

Monthly Wholesale Trade

January 1984

Sales and Inventories

Issued March 1984
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NOTICE OF REVISION TO MONTHLY WHOLESALE SALES, INVENTORY, AND STOCK/SALES RATIO ESTIMATES: Monthly merchant wholesalers' sales, inventories, and stock/sales ratios by kind of business for the United States have been revised for the period January 1978 through January 1984 utilizing the results from the 1982 Annual Wholesale Trade Survey.

The data shown in this report reflect this revision. Revised estimates for other months are shown in the publication "Revised Monthly Wholesale Trade, Sales and Inventories: January 1974 through December 1983."

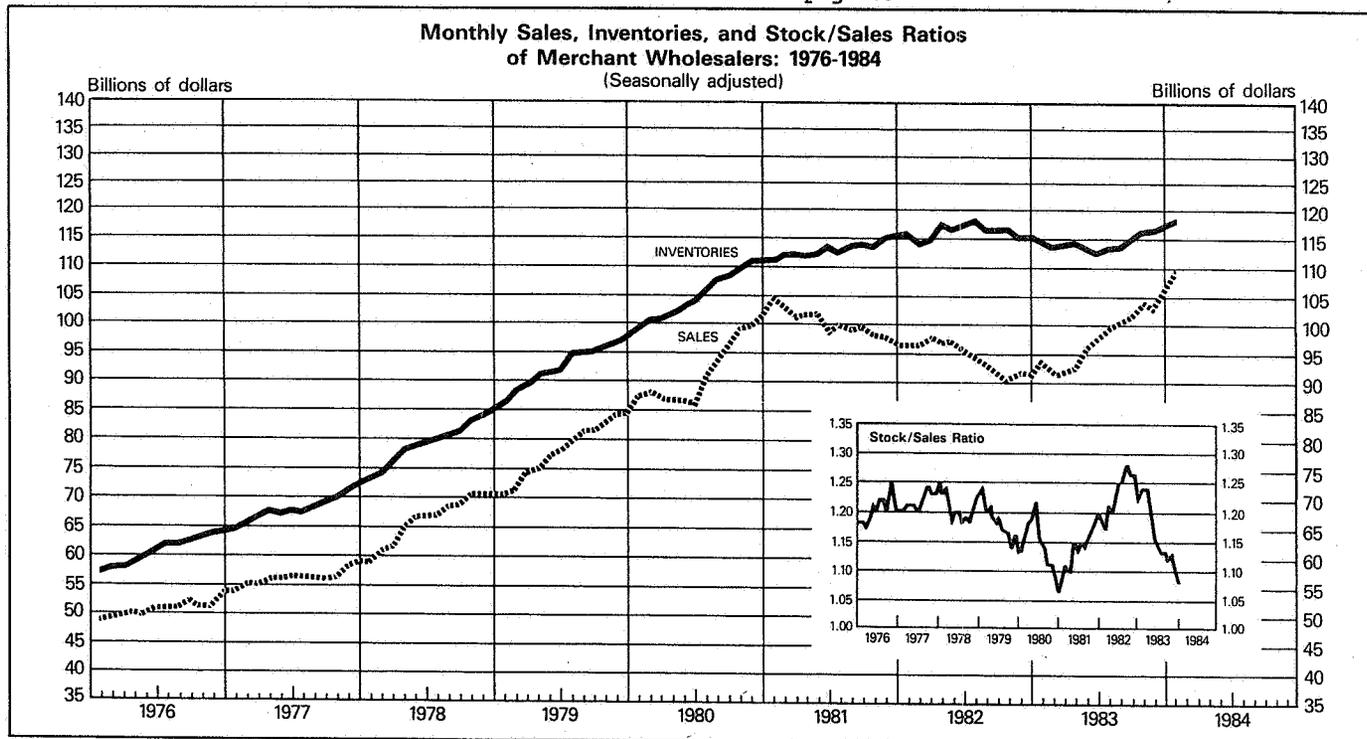
Sales January 1984 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$110.1 billion, up 3.0 percent from the revised December level of \$106.9 billion, and 16.7 percent above a year ago. January sales of durable goods were up 3.6 percent from the revised December level and increased 18.4 percent from a year ago. This is the fifth consecutive positive month-to-month percent change. January sales of nondurable goods were up 2.6 percent from the revised December level and

were 15.4 percent above January 1983. Based on seasonally adjusted data, comparisons with previous month sales levels showed mixed results for both durable and nondurable goods categories.

Inventories Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$118.9 billion at the end of January, up 0.7 percent from the revised December level of \$118.1 billion and 3.4 percent above a year ago. Inventories of durable goods wholesalers increased 1.0 percent from the December level, and were 1.4 percent above a year ago. Inventories of nondurable goods wholesalers were little changed from the December level and were 7.2 percent above January 1983.

Stock/Sales Ratio The January stock/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.08, down from the December ratio of 1.10 and below the year ago ratio of 1.22.

Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling errors. A discussion of the reliability of the data is on page 3.



U.S. Department of Commerce
BUREAU OF THE CENSUS

Address inquiries concerning this report to Michael Brown, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-3916 or 763-3917.

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Table 1. Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1984 and 1983

(SALES AND INVENTORIES IN MILLIONS OF DOLLARS)

SIC CODE	KIND OF BUSINESS	1983												TOTAL 1983	
		JAN. ^P	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.		DEC.
DATA NOT ADJUSTED FOR SEASONAL VARIATION OR TRADING-DAY DIFFERENCES															
	SALES, TOTAL.....	103,851	86,870	84,566	100,445	90,803	98,304	103,032	94,672	103,062	102,862	106,051	105,762	107,361	1,183,790
50	DURABLE GOODS.....	43,318	35,929	34,978	41,781	38,479	40,870	44,858	40,811	44,809	44,754	46,300	45,620	45,621	504,810
501	MOTOR VEHICLES & AUTO. EQUIP.	8,901	6,931	6,684	8,344	7,884	7,997	8,867	8,425	8,541	8,195	9,030	8,953	8,963	98,814
502	FURNITURE & HOME FURNISHINGS.....	1,572	1,228	1,242	1,544	1,468	1,503	1,573	1,364	1,631	1,696	1,868	1,787	1,668	18,572
506	ELECTRICAL GOODS.....	5,777	4,241	4,347	5,000	4,755	5,089	5,685	5,585	6,054	6,269	6,249	6,332	6,537	66,143
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,617	2,223	2,073	2,443	2,314	2,540	2,726	2,667	2,979	2,875	2,887	2,887	2,887	31,187
508	MACHINERY, EQUIP. & SUPPLIES.....	12,122	10,344	10,226	12,102	10,731	11,587	12,332	10,718	12,174	12,129	11,970	12,174	12,465	138,952
51	NONDURABLE GOODS.....	60,533	50,941	49,588	58,664	52,324	57,434	58,174	53,861	58,253	58,108	59,751	60,142	61,740	678,980
511	PAPER & PAPER PRODUCTS.....	2,394	2,051	1,947	2,265	2,009	2,091	2,330	1,990	2,330	2,417	2,383	2,417	2,439	26,532
514	GROCERIES & RELATED PRODUCTS.....	17,106	14,865	14,681	16,646	15,796	16,981	17,452	16,252	17,396	17,329	17,329	17,329	17,492	199,836
518	BEER, WINE, & DISTILLED BEVERAGES.	2,417	2,262	2,321	3,086	2,779	3,327	3,799	3,127	3,313	3,135	2,933	3,330	3,543	36,945
519	MISC. NONDURABLE GOODS.....	7,070	5,655	5,689	7,408	6,954	8,352	7,848	6,746	7,077	7,078	7,472	7,055	7,410	84,744
	INVENTORIES, TOTAL.....	119,514	115,518	115,300	115,695	115,115	112,624	112,130	112,019	112,420	114,993	117,778	118,566	119,421	(X)
50	DURABLE GOODS.....	75,368	74,352	73,980	74,178	74,048	73,228	73,371	73,339	73,368	74,769	74,582	74,417	75,432	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	12,241	13,011	12,754	12,581	12,551	12,249	12,129	12,014	11,631	12,493	12,639	12,459	12,488	(X)
502	FURNITURE & HOME FURNISHINGS.....	2,355	2,243	2,277	2,253	2,212	2,187	2,259	2,250	2,306	2,354	2,233	2,264	2,264	(X)
505	METALS & MINERALS, EX. PETROLEUM..	8,290	8,397	8,601	8,365	8,018	8,143	8,192	8,133	8,213	8,497	8,223	8,399	8,462	(X)
506	ELECTRICAL GOODS.....	8,966	8,094	7,843	7,964	8,045	8,030	8,201	8,461	8,433	8,603	8,811	8,698	8,812	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,534	4,556	4,594	4,606	4,696	4,601	4,507	4,552	4,470	4,484	4,493	4,569	4,533	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	28,662	28,082	28,069	28,467	28,403	28,045	28,045	27,587	27,914	27,729	27,914	27,684	28,534	(X)
51	NONDURABLE GOODS.....	44,146	41,166	41,320	41,517	41,067	39,396	38,759	38,680	39,052	40,224	43,196	44,149	43,989	(X)
511	PAPER & PAPER PRODUCTS.....	2,308	1,970	1,974	1,986	1,980	2,073	2,080	2,081	2,213	2,223	2,229	2,377	2,341	(X)
514	GROCERIES & RELATED PRODUCTS.....	8,588	7,908	8,108	8,112	7,929	8,174	8,085	8,012	8,265	8,401	8,775	9,073	8,726	(X)
515	FARM-PRODUCT RAW MATERIALS.....	9,601	8,320	8,062	7,815	6,899	5,808	5,417	6,038	6,617	7,227	9,106	9,615	9,439	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.	2,922	3,100	3,116	3,200	3,342	3,409	3,382	3,459	3,329	3,196	3,506	3,482	2,916	(X)
519	MISC. NONDURABLE GOODS.....	7,251	7,153	7,346	7,457	7,408	6,596	6,386	6,310	6,113	6,317	6,594	6,582	7,021	(X)
	STOCK/SALES RATIOS, TOTAL....	1.15	1.33	1.36	1.15	1.27	1.15	1.09	1.18	1.09	1.12	1.11	1.12	1.11	(X)
50	DURABLE GOODS.....	1.74	2.07	2.12	1.78	1.92	1.79	1.64	1.80	1.64	1.67	1.61	1.63	1.65	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	1.38	1.88	1.91	1.51	1.59	1.53	1.37	1.43	1.36	1.52	1.40	1.39	1.39	(X)
502	FURNITURE & HOME FURNISHINGS.....	1.50	1.83	1.83	1.46	1.51	1.46	1.44	1.65	1.41	1.39	1.20	1.27	1.39	(X)
506	ELECTRICAL GOODS.....	1.55	1.91	1.80	1.59	1.69	1.58	1.44	1.51	1.39	1.37	1.41	1.37	1.35	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	1.73	2.05	2.22	1.89	2.03	1.81	1.65	1.71	1.50	1.56	1.56	1.61	1.73	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	2.36	2.71	2.74	2.35	2.65	2.42	2.27	2.57	2.25	2.29	2.33	2.27	2.29	(X)
51	NONDURABLE GOODS.....	0.73	0.81	0.83	0.71	0.78	0.69	0.67	0.72	0.67	0.69	0.72	0.73	0.71	(X)
511	PAPER & PAPER PRODUCTS.....	0.96	0.96	1.01	0.88	0.99	0.99	0.95	1.05	0.95	0.92	0.94	0.98	0.96	(X)
514	GROCERIES & RELATED PRODUCTS.....	0.50	0.53	0.55	0.49	0.50	0.48	0.46	0.49	0.48	0.47	0.51	0.52	0.50	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.	1.21	1.37	1.34	1.04	1.20	1.02	0.89	1.11	1.00	1.02	1.20	1.05	0.82	(X)
519	MISC. NONDURABLE GOODS.....	1.03	1.26	1.29	1.01	1.07	0.79	0.81	0.94	0.86	0.89	0.88	0.93	0.95	(X)
DATA ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES															
	SALES, TOTAL.....	110,109	94,344	92,347	92,614	92,890	96,646	98,577	99,941	100,894	102,171	104,210	103,793	106,892	(X)
50	DURABLE GOODS.....	48,024	40,552	38,564	38,794	39,224	40,667	42,479	42,824	42,757	43,535	44,519	44,946	46,363	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	9,592	7,616	7,051	7,592	7,677	7,894	8,195	8,632	8,473	8,746	8,923	9,080	9,231	(X)
502	FURNITURE & HOME FURNISHINGS.....	1,743	1,355	1,333	1,413	1,432	1,548	1,498	1,536	1,601	1,650	1,725	1,727	1,745	(X)
506	ELECTRICAL GOODS.....	6,455	4,781	4,814	4,817	5,037	5,236	5,389	5,619	5,799	5,970	6,044	6,042	6,347	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,808	2,443	2,391	2,400	2,359	2,535	2,591	2,643	2,748	2,751	2,718	2,792	2,815	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	13,713	11,986	11,200	11,226	10,753	11,371	11,656	11,378	11,539	11,708	11,887	12,186	12,342	(X)
51	NONDURABLE GOODS.....	62,085	53,792	53,783	53,820	53,666	55,979	56,098	57,117	58,137	58,636	59,691	58,847	60,529	(X)
511	PAPER & PAPER PRODUCTS.....	2,443	2,150	2,065	2,088	2,093	2,112	2,142	2,147	2,230	2,329	2,348	2,398	2,469	(X)
514	GROCERIES & RELATED PRODUCTS.....	17,726	15,714	16,045	15,944	16,102	16,913	16,797	16,449	16,857	17,524	17,095	17,187	17,336	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.	3,115	3,016	2,938	3,040	2,868	3,317	3,407	3,105	3,090	3,038	3,008	3,026	3,052	(X)
519	MISC. NONDURABLE GOODS.....	8,043	6,493	6,524	6,632	6,868	7,181	7,233	7,215	7,273	7,193	7,487	7,303	7,373	(X)
	INVENTORIES, TOTAL.....	118,919	115,030	114,425	114,569	114,902	113,557	113,172	114,124	114,227	115,674	116,825	116,958	118,067	(X)
50	DURABLE GOODS.....	76,593	75,561	74,502	74,104	73,753	72,647	72,501	73,193	73,076	74,249	74,806	74,791	75,811	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	12,204	12,972	12,729	12,506	12,414	12,261	12,153	12,087	11,954	12,531	12,626	12,397	12,352	(X)
502	FURNITURE & HOME FURNISHINGS.....	2,398	2,284	2,284	2,213	2,188	2,198	2,234	2,223	2,308	2,301	2,219	2,317	2,369	(X)
505	METALS & MINERALS, EX. PETROLEUM..	8,451	8,560	8,644	8,484	8,266	7,999	8,103	8,141	8,100	8,339	8,256	8,357	8,420	(X)
506	ELECTRICAL GOODS.....	9,320	8,414	8,061	8,127	8,110	8,014	8,088	8,352	8,300	8,451	8,571	8,620	8,901	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,575	4,602	4,576	4,533	4,498	4,511	4,440	4,494	4,474	4,548	4,561	4,769	4,678	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	29,367	28,773	28,295	28,325	28,122	27,685	27,549	27,450	27,280	27,564	28,168	28,020	28,793	(X)
51	NONDURABLE GOODS.....	42,326	39,469	39,923	40,465	41,149	40,910	40,671	40,931	41,151	41,425	42,019	42,167	42,256	(X)
511	PAPER & PAPER PRODUCTS.....	2,329	1,990	1,988	2,004	2,000	2,057	2,059	2,054	2,206	2,230	2,242	2,353	2,343	(X)
514	GROCERIES & RELATED PRODUCTS.....	8,649	7,964	8,068	7,984	7,977	8,358	8,126	8,260	8,654	8,384	8,462	8,792	8,530	(X)
515	FARM-PRODUCT RAW MATERIALS.....	7,524	6,536	6,763	7,028	7,083	7,296	7,301	7,731	8,230	8,443	8,648	8,107	7,668	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.	3,047	3,228	3,301	3,265	3,349	3,372	3,309	3,428	3,332	3,209	3,283	3,209	3,152	(X)
519	MISC. NONDURABLE GOODS.....	6,893	6,799	6,853	6,823	6,904	6,669	6,758	6,691	6,580	6,699	6,735	6,730	7,014	(X)
	STOCK/SALES RATIOS, TOTAL....	1.08	1.22	1.24	1.24	1.24	1.17	1.15	1.14	1.13	1.13	1.12	1.13	1.10	

