	1,398	1,441	1,474
512	Drugs, drug proprietaries, and druggists' sundries	1,315	1,324	1,331	1,328	1,382	1,398	1,379	1,413	1,460	1,452	1,491	1,532
514	Groceries and related products	5,423	5,339	5,587	5,734	5,834	5,960	5,946	5,934	6,248	6,355	6,280	6,350
517	Petroleum and petroleum products	1,949	1,932	1,995	2,002	2,027	1,894	2,069	2,114	2,047	2,052	2,056	2,111
518	Beer, wine, and distilled alcoholic beverages	1,984	1,958	2,075	2,155	2,108	2,083	2,202	2,211	2,203	2,282	2,360	2,423
	Stock-sales ratios based on ADJUSTED data												
	Merchant wholesalers, total	123	122	124	120	118	120	119	118	120	116	117	119
	Total (excluding farm-product raw materials)	127	127	128	125	125	127	126	125	127	124	122	124
50	Durable goods, total	175	169	171	165	169	170	166	167	169	165	164	163
501	Motor vehicles and automotive parts and supplies	148	140	143	142	143	148	151	152	149	146	146	152
502	Furniture and home furnishings	153	157	154	154	163	169	155	165	160	172	162	147
503	Lumber and other construction materials	119	120	122	109	111	111	113	109	107	109	108	103
505	Metals and minerals, except petroleum	175	168	177	164	184	175	167	175	182	165	159	156
506	Electrical goods	165	160	161	158	157	164	163	154	163	163	163	167
507	Hardware, plumbing, heating equipment, and supplies	190	203	199	190	188	189	186	184	196	184	185	177
508	Machinery, equipment, and supplies	223	212	211	201	207	206	208	209	211	203	202	196
51	Nondurable goods, total	80	80	83	82	77	78	78	76	78	75	77	79
	Total (excluding farm-product raw materials)	79	80	81	81	79	80	80	79	81	79	78	81
511	Paper and paper products	92	92	92	89	91	93	94	93	101	92	92	91
512	Drugs, drug proprietaries, and druggists' sundries	146	149	140	140	147	147	142	144	152	144	145	150
514	Groceries and related products	56	53	56	56	56	59	58	57	60	57	56	56
517	Petroleum and petroleum products	45	48	51	50	45	46	51	48	47	47	45	48
518	Beer, wine, and distilled alcoholic beverages	94	89	91	99	98	95	98	97	95	99	98	104

See footnotes at end of table.

Table 4A. Estimated Monthly Sales, Inventories, and Stock-Sales Ratios of Merchant Wholesalers by Kind of Business for the United States, Adjusted: 1978 and 1977—Continued

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

1972 SIC code	Kind of business	1977											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Sales ADJUSTED for seasonal variations and trading-day differences											
	Merchant wholesalers, total	50,678	51,857	52,672	53,385	53,866	53,735	53,495	53,208	53,307	53,639	55,558	57,266
	Total (excluding farm-product raw materials)	44,889	45,841	46,839	46,891	47,260	47,157	47,334	48,037	48,018	48,630	49,887	51,663
50	Durable goods, total	21,785	22,625	22,621	22,941	23,275	23,419	23,620	24,390	24,150	24,997	25,601	26,488
501	Motor vehicles and automotive parts and supplies	4,018	4,162	4,201	4,304	4,528	4,473	4,439	4,497	4,504	4,889	4,969	5,220
502	Furniture and home furnishings	882	853	874	879	901	907	900	914	934	950	957	1,082
503	Lumber and other construction materials	1,919	2,009	2,045	2,048	2,057	2,090	2,171	2,283	2,349	2,418	2,320	2,443
505	Metals and minerals, except petroleum	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	2,540	2,580	2,539	2,605	2,669
506	Electrical goods	2,423	2,480	2,508	2,544	2,491	2,547	2,686	2,664	2,731	2,818	2,918	2,917
507	Hardware, plumbing, heating equipment, and supplies	1,734	1,766	1,795	1,850	1,871	1,863	1,909	1,902	1,834	1,916	1,958	2,024
508	Machinery, equipment, and supplies	6,358	6,751	6,618	6,626	6,740	6,753	6,756	7,130	6,726	6,988	7,268	7,396
51	Nondurable goods, total	28,893	29,232	30,051	30,444	30,591	30,316	29,875	28,818	29,157	28,642	29,957	30,778
	Total (excluding farm-product raw materials)	23,104	23,216	24,218	23,950	23,985	23,738	23,714	23,647	23,852	23,633	24,286	25,175
511	Paper and paper products	1,209	1,295	1,272	1,285	1,308	1,294	1,242	1,282	1,305	1,294	1,294	1,419
512	Drugs, drug proprietaries, and druggists' sundries	894	898	917	902	919	919	914	916	908	867	913	932
513	Apparel, piece goods, and notions	1,485	1,484	1,566	1,519	1,585	1,580	1,600	1,687	1,668	1,821	1,740	1,856
514	Groceries and related products	8,797	8,828	9,206	9,228	9,225	8,825	9,210	9,218	9,367	9,280	9,620	9,947
515	Farm-product raw materials[1]	5,789	6,016	5,833	6,494	6,606	6,578	6,161	5,171	5,305	5,009	5,671	5,603
517	Petroleum and petroleum products	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	3,682	3,712	3,749	3,928	4,124
518	Beer, wine, and distilled alcoholic beverages	1,763	1,861	1,903	1,957	1,921	1,963	1,988	1,970	2,012	1,907	2,026	2,035
519	Miscellaneous nondurable goods	4,061	4,019	4,153	4,276	4,335	4,151	4,015	3,973	4,071	3,901	3,901	3,992
		Inventories ADJUSTED for seasonal variations											
	Merchant wholesalers, total	62,123	63,062	64,300	65,301	64,838	64,947	64,210	65,095	66,119	66,209	67,047	67,998
	Total (excluding farm-product raw materials)	57,316	57,988	58,829	59,280	59,575	60,207	60,647	61,521	62,413	62,347	62,835	63,712
50	Durable goods, total	38,819	39,264	39,527	39,809	40,224	40,876	41,404	42,396	42,896	43,014	43,642	44,368
501	Motor vehicles and automotive parts and supplies	6,664	6,743	6,708	6,705	6,804	6,867	6,937	7,071	6,989	7,248	7,534	7,394
502	Furniture and home furnishings	1,350	1,345	1,356	1,352	1,392	1,388	1,395	1,432	1,480	1,461	1,438	1,541
503	Lumber and other construction materials	2,159	2,228	2,334	2,263	2,219	2,241	2,288	2,415	2,566	2,612	2,607	2,680
505	Metals and minerals, except petroleum	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	4,461	4,520	4,418	4,484	4,397
506	Electrical goods	3,990	4,041	4,108	4,237	4,310	4,326	4,347	4,521	4,581	4,519	4,547	4,710
507	Hardware, plumbing, heating equipment, and supplies	3,287	3,322	3,387	3,567	3,503	3,598	3,669	3,533	3,636	3,684	3,667	3,709
508	Machinery, equipment, and supplies	13,353	13,547	13,609	13,629	13,847	14,253	14,410	14,824	14,840	14,690	15,086	15,651
51	Nondurable goods, total	23,304	23,798	24,773	25,492	24,614	24,071	22,806	22,699	23,223	23,195	23,405	23,630
	Total (excluding farm-product raw materials)	18,497	18,724	19,302	19,471	19,351	19,331	19,243	19,125	19,517	19,333	19,193	19,344
511	Paper and paper products	r1,177	r1,201	r1,223	r1,233	r1,276	1,269	1,273	1,237	1,274	1,257	1,272	1,250
512	Drugs, drug proprietaries, and druggists' sundries	1,204	1,221	1,254	1,243	1,247	1,263	1,295	1,296	1,289	1,315	1,319	1,317
514	Groceries and related products	5,006	5,156	5,212	5,356	5,433	5,396	5,389	5,385	5,497	5,436	5,311	5,480
517	Petroleum and petroleum products	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	1,973	2,028	1,894	1,944	1,958
518	Beer, wine, and distilled alcoholic beverages	1,864	1,892	2,011	2,038	2,058	2,051	2,104	2,026	2,036	1,971	1,969	1,898
		Stock-sales ratios based on ADJUSTED data											
	Merchant wholesalers, total	123	122	122	122	120	121	120	122	124	123	121	119
	Total (excluding farm-product raw materials)	128	126	126	126	126	128	128	128	130	128	126	123
50	Durable goods, total	178	174	175	174	173	175	175	174	178	172	170	168
501	Motor vehicles and automotive parts and supplies	166	162	160	156	150	154	156	157	155	148	152	142
502	Furniture and home furnishings	153	158	155	154	154	153	155	157	158	154	150	142
503	Lumber and other construction materials	113	111	114	110	108	107	105	106	109	108	112	110
505	Metals and minerals, except petroleum	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	176	175	174	172	165
506	Electrical goods	165	163	164	167	173	170	162	170	168	160	156	161
507	Hardware, plumbing, heating equipment, and supplies	190	188	189	193	187	193	192	186	198	192	187	183
508	Machinery, equipment, and supplies	210	201	206	206	205	211	213	208	221	210	208	212
51	Nondurable goods, total	81	81	82	84	80	79	76	79	80	81	78	77
	Total (excluding farm-product raw materials)	80	81	80	81	81	81	81	81	82	82	79	77
511	Paper and paper products	r97	r93	r96	r96	r98	98	102	96	98	97	98	88
512	Drugs, drug proprietaries, and druggists' sundries	135	136	137	138	136	137	142	141	142	152	144	141
514	Groceries and related products	57	58	57	58	59	61	59	58	59	59	55	55
517	Petroleum and petroleum products	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	54	55	51	49	47
518	Beer, wine, and distilled alcoholic beverages	106	102	106	104	107	104	106	103	101	103	97	93