Table 2. Percent Change in Sales and Inventories of Merchant Wholesalers

SIC CODE	KIND OF BUSINESS	UNADJUSTED				ADJUSTED ¹			
		SALES		INVENTORIES, END-OF-MONTH (AT COST)		SALES		INVENTORIES, END-OF-MONTH (AT COST)	
		JAN. 1984 FROM DEC. 1983	JAN. 1984 FROM JAN. 1983	JAN. 1984 FROM DEC. 1983	JAN. 1984 FROM JAN. 1983	JAN. 1984 FROM DEC. 1983	JAN. 1984 FROM JAN. 1983	JAN. 1984 FROM DEC. 1983	JAN. 1984 FROM JAN. 1983
	TOTAL.....	-3.3	+19.5	+0.1	+3.5	+3.0	+16.7	+0.7	+3.4
50	DURABLE GOODS.....	-5.0	+20.6	-0.1	+1.4	+3.6	+18.4	+1.0	+1.4
501	MOTOR VEHICLES & AUTO, EQUIP.	-0.7	+28.4	-2.0	-5.9	+3.9	+25.9	-1.2	-5.9
502	FURNITURE & HOME FURNISHINGS.....	-5.8	+28.0	+1.3	+5.0	-0.1	+28.6	+1.2	+5.0
505	METALS & MINERALS, EX. PETROLEUM..	(S)	(S)	-2.0	-1.3	(S)	(S)	+0.4	-1.3
506	ELECTRICAL GOODS.....	-11.6	+36.2	+1.7	+10.8	+1.7	+35.0	+4.7	+10.8
507	HARDWARE, PLUMBING & HEATING EQUIP.	-0.3	+17.7	0.0	-0.5	-0.2	+14.9	-2.2	-0.6
508	MACHINERY, EQUIP. & SUPPLIES.....	-2.8	+17.2	+0.4	+2.1	+11.1	+14.4	+2.0	+2.1
51	NONDURABLE GOODS.....	-2.0	+18.8	+0.4	+7.2	+2.6	+15.4	+0.2	+7.2
511	PAPER & PAPER PRODUCTS.....	-1.8	+16.7	-1.4	+17.2	-1.1	+13.6	-0.6	+17.0
514	GROCERIES & RELATED PRODUCTS.....	-2.2	+15.1	-1.6	+8.6	+2.2	+12.8	+1.4	+8.6
515	FARM-PRODUCT RAW MATERIALS.....	(S)	(S)	+1.7	+15.4	(S)	(S)	-1.9	+15.1
518	BEER, WINE, & DISTILLED BEVERAGES.	-31.8	+6.9	+0.2	-5.7	+2.1	+3.3	-3.3	-5.5
519	MISC. NONDURABLE GOODS.....	-4.6	+25.0	+3.3	+1.4	+9.1	+23.9	-1.7	+1.4

(S) DATA DO NOT MEET PUBLICATION STANDARDS.

¹ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES.

EXPLANATORY MATERIAL

Scope of Survey

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the *Standard Industrial Classification Manual*¹ and as covered in the 1977 Economic Censuses, includes establishments 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; and (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), who 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.

Also included in this survey are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments and manufacturers' sales branches of ferrous metal service centers SIC (505).

¹ Executive Office of the President, Office of Management and Budget, *Standard Industrial Classification Manual, 1972*, and the 1977 Supplement.

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.

The estimates of the coefficients of variation for sales and inventories at the level of detail provided in this publication are shown in table 4. Note that 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. 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.

The coefficient of variation also 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.

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 13 percent of the sales estimates and 21 percent for inventories.

Differences between preliminary and final estimates² of seasonally adjusted sales ranged from approximately +0.8 percent to -0.4 percent for the past 12 months. During the same period, the average of the absolute differences was 0.3 percent. The corresponding range for inventories was approximately +0.8 percent to -0.6 percent for the past 12 months. The average of the absolute differences was 0.4 percent.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventories estimates in this report reflect the results of a benchmarking³ operation which made use of 1982 estimates tabulated from the 1982 Annual Trade Survey. Monthly wholesale sales and inventories estimates were revised in a manner designed to minimize the differences in the month-to-month trends between the revised and unrevised series. The estimates for the unrevised series were derived by using composite estimating procedures. Monthly sales estimates were revised for the period January 1980 through December 1983. The revised monthly sales estimates for 1980 and 1981 were constrained to sum to the 1980 and 1981 annual estimates tabulated from the 1981 Annual Trade Survey. The revised monthly sales estimates for 1982 were constrained to sum to the 1982 annual estimates tabulated from the 1982 Annual Trade Survey. Similarly, monthly inventories were revised for the period January 1982 through December 1983 using end-of-year inventories tabulated for 1981 and 1982 as benchmarks. (For a few series, monthly inventories were revised for the period January 1978 through December 1983.)

Through the use of carry-forward factors, the effect of the revision process was applied to all composite estimates subsequent to December 1982. These factors were derived at the three-digit kind-of-business level and are held constant until the next revision and benchmarking process. Aggregate level estimates were derived by summing appropriate detail level estimates, thereby assuring additivity.

Subsequent revisions of the monthly sales and inventory series will make use of future annual surveys of wholesale trade and the 1982 Census of Wholesale Trade.

Unpublished Data

Sales and inventory estimates for unpublished three-digit wholesale trade categories are not included in this publication because the sampling variability associated with these data do not meet publication criteria. The Census Bureau on written request will release these data for individual use, though not for publication.

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 sources such as investments, rental or sale of real estate, etc.

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.

Inventories. Inventories represent stocks at cost of merchandise owned by merchant wholesalers at the end of the month regardless of location except for goods held outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included. Goods held in foreign trade zones in the United States are also included.

Stock/sales Ratios. The stock/sales ratios are derived by dividing the dollar value of inventories 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.

Kind-of-Business Classifications

The durable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 50. This group includes establishments classified in SIC groups 501 through 509.

The nondurable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 51. This group includes establishments classified in SIC groups 511 through 519.

For a further description of the kinds of business included in the major groups see the *1972 Standard Industrial Classification Manual* and the 1977 Supplement.

Adjustment for Seasonal and Trading-day Variation

Seasonal factors for adjusting data in this 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 estimates were also derived from the X-11 program.

Seasonal 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 conditions, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of the trading-day adjustment procedure 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 seasonal adjustment procedure may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

² See Sample Design and Estimation Procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983*.

³ For a more detailed description, see the section dealing with revisions to published data in the Current Business Reports publication, *Revised Monthly Wholesale Trade: January 1974 through December 1983*.

Table 3. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1983-August 1984

SIC code	Kind of business	1983												1984							
		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.
	Sales ¹ , total.....	0.930	0.918	1.084	0.977	1.022	1.037	0.946	1.022	1.005	1.016	1.018	1.003	0.953	0.956	1.053	0.976	1.056	1.003	0.971	1.022
50	Durable goods.....	0.886	0.907	1.077	0.981	1.005	1.056	0.953	1.048	1.028	1.040	1.015	0.984	0.902	0.948	1.045	0.988	1.038	1.014	0.981	1.048
501	Motor vehicles and auto, equip...	0.910	0.948	1.099	1.027	1.013	1.082	0.976	1.008	0.937	1.012	0.986	0.971	0.928	0.985	1.075	1.038	1.048	1.035	0.999	1.029
502	Furniture and home furnishings...	0.906	0.932	1.093	1.025	0.971	1.050	0.888	1.019	1.028	1.083	1.035	0.956	0.902	0.994	1.070	1.015	1.016	1.014	0.887	1.022
506	Electrical goods.....	0.887	0.903	1.038	0.944	0.972	1.055	0.994	1.044	1.050	1.034	1.048	1.030	0.895	0.939	1.010	0.933	1.003	1.033	1.012	1.029
507	Hardware, plumbing & heating equip.	0.910	0.867	1.018	0.981	1.002	1.052	1.009	1.084	1.045	1.062	1.015	0.933	0.932	0.906	0.983	0.996	1.027	1.008	1.045	1.078
508	Machinery, equip. and supplies...	0.863	0.913	1.078	0.998	1.019	1.058	0.942	1.055	1.036	1.007	0.999	1.010	0.834	0.955	1.050	0.995	1.049	1.028	0.966	1.055
51	Nondurable goods.....	0.947	0.922	1.090	0.975	1.026	1.037	0.943	1.002	0.991	1.001	1.022	1.020	0.975	0.956	1.060	0.971	1.058	1.009	0.968	1.002
511	Paper and paper products.....	0.954	0.943	1.085	0.960	0.990	1.024	0.927	1.045	1.038	1.015	1.008	0.988	0.980	0.981	1.052	0.953	1.034	0.985	0.954	1.050
514	Groceries and related products...	0.946	0.915	1.044	0.981	1.004	1.039	0.988	1.032	1.018	1.002	1.007	1.009	0.965	0.949	1.023	0.962	1.042	1.019	1.007	1.033
518	Beer, wine, & distilled beverages	0.750	0.790	1.015	0.969	1.003	1.115	1.007	1.072	1.032	0.975	1.097	1.161	0.776	0.834	0.982	0.952	1.062	1.069	1.022	1.101
519	Miscellaneous nondurable goods...	0.871	0.872	1.117	1.017	1.163	1.085	0.935	0.973	0.984	0.998	0.966	1.005	0.879	0.901	1.100	1.029	1.186	1.052	0.953	0.983
	Inventories ¹ , total.....	1.003	1.009	1.011	1.008	0.989	0.990	0.984	0.983	0.993	1.007	1.012	1.009	1.003	1.009	1.011	1.008	0.988	0.990	0.983	0.983
50	Durable goods.....	0.984	0.993	1.001	1.004	1.008	1.012	1.002	1.004	1.007	0.997	0.995	0.995	0.984	0.992	1.001	1.004	1.007	1.012	1.001	1.003
501	Motor vehicles and auto, equip...	1.003	1.002	1.006	1.011	0.999	0.998	0.994	0.973	0.997	1.001	1.005	1.011	1.003	1.000	1.005	1.011	0.998	0.998	0.994	0.972
502	Furniture and home furnishings...	0.982	0.997	1.018	1.011	0.995	1.011	1.012	0.999	1.023	0.993	0.977	0.981	0.982	0.998	1.017	1.010	0.995	1.010	1.012	0.999
505	Metals & minerals, ex. petroleum.	0.981	0.995	0.986	0.970	1.018	1.011	0.999	1.014	1.019	0.996	1.005	1.005	0.981	0.996	0.986	0.969	1.017	1.011	0.999	1.012
506	Electrical goods.....	0.962	0.973	0.980	0.992	1.002	1.014	1.013	1.016	1.018	1.028	1.009	0.990	0.962	0.973	0.980	0.992	1.002	1.014	1.013	1.016
507	Hardware, plumbing & heating equip.	0.990	1.004	1.016	1.044	1.020	1.015	1.013	0.999	0.986	0.985	0.958	0.969	0.991	1.004	1.015	1.043	1.020	1.014	1.013	0.999
508	Machinery, equip. and supplies...	0.976	0.992	1.005	1.010	1.013	1.018	1.005	1.004	1.006	0.991	0.988	0.991	0.976	0.992	1.005	1.010	1.013	1.017	1.005	1.003
51	Nondurable goods.....	1.043	1.035	1.026	0.998	0.963	0.953	0.945	0.949	0.971	1.028	1.047	1.041	1.043	1.035	1.025	0.998	0.963	0.954	0.944	0.949
511	Paper and paper products.....	0.990	0.993	0.991	0.990	1.008	1.010	1.013	1.003	0.997	0.994	1.010	0.999	0.991	0.993	0.990	0.989	1.008	1.009	1.013	1.004
514	Groceries and related products...	0.993	1.005	1.016	0.994	0.978	0.995	0.970	0.955	1.002	1.037	1.032	1.023	0.993	1.006	1.016	0.993	0.977	0.995	0.969	0.954
515	Farm-product raw materials.....	1.273	1.192	1.112	0.974	0.796	0.742	0.781	0.804	0.856	1.053	1.186	1.231	1.276	1.191	1.112	0.974	0.795	0.740	0.780	0.803
518	Beer, wine, & distilled beverages	0.961	0.944	0.980	0.998	1.011	1.022	1.009	0.999	0.996	1.068	1.085	0.925	0.959	0.944	0.978	0.996	1.011	1.023	1.010	1.001
519	Miscellaneous nondurable goods...	1.052	1.072	1.093	1.073	0.989	0.945	0.943	0.929	0.943	0.979	0.978	1.001	1.052	1.072	1.093	1.074	0.989	0.946	0.943	0.928

¹Adjusted sales and inventory data shown in table 1 are obtained by dividing the unadjusted data by the adjustment factors shown above for the corresponding group. Adjusted data for the totals are obtained by adding the durable and nondurable goods. Seasonal factors shown for the totals will provide an approximation of the adjusted estimates, but may show small differences from the published data.