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

NA Not available. pPreliminary estimate. See p. 21, Sample Design and Estimation Procedures. rRevised.

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

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

(Based on seasonally-adjusted data)

Item	3 month period, Oct. 1978-Dec. 1978 from--			
	July 1978-Sept. 1978 (3 months ago)	Apr. 1978-Jun. 1978 (6 months ago)	Jan. 1978-Mar. 1978 (9 months ago)	Oct. 1977-Dec. 1977 (12 months ago)
Merchant wholesalers, total.....	+5	+7	+17	+22
Durable goods, total.....	+6	+10	+18	+23
Nondurable goods, total.....	+5	+5	+17	+21

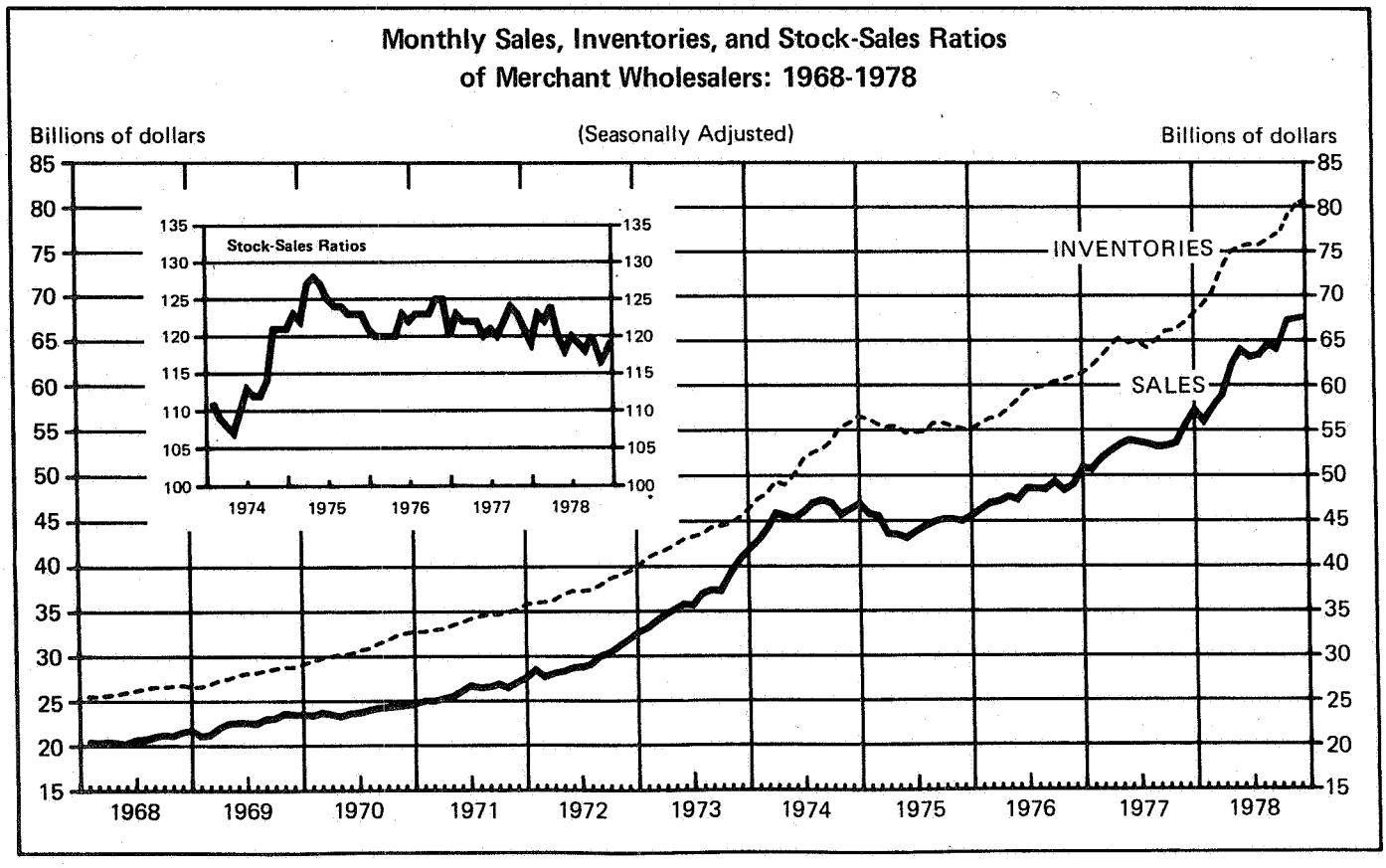


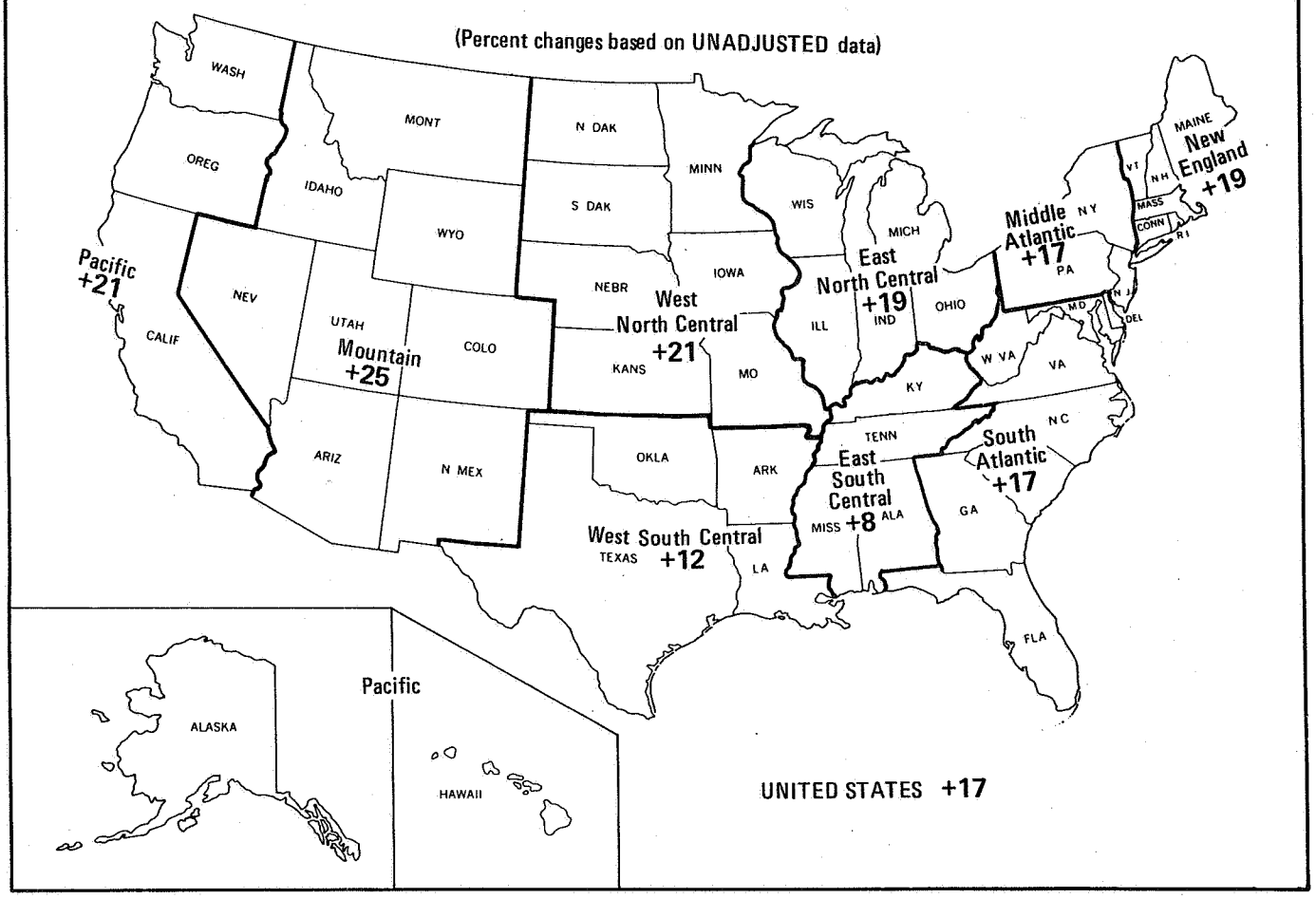
Table 5. Percent Changes in Sales and Inventories of Merchant Wholesalers by Kind of Business for the United States: December 1978

1972 SIC code	Kind of business	Unadjusted					Adjusted[1]			
		Sales			Inventories, end-of-month (at cost)		Sales		Inventories, end-of-month (at cost)	
		Dec. 1978 from Nov. 1978	Dec. 1978 from Dec. 1977	12 months 1978 from 12 months 1977	Dec. 1978 from Nov. 1978	Dec. 1978 from Dec. 1977	Dec. 1978 from Nov. 1978	Dec. 1978 from Dec. 1977	Dec. 1978 from Nov. 1978	Dec. 1978 from Dec. 1977
	Merchant wholesalers, total	-4	+15	+17	+1	+18	+1	+19	+2	+18
	Total (excluding farm-product raw materials)	-4	+15	+17	+2	+19	+1	+18	+2	+19
50	Durable goods, total	-5	+19	+23	+1	+18	+3	+22	+2	+18
501	Motor vehicles and automotive parts and supplies	-6	+21	+27	+1	+27	-5	+19	-1	+27
5012	Automobiles and other motor vehicles	-4	+21	+27	+1	+32	(*)	(*)	(*)	(*)
5013,4	Automotive parts and supplies, tires and tubes	-7	+20	+27	+2	+25	(*)	(*)	(*)	(*)
5013	Automotive parts and supplies	-7	+18	+25	+2	+29	(*)	(*)	(*)	(*)
502	Furniture and home furnishings	-7	+10	+17	-4	+14	+7	+11	-3	+14
5021	Furniture--household and office	-3	+14	+27	-3	+10	(*)	(*)	(*)	(*)
5021 pt.	Household furniture	-9	+27	+31	-4	+15	(*)	(*)	(*)	(*)
5021 pt.	Office furniture	0	+7	+24	-1	+7	(*)	(*)	(*)	(*)
5023	Home furnishings	-10	+8	+13	-5	+16	(*)	(*)	(*)	(*)
503	Lumber and other construction materials	-13	+20	+23	+2	+17	+5	+24	+1	+17
5031	Lumber, plywood, and millwork	-12	+21	+22	+3	+18	(*)	(*)	(*)	(*)
5039	Construction materials, n.e.c.	-14	+18	+25	-1	+15	(*)	(*)	(*)	(*)
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	-8	+8	(S)	-2	+8	+2	+8	+4	+9
505	Metals and minerals, except petroleum	-5	+25	+24	+2	+19	+1	+25	0	+19
5051 pt.	Ferrous metals service centers and offices	-5	+31	+28	+3	+19	(*)	(*)	(*)	(*)
5051 pt.	Ferrous metals service centers	-5	+30	+31	+4	+22	(*)	(*)	(*)	(*)
5051 pt.	Nonferrous metals service centers and offices	-6	+8	+20	-3	+17	(*)	(*)	(*)	(*)
506	Electrical goods	-4	+13	+21	+1	+20	+1	+16	+3	+20
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-2	+22	+25	+5	+25	(*)	(*)	(*)	(*)
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-6	+4	+17	-2	+16	(*)	(*)	(*)	(*)
5064	Electrical appliances, TV and radio sets	-8	0	+8	-2	+17	(*)	(*)	(*)	(*)
507	Hardware, plumbing, heating equipment, and supplies	-7	+15	+16	+2	+13	+7	+17	+3	+14
5072	Hardware	-12	+8	+9	+2	+4	(*)	(*)	(*)	(*)
5074	Plumbing and heating equipment and supplies (hydronics)	-6	+15	+14	+3	+15	(*)	(*)	(*)	(*)
5075	Warm air heating and air conditioning equipment and supplies	-2	+24	+29	-1	+25	(*)	(*)	(*)	(*)
508	Machinery, equipment, and supplies	+1	+22	+19	+2	+17	+7	+26	+4	+17
5081	Commercial machines and equipment	+4	+10	+25	+4	+9	(*)	(*)	(*)	(*)
5082	Construction and mining machinery and equipment	0	+12	+15	+2	+25	(*)	(*)	(*)	(*)
5083	Farm and garden machinery and equipment	-7	+23	+22	+3	+2	(*)	(*)	(*)	(*)
5084,5	Industrial machinery, equipment, and supplies	+5	+28	+24	+2	+20	(*)	(*)	(*)	(*)
5086	Professional equipment and supplies	+2	+20	+15	0	+28	(*)	(*)	(*)	(*)
5093	Scrap and waste materials	-1	+40	+23	+3	+9	(*)	(*)	(*)	(*)
5093 pt.	Iron and steel scrap	-4	+48	+25	+3	+9	(*)	(*)	(*)	(*)
5093 pt.	Waste materials	+2	+29	+20	+4	+9	(*)	(*)	(*)	(*)
51	Nondurable goods, total	-4	+12	+13	0	+18	-1	+16	+2	+19
	Total (excluding farm-product raw materials)	-3	+10	+12	+2	+20	-1	+14	+3	+20
511	Paper and paper products	-4	+10	+14	+2	+17	+4	+14	+2	+18
5111,3	Printing, writing, industrial, and personal service paper	-3	+15	+11	+4	+15	(*)	(*)	(*)	(*)
512	Drugs, drug proprietaries, and druggists' sundries	-5	+7	+6	0	+16	-1	+9	+3	+16
5122	Drugs, drug proprietaries, and druggists' sundries	-5	+7	+6	0	+16	(*)	(*)	(*)	(*)
5122 pt.	General-line drugs	-3	+6	+7	+1	+22	(*)	(*)	(*)	(*)
514	Groceries and related products	-3	+10	+13	0	+16	+2	+15	+1	+16
5141	Groceries, general-line	-5	+9	+11	-1	+13	(*)	(*)	(*)	(*)
5141 pt.	Voluntary groups	-7	+8	+7	-3	+8	(*)	(*)	(*)	(*)
5141 pt.	Retailers cooperatives	-5	+11	+12	-1	+13	(*)	(*)	(*)	(*)
5141 pt.	Other general-lines	-4	+9	+13	+1	+17	(*)	(*)	(*)	(*)
5142,3,6,9	Specialty-line groceries	-4	+2	+8	+3	+11	(*)	(*)	(*)	(*)
5144	Poultry and poultry products	-2	+22	+15	-4	+20	(*)	(*)	(*)	(*)
5145	Confectionery	-7	+4	+16	0	+15	(*)	(*)	(*)	(*)
5147	Meats and meat products	0	+26	+22	0	+48	(*)	(*)	(*)	(*)
5148	Fresh fruits and vegetables	0	+10	+21	-2	+25	(*)	(*)	(*)	(*)
515	Farm-product raw materials[2]	-7	+19	+19	-5	+10	-1	+24	-5	+13
5152	Cotton	+1	-15	+8	+10	+27	(*)	(*)	(*)	(*)
5153	Grain	-7	+25	+20	-12	+5	(*)	(*)	(*)	(*)
517	Petroleum and petroleum products	+1	+6	+7	+2	+8	-5	+6	+3	+8
5171	Petroleum bulk stations and terminals	+5	+5	+4	+2	+5	(*)	(*)	(*)	(*)
518	Beer, wine, and distilled alcoholic beverages	+5	+10	+16	-9	+27	-4	+14	+3	+28
5181	Beer and ale	0	+7	+18	-7	+24	(*)	(*)	(*)	(*)
5182	Wines and distilled alcoholic beverages	+9	+12	+13	-9	+28	(*)	(*)	(*)	(*)
519	Miscellaneous nondurable goods	-1	+10	+7	+4	+18	-2	+14	+3	+18
5191	Farm supplies	-2	+14	0	+14	+29	(*)	(*)	(*)	(*)
5194	Tobacco and tobacco products	+1	+3	+9	-3	+12	(*)	(*)	(*)	(*)
5198	Paints, varnishes, and supplies	-17	+6	+16	+4	+21	(*)	(*)	(*)	(*)
5199 pt.	Books, periodicals, newspapers	-3	+14	+35	-4	(S)	(*)	(*)	(*)	(*)