Note: Merchant wholesalers totals and group totals include data for some groups not shown separately. The seasonal factors shown have been computed based on monthly estimates through December 1983.

Table 4. Coefficients of Variation of Sales and Inventories

(In percent)

SIC code	Kind of business	Sales						Inventories					
		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total....	1.2-1.7	1.5	1.4-1.7	1.5	0.6-0.9	0.7	1.5-1.8	1.7	1.6-1.7	1.7	0.3-0.4	0.3
50	Durable goods, total.....	1.4-1.7	1.5	1.3-1.5	1.4	0.5-0.9	0.7	1.6-2.0	2.0	1.8-2.0	1.8	0.3-0.4	0.3
501	Motor vehicles and automotive parts and supplies.....	3.2-4.3	3.8	3.3-4.1	3.5	1.1-2.0	1.6	2.8-3.5	3.4	3.0-3.8	3.2	0.8-1.5	1.0
502	Furniture and home furnishings.....	9.5-12.7	10.0	7.4-9.9	8.6	2.6-6.3	5.1	9.6-11.7	11.3	10.4-11.6	10.8	1.0-2.2	1.5
505	Metals and minerals, except petroleum (S)	(S)	(S)	(S)	(S)	(S)	(S)	4.2-4.9	4.6	4.2-4.8	4.6	0.6-1.2	0.9
506	Electrical goods.....	6.5-8.7	7.5	6.6-8.0	6.8	1.7-3.0	2.1	6.1-7.1	6.7	6.3-7.1	6.7	0.5-1.0	0.7
507	Hardware, plumbing, heating equipment, and supplies.....	6.0-7.3	6.2	5.5-6.5	6.3	1.7-2.9	2.2	6.0-6.6	6.2	5.7-6.3	6.1	0.9-1.7	1.2
508	Machinery, equipment, and supplies...	2.2-2.8	2.6	2.2-2.7	2.4	1.2-1.3	1.2	2.4-3.0	2.6	2.3-2.8	2.6	0.5-0.8	0.6
51	Nondurable goods, total.....	2.2-2.9	2.7	2.4-2.9	2.5	0.7-1.5	1.1	2.1-2.7	2.4	2.0-2.8	2.3	0.5-1.3	0.7
511	Paper and paper products.....	4.6-6.2	5.2	4.3-5.9	5.0	1.3-2.4	1.7	5.7-8.1	6.7	5.7-7.6	6.8	0.9-1.4	1.1
514	Groceries and related products.....	4.5-5.2	4.7	4.2-5.2	4.6	1.2-3.3	1.5	3.8-4.7	4.1	3.5-5.0	4.2	0.7-2.7	1.1
515	Farm-product raw materials.....	(S)	(S)	(S)	(S)	(S)	(S)	3.1-4.8	4.3	3.0-4.4	3.5	1.3-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages.....	4.4-6.1	5.2	4.7-7.6	5.3	1.2-3.6	2.2	3.6-4.7	4.5	3.8-4.5	4.1	1.1-2.4	1.7
519	Miscellaneous nondurable goods.....	3.7-5.2	4.4	3.8-4.4	4.0	1.4-3.7	3.1	4.7-5.6	5.2	4.7-5.9	5.0	1.1-2.2	1.5

S Data do not meet publication standards.

Note: Coefficients of variation are based on data unadjusted for seasonal variations or trading-day differences. The range and median coefficients of variation are based on data for August 1983 through January 1984.

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Monthly Wholesale Trade

Sales and Inventories

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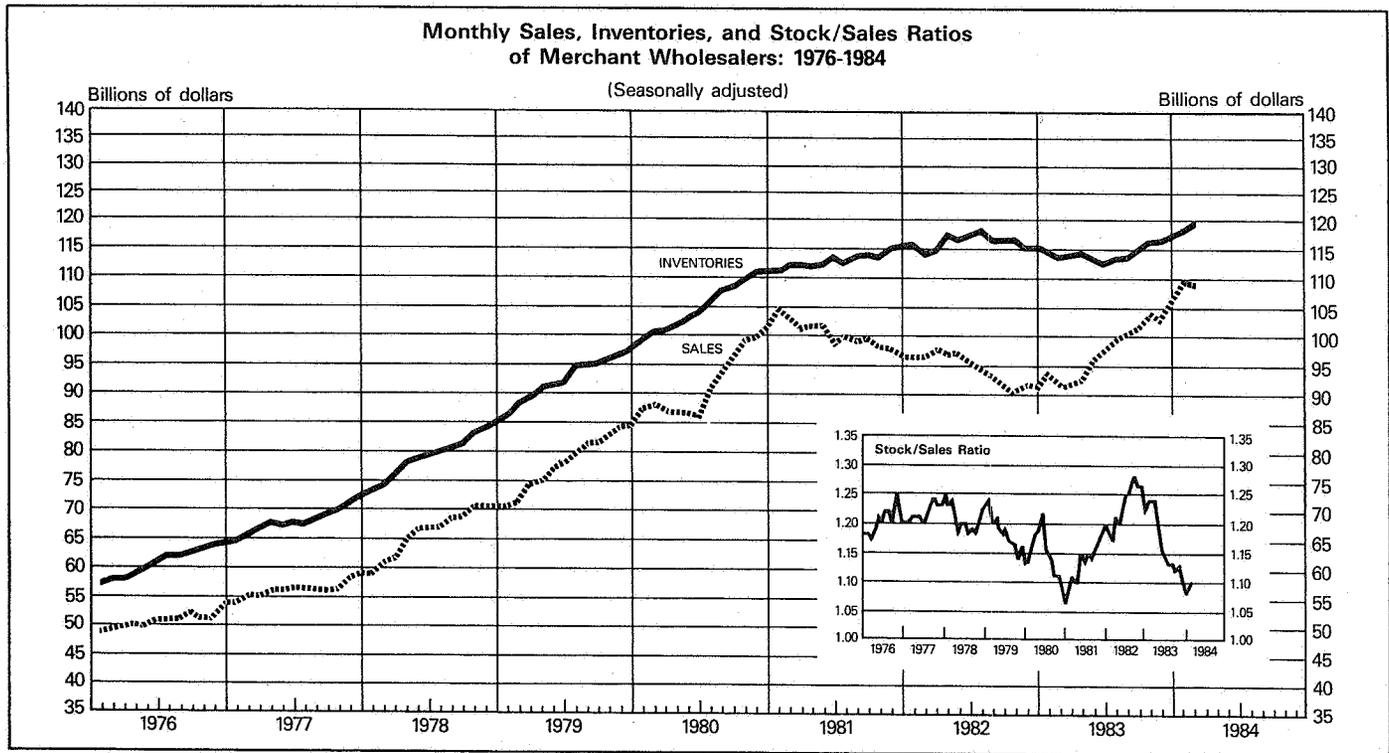
Sales February 1984 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$108.8 billion, down 1.6 percent from the revised January level of \$110.6 billion, but 17.9 percent above a year ago. February sales of durable goods were down 1.1 percent from the revised January level but increased 22.8 percent from a year ago. Based on seasonally adjusted data, comparisons with previous month sales levels showed mixed results. February sales of nondurable goods were 1.9 percent below the revised January level but were 14.4 percent above February 1983.

Inventories Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$120.5 billion at the end of February, up 1.1 percent from the revised

January level of \$119.2 billion and 5.3 percent above a year ago. This is the eighth consecutive positive month-to-month percent change. Inventories of durable goods wholesalers were up 0.9 percent from the January level, and were 3.4 percent above a year ago. Inventories of nondurable goods wholesalers increased 1.4 percent from the January level and were 8.7 percent above February 1983.

Stock/Sales Ratio The February stock/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.11, up from the January ratio of 1.08 and below the year ago ratio of 1.24.

Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling errors. A discussion of the reliability of the data is on page 3.



U.S. Department of Commerce
BUREAU OF THE CENSUS

Address inquiries concerning this report to Michael Brown, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-3916 or 763-3917.

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Table 1. Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1984 and 1983

SIC CODE	KIND OF BUSINESS	(SALES AND INVENTORIES IN MILLIONS OF DOLLARS)												TOTAL 2 MONTHS		
		1984			1983									1984	1983	
		JAN.	FEB. ^P	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.		
		DATA NOT ADJUSTED FOR SEASONAL VARIATION OR TRADING-DAY DIFFERENCES														
	SALES, TOTAL.....	104,313	103,675	84,566	100,445	90,803	98,304	103,032	94,672	103,062	102,862	106,051	105,762	107,361	207,988	171,436
50	DURABLE GOODS.....	43,165	44,880	34,978	41,781	38,479	40,870	44,858	40,811	44,809	44,754	46,300	45,620	45,621	88,045	70,907
501	MOTOR VEHICLES & AUTO. EQUIP.	8,859	8,672	6,684	8,344	7,884	7,997	8,867	8,425	8,541	8,195	9,030	8,953	8,963	17,531	13,615
502	FURNITURE & HOME FURNISHINGS.....	1,596	1,765	1,242	1,544	1,468	1,503	1,573	1,364	1,631	1,696	1,868	1,787	1,668	3,361	2,470
506	ELECTRICAL GOODS.....	5,713	5,943	4,347	5,000	4,755	5,089	5,685	5,585	6,054	6,269	6,289	6,332	6,537	11,656	8,588
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,611	2,618	2,073	2,443	2,314	2,540	2,726	2,667	2,979	2,875	2,887	2,834	2,626	5,229	4,296
508	MACHINERY, EQUIP. & SUPPLIES.....	11,986	12,660	10,226	12,102	10,731	11,587	12,332	10,718	12,174	12,129	11,970	12,174	12,465	24,646	20,570
51	NONDURABLE GOODS.....	61,148	58,795	49,588	58,664	52,324	57,434	58,174	53,861	58,253	58,108	59,751	60,142	61,740	119,943	100,529
511	PAPER & PAPER PRODUCTS.....	2,405	2,423	1,947	2,265	2,009	2,091	2,193	1,990	2,330	2,417	2,383	2,417	2,439	4,828	3,998
514	GROCERIES & RELATED PRODUCTS.....	17,085	17,108	14,681	16,646	15,796	16,981	17,452	16,252	17,396	17,129	17,307	17,492	17,492	34,193	29,546
518	BEER, WINE, & DISTILLED BEVERAGES.	2,379	2,533	2,321	3,086	2,770	3,287	3,799	3,127	3,313	3,135	2,933	3,320	3,543	4,932	4,583
519	MISC. NONDURABLE GOODS.....	7,516	7,493	5,669	7,408	6,954	8,352	7,848	6,746	7,077	7,078	7,472	7,055	7,410	15,009	11,344
	INVENTORIES, TOTAL.....	119,818	121,373	115,300	115,695	115,115	112,624	112,130	112,019	112,420	114,993	117,778	118,566	119,421	(X)	(X)
50	DURABLE GOODS.....	75,185	76,447	73,980	74,178	74,048	73,228	73,371	73,339	73,368	74,769	74,582	74,417	75,432	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	12,226	12,639	12,754	12,581	12,551	12,249	12,129	12,014	11,631	12,493	12,639	12,459	12,488	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	2,329	2,365	2,277	2,253	2,212	2,187	2,259	2,250	2,306	2,354	2,233	2,264	2,324	(X)	(X)
505	METALS & MINERALS, EX. PETROLEUM..	8,343	8,327	8,601	8,365	8,018	8,143	8,192	8,133	8,213	8,497	8,223	8,399	8,462	(X)	(X)
506	ELECTRICAL GOODS.....	9,079	9,247	7,843	7,964	8,045	8,030	8,201	8,461	8,433	8,603	8,811	8,398	8,812	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,567	4,765	4,594	4,606	4,696	4,601	4,507	4,552	4,470	4,484	4,493	4,569	4,533	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	28,417	28,578	28,069	28,467	28,403	28,045	28,045	27,587	27,389	27,729	27,941	27,684	28,534	(X)	(X)
51	NONDURABLE GOODS.....	44,633	44,926	41,320	41,517	41,067	39,396	38,759	38,680	39,052	40,224	43,196	44,149	43,989	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	2,322	2,371	1,974	1,986	1,980	2,073	2,080	2,081	2,213	2,223	2,229	2,377	2,341	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	8,660	9,013	8,108	8,112	7,929	8,174	8,085	8,012	8,265	8,401	8,775	9,073	8,726	(X)	(X)
515	FARM-PRODUCT RAW MATERIALS.....	9,450	8,640	8,062	7,815	6,899	5,808	5,417	6,038	6,617	7,227	9,106	9,615	9,439	(X)	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.	2,954	3,074	3,116	3,200	3,342	3,409	3,382	3,459	3,329	3,196	3,506	3,482	2,916	(X)	(X)
519	MISC. NONDURABLE GOODS.....	7,504	8,191	7,346	7,457	7,408	6,596	6,386	6,310	6,113	6,317	6,594	6,582	7,021	(X)	(X)
	STOCK/SALES RATIOS, TOTAL.....	1.15	1.17	1.36	1.15	1.27	1.15	1.09	1.18	1.09	1.12	1.11	1.12	1.11	(X)	(X)
50	DURABLE GOODS.....	1.74	1.70	2.12	1.78	1.92	1.79	1.64	1.80	1.64	1.67	1.61	1.63	1.65	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	1.38	1.46	1.91	1.51	1.59	1.53	1.37	1.43	1.36	1.52	1.40	1.39	1.39	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	1.46	1.34	1.83	1.46	1.51	1.46	1.44	1.65	1.41	1.39	1.20	1.27	1.39	(X)	(X)
505	METALS & MINERALS, EX. PETROLEUM..	1.59	1.56	1.80	1.59	1.69	1.58	1.44	1.51	1.39	1.37	1.41	1.37	1.35	(X)	(X)
506	ELECTRICAL GOODS.....	1.75	1.82	2.22	1.89	2.03	1.81	1.65	1.71	1.50	1.56	1.61	1.61	1.73	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	2.37	2.26	2.74	2.35	2.65	2.42	2.27	2.57	2.25	2.29	2.33	2.27	2.29	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	0.73	0.76	0.83	0.71	0.78	0.69	0.67	0.72	0.67	0.69	0.72	0.73	0.71	(X)	(X)
51	NONDURABLE GOODS.....	0.97	0.98	1.01	0.88	0.99	0.99	0.95	1.05	0.95	0.92	0.94	0.98	0.96	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	0.51	0.53	0.55	0.49	0.50	0.48	0.46	0.49	0.48	0.47	0.51	0.52	0.50	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	1.24	1.20	1.34	1.04	1.20	1.02	0.89	1.11	1.00	1.02	1.20	1.05	0.82	(X)	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.	1.00	1.09	1.29	1.01	1.07	0.79	0.81	0.94	0.86	0.89	0.88	0.93	0.95	(X)	(X)
519	MISC. NONDURABLE GOODS.....	1.00	1.09	1.29	1.01	1.07	0.79	0.81	0.94	0.86	0.89	0.88	0.93	0.95	(X)	(X)
		DATA ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES														
	SALES, TOTAL.....	110,571	108,843	92,347	92,614	92,890	96,646	98,577	99,941	100,894	102,171	104,210	103,793	106,892	(X)	(X)
50	DURABLE GOODS.....	47,855	47,342	38,564	38,794	39,224	40,667	42,479	42,824	42,757	43,535	44,519	44,946	46,363	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	5,546	8,804	7,051	7,592	7,677	7,894	8,195	8,632	8,473	8,746	8,923	9,080	9,231	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	1,769	1,776	1,333	1,413	1,432	1,548	1,498	1,536	1,601	1,650	1,725	1,727	1,745	(X)	(X)
506	ELECTRICAL GOODS.....	6,383	6,329	4,814	4,817	5,037	5,236	5,389	5,619	5,799	5,970	6,044	6,042	6,347	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,802	2,890	2,391	2,400	2,359	2,535	2,591	2,643	2,748	2,751	2,718	2,792	2,815	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	13,559	13,257	11,200	11,226	10,753	11,371	11,656	11,378	11,539	11,708	11,887	12,186	12,342	(X)	(X)
51	NONDURABLE GOODS.....	62,716	61,501	53,783	53,820	53,666	55,979	56,098	57,117	58,137	58,636	59,691	58,847	60,529	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	2,454	2,470	2,065	2,088	2,093	2,112	2,142	2,147	2,230	2,329	2,348	2,398	2,469	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	17,705	18,027	16,045	15,944	16,102	16,913	16,797	16,449	16,857	17,524	17,095	17,187	17,336	(X)	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.	3,066	3,061	2,938	3,040	2,868	3,317	3,407	3,105	3,090	3,038	3,008	3,026	3,052	(X)	(X)
519	MISC. NONDURABLE GOODS.....	8,551	8,316	6,524	6,632	6,838	7,181	7,233	7,215	7,273	7,193	7,487	7,303	7,373	(X)	(X)
	INVENTORIES, TOTAL.....	119,201	120,471	114,425	114,569	114,902	113,557	113,172	114,124	114,227	115,674	116,825	116,958	118,067	(X)	(X)
50	DURABLE GOODS.....	76,408	77,064	74,402	74,104	73,753	72,647	72,501	73,193	73,076	74,249	74,806	74,791	75,811	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	12,189	12,639	12,729	12,506	12,414	12,261	12,153	12,087	11,954	12,626	12,397	12,352	12,352	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	2,372	2,370	2,284	2,213	2,186	2,198	2,234	2,223	2,308	2,301	2,249	2,317	2,369	(X)	(X)
505	METALS & MINERALS, EX. PETROLEUM..	8,505	8,360	8,644	8,484	8,266	7,999	8,103	8,141	8,100	8,339	8,256	8,357	8,420	(X)	(X)
506	ELECTRICAL GOODS.....	9,438	9,504	8,061	8,127	8,110	8,014	8,088	8,352	8,300	8,451	8,571	8,620	8,901	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,608	4,746	4,576	4,533	4,498	4,511	4,440	4,494	4,474	4,548	4,561	4,769	4,678	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	29,116	28,808	28,295	28,325	28,122	27,685	27,549	27,450	27,280	27,564	28,168	28,020	28,793	(X)	(X)
51	NONDURABLE GOODS.....	42,793	43,407	39,223	40,465	41,149	40,910	40,671	40,931	41,151	41,425	42,019	42,167	42,256	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	2,343	2,388	1,988	2,004	2,000	2,057	2,059	2,054	2,206	2,230	2,242	2,353	2,343	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	8,721	8,959	8,068	7,984	7,977	8,358	8,126	8,260	8,654	8,384	8,462	8,792	8,530	(X)	(X)