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

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

Sales of Merchant Wholesalers by Geographic Division
12 Months 1978 Compared With 12 Months 1977



Geographic Distribution of Wholesale Sales: 1978

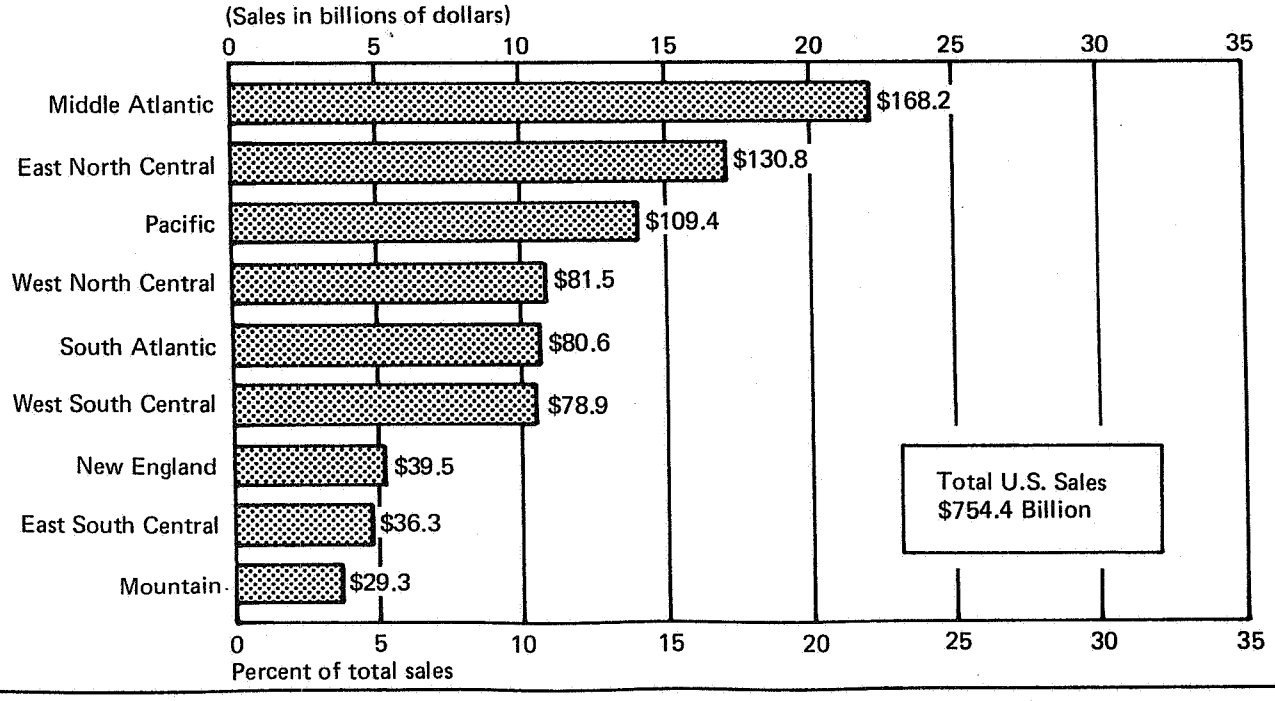


Table 6. Estimated Monthly Sales of Merchant Wholesalers and Sampling Errors, Geographic Division: 1978 and 1977