Table 2. Percent Change in Sales and Inventories of Merchant Wholesalers

SIC CODE	KIND OF BUSINESS	UNADJUSTED					ADJUSTED ¹			
		SALES			INVENTORIES, END-OF-MONTH (AT COST)		SALES		INVENTORIES, END-OF-MONTH (AT COST)	
		FEB. 1984 FROM JAN. 1984	FEB. 1984 FROM FEB. 1983	2 MONTHS 1984 FROM 2 MONTHS 1983	FEB. 1984 FROM JAN. 1984	FEB. 1984 FROM FEB. 1983	FEB. 1984 FROM JAN. 1984	FEB. 1984 FROM FEB. 1983	FEB. 1984 FROM JAN. 1984	FEB. 1984 FROM FEB. 1983
	TOTAL.....	-0.6	+22.6	+21.3	+1.3	+5.3	-1.6	+17.9	+1.1	+5.3
50	DURABLE GOODS.....	+4.0	+28.3	+24.2	+1.7	+3.3	-1.1	+22.8	+0.9	+3.4
501	MOTOR VEHICLES & AUTO. EQUIP.	-2.1	+29.7	+28.8	+3.4	-0.9	-7.8	+24.9	+3.7	-0.7
502	FURNITURE & HOME FURNISHINGS.....	+10.6	+42.1	+36.1	+1.5	+3.9	+0.4	+33.2	-0.1	+3.8
505	METALS & MINERALS, EX. PETROLEUM.. (S)	(S)	(S)	(S)	-0.2	-3.2	(S)	(S)	-1.7	-3.3
506	ELECTRICAL GOODS.....	+4.0	+36.7	+35.7	+1.9	+17.9	-0.8	+31.5	+0.7	+17.9
507	HARDWARE, PLUMBING & HEATING EQUIP.	+0.3	+26.3	+21.7	+4.3	+3.7	+3.1	+20.9	+3.0	+3.7
508	MACHINERY, EQUIP. & SUPPLIES.....	+5.6	+23.8	+19.8	+0.6	+1.8	-2.2	+18.4	-1.1	+1.8
51	NONDURABLE GOODS.....	-3.8	+18.6	+19.3	+0.7	+8.7	-1.9	+14.4	+1.4	+8.7
511	PAPER & PAPER PRODUCTS.....	+0.7	+24.4	+20.8	+2.1	+20.1	+0.7	+19.6	+1.9	+20.1
514	GROCERIES & RELATED PRODUCTS.....	+0.1	+16.5	+15.7	+4.1	+11.2	+1.8	+12.4	+2.7	+11.0
515	FARM-PRODUCT RAW MATERIALS..... (S)	(S)	(S)	(S)	-8.6	+7.2	(S)	(S)	-2.1	+7.3
518	BEER, WINE, & DISTILLED BEVERAGES.	+7.3	+10.0	+7.6	+4.1	-1.3	-0.2	+4.2	+5.7	-1.4
519	MISC. NONDURABLE GOODS.....	-0.3	+31.7	+32.3	+9.2	+11.5	-2.7	+27.5	+7.1	+11.5

(S) DATA DO NOT MEET PUBLICATION STANDARDS.

¹ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES.

EXPLANATORY MATERIAL

Scope of Survey

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the *Standard Industrial Classification Manual*¹ and as covered in the 1977 Economic Censuses, includes establishments 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; and (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), who 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.

Also included in this survey are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments and manufacturers' sales branches of ferrous metal service centers SIC (505).

¹Executive Office of the President, Office of Management and Budget, *Standard Industrial Classification Manual, 1972*, and the 1977 Supplement.

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.

The estimates of the coefficients of variation for sales and inventories at the level of detail provided in this publication are shown in table 4. Note that 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. 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.

The coefficient of variation also 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.

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 13 percent of the sales estimates and 21 percent for inventories.

Differences between preliminary and final estimates² of seasonally adjusted sales ranged from approximately +0.8 percent to -0.4 percent for the past 12 months. During the same period, the average of the absolute differences was 0.3 percent. The corresponding range for inventories was approximately +0.8 percent to -0.6 percent for the past 12 months. The average of the absolute differences was 0.4 percent.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventories estimates in this report reflect the results of a benchmarking³ operation which made use of 1982 estimates tabulated from the 1982 Annual Trade Survey. Monthly wholesale sales and inventories estimates were revised in a manner designed to minimize the differences in the month-to-month trends between the revised and unrevised series. The estimates for the unrevised series were derived by using composite estimating procedures. Monthly sales estimates were revised for the period January 1980 through December 1983. The revised monthly sales estimates for 1980 and 1981 were constrained to sum to the 1980 and 1981 annual estimates tabulated from the 1981 Annual Trade Survey. The revised monthly sales estimates for 1982 were constrained to sum to the 1982 annual estimates tabulated from the 1982 Annual Trade Survey. Similarly, monthly inventories were revised for the period January 1982 through December 1983 using end-of-year inventories tabulated for 1981 and 1982 as benchmarks. (For a few series, monthly inventories were revised for the period January 1978 through December 1983.)

Through the use of carry-forward factors, the effect of the revision process was applied to all composite estimates subsequent to December 1982. These factors were derived at the three-digit kind-of-business level and are held constant until the next revision and benchmarking process. Aggregate level estimates were derived by summing appropriate detail level estimates, thereby assuring additivity.

Subsequent revisions of the monthly sales and inventory series will make use of future annual surveys of wholesale trade and the 1982 Census of Wholesale Trade.

Unpublished Data

Sales and inventory estimates for unpublished three-digit wholesale trade categories are not included in this publication because the sampling variability associated with these data do not meet publication criteria. The Census Bureau on written request will release these data for individual use, though not for publication.

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 sources such as investments, rental or sale of real estate, etc.

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.

Inventories. Inventories represent stocks at cost of merchandise owned by merchant wholesalers at the end of the month regardless of location except for goods held outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included. Goods held in foreign trade zones in the United States are also included.

Stock/sales Ratios. The stock/sales ratios are derived by dividing the dollar value of inventories 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.

Kind-of-Business Classifications

The durable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 50. This group includes establishments classified in SIC groups 501 through 509.

The nondurable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 51. This group includes establishments classified in SIC groups 511 through 519.

For a further description of the kinds of business included in the major groups see the *1972 Standard Industrial Classification Manual* and the 1977 Supplement.

Adjustment for Seasonal and Trading-day Variation

Seasonal factors for adjusting data in this 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 estimates were also derived from the X-11 program.

Seasonal 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 conditions, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of the trading-day adjustment procedure 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 seasonal adjustment procedure may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

² See Sample Design and Estimation Procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983*.

³ For a more detailed description, see the section dealing with revisions to published data in the Current Business Reports publication, *Revised Monthly Wholesale Trade: January 1974 through December 1983*.

Table 3. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1983-August 1984

SIC code	Kind of business	1983												1984							
		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.
	Sales ¹ , total.....	0.930	0.918	1.084	0.977	1.022	1.037	0.946	1.022	1.005	1.016	1.018	1.003	0.953	0.956	1.053	0.976	1.056	1.003	0.971	1.022
50	Durable goods.....	0.886	0.907	1.077	0.981	1.005	1.056	0.953	1.048	1.028	1.040	1.015	0.984	0.902	0.948	1.045	0.988	1.038	1.014	0.981	1.048
501	Motor vehicles and auto, equip...	0.910	0.948	1.099	1.027	1.013	1.082	0.976	1.008	0.937	1.012	0.986	0.971	0.928	0.985	1.075	1.038	1.048	1.035	0.999	1.029
502	Furniture and home furnishings...	0.906	0.932	1.093	1.025	0.971	1.050	0.888	1.019	1.028	1.083	1.035	0.956	0.902	0.994	1.070	1.015	1.016	1.014	0.887	1.022
506	Electrical goods.....	0.887	0.903	1.038	0.944	0.972	1.055	0.994	1.044	1.050	1.034	1.048	1.030	0.895	0.939	1.010	0.933	1.003	1.033	1.012	1.029
507	Hardware, plumbing & heating equip.	0.910	0.867	1.018	0.981	1.002	1.052	1.009	1.084	1.045	1.062	1.015	0.933	0.932	0.906	0.983	0.996	1.027	1.008	1.045	1.078
508	Machinery, equip. and supplies...	0.863	0.913	1.078	0.998	1.019	1.058	0.942	1.055	1.036	1.007	0.999	1.010	0.834	0.955	1.050	0.995	1.049	1.028	0.966	1.055
51	Nondurable goods.....	0.947	0.922	1.090	0.975	1.026	1.037	0.943	1.002	0.991	1.001	1.022	1.020	0.975	0.956	1.060	0.971	1.058	1.009	0.968	1.002
511	Paper and paper products.....	0.954	0.943	1.085	0.960	0.990	1.024	0.927	1.045	1.038	1.015	1.008	0.988	0.980	0.981	1.052	0.953	1.034	0.985	0.954	1.050
514	Groceries and related products...	0.946	0.915	1.044	0.981	1.004	1.039	0.988	1.032	1.018	1.002	1.007	1.009	0.965	0.949	1.023	0.962	1.042	1.019	1.007	1.033
518	Beer, wine, & distilled beverages	0.750	0.790	1.015	0.969	1.003	1.115	1.007	1.072	1.032	0.975	1.097	1.161	0.776	0.834	0.982	0.952	1.062	1.069	1.022	1.101
519	Miscellaneous nondurable goods...	0.871	0.872	1.117	1.017	1.163	1.085	0.935	0.973	0.984	0.998	0.966	1.005	0.879	0.901	1.100	1.029	1.186	1.052	0.953	0.983
	Inventories ¹ , total.....	1.003	1.009	1.011	1.008	0.989	0.990	0.984	0.983	0.993	1.007	1.012	1.009	1.003	1.009	1.011	1.008	0.988	0.990	0.983	0.983
50	Durable goods.....	0.984	0.993	1.001	1.004	1.008	1.012	1.002	1.004	1.007	0.997	0.995	0.995	0.984	0.992	1.001	1.004	1.007	1.012	1.001	1.003
501	Motor vehicles and auto, equip...	1.003	1.002	1.006	1.011	0.999	0.998	0.994	0.973	0.997	1.001	1.005	1.011	1.003	1.000	1.005	1.011	0.998	0.998	0.994	0.972
502	Furniture and home furnishings...	0.982	0.997	1.018	1.011	0.995	1.011	1.012	0.999	1.023	0.993	0.977	0.981	0.982	0.998	1.017	1.010	0.995	1.010	1.012	0.999
505	Metals & minerals, ex. petroleum.	0.981	0.995	0.986	0.970	1.018	1.011	0.999	1.014	1.019	0.996	1.005	1.005	0.981	0.996	0.986	0.969	1.017	1.011	0.999	1.012
506	Electrical goods.....	0.962	0.973	0.980	0.992	1.002	1.014	1.013	1.016	1.018	1.028	1.009	0.990	0.962	0.973	0.980	0.992	1.002	1.014	1.013	1.016
507	Hardware, plumbing & heating equip.	0.990	1.004	1.016	1.044	1.020	1.015	1.013	0.999	0.986	0.985	0.958	0.969	0.991	1.004	1.015	1.043	1.020	1.014	1.013	0.999
508	Machinery, equip. and supplies...	0.976	0.992	1.005	1.010	1.013	1.018	1.005	1.004	1.006	0.991	0.988	0.991	0.976	0.992	1.005	1.010	1.013	1.017	1.005	1.003
51	Nondurable goods.....	1.043	1.035	1.026	0.998	0.963	0.953	0.945	0.949	0.971	1.028	1.047	1.041	1.043	1.035	1.025	0.998	0.963	0.954	0.944	0.949
511	Paper and paper products.....	0.990	0.993	0.991	0.990	1.008	1.010	1.013	1.003	0.997	0.994	1.010	0.999	0.991	0.993	0.990	0.989	1.008	1.009	1.013	1.004
514	Groceries and related products...	0.993	1.005	1.016	0.994	0.978	0.995	0.970	0.955	1.002	1.037	1.032	1.023	0.993	1.006	1.016	0.993	0.977	0.995	0.969	0.954
515	Farm-product raw materials.....	1.273	1.192	1.112	0.974	0.796	0.742	0.781	0.804	0.856	1.053	1.186	1.231	1.276	1.191	1.112	0.974	0.795	0.740	0.780	0.803
518	Beer, wine, & distilled beverages	0.961	0.944	0.980	0.998	1.011	1.022	1.009	0.999	0.996	1.068	1.085	0.925	0.959	0.944	0.978	0.996	1.011	1.023	1.010	1.001
519	Miscellaneous nondurable goods...	1.052	1.072	1.093	1.073	0.989	0.945	0.943	0.929	0.943	0.979	0.978	1.001	1.052	1.072	1.093	1.074	0.989	0.946	0.943	0.928