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

1972 SIC code	Kind of business and geographic division[1]	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.P	Total 12 mos.	Sampling error of the estimate	
															Range[2]	Median
		1978														
	Merchant wholesalers, total	52,143	52,766	62,900	60,613	66,249	65,834	60,651	67,702	63,933	69,086	67,699	64,821	754,400	0.8-0.9	0.9
	New England	2,693	2,657	3,191	2,913	3,231	3,451	3,206	3,654	3,472	3,638	3,678	3,681	39,464	5-6	6
	Middle Atlantic	11,846	11,840	14,206	13,114	14,345	14,752	13,281	15,382	14,387	15,123	15,304	14,576	168,158	2-2	2
	East North Central	8,929	9,269	10,680	10,708	11,787	11,510	10,461	11,636	10,821	12,195	11,757	11,004	130,756	2-3	3
	West North Central	5,566	5,390	6,419	6,522	7,583	6,999	6,513	7,373	6,836	7,790	7,471	7,076	81,537	2-3	2
	South Atlantic	5,666	5,686	6,792	6,533	6,858	7,044	6,523	7,139	6,877	7,449	7,106	6,905	80,579	2-3	2
	East South Central	2,421	2,534	3,201	3,318	3,453	3,132	2,962	3,127	2,938	3,213	3,075	2,933	36,308	4-5	4
	West South Central	5,582	5,843	6,878	6,433	6,857	6,744	6,382	6,890	6,717	7,036	6,885	6,691	78,939	3-4	4
	Mountain	1,934	1,900	2,536	2,412	2,537	2,777	2,456	2,620	2,693	2,583	2,477	2,343	29,268	5-5	5
	Pacific	7,506	7,649	8,994	8,659	9,600	9,426	8,868	9,881	9,191	10,058	9,946	9,613	109,392	2-3	3
50	Durable goods, total	22,869	23,880	28,985	28,784	30,405	30,991	28,701	32,279	30,404	32,242	31,037	29,569	350,159	0.8-1.0	0.9
	Middle Atlantic	4,973	5,138	6,295	5,952	6,181	6,464	5,808	6,765	6,303	6,618	6,516	6,164	73,179	4-5	4
	East North Central	3,935	4,363	5,081	5,128	5,495	5,407	4,958	5,793	5,342	5,801	5,674	5,306	62,281	3-4	4
	West North Central	1,776	1,805	2,228	2,378	2,548	2,446	2,383	2,695	2,504	2,740	2,652	2,501	28,656	5-6	5
	South Atlantic	2,809	2,768	3,414	3,455	3,538	3,817	3,480	3,738	3,689	3,869	3,608	3,448	41,633	4-5	4
	West South Central	2,413	2,626	3,180	3,097	3,303	3,366	3,135	3,403	3,224	3,438	3,160	3,128	37,471	4-4	4
	Mountain	923	893	1,192	1,208	1,247	1,412	1,303	1,372	1,340	1,283	1,172	1,108	14,454	6-7	7
	Pacific	4,115	4,283	5,007	4,901	5,316	5,256	5,026	5,641	5,214	5,597	5,524	5,345	61,224	2-3	3
51	Nondurable goods, total	29,274	28,886	33,915	31,829	35,844	34,843	31,950	35,423	33,529	36,844	36,662	35,252	404,254	1.0-1.2	1.0
	New England	1,735	1,735	2,017	1,747	2,014	2,151	1,988	2,293	2,117	2,245	2,316	2,376	24,735	5-7	6
	Middle Atlantic	6,873	6,701	7,912	7,162	8,164	8,288	7,473	8,617	8,084	8,505	8,788	8,411	94,979	3-3	3
	East North Central	4,994	4,906	5,599	5,580	6,292	6,103	5,504	5,843	5,479	6,394	6,083	5,698	68,475	3-4	3
	West North Central	3,790	3,584	4,191	4,145	5,035	4,554	4,129	4,678	4,331	5,050	4,820	4,575	52,882	3-4	3
	South Atlantic	2,857	2,918	3,378	3,078	3,320	3,227	3,044	3,400	3,188	3,580	3,498	3,457	38,946	3-5	3
	East South Central	1,453	1,451	1,788	1,819	1,892	1,609	1,572	1,616	1,505	1,710	1,706	1,668	19,788	3-4	4
	West South Central	3,169	3,217	3,699	3,336	3,554	3,378	3,248	3,487	3,493	3,598	3,725	3,563	41,467	5-5	5
	Pacific	3,392	3,367	3,987	3,757	4,284	4,170	3,842	4,241	3,978	4,461	4,422	4,267	48,168	4-5	4
		1977														
	Merchant wholesalers, total	46,352	47,683	56,383	53,357	54,633	55,794	51,290	55,597	54,505	54,251	56,034	56,224	642,104	0.8-0.9	0.9
	New England	2,381	2,365	2,893	2,649	2,744	2,890	2,651	2,856	2,880	2,919	3,036	3,008	33,272	5-6	6
	Middle Atlantic	10,442	10,806	12,783	11,835	12,208	12,592	11,263	12,356	12,428	11,945	12,494	12,924	144,076	2-2	2
	East North Central	7,692	8,164	9,363	9,042	9,361	9,520	8,807	9,685	9,431	9,724	9,841	9,596	110,226	2-3	3
	West North Central	5,001	5,028	5,842	6,018	6,106	5,820	5,332	5,639	5,509	5,670	5,977	5,617	67,559	2-3	2
	South Atlantic	4,862	4,965	6,061	5,699	5,850	6,017	5,548	6,015	5,934	5,854	6,126	6,188	69,119	2-3	2
	East South Central	2,665	2,632	3,158	2,882	2,882	2,884	2,652	2,853	2,723	2,813	2,765	2,822	33,731	4-5	4
	West South Central	5,165	5,429	6,367	5,842	5,774	6,096	5,715	6,108	5,745	5,644	6,008	6,283	70,176	3-4	4
	Mountain	1,603	1,679	2,029	1,887	1,897	2,054	1,949	2,040	2,177	2,027	1,964	2,099	23,405	5-5	5
	Pacific	6,541	6,609	7,887	7,503	7,811	7,921	7,373	8,045	7,678	7,655	7,821	7,688	90,532	2-3	3
50	Durable goods, total	18,895	20,013	24,008	23,356	24,159	25,292	22,915	25,998	25,461	25,369	25,340	24,797	285,605	0.8-1.0	0.9
	Middle Atlantic	3,995	4,184	5,128	4,921	5,062	5,315	4,662	5,354	5,366	5,420	5,477	5,379	60,263	4-5	4
	East North Central	3,338	3,700	4,199	4,187	4,367	4,549	4,073	4,771	4,635	4,573	4,549	4,282	51,223	3-4	4
	West North Central	1,550	1,637	1,862	1,931	1,996	2,098	1,911	2,083	2,003	2,061	2,075	1,900	23,107	5-6	5
	South Atlantic	2,283	2,406	2,992	2,827	2,957	3,134	2,840	3,127	3,113	3,088	3,051	2,971	34,789	4-5	4
	West South Central	2,089	2,212	2,584	2,508	2,593	2,725	2,520	2,886	2 673	2,643	2,611	2,729	30,773	4-4	4
	Mountain	686	734	922	851	856	1,000	921	1,016	1,051	988	900	989	10,914	6-7	7
	Pacific	3,294	3,427	4,130	4,001	4,156	4,265	3,967	4,477	4,282	4,210	4,335	4,262	48,806	2-3	3
51	Nondurable goods, total	27,457	27,670	32,375	30,001	30,474	30,502	28,375	29,599	29,044	28,882	30,694	31,427	356,498	1.0-1.2	1.0
	New England	1,627	1,614	1,882	1,717	1,800	1,923	1,786	1,860	1,843	1,839	1,918	1,918	21,727	5-7	6
	Middle Atlantic	6,447	6,622	7,655	6,914	7,146	7,277	6,601	7,002	7,062	6,525	7,017	7,545	83,813	3-3	3
	East North Central	4,354	4,464	5,164	4,855	4,994	4,971	4,734	4,914	4,796	5,151	5,292	5,314	59,003	3-4	3
	West North Central	3,451	3,391	3,980	4,087	4,110	3,722	3,421	3,556	3,506	3,609	3,902	3,717	44,452	3-4	3
	South Atlantic	2,579	2,559	3,069	2,872	2,893	2,883	2,708	2,888	2,821	2,766	3,075	3,217	34,330	3-5	3
	East South Central	1,759	1,676	1,978	1,684	1,654	1,645	1,496	1,565	1,422	1,507	1,542	1,626	19,554	3-4	4
	West South Central	3,076	3,217	3,783	3,334	3,181	3,371	3,195	3,222	3,072	3,001	3,397	3,554	39,403	5-5	5
	Pacific	3,247	3,182	3,757	3,502	3,655	3,656	3,406	3,568	3,396	3,445	3,486	3,426	41,726	4-5	4

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

P Preliminary estimate. See p. 21, Sample Design and Estimation Procedures.

[1] See map on page 12.

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

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: December 1978

(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			
		December 1978 from November 1978	December 1978 from December 1977	12 months 1978 from 12 months 1977	December 1978 from November 1978	December 1978 from December 1977		
		A	B	C[1]	D	E	A	D
	Merchant wholesalers, total	-4	+15	+17	+1	+18	0.4	0.2
	New England	0	+22	+19	-1	+16	2.0	1.9
	Middle Atlantic	-5	+13	+17	+2	+15	1.1	0.6
	East North Central	-6	+15	+19	-3	+13	1.2	0.8
	West North Central	-5	+26	+21	-2	+16	1.3	1.1
	South Atlantic	-3	+12	+17	0	+16	1.6	1.0
	East South Central	-5	+4	+8	+1	+23	1.7	1.4
	West South Central	-3	+6	+12	+1	+19	1.4	0.8
	Mountain	-5	+12	+25	+4	+10	2.4	1.3
	Pacific	-3	+25	+21	+1	+25	1.2	0.5
50	Durable goods, total	-5	+19	+23	+1	+18	0.6	0.3
	New England	-4	+20	+28	-1	+17	2.4	1.3
	Middle Atlantic	-5	+15	+21	+2	+13	1.7	1.0
	East North Central	-6	+24	+22	-1	+15	1.9	1.0
	West North Central	-6	+32	+24	0	+22	3.3	1.7
	South Atlantic	-4	+16	+20	-1	+14	1.9	1.2
	East South Central	-8	+6	+16	+2	+14	3.9	2.5
	West South Central	-1	+15	+22	+2	+21	2.1	1.2
	Mountain	-6	+12	+32	+4	+12	2.9	1.7
	Pacific	-3	+25	+25	+1	+29	1.9	0.7
51	Nondurable goods, total	-4	+12	+13	0	+18	0.6	0.4
	New England	+3	+24	+14	-2	+15	1.9	2.7
	Middle Atlantic	-4	+11	+13	+2	+19	1.9	0.9
	East North Central	-6	+7	+16	-7	+10	1.4	1.1
	West North Central	-5	+23	+19	-3	+9	1.6	1.4
	South Atlantic	-1	+7	+13	+2	+22	2.4	1.8
	East South Central	-2	+3	+1	-1	+38	1.7	2.4
	West South Central	-4	0	+5	+1	+17	2.2	1.3
	Mountain	-5	+11	+19	+5	+4	3.2	1.2
	Pacific	-4	+25	+16	0	+17	1.3	1.2
5013,4	Automotive parts and supplies, tires and tubes	-7	+20	+27	+2	+25	2	1
	New England	-6	+26	+28	-3	+32	7	4
	Middle Atlantic	-1	+26	+41	+4	+6	4	2
	East North Central	-5	+20	+20	0	+19	7	1
	West North Central	-7	+26	+22	+3	+28	5	2
	South Atlantic	-8	+10	+22	0	+16	4	2
	East South Central	-8	+10	+27	+2	+13	4	3
	West South Central	-12	+16	+19	+2	+31	5	2
	Mountain	-18	+6	+37	-5	(S)	7	3
	Pacific	-7	+25	+28	+2	(S)	3	2
502	Furniture and home furnishings	-7	+10	+17	-4	+14	2	1
	Middle Atlantic	-12	+24	+19	-5	+22	4	2
	East North Central	-14	+6	+23	-4	-10	7	2
	West North Central	-2	+20	+23	-11	+7	5	4
	West South Central	-7	+35	+26	-12	+11	5	7
	Pacific	-11	+7	+17	-2	+7	5	3
503	Lumber and other construction materials	-13	+20	+23	+2	+17	2	1
	New England	-15	+10	+16	-2	(S)	4	5
	Middle Atlantic	-13	+10	+25	-1	+7	4	2
	East North Central	-13	+19	+23	0	+16	3	2
	West North Central	-18	+41	+28	-1	+23	7	7
	South Atlantic	-16	+30	+36	0	+27	4	2
	East South Central	-12	+3	+25	-4	+11	4	3
	West South Central	-6	+27	+26	+15	+55	6	5
	Pacific	-11	+20	+11	+1	+9	5	1
5051 pt.	Ferrous metals service centers	-5	+30	+31	+4	+22	2	1
	New England	-1	+10	+31	+3	+12	6	2
	Middle Atlantic	-7	+27	+26	+4	+3	5	2
	East North Central	-12	+30	+32	-1	+21	3	2
	West North Central	-6	+26	+35	+3	+19	5	2
	South Atlantic	-4	+13	+25	+7	+17	3	2
	East South Central	-14	+14	+18	+8	+19	4	4
	West South Central	+4	+45	+29	+3	+39	4	2
	Mountain	-10	(S)	+29	+1	+13	2	2
	Pacific	+9	(S)	+58	+15	(S)	2	3
5063	Electrical apparatus and equipment, wiring supplies, and construction materials	-2	+22	+25	+5	+25	2	1
	New England	-5	+21	+24	+2	+24	3	2
	Middle Atlantic	-2	+8	+18	+7	+12	5	2
	East North Central	-3	+21	+26	+3	+14	3	2
	West North Central	-10	+30	+16	+2	+54	5	3
	South Atlantic	-6	+16	+20	-3	+17	3	2
	East South Central	-18	(S)	+42	+15	+43	3	5
	West South Central	+17	+48	+38	+12	+45	4	2
	Mountain	+4	+36	+26	+2	+17	4	2
	Pacific	+1	+38	+28	+1	+29	4	2

See footnotes at end of table.

Table 7. Percent Changes in Sales and Inventories of Merchant Wholesalers and Sampling Errors by Kind of Business for Geographic Divisions: December 1978 —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: December 1978 from November 1978	Sales: December 1978 from December 1977	Sales: 12 months 1978 from 12 months 1977	Inventories: December 1978 from November 1978	Inventories: December 1978 from December 1977	Sampling errors of the ratio corresponding to the percent change in columns[2]--	
		A	B	C[1]	D	E	A	D
5064,5	Electrical appliances, TV and radio sets, and electronic parts and equipment	-6	+4	+17	-2	+16	3	1
	Middle Atlantic	-2	+12	+26	-7	+19	3	2
	East North Central	-11	+11	+6	-2	+18	4	1
	West North Central	+16	+4	+1	-4	+ 3	4	4
	South Atlantic	-1	-5	+13	-2	+12	6	4
	West South Central	-6	+2	+16	-2	+9	4	4
	Mountain	-15	(S)	(S)	-1	-12	6	3
	Pacific	-17	-5	+27	-1	+15	3	2
5072	Hardware	-12	+8	+9	+2	+4	1	1
	New England	-6	(S)	+15	-4	+19	6	3
	Middle Atlantic	-6	+4	+2	+2	0	6	2
	East North Central	-8	+15	+23	+1	+14	4	2
	West North Central	-14	+32	+8	+1	+11	3	3
	South Atlantic	-15	-11	-1	+6	-14	4	2
	East South Central	-21	-8	-10	-3	-18	4	1
	Pacific	-14	+4	+8	+1	+2	3	2
5074	Plumbing and heating equipment and supplies (hydronics)	-6	+15	+14	+3	+15	2	1
	Middle Atlantic	-2	+2	+3	+1	-6	6	3
	East North Central	-5	+30	+23	+5	(S)	3	3
	South Atlantic	+3	+27	+10	+2	+7	3	2
	Mountain	(S)	(S)	(S)	-3	-17	7	4
	Pacific	-2	+24	+15	+3	+8	5	4
5084,5	Industrial machinery, equipment, and supplies	+5	+28	+24	+2	+20	2	1
	Middle Atlantic	+9	+21	+15	-1	+8	7	2
	East North Central	-7	+24	+22	+1	+28	3	2
	West South Central	+22	+47	+42	+1	+26	4	3
	Pacific	+2	+29	+36	+6	+35	5	2
512	Drugs, drug proprietaries, and druggists' sundries	-5	+7	+6	0	+16	1	1
	New England	-12	-3	+4	+5	-3	5	3
	Middle Atlantic	+3	+2	+4	-7	+2	3	2
	East North Central	-9	-3	+4	-5	+3	6	3
	West North Central	-5	-6	+3	+1	+7	2	2
	South Atlantic	-11	+5	+16	-2	+18	6	5
	East South Central	-7	+28	+19	+7	(S)	6	5
	West South Central	+4	+34	+4	-2	+39	3	2
	Mountain	-10	+22	+13	+3	+33	3	2
	Pacific	-4	+16	-1	+1	+19	3	3
5141	Groceries, general-line	-5	+9	+11	-1	+13	1	1
	New England	-7	+6	+18	+2	+18	2	1
	Middle Atlantic	-4	+7	+9	-3	+7	1	2
	East North Central	-3	+6	+7	0	+13	3	1
	West North Central	-9	+1	+9	-7	+13	1	1
	South Atlantic	-7	+20	+18	-2	+26	2	1
	West South Central	-5	+9	+10	-5	+5	2	1
	Mountain	-3	+10	+14	+1	+9	2	2
	Pacific	-4	+21	+18	0	+18	1	1
5142,3,6,9	Specialty-line groceries	-4	+2	+8	+3	+11	1	1
	Middle Atlantic	-2	-4	+13	+4	+13	4	2
	East North Central	-4	+19	+20	-2	+11	3	2
	West North Central	-2	+2	+19	0	+7	3	1
	South Atlantic	-1	-5	+11	+8	+36	5	6
	East South Central	-5	+1	(S)	-7	+8	2	2
5148	Fresh fruits and vegetables	0	+10	+21	-2	+25	2	4
	Middle Atlantic	-1	+15	+26	-1	+24	7	5
	East North Central	+4	-2	+11	-7	+9	6	6
	West North Central	-1	-3	+12	-5	+9	6	3
	West South Central	+11	+14	+26	-6	+49	5	3
	Pacific	-12	+6	+17	-3	+30	4	4
5194	Tobacco and tobacco products	+1	+3	+9	-3	+12	1	1
	New England	0	-10	-1	-8	+1	5	3
	Middle Atlantic	+13	+22	+14	0	+28	4	3
	East North Central	-3	-10	+11	-4	-5	4	3
	West North Central	-7	-3	-7	-15	+5	4	2
	South Atlantic	+5	+17	+16	-5	+28	6	6
	East South Central	-5	(S)	-5	-1	-2	7	4
	West South Central	+3	+8	+22	+1	(S)	7	6
	Mountain	-2	(S)	-9	-6	(S)	6	2
	Pacific	-6	+16	+18	-3	+11	2	5

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

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

[1]See map on page 7.