¹Adjusted sales and inventory data shown in table 1 are obtained by dividing the unadjusted data by the adjustment factors shown above for the corresponding group. Adjusted data for the totals are obtained by adding the durable and nondurable goods. Seasonal factors shown for the totals will provide an approximation of the adjusted estimates, but may show small differences from the published data.

Note: Merchant wholesalers totals and group totals include data for some groups not shown separately. The seasonal factors shown have been computed based on monthly estimates through December 1983.

Table 4. Coefficients of Variation of Sales and Inventories

(In percent)

SIC code	Kind of business	Sales						Inventories					
		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total....	1.2-1.7	1.5	1.4-1.7	1.5	0.6-0.9	0.7	1.5-1.8	1.7	1.6-1.7	1.7	0.3-0.4	0.3
50	Durable goods, total.....	1.4-1.7	1.5	1.3-1.5	1.4	0.5-0.9	0.7	1.6-2.0	2.0	1.8-2.0	1.8	0.3-0.4	0.3
501	Motor vehicles and automotive parts and supplies.....	3.2-4.3	3.8	3.3-4.1	3.5	1.1-2.0	1.6	2.8-3.5	3.4	3.0-3.8	3.2	0.8-1.5	1.0
502	Furniture and home furnishings.....	9.5-12.7	10.0	7.4-9.9	8.6	2.6-6.3	5.1	9.6-11.7	11.3	10.4-11.6	10.8	1.0-2.2	1.5
505	Metals and minerals, except petroleum (S)	(S)	(S)	(S)	(S)	(S)	(S)	4.2-4.9	4.6	4.2-4.8	4.6	0.6-1.2	0.9
506	Electrical goods.....	6.5-8.7	7.5	6.6-8.0	6.8	1.7-3.0	2.1	6.1-7.1	6.7	6.3-7.1	6.7	0.5-1.0	0.7
507	Hardware, plumbing, heating equipment, and supplies.....	6.0-7.3	6.2	5.5-6.5	6.3	1.7-2.9	2.2	6.0-6.6	6.2	5.7-6.3	6.1	0.9-1.7	1.2
508	Machinery, equipment, and supplies...	2.2-2.8	2.6	2.2-2.7	2.4	1.2-1.3	1.2	2.4-3.0	2.6	2.3-2.8	2.6	0.5-0.8	0.6
51	Nondurable goods, total.....	2.2-2.9	2.7	2.4-2.9	2.5	0.7-1.5	1.1	2.1-2.7	2.4	2.0-2.8	2.3	0.5-1.3	0.7
511	Paper and paper products.....	4.6-6.2	5.2	4.3-5.9	5.0	1.3-2.4	1.7	5.7-8.1	6.7	5.7-7.6	6.8	0.9-1.4	1.1
514	Groceries and related products.....	4.5-5.2	4.7	4.2-5.2	4.6	1.2-3.3	1.5	3.8-4.7	4.1	3.5-5.0	4.2	0.7-2.7	1.1
515	Farm-product raw materials.....	(S)	(S)	(S)	(S)	(S)	(S)	3.1-4.8	4.3	3.0-4.4	3.5	1.3-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages.....	4.4-6.1	5.2	4.7-7.6	5.3	1.2-3.6	2.2	3.6-4.7	4.5	3.8-4.5	4.1	1.1-2.4	1.7
519	Miscellaneous nondurable goods.....	3.7-5.2	4.4	3.8-4.4	4.0	1.4-3.7	3.1	4.7-5.6	5.2	4.7-5.9	5.0	1.1-2.2	1.5

S Data do not meet publication standards.

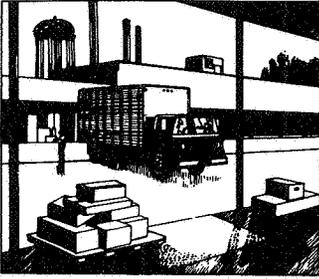
Note: Coefficients of variation are based on data unadjusted for seasonal variations or trading-day differences. The range and median coefficients of variation are based on data for August 1983 through January 1984.

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Monthly Wholesale Trade

Sales and Inventories

Issued May 1984
BW-84-03

March 1984

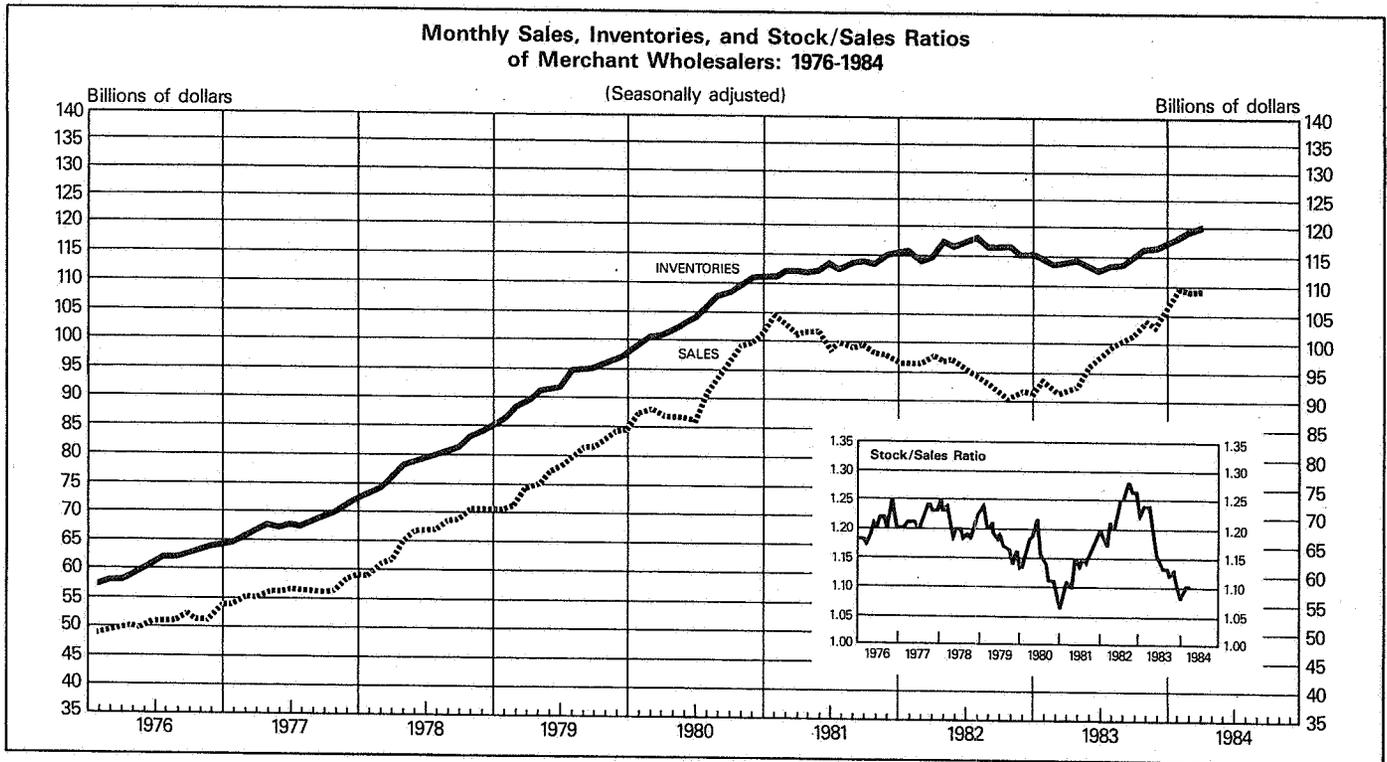
Sales March 1984 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$109.2 billion, up 0.8 percent from the revised February level of \$108.3 billion, and 17.9 percent above a year ago. The February preliminary estimate was revised downward by \$515 million or about 0.5 percent. March sales of durable goods were up 1.5 percent from the revised February level and increased 23.8 percent from a year ago. All but two durable goods categories contributed to the month-to-month increase. The exceptions are furniture and home furnishings, which was down 1.5 percent from the previous month but 22.6 percent above a year ago, and the unpublished miscellaneous durable goods category. March sales of nondurable goods were little changed from the revised February level and were 13.6 percent above March 1983.

Inventories Total inventories of merchant wholesalers, after adjustment for seasonal variation but

not for price changes, were \$120.9 billion at the end of March, up 0.4 percent from the revised February level of \$120.4 billion and 5.5 percent above a year ago. This is the ninth consecutive positive month-to-month percent change. The February preliminary estimate was revised downward by \$60 million or about 0.1 percent. Inventories of durable goods wholesalers were up 0.6 percent from the February level, and increased 4.4 percent from a year ago. Inventories of nondurable goods wholesalers were virtually unchanged from the February level and were 7.5 percent above March 1983.

Stock/Sales Ratio The March stock/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.11, unchanged from the February ratio and below the year ago ratio of 1.24.

Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling errors. A discussion of the reliability of the data is on page 3.



U.S. Department of Commerce
BUREAU OF THE CENSUS

Address inquiries concerning this report to Michael Brown, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-3916 or 763-3917.

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Table 1. Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1984 and 1983