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

APPENDIX A. Reliability of Data

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

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

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

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

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

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

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

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

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

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

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

Note: Measures of sampling variability are based on data unadjusted for seasonal variations or trading-day differences. The range of sampling error of the monthly dollar estimates and the ratio of current month to previous month for sales and inventories is based on date 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 1977-December 1978

1972 SIC code	Kind of business	1977											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	91.7	92.1	107.2	99.0	100.6	103.8	95.5	104.5	102.5	100.4	101.1	99.6
	Total (excluding farm-product raw materials)	89.6	91.5	106.3	99.7	101.8	106.0	96.5	105.8	103.6	100.0	100.0	96.9
50	Durable goods, total	87.1	88.2	106.3	101.3	103.7	107.8	96.9	106.5	105.8	101.1	99.3	94.0
501	Motor vehicles and automotive parts and supplies	89.7	89.3	109.5	108.3	107.5	107.2	100.5	105.9	101.1	94.2	95.0	90.0
502	Furniture and home furnishings	82.6	89.5	104.2	97.8	98.8	106.7	90.7	106.4	106.9	110.3	109.2	94.7
503	Lumber and other construction materials	78.4	80.8	101.1	99.8	108.0	112.1	104.6	116.4	108.7	102.4	100.6	85.4
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.7	89.9	104.1	101.6	101.8	104.0	92.1	106.4	102.0	109.1	110.4	98.2
505	Metals and minerals, except petroleum	94.4	90.9	110.4	99.9	105.3	104.8	92.5	107.5	105.0	96.0	99.5	90.8
506	Electrical goods	87.8	88.6	101.8	97.1	96.0	108.4	98.5	105.9	104.2	106.4	101.9	101.6
507	Hardware, plumbing, heating equipment, and supplies	87.4	87.4	101.2	99.4	102.9	108.3	99.4	108.7	106.9	105.8	100.8	89.9
508	Machinery, equipment, and supplies	86.4	89.0	107.7	102.7	104.4	108.8	95.7	103.5	107.3	102.5	95.5	94.9
509	Miscellaneous durable goods	82.8	89.8	105.7	98.8	100.4	107.7	89.8	105.8	106.7	104.1	104.3	102.0
51	Nondurable goods, total	95.1	95.1	108.4	97.4	98.3	100.7	94.8	102.3	99.7	99.4	102.8	103.9
	Total (excluding farm-product raw materials)	91.7	94.2	106.8	98.1	100.0	104.1	96.3	104.6	101.6	99.0	100.6	100.3
511	Paper and paper products	93.8	92.2	104.3	95.1	96.4	104.2	97.3	108.3	104.7	103.6	103.2	95.7
512	Drugs, drug proprietaries, and druggists' sundries	94.2	92.6	105.1	98.8	97.7	98.7	92.7	103.9	104.4	108.3	101.4	98.9
513	Apparel, piece goods, and notions	89.7	94.6	106.4	95.2	95.2	100.5	95.1	114.9	108.8	105.4	105.6	87.1
514	Groceries and related products	94.2	90.9	103.8	98.5	101.5	106.7	99.1	105.4	100.7	100.1	99.7	98.5
515	Farm-product raw materials[1]	105.1	95.8	112.8	96.9	101.5	88.2	88.5	95.5	93.5	102.2	110.6	108.6
516	Chemicals and allied products	87.1	89.9	107.4	101.2	102.5	106.5	97.0	107.2	103.4	102.0	99.3	94.3
517	Petroleum and petroleum products	94.8	102.6	105.4	98.9	90.9	98.9	100.1	101.9	97.3	102.4	101.4	105.6
518	Beer, wine, and distilled alcoholic beverages	75.8	80.8	101.4	94.1	103.0	113.8	98.1	107.0	100.3	98.8	105.8	120.1
519	Miscellaneous nondurable goods	95.1	101.7	116.8	104.4	101.4	100.9	88.1	96.2	99.6	95.4	96.1	100.9
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	102.1	101.4	100.9	99.9	98.4	98.4	98.4	98.4	98.6	100.9	102.1	101.1
	Total (excluding farm-product raw materials)	99.8	100.3	100.8	100.1	100.3	100.5	100.1	99.2	99.3	100.0	100.2	99.4
50	Durable goods, total	99.1	100.3	101.1	100.9	101.4	101.8	100.9	99.4	99.1	99.1	98.9	98.9
501	Motor vehicles and automotive parts and supplies	101.4	102.8	102.1	101.4	102.4	100.9	98.9	96.6	97.9	97.8	97.9	100.4
502	Furniture and home furnishings	98.9	99.4	100.1	99.8	99.9	101.4	100.9	101.3	100.9	99.6	100.4	98.1
503	Lumber and other construction materials	97.9	98.4	102.8	102.6	105.4	103.1	102.9	100.6	97.8	95.3	96.4	97.1
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	100.8	99.9	100.9	103.4	107.6	104.6	101.6	100.3	100.6	94.4	89.3
505	Metals and minerals, except petroleum	100.4	98.9	100.9	101.4	100.1	99.4	102.8	101.3	98.1	96.8	99.1	101.4
506	Electrical goods	97.3	97.6	99.1	99.4	100.6	101.9	101.1	101.3	100.4	101.6	101.4	98.8
507	Hardware, plumbing, heating equipment, and supplies	98.1	98.6	101.6	103.1	102.8	101.1	100.9	101.4	98.4	98.3	98.4	97.6
508	Machinery, equipment, and supplies	99.1	101.1	101.9	100.6	101.1	102.3	100.1	97.9	99.1	99.6	99.6	97.8
509	Miscellaneous durable goods	97.1	98.9	96.8	98.4	96.8	101.3	101.9	102.9	101.3	103.1	101.8	100.4
51	Nondurable goods, total	105.4	103.4	100.9	98.1	93.9	93.3	94.8	97.3	97.6	103.9	106.9	105.4
	Total (excluding farm-product raw materials)	100.5	100.2	100.5	99.4	98.2	98.4	98.3	99.0	99.8	101.9	102.7	100.9
511	Paper and paper products	99.1	99.1	98.8	100.4	99.8	101.9	99.6	100.9	100.1	100.3	99.8	100.9
512	Drugs, drug proprietaries, and druggists' sundries	96.4	97.8	100.1	101.4	98.1	100.4	99.3	100.1	102.4	104.4	101.4	98.9
513	Apparel, piece goods, and notions	100.1	99.6	98.4	98.6	101.1	100.4	102.6	101.1	100.4	99.1	99.1	99.9
514	Groceries and related products	99.9	100.9	102.4	99.9	98.4	98.4	98.1	98.1	99.1	101.3	102.9	101.1
515	Farm-product raw materials[1]	121.4	113.9	104.9	92.4	80.8	73.9	84.8	84.8	89.8	108.9	122.1	123.9
516	Chemicals and allied products	99.8	100.1	102.1	101.4	101.3	99.9	99.8	99.1	99.6	97.8	99.4	100.1
517	Petroleum and petroleum products	104.8	99.8	97.1	93.1	95.1	96.8	96.4	99.3	101.8	106.8	105.6	104.3
518	Beer, wine, and distilled alcoholic beverages	96.9	97.9	97.1	98.9	101.8	103.1	98.6	97.6	100.6	107.6	105.4	95.3
519	Miscellaneous nondurable goods	103.6	104.3	102.9	100.6	96.3	93.3	95.3	98.4	98.1	99.8	103.6	104.4

See footnotes at end of table.