SIC CODE	KIND OF BUSINESS	(SALES AND INVENTORIES IN MILLIONS OF DOLLARS)												TOTAL 3 MONTHS		
		1984				1983								1984	1983	
		JAN.	FEB.	MAR. ^P	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	1984	1983
DATA NOT ADJUSTED FOR SEASONAL VARIATION OR TRADING-DAY DIFFERENCES																
	SALES, TOTAL.....	103,878	103,183	114,993	100,445	90,803	98,304	103,032	94,672	103,062	102,862	106,051	105,762	107,361	322,054	271,881
50	DURABLE GOODS.....	43,165	44,848	50,185	41,781	38,479	40,870	44,858	40,811	44,809	44,754	46,300	45,620	45,621	138,198	112,688
501	MOTOR VEHICLES & AUTO. EQUIP.	8,859	8,640	9,665	8,344	7,884	7,997	8,867	8,425	8,541	8,195	9,030	8,953	8,963	27,164	21,959
502	FURNITURE & HOME FURNISHINGS.....	1,596	1,747	1,853	1,544	1,468	1,503	1,573	1,364	1,631	1,696	1,868	1,787	1,668	5,198	4,014
506	ELECTRICAL GOODS.....	5,713	6,063	6,673	5,000	4,755	5,089	5,685	5,585	6,054	6,269	6,249	6,332	6,537	18,449	13,588
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,611	2,623	2,902	2,443	2,314	2,540	2,726	2,667	2,979	2,875	2,887	2,834	2,626	8,136	6,739
508	MACHINERY, EQUIP. & SUPPLIES.....	11,986	12,486	14,339	12,102	10,731	11,587	12,332	10,718	12,174	12,129	11,970	12,174	12,465	38,811	32,672
51	NONDURABLE GOODS.....	60,713	58,335	64,808	58,664	52,324	57,434	58,174	53,861	58,253	58,108	59,781	60,142	61,740	183,856	159,193
511	PAPER & PAPER PRODUCTS.....	2,405	2,445	2,653	2,265	2,009	2,091	2,193	1,990	2,330	2,417	2,383	2,417	2,439	7,503	6,263
514	GROCERIES & RELATED PRODUCTS.....	17,085	17,285	18,669	16,646	15,796	16,981	17,452	16,252	17,396	17,839	17,129	17,307	17,492	53,039	46,192
518	BEER, WINE, & DISTILLED BEVERAGES.	2,379	2,508	2,888	3,086	2,779	3,327	3,799	3,127	3,313	3,135	2,933	3,320	3,542	7,775	7,669
519	MISC. NONDURABLE GOODS.....	7,081	6,842	8,375	7,408	6,954	8,352	7,848	6,746	7,077	7,078	7,472	7,055	7,410	22,298	18,752
	INVENTORIES, TOTAL.....	119,818	121,319	122,070	115,695	115,115	112,624	112,130	120,019	112,420	114,993	117,778	118,566	119,421	(X)	(X)
50	DURABLE GOODS.....	75,185	76,295	77,476	74,178	74,048	73,228	73,371	73,339	73,368	74,769	74,582	74,417	75,432	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	12,226	12,551	12,575	12,581	12,551	12,249	12,129	12,014	11,631	12,493	12,639	12,459	12,488	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	2,329	2,395	2,391	2,253	2,212	2,187	2,259	2,250	2,306	2,354	2,233	2,264	2,324	(X)	(X)
505	METALS & MINERALS, EX. PETROLEUM..	8,343	8,422	8,491	8,365	8,018	8,143	8,192	8,213	8,213	8,497	8,223	8,399	8,462	(X)	(X)
506	ELECTRICAL GOODS.....	9,079	9,151	9,458	7,964	8,045	8,030	8,201	8,461	8,433	8,603	8,811	8,698	8,812	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,567	4,741	4,951	4,606	4,696	4,601	4,507	4,552	4,470	4,484	4,493	4,569	4,533	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	28,417	28,525	28,972	28,467	28,403	28,045	28,045	27,587	27,389	27,729	27,914	27,684	28,534	(X)	(X)
51	NONDURABLE GOODS.....	44,633	45,024	44,594	41,517	41,067	39,396	38,759	38,680	39,052	40,224	43,196	44,149	43,989	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	2,322	2,401	2,425	1,986	1,980	2,073	2,080	2,081	2,213	2,223	2,229	2,377	2,341	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	8,660	9,219	9,361	8,112	7,929	8,174	8,085	8,012	8,265	8,401	8,775	9,073	8,726	(X)	(X)
515	FARM-PRODUCT RAW MATERIALS.....	9,450	8,773	8,178	7,615	6,899	5,808	5,417	6,038	6,617	7,227	9,106	9,415	9,439	(X)	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.	2,954	3,067	3,241	3,200	3,342	3,409	3,382	3,459	3,329	3,196	3,506	3,682	2,916	(X)	(X)
519	MISC. NONDURABLE GOODS.....	7,504	8,024	8,506	7,457	7,408	6,596	6,386	6,310	6,113	6,317	6,594	6,582	7,021	(X)	(X)
	STOCK/SALES RATIOS, TOTAL.....	1.15	1.18	1.06	1.15	1.27	1.15	1.09	1.18	1.09	1.12	1.11	1.12	1.11	(X)	(X)
50	DURABLE GOODS.....	1.74	1.70	1.54	1.78	1.92	1.79	1.64	1.80	1.64	1.67	1.61	1.63	1.65	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	1.38	1.45	1.30	1.51	1.59	1.53	1.37	1.43	1.36	1.52	1.40	1.39	1.39	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	1.46	1.37	1.29	1.46	1.51	1.46	1.44	1.65	1.41	1.39	1.20	1.27	1.39	(X)	(X)
506	ELECTRICAL GOODS.....	1.59	1.51	1.42	1.59	1.69	1.58	1.44	1.51	1.39	1.37	1.41	1.37	1.35	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	1.75	1.81	1.71	1.89	2.03	1.81	1.65	1.71	1.50	1.56	1.56	1.61	1.73	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	2.37	2.28	2.02	2.35	2.65	2.42	2.27	2.57	2.25	2.29	2.33	2.27	2.29	(X)	(X)
51	NONDURABLE GOODS.....	0.74	0.77	0.69	0.71	0.78	0.69	0.67	0.72	0.67	0.69	0.72	0.73	0.71	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	0.97	0.98	0.91	0.88	0.99	0.99	0.95	1.05	0.95	0.92	0.94	0.98	0.96	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	0.51	0.53	0.50	0.49	0.50	0.48	0.46	0.49	0.48	0.47	0.51	0.52	0.50	(X)	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.	1.24	1.22	1.12	1.04	1.20	1.02	0.89	1.11	1.00	1.02	1.20	1.05	0.82	(X)	(X)
519	MISC. NONDURABLE GOODS.....	1.06	1.17	1.02	1.01	1.07	0.79	0.81	0.94	0.86	0.89	0.88	0.93	0.95	(X)	(X)
DATA ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES																
	SALES, TOTAL.....	110,125	108,328	109,164	92,614	92,890	96,646	98,577	99,941	100,894	102,171	104,210	103,793	106,892	(X)	(X)
50	DURABLE GOODS.....	47,855	47,308	48,024	38,794	39,224	40,667	42,479	42,824	42,757	43,535	44,519	44,946	46,363	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	9,546	8,772	8,991	7,592	7,677	7,894	8,195	8,632	8,473	8,746	8,923	9,080	9,231	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	1,769	1,758	1,732	1,413	1,432	1,548	1,498	1,536	1,601	1,650	1,725	1,727	1,745	(X)	(X)
506	ELECTRICAL GOODS.....	6,383	6,457	6,607	4,817	5,037	5,236	5,389	5,619	5,799	5,970	6,044	6,042	6,347	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,802	2,895	2,952	2,400	2,359	2,535	2,591	2,643	2,748	2,751	2,718	2,792	2,815	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	13,559	13,074	13,656	11,226	10,753	11,371	11,656	11,378	11,539	11,708	11,887	12,186	12,342	(X)	(X)
51	NONDURABLE GOODS.....	62,270	61,020	61,140	53,820	53,666	55,979	56,098	57,117	58,137	58,636	59,691	58,847	60,529	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	2,454	2,492	2,522	2,088	2,093	2,112	2,142	2,297	2,329	2,329	2,348	2,398	2,469	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	17,705	18,214	18,249	15,944	16,102	16,913	16,797	16,449	16,857	17,524	17,095	17,187	17,336	(X)	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.	3,066	3,007	2,941	3,040	2,868	3,317	3,407	3,105	3,090	3,008	3,008	3,026	3,052	(X)	(X)
519	MISC. NONDURABLE GOODS.....	8,056	7,594	7,614	6,632	6,838	7,181	7,233	7,215	7,273	7,193	7,487	7,303	7,373	(X)	(X)
	INVENTORIES, TOTAL.....	119,201	120,411	120,905	114,569	114,902	113,557	113,172	114,124	114,227	115,674	116,825	116,958	118,067	(X)	(X)
50	DURABLE GOODS.....	76,408	76,910	77,399	74,104	73,753	72,647	72,501	73,193	73,076	74,249	74,806	74,791	75,811	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	12,189	12,551	12,512	12,506	12,414	12,261	12,153	12,087	11,954	12,531	12,626	12,397	12,352	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	2,372	2,400	2,351	2,213	2,188	2,198	2,234	2,203	2,208	2,301	2,249	2,317	2,369	(X)	(X)
505	METALS & MINERALS, EX. PETROLEUM..	8,505	8,456	8,612	8,484	8,266	7,999	8,103	8,141	8,100	8,339	8,256	8,357	8,420	(X)	(X)
506	ELECTRICAL GOODS.....	9,438	9,405	9,651	8,127	8,110	8,014	8,088	8,352	8,300	8,451	8,571	8,620	8,901	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,608	4,722	4,878	4,533	4,498	4,511	4,440	4,494	4,474	4,548	4,561	4,769	4,678	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	29,116	28,755	28,828	28,325	28,122	27,685	27,549	27,450	27,280	27,564	28,166	28,020	28,793	(X)	(X)
51	NONDURABLE GOODS.....	42,793	43,501	43,506	40,465	41,149	40,910	40,671	40,931	41,151	41,425	42,019	42,167	42,256	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	2,343	2,418	2,449	2,004	2,000	2,057	2,059	2,054	2,206	2,230	2,242	2,353	2,343	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	8,721	9,164	9,214	7,984	7,977	8,358	8,126	8,260	8,654	8,384	8,462	8,792	8,530	(X)	(X)
515	FARM-PRODUCT RAW MATERIALS.....	7,406	7,366	7,354	7,028	7,083	7,296	7,301	7,731	8,230	8,443	8,648	8,107	7,66		

Table 2. Percent Change in Sales and Inventories of Merchant Wholesalers

SIC CODE	KIND OF BUSINESS	UNADJUSTED					ADJUSTED ¹			
		SALES			INVENTORIES, END-OF-MONTH (AT COST)		SALES		INVENTORIES, END-OF-MONTH (AT COST)	
		MAR. 1984 FROM FEB. 1984	MAR. 1984 FROM MAR. 1983	3 MONTHS 1984 FROM 3 MONTHS 1983	MAR. 1984 FROM FEB. 1984	MAR. 1984 FROM MAR. 1983	MAR. 1984 FROM FEB. 1984	MAR. 1984 FROM MAR. 1983	MAR. 1984 FROM FEB. 1984	MAR. 1984 FROM MAR. 1983
	TOTAL.....	+11.4	+14.5	+18.5	+0.6	+5.5	+0.8	+17.9	+0.4	+5.5
50	DURABLE GOODS.....	+11.9	+20.1	+22.6	+1.5	+4.4	+1.5	+23.8	+0.6	+4.4
501	MOTOR VEHICLES & AUTO. EQUIP.	+11.9	+15.8	+23.7	+0.2	0.0	+2.5	+18.4	-0.3	0.0
502	FURNITURE & HOME FURNISHINGS.....	+6.1	+20.0	+29.4	-0.2	+6.1	-1.5	+22.6	-2.0	+6.2
505	METALS & MINERALS, EX. PETROLEUM.. (S)	(S)	(S)	(S)	+0.8	+1.5	(S)	(S)	+1.8	+1.5
506	ELECTRICAL GOODS.....	+10.1	+33.5	+35.8	+3.4	+18.8	+2.3	+37.2	+2.6	+18.8
507	HARDWARE, PLUMBING & HEATING EQUIP.	+10.6	+18.8	+20.7	+4.4	+7.5	+2.0	+23.0	+3.3	+7.6
508	MACHINERY, EQUIP. & SUPPLIES.....	+14.8	+18.5	+18.8	+1.6	+1.8	+4.5	+21.6	+0.3	+1.8
51	NONDURABLE GOODS.....	+11.1	+10.5	+15.5	-1.0	+7.4	+0.2	+13.6	0.0	+7.5
511	PAPER & PAPER PRODUCTS.....	+8.5	+17.1	+19.8	+1.0	+22.1	+1.2	+20.8	+1.3	+22.2
514	GROCERIES & RELATED PRODUCTS.....	+8.0	+12.2	+14.8	+1.5	+15.4	+0.2	+14.5	+0.5	+15.4
515	FARM-PRODUCT RAW MATERIALS..... (S)	(S)	(S)	(S)	-6.8	+4.6	(S)	(S)	-0.2	+4.6
518	BEER, WINE, & DISTILLED BEVERAGES.	+15.2	-6.4	+1.4	+5.7	+1.3	-2.2	-3.3	+2.0	+1.5
519	MISC. NONDURABLE GOODS.....	+22.4	+13.1	+18.9	+6.0	+14.1	+0.3	+14.8	+4.0	+14.1

(S) DATA DO NOT MEET PUBLICATION STANDARDS.

¹ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES.

EXPLANATORY MATERIAL

Scope of Survey

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the *Standard Industrial Classification Manual*¹ and the 1977 Supplement and as covered in the 1977 Economic Censuses, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm, or professional business users; 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; and (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), who 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.

Also included in this survey are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments and manufacturers' sales branches of ferrous metal service centers SIC (505).

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.

The estimates of the coefficients of variation in percent for sales and inventories at the level of detail provided in this publication are shown in table 4. Note that 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. 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.

The coefficient of variation also 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.

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 13 percent of the sales estimates and 21 percent for inventories.

Differences between preliminary and final estimates² of seasonally adjusted sales ranged from approximately +0.8 percent to -0.5 percent for the past 12 months. During the same

¹Executive Office of the President, Office of Management and Budget, *Standard Industrial Classification Manual, 1972*, and the 1977 Supplement.

²See Sample Design and Estimation Procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983*.

period, the average of the absolute differences was 0.4 percent. The corresponding range for inventories was approximately +0.8 percent to -0.6 percent for the past 12 months. The average of the absolute differences was 0.4 percent.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventories estimates in this report reflect the results of a benchmarking³ operation which made use of 1982 estimates tabulated from the 1982 Annual Trade Survey. Monthly wholesale sales and inventories estimates were revised in a manner designed to minimize the differences in the month-to-month trends between the revised and unrevised series. The estimates for the unrevised series were derived by using composite estimating procedures. Monthly sales estimates were revised for the period January 1980 through December 1983. The revised monthly sales estimates for 1980 and 1981 were constrained to sum to the 1980 and 1981 annual estimates tabulated from the 1981 Annual Trade Survey. The revised monthly sales estimates for 1982 were constrained to sum to the 1982 annual estimates tabulated from the 1982 Annual Trade Survey. Similarly, monthly inventories were revised for the period January 1982 through December 1983 using end-of-year inventories tabulated for 1981 and 1982 as benchmarks. (For a few series, monthly inventories were revised for the period January 1978 through December 1983.)

Through the use of carry-forward factors, the effect of the revision process was applied to all composite estimates subsequent to December 1982. These factors were derived at the three-digit kind-of-business level and are held constant until the next revision and benchmarking process. Aggregate level estimates were derived by summing appropriate detail level estimates, thereby assuring additivity.

Subsequent revisions of the monthly sales and inventory series will make use of future annual surveys of wholesale trade and the 1982 Census of Wholesale Trade.

Unpublished Data

Sales and inventory estimates for unpublished three-digit wholesale trade categories are not included in this publication because the sampling variability associated with these data do not meet publication criteria. The Census Bureau on written request will release these data for individual use, though not for publication.

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 sources such as investments, rental or sale of real estate, etc.

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.

Inventories. Inventories represent stocks at cost of merchandise owned by merchant wholesalers at the end of the month regardless of location except for goods held outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included. Goods held in foreign trade zones in the United States are also included.

Stock/Sales Ratios. The stock/sales ratios are derived by dividing the dollar value of inventories 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.

Kind-of-Business Classifications

The durable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 50. This group includes establishments classified in SIC groups 501 through 509.

The nondurable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 51. This group includes establishments classified in SIC groups 511 through 519.

For a further description of the kinds of business included in the major groups see the *1972 Standard Industrial Classification Manual* and the 1977 Supplement.

Adjustment for Seasonal and Trading-Day Variation

Seasonal factors for adjusting data in this 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 estimates were also derived from the X-11 program.

Seasonal 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 conditions, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of the trading-day adjustment procedure 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 seasonal adjustment procedure may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

³For a more detailed description, see the section dealing with revisions to published data in the Current Business Report *Revised Monthly Wholesale Trade: January 1974 through December 1983*.