Table B-1. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1977-December 1978—Continued

1972 SIC code	Kind of business	1978											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		Seasonal and trading-day adjustment factors for sales											
	Merchant wholesalers, total	93.9	92.2	106.9	96.5	103.5	103.8	95.4	105.1	98.9	102.5	101.4	96.7
	Total (excluding farm-product raw materials)	91.9	91.6	106.4	97.5	104.6	105.9	95.9	106.4	100.9	102.2	98.8	95.1
50	Durable goods, total	89.8	89.0	105.2	98.7	106.3	107.6	96.4	107.1	102.9	104.2	98.4	91.4
501	Motor vehicles and automotive parts and supplies	93.6	89.1	107.0	107.0	107.4	108.0	99.3	107.5	96.9	98.4	92.5	91.4
502	Furniture and home furnishings	84.6	89.1	104.6	95.9	101.6	106.2	89.4	107.2	104.2	112.8	108.3	93.8
503	Lumber and other construction materials	81.6	81.2	101.7	95.3	110.7	112.5	102.4	116.9	104.7	108.0	100.0	82.7
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	79.4	90.3	102.8	100.3	109.7	98.1	95.1	104.0	104.7	105.7	108.7	97.3
505	Metals and minerals, except petroleum	98.8	91.0	108.9	97.9	107.9	103.6	90.7	108.4	103.1	100.0	97.4	91.1
506	Electrical goods	89.4	89.1	101.7	95.2	99.2	106.4	100.2	104.9	100.9	107.7	103.3	98.5
507	Hardware, plumbing, heating equipment, and supplies	89.5	87.8	100.8	97.5	105.5	107.8	99.7	109.4	103.4	107.2	101.1	88.0
508	Machinery, equipment, and supplies	88.1	88.8	107.8	99.6	107.3	108.7	95.7	104.3	104.0	103.7	96.9	91.6
509	Miscellaneous durable goods	86.5	89.8	104.7	95.1	101.0	110.6	87.6	108.0	102.4	109.5	105.2	96.2
51	Nondurable goods, total	97.0	95.1	108.7	95.1	101.3	100.9	94.8	102.9	96.9	100.9	102.6	100.7
	Total (excluding farm-product raw materials)	93.9	94.5	107.7	95.7	102.7	104.4	95.6	105.1	98.6	100.5	100.4	97.5
511	Paper and paper products	95.2	92.4	104.5	92.6	101.9	103.0	96.6	108.3	103.7	105.0	100.5	92.7
512	Drugs, drug proprietaries, and druggists' sundries	98.2	92.7	104.9	96.0	100.4	99.8	92.7	104.5	101.4	108.3	100.6	96.9
513	Apparel, piece goods, and notions	91.3	94.8	106.4	92.3	99.6	99.3	93.5	115.1	106.8	108.1	103.9	86.0
514	Groceries and related products	95.0	91.0	104.1	96.4	104.5	106.2	99.1	106.0	100.1	100.3	99.9	94.3
515	Farm-product raw materials[1]	106.8	95.8	112.8	94.4	99.6	89.9	92.3	94.6	92.6	100.5	111.2	104.6
516	Chemicals and allied products	90.0	89.4	106.9	98.2	105.2	106.5	97.0	107.3	99.7	105.5	98.0	94.1
517	Petroleum and petroleum products	96.5	102.1	107.7	96.2	92.8	99.9	98.4	101.7	95.5	102.4	98.7	105.8
518	Beer, wine, and distilled alcoholic beverages	78.7	80.9	100.7	91.2	106.7	113.9	97.3	108.1	96.9	101.9	105.3	115.3
519	Miscellaneous nondurable goods	97.4	101.6	118.1	101.5	104.3	102.9	87.2	96.5	96.0	97.0	96.4	97.4
		Seasonal adjustment factors for inventories											
	Merchant wholesalers, total	101.9	101.3	101.0	100.1	98.6	98.5	98.4	98.0	98.9	100.6	101.7	100.5
	Total (excluding farm-product raw materials)	99.7	100.3	100.8	100.2	100.2	100.5	100.1	99.1	99.4	100.0	100.3	99.2
50	Durable goods, total	99.1	100.2	100.9	100.6	101.1	101.6	100.8	99.3	99.3	99.0	99.1	98.7
501	Motor vehicles and automotive parts and supplies	101.4	102.6	101.8	101.0	102.1	100.9	98.9	96.8	97.9	97.8	98.1	100.5
502	Furniture and home furnishings	99.4	99.2	99.8	99.5	99.8	101.3	100.6	101.0	101.5	100.5	99.1	98.1
503	Lumber and other construction materials	98.1	98.8	103.0	102.6	105.0	101.6	101.5	100.2	98.9	96.1	96.9	97.3
504	Sporting, recreational, photographic, and hobby goods, toys and supplies	97.1	102.4	99.2	100.5	103.3	107.3	104.4	101.1	100.6	101.2	93.9	89.0
505	Metals and minerals, except petroleum	100.4	98.6	100.5	101.0	99.7	99.2	102.4	101.9	98.6	96.7	99.5	101.5
506	Electrical goods	97.2	97.4	99.0	99.9	100.2	101.8	101.2	101.5	100.4	101.2	101.0	98.8
507	Hardware, plumbing, heating equipment, and supplies	97.8	98.0	101.6	103.2	102.8	101.7	100.5	101.4	98.7	98.6	98.2	97.3
508	Machinery, equipment, and supplies	99.2	101.1	101.7	100.0	101.0	102.3	100.1	98.1	99.3	99.6	99.5	97.8
509	Miscellaneous durable goods	97.1	98.7	96.6	98.2	96.6	101.2	101.8	102.6	101.5	103.1	102.1	100.2
51	Nondurable goods, total	104.8	103.2	101.6	98.3	95.3	93.7	94.6	96.3	98.6	103.3	106.0	103.9
	Total (excluding farm-product raw materials)	100.4	100.2	100.7	99.7	98.5	98.6	98.3	98.6	99.7	101.9	102.5	100.8
511	Paper and paper products	98.7	99.0	98.7	100.6	99.4	102.0	99.6	100.6	99.5	101.5	100.0	100.2
512	Drugs, drug proprietaries, and druggists' sundries	96.3	97.6	99.9	101.3	97.7	100.2	99.2	99.8	102.0	105.0	101.8	98.8
513	Apparel, piece goods, and notions	99.9	99.4	98.6	98.5	101.1	100.0	102.2	101.0	100.0	98.3	100.1	100.6
514	Groceries and related products	99.6	100.7	102.2	100.1	98.6	98.5	98.1	97.8	99.0	101.8	102.1	101.3
515	Farm-product raw materials[1]	120.2	114.0	106.9	93.1	81.5	76.1	84.4	83.5	88.3	108.7	121.4	120.9
516	Chemicals and allied products	99.9	99.9	102.7	101.1	101.3	99.8	99.6	99.4	99.9	96.9	98.7	100.6
517	Petroleum and petroleum products	104.9	100.2	97.9	93.5	95.6	97.0	95.4	99.0	102.5	104.8	104.6	104.2
518	Beer, wine, and distilled alcoholic beverages	96.6	96.5	97.2	99.0	101.3	103.1	98.9	97.6	100.8	107.5	106.5	94.6
519	Miscellaneous nondurable goods	103.4	103.2	105.3	101.1	96.2	92.9	95.1	97.2	98.6	99.7	103.2	104.1

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]—Establishment 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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