Table 3. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1983-August 1984

SIC code	Kind of business	1983												1984								
		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	
	Sales ¹ , total.....	0.930	0.918	1.084	0.977	1.022	1.037	0.946	1.022	1.005	1.016	1.018	1.003	0.953	0.956	1.053	0.976	1.056	1.003	0.971	1.022	
50	Durable goods.....	0.886	0.907	1.077	0.981	1.005	1.056	0.953	1.048	1.028	1.040	1.015	0.984	0.902	0.948	1.045	0.988	1.038	1.014	0.981	1.048	
501	Motor vehicles and auto, equip...	0.910	0.948	1.099	1.027	1.013	1.082	0.976	1.008	0.937	1.012	0.986	0.971	0.928	0.985	1.075	1.038	1.048	1.035	0.999	1.029	
502	Furniture and home furnishings...	0.906	0.932	1.093	1.025	0.971	1.050	0.888	1.019	1.028	1.083	1.035	0.956	0.902	0.994	1.070	1.015	1.016	1.014	0.887	1.022	
506	Electrical goods.....	0.887	0.903	1.038	0.944	0.972	1.055	0.994	1.044	1.050	1.034	1.048	1.030	0.895	0.939	1.010	0.933	1.003	1.033	1.012	1.029	
507	Hardware, plumbing & heating equip.	0.910	0.867	1.018	0.981	1.002	1.052	1.009	1.084	1.045	1.062	1.015	0.933	0.932	0.906	0.983	0.996	1.027	1.008	1.045	1.078	
508	Machinery, equip. and supplies...	0.863	0.913	1.078	0.998	1.019	1.058	0.942	1.055	1.036	1.007	0.999	1.010	0.834	0.955	1.050	0.995	1.049	1.028	0.966	1.055	
51	Nondurable goods.....	0.947	0.922	1.090	0.975	1.026	1.037	0.943	1.002	0.991	1.001	1.022	1.020	0.975	0.956	1.060	0.971	1.058	1.009	0.968	1.002	
511	Paper and paper products.....	0.954	0.943	1.085	0.960	0.990	1.024	0.927	1.045	1.038	1.015	1.008	0.988	0.980	0.981	1.052	0.953	1.034	0.985	0.954	1.050	
514	Groceries and related products...	0.946	0.915	1.044	0.981	1.004	1.039	0.988	1.032	1.018	1.002	1.007	1.009	0.965	0.949	1.023	0.962	1.042	1.019	1.007	1.033	
518	Beer, wine, & distilled beverages	0.750	0.790	1.015	0.969	1.003	1.115	1.007	1.072	1.032	0.975	1.097	1.161	0.776	0.834	0.982	0.952	1.062	1.069	1.022	1.101	
519	Miscellaneous nondurable goods...	0.871	0.872	1.117	1.017	1.163	1.085	0.935	0.973	0.984	0.998	0.966	1.005	0.879	0.901	1.100	1.029	1.186	1.052	0.953	0.983	
	Inventories ¹ , total.....	1.003	1.009	1.011	1.008	0.989	0.990	0.984	0.983	0.993	1.007	1.012	1.009	1.003	1.009	1.011	1.008	0.988	0.990	0.983	0.983	
50	Durable goods.....	0.984	0.993	1.001	1.004	1.008	1.012	1.002	1.004	1.007	0.997	0.995	0.995	0.984	0.992	1.001	1.004	1.007	1.012	1.001	1.003	
501	Motor vehicles and auto, equip...	1.003	1.002	1.006	1.011	0.999	0.998	0.994	0.973	0.997	1.001	1.005	1.011	1.003	1.000	1.005	1.011	0.998	0.998	0.994	0.972	
502	Furniture and home furnishings...	0.982	0.997	1.018	1.011	0.995	1.011	1.012	0.999	1.023	0.993	0.977	0.981	0.982	0.998	1.017	1.010	0.995	1.010	1.012	0.999	
505	Metals & minerals, ex. petroleum.	0.981	0.995	0.986	0.970	1.018	1.011	0.999	1.014	1.019	0.996	1.005	1.005	0.981	0.996	0.986	0.969	1.017	1.011	0.999	1.012	
506	Electrical goods.....	0.962	0.973	0.980	0.992	1.002	1.014	1.013	1.016	1.018	1.028	1.009	0.990	0.962	0.973	0.980	0.992	1.002	1.014	1.013	1.016	
507	Hardware, plumbing & heating equip.	0.990	1.004	1.016	1.044	1.020	1.015	1.013	0.999	0.986	0.985	0.958	0.969	0.991	1.004	1.015	1.043	1.020	1.014	1.013	0.999	
508	Machinery, equip. and supplies...	0.976	0.992	1.005	1.010	1.013	1.018	1.005	1.004	1.006	0.991	0.988	0.991	0.976	0.992	1.005	1.010	1.013	1.017	1.005	1.003	
51	Nondurable goods.....	1.043	1.035	1.026	0.998	0.963	0.953	0.945	0.949	0.971	1.028	1.047	1.041	1.043	1.035	1.025	0.998	0.963	0.954	0.944	0.949	
511	Paper and paper products.....	0.990	0.993	0.991	0.990	1.008	1.010	1.013	1.003	0.997	0.994	1.010	0.999	0.991	0.993	0.990	0.989	1.008	1.009	1.013	1.004	
514	Groceries and related products...	0.993	1.005	1.016	0.994	0.978	0.995	0.970	0.955	1.002	1.037	1.032	1.023	0.993	1.006	1.016	0.993	0.977	0.995	0.969	0.954	
515	Farm-product raw materials.....	1.273	1.192	1.112	0.974	0.796	0.742	0.781	0.804	0.856	1.053	1.186	1.231	1.276	1.191	1.112	0.974	0.795	0.740	0.780	0.803	
518	Beer, wine, & distilled beverages	0.961	0.944	0.980	0.998	1.011	1.022	1.009	0.999	0.996	1.068	1.085	0.925	0.959	0.944	0.978	0.996	1.011	1.023	1.010	1.001	
519	Miscellaneous nondurable goods...	1.052	1.072	1.093	1.073	0.989	0.945	0.943	0.929	0.943	0.979	0.978	1.001	1.052	1.072	1.093	1.074	0.989	0.946	0.943	0.928	

¹Adjusted sales and inventory data shown in table 1 are obtained by dividing the unadjusted data by the adjustment factors shown above for the corresponding group. Adjusted data for the totals are obtained by adding the durable and nondurable goods. Seasonal factors shown for the totals will provide an approximation of the adjusted estimates, but may show small differences from the published data.

Note: Merchant wholesalers totals and group totals include data for some groups not shown separately. The seasonal factors shown have been computed based on monthly estimates through December 1983.

Table 4. Coefficients of Variation of Sales and Inventories

(In percent)

SIC code	Kind of business	Sales						Inventories					
		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total....	1.2-1.7	1.5	1.4-1.7	1.5	0.6-0.9	0.7	1.5-1.8	1.7	1.6-1.7	1.7	0.3-0.4	0.3
50	Durable goods, total.....	1.4-1.7	1.5	1.3-1.5	1.4	0.5-0.9	0.7	1.6-2.0	2.0	1.8-2.0	1.8	0.3-0.4	0.3
501	Motor vehicles and automotive parts and supplies.....	3.2-4.3	3.8	3.3-4.1	3.5	1.1-2.0	1.6	2.8-3.5	3.4	3.0-3.8	3.2	0.8-1.5	1.0
502	Furniture and home furnishings.....	9.5-12.7	10.0	7.4-9.9	8.6	2.6-6.3	5.1	9.6-11.7	11.3	10.4-11.6	10.8	1.0-2.2	1.5
505	Metals and minerals, except petroleum (S)	(S)	(S)	(S)	(S)	(S)	(S)	4.2-4.9	4.6	4.2-4.8	4.6	0.6-1.2	0.9
506	Electrical goods.....	6.5-8.7	7.5	6.6-8.0	6.8	1.7-3.0	2.1	6.1-7.1	6.7	6.3-7.1	6.7	0.5-1.0	0.7
507	Hardware, plumbing, heating equipment, and supplies.....	6.0-7.3	6.2	5.5-6.5	6.3	1.7-2.9	2.2	6.0-6.6	6.2	5.7-6.3	6.1	0.9-1.7	1.2
508	Machinery, equipment, and supplies...	2.2-2.8	2.6	2.2-2.7	2.4	1.2-1.3	1.2	2.4-3.0	2.6	2.3-2.8	2.6	0.5-0.8	0.6
51	Nondurable goods, total.....	2.2-2.9	2.7	2.4-2.9	2.5	0.7-1.5	1.1	2.1-2.7	2.4	2.0-2.8	2.3	0.5-1.3	0.7
511	Paper and paper products.....	4.6-6.2	5.2	4.3-5.9	5.0	1.3-2.4	1.7	5.7-8.1	6.7	5.7-7.6	6.8	0.9-1.4	1.1
514	Groceries and related products.....	4.5-5.2	4.7	4.2-5.2	4.6	1.2-3.3	1.5	3.8-4.7	4.1	3.5-5.0	4.2	0.7-2.7	1.1
515	Farm-product raw materials.....	(S)	(S)	(S)	(S)	(S)	(S)	3.1-4.8	4.3	3.0-4.4	3.5	1.3-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages.....	4.4-6.1	5.2	4.7-7.6	5.3	1.2-3.6	2.2	3.6-4.7	4.5	3.8-4.5	4.1	1.1-2.4	1.7
519	Miscellaneous nondurable goods.....	3.7-5.2	4.4	3.8-4.4	4.0	1.4-3.7	3.1	4.7-5.6	5.2	4.7-5.9	5.0	1.1-2.2	1.5

S Data do not meet publication standards.

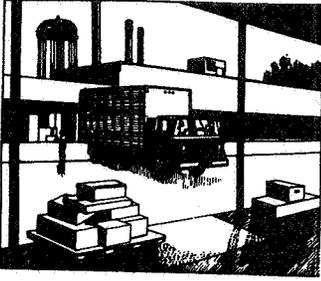
Note: Coefficients of variation are based on data unadjusted for seasonal variations or trading-day differences. The range and median coefficients of variation are based on data for August 1983 through January 1984.

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Monthly Wholesale Trade

Sales and Inventories

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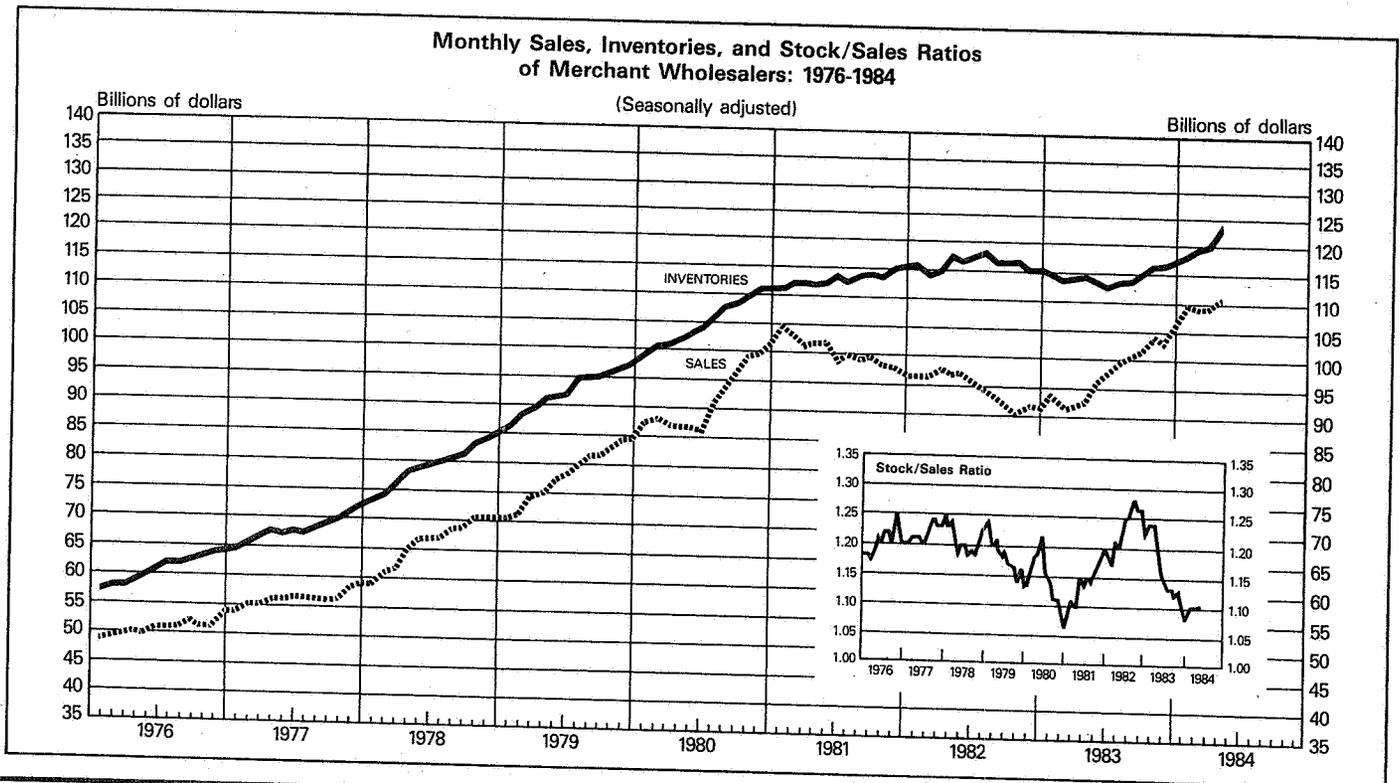
Sales April 1984 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$110.8 billion, up 1.1 percent from the revised March level of \$109.6 billion, and 19.3 percent above a year ago. The March preliminary estimate was revised upward by \$389 million or about 0.4 percent. April sales of durable goods were up 1.9 percent from the revised March level and increased 25.9 percent from a year ago. Based on seasonally adjusted data, comparisons with previous month sales levels showed mixed results. April sales of non-durable goods were little changed from the revised March level and were 14.4 percent above April 1983.

Inventories Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$123.6 billion at the end of April, up 1.7 percent from the revised March level of \$121.5 billion and 7.5 percent above a

year ago. This is the tenth consecutive positive month-to-month percent change. The March preliminary estimate was revised upward by \$572 million or about 0.5 percent. Both the durable and non-durable goods categories showed monthly increases. Inventories of durable goods wholesalers were up 0.5 percent from the March level, and increased 6.6 percent from a year ago. Inventories of non-durable goods wholesalers were up 3.9 percent from the March level and were 9.3 percent above April 1983.

Stock/Sales Ratio The April stock/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.12, up from the March ratio of 1.11 and below the year ago ratio of 1.24.

Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling errors. A discussion of the reliability of the data is on page 3.



U.S. Department of Commerce
BUREAU OF THE CENSUS

Address inquiries concerning this report to Michael Brown, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-3916 or 763-3917.

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Table 1. Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1984 and 1983

		(SALES AND INVENTORIES IN MILLIONS OF DOLLARS)												TOTAL 4 MONTHS			
SIC CODE	KIND OF BUSINESS	1984					1983							1984	1983		
		JAN.	FEB.	MAR.	APR. ^P	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	1984	1983	
DATA NOT ADJUSTED FOR SEASONAL VARIATION OR TRADING-DAY DIFFERENCES																	
	SALES, TOTAL.....	103,878	103,183	115,399	108,417	90,803	98,304	103,032	94,672	103,062	102,862	106,051	105,762	107,361	430,877	362,684	
50	DURABLE GOODS.....	43,165	44,848	50,634	48,784	38,479	40,870	44,858	40,811	44,809	44,754	46,300	45,620	45,621	187,431	151,167	
501	MOTOR VEHICLES & AUTO. EQUIP.	8,859	8,640	9,802	9,604	7,884	7,997	8,867	8,425	8,541	8,195	9,030	8,953	8,963	36,905	29,843	
502	FURNITURE & HOME FURNISHINGS.....	1,596	1,747	1,933	1,909	1,468	1,503	1,573	1,364	1,631	1,696	1,868	1,787	1,668	7,185	5,482	
506	ELECTRICAL GOODS.....	5,713	6,063	6,824	6,371	4,755	5,089	5,685	5,585	6,054	6,269	6,249	6,332	6,537	24,971	18,343	
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,611	2,623	2,886	2,835	2,314	2,540	2,726	2,667	2,979	2,875	2,887	2,834	2,626	10,955	9,053	
508	MACHINERY, EQUIP. & SUPPLIES.....	11,986	12,486	14,253	13,946	10,731	11,587	12,332	10,718	12,174	12,129	11,970	12,174	12,465	52,671	43,403	
51	NONDURABLE GOODS.....	60,713	58,335	64,765	59,633	52,324	57,434	58,174	53,861	58,253	58,108	59,751	60,142	61,740	243,446	211,517	
511	PAPER & PAPER PRODUCTS.....	2,405	2,445	2,623	2,525	2,009	2,091	2,193	1,990	2,417	2,330	2,417	2,383	2,417	2,439	9,998	8,272
514	GROCERIES & RELATED PRODUCTS.....	17,085	17,265	18,565	17,959	15,796	16,981	17,452	16,252	17,396	17,839	17,129	17,307	17,492	70,894	61,988	
518	BEER, WINE, & DISTILLED BEVERAGES.	2,379	2,508	2,965	2,893	2,779	3,327	3,799	3,127	3,313	3,135	2,933	3,320	3,543	10,755	10,448	
519	MISC. NONDURABLE GOODS.....	7,081	6,842	8,149	8,257	6,954	8,352	7,848	6,746	7,077	7,078	7,472	7,055	7,410	30,329	25,706	
	INVENTORIES, TOTAL.....	119,818	121,319	122,637	123,801	115,115	112,624	112,130	112,019	112,420	114,993	117,778	118,566	119,421	(X)	(X)	
50	DURABLE GOODS.....	75,185	76,295	78,266	78,921	74,048	73,228	73,371	73,339	73,368	74,769	74,582	74,417	75,432	(X)	(X)	
501	MOTOR VEHICLES & AUTO. EQUIP.	12,226	12,551	12,703	12,783	12,551	12,249	12,129	12,014	11,631	12,493	12,639	12,459	12,488	(X)	(X)	
502	FURNITURE & HOME FURNISHINGS.....	2,329	2,395	2,409	2,394	2,212	2,187	2,259	2,250	2,306	2,354	2,233	2,264	2,324	(X)	(X)	
506	METALS & MINERALS, EX. PETROLEUM..	8,343	8,422	8,529	8,576	8,018	8,143	8,192	8,133	8,213	8,497	8,223	8,399	8,462	(X)	(X)	
505	ELECTRICAL GOODS.....	9,079	9,151	9,516	9,900	8,045	8,030	8,201	8,461	8,433	8,603	8,811	8,698	8,812	(X)	(X)	
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,567	4,741	4,880	4,911	4,696	4,601	4,507	4,552	4,470	4,484	4,493	4,569	4,533	(X)	(X)	
508	MACHINERY, EQUIP. & SUPPLIES.....	28,417	28,525	29,376	29,609	28,403	28,045	28,405	27,587	27,389	27,729	27,914	27,684	28,534	(X)	(X)	
51	NONDURABLE GOODS.....	44,633	45,024	44,371	44,880	41,067	39,396	38,759	38,680	39,052	40,224	43,196	44,149	43,989	(X)	(X)	
511	PAPER & PAPER PRODUCTS.....	2,322	2,401	2,410	2,410	1,980	2,073	2,080	2,081	2,213	2,223	2,229	2,377	2,341	(X)	(X)	
514	GROCERIES & RELATED PRODUCTS.....	8,660	9,219	9,093	9,045	7,929	8,174	8,085	8,012	8,265	8,401	8,775	9,073	8,726	(X)	(X)	
515	FARM-PRODUCT RAW MATERIALS.....	9,450	8,773	8,217	8,109	6,899	5,808	5,417	6,038	6,617	7,227	9,106	9,615	9,439	(X)	(X)	
518	BEER, WINE, & DISTILLED BEVERAGES.	2,954	3,067	3,295	3,357	3,342	3,409	3,382	3,459	3,329	3,196	3,506	3,482	2,916	(X)	(X)	
519	MISC. NONDURABLE GOODS.....	7,504	8,024	8,455	8,434	7,408	6,596	6,386	6,310	6,113	6,317	6,594	6,582	7,021	(X)	(X)	
	STOCK/SALES RATIOS, TOTAL....	1.15	1.18	1.06	1.14	1.27	1.15	1.09	1.18	1.09	1.12	1.11	1.12	1.11	(X)	(X)	
50	DURABLE GOODS.....	1.74	1.70	1.55	1.62	1.92	1.79	1.64	1.80	1.64	1.67	1.61	1.63	1.65	(X)	(X)	
501	MOTOR VEHICLES & AUTO. EQUIP.	1.38	1.45	1.30	1.33	1.59	1.53	1.37	1.43	1.36	1.52	1.40	1.39	1.39	(X)	(X)	
502	FURNITURE & HOME FURNISHINGS.....	1.46	1.37	1.25	1.25	1.51	1.46	1.44	1.65	1.41	1.39	1.20	1.27	1.39	(X)	(X)	
506	ELECTRICAL GOODS.....	1.59	1.51	1.39	1.55	1.69	1.58	1.44	1.51	1.39	1.37	1.41	1.37	1.35	(X)	(X)	
507	HARDWARE, PLUMBING & HEATING EQUIP.	1.75	1.81	1.69	1.73	2.03	1.81	1.65	1.71	1.50	1.56	1.56	1.61	1.73	(X)	(X)	
508	MACHINERY, EQUIP. & SUPPLIES.....	2.37	2.28	2.06	2.12	2.65	2.42	2.27	2.57	2.25	2.29	2.33	2.27	2.29	(X)	(X)	
51	NONDURABLE GOODS.....	0.74	0.77	0.69	0.75	0.78	0.69	0.67	0.72	0.67	0.69	0.72	0.73	0.71	(X)	(X)	
511	PAPER & PAPER PRODUCTS.....	0.97	0.98	0.92	0.95	0.99	0.99	0.95	1.05	0.95	0.92	0.94	0.98	0.96	(X)	(X)	
514	GROCERIES & RELATED PRODUCTS.....	0.51	0.53	0.49	0.50	0.50	0.48	0.46	0.49	0.48	0.47	0.51	0.52	0.50	(X)	(X)	
518	BEER, WINE, & DISTILLED BEVERAGES.	1.24	1.22	1.11	1.16	1.20	1.02	0.89	1.11	1.00	1.02	1.20	1.05	0.82	(X)	(X)	
519	MISC. NONDURABLE GOODS.....	1.06	1.17	1.04	1.02	1.07	0.79	0.81	0.94	0.86	0.89	0.88	0.93	0.95	(X)	(X)	
DATA ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES																	
	SALES, TOTAL.....	110,125	108,328	109,553	110,791	92,890	96,646	98,577	99,941	100,894	102,171	104,210	103,793	106,892	(X)	(X)	
50	DURABLE GOODS.....	47,855	47,308	48,454	49,377	39,224	40,667	42,479	42,824	42,757	43,535	44,519	44,946	46,363	(X)	(X)	
501	MOTOR VEHICLES & AUTO. EQUIP.	9,546	8,772	9,118	9,252	7,677	7,894	8,195	8,632	8,473	8,746	8,923	9,080	9,231	(X)	(X)	
502	FURNITURE & HOME FURNISHINGS.....	1,769	1,758	1,807	1,881	1,432	1,548	1,498	1,536	1,601	1,650	1,725	1,727	1,745	(X)	(X)	
506	ELECTRICAL GOODS.....	6,383	6,457	6,756	6,829	5,037	5,236	5,389	5,619	5,799	5,970	6,044	6,042	6,347	(X)	(X)	
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,802	2,895	2,936	2,846	2,359	2,535	2,591	2,643	2,748	2,751	2,718	2,792	2,815	(X)	(X)	
508	MACHINERY, EQUIP. & SUPPLIES.....	13,559	13,074	13,574	14,016	10,753	11,371	11,656	11,378	11,539	11,708	11,887	12,186	12,342	(X)	(X)	
51	NONDURABLE GOODS.....	62,270	61,020	61,099	61,414	53,666	55,979	56,098	57,117	58,137	58,636	59,691	58,847	60,529	(X)	(X)	
511	PAPER & PAPER PRODUCTS.....	2,454	2,492	2,493	2,650	2,093	2,112	2,142	2,147	2,230	2,329	2,348	2,398	2,469	(X)	(X)	
514	GROCERIES & RELATED PRODUCTS.....	17,705	18,214	18,148	18,668	16,102	16,913	16,797	16,449	16,857	17,524	17,095	17,187	17,336	(X)	(X)	
518	BEER, WINE, & DISTILLED BEVERAGES.	3,066	3,007	3,019	3,039	2,868	3,317	3,407	3,105	3,090	3,038	3,008	3,026	3,052	(X)	(X)	
519	MISC. NONDURABLE GOODS.....	8,056	7,594	7,408	8,024	6,838	7,181	7,233	7,215	7,273	7,193	7,487	7,303	7,373	(X)	(X)	
	INVENTORIES, TOTAL.....	119,201	120,411	121,477	123,577	114,902	113,557	113,172	114,124	114,227	115,674	116,825	116,958	118,067	(X)	(X)	
50	DURABLE GOODS.....	76,408	76,910	78,188	78,607	73,753	72,647	72,501	73,193	73,076	74,249	74,806	74,791	75,811	(X)	(X)	
501	MOTOR VEHICLES & AUTO. EQUIP.	12,189	12,551	12,640	12,644	12,414	12,261	12,153	12,087	11,954	12,531	12,626	12,397	12,352	(X)	(X)	
502	FURNITURE & HOME FURNISHINGS.....	2,372	2,401	2,369	2,370	2,188	2,198	2,234	2,223	2,308	2,301	2,249	2,317	2,369	(X)	(X)	
505	METALS & MINERALS, EX. PETROLEUM..	8,505	8,456	8,550	8,650	8,266	7,999	8,103	8,141	8,100	8,339	8,256	8,357	8,420	(X)	(X)	
506	ELECTRICAL GOODS.....	9,438	9,405	9,710	9,980	8,110	8,014	8,088	8,352	8,300	8,451	8,571	8,620	8,901	(X)	(X)	
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,608	4,722	4,808	4,709	4,498	4,511	4,440	4,494	4,474	4,548	4,561	4,769	4,678	(X)	(X)	
508	MACHINERY, EQUIP. & SUPPLIES.....	29,116	28,755	29,230	29,316	28,122	27,685	27,549	27,450	27,564	27,564	28,168	28,020	28,793	(X)	(X)	
51	NONDURABLE GOODS.....	42,793	43,501	43,289	44,970	41,149	40,910	40,671	40,931	41,151	41,425	42,019	42,167	42,256	(X)	(X)	
511	PAPER & PAPER PRODUCTS.....	2,343	2,418	2,434	2,437	2,000	2,057	2,059	2,054	2,206	2,230	2,242	2,353	2,343	(X)	(X)	
514	GROCERIES & RELATED PRODUCTS.....	8,721	9,164	8,950	9,109	7,977	8,358	8,126	8,260	8,654	8,384	8,462	8,792	8,530	(X)	(X)	
515	FARM-PRODUCT RAW MATERIALS.....	7,406	7,366	7,389	8,325	7,083	7,296	7,301	7,731	8,230	8,443						

Table 2. Percent Change in Sales and Inventories of Merchant Wholesalers

SIC CODE	KIND OF BUSINESS	UNADJUSTED					ADJUSTED ¹				
		SALES			INVENTORIES, END-OF-MONTH (AT COST)		SALES			INVENTORIES, END-OF-MONTH (AT COST)	
		APR. 1984 FROM MAR. 1984	APR. 1984 FROM APR. 1983	4 MONTHS FROM APR. 1983	APR. 1984 FROM MAR. 1984	APR. 1984 FROM APR. 1983	APR. 1984 FROM MAR. 1984	APR. 1984 FROM APR. 1983	APR. 1984 FROM MAR. 1984	APR. 1984 FROM APR. 1983	
	TOTAL.....	-6.1	+19.4	+18.8	+0.9	+7.5	+1.1	+19.3	+1.7	+7.5	
50	DURABLE GOODS.....	-3.7	+26.8	+24.0	+0.8	+6.6	+1.9	+25.9	+0.5	+6.6	
501	MOTOR VEHICLES & AUTO. EQUIP.	-2.0	+21.8	+23.7	+0.6	+1.8	+1.5	+20.5	0.0	+1.9	
502	FURNITURE & HOME FURNISHINGS.....	-1.2	+30.0	+31.1	-0.6	+8.2	+4.1	+31.4	0.0	+8.3	
505	METALS & MINERALS, EX. PETROLEUM..	(S)	(S)	(S)	+0.6	+7.0	(S)	(S)	+2.3	+7.1	
506	ELECTRICAL GOODS.....	-6.6	+34.0	+36.1	+4.0	+23.1	+1.1	+35.6	+2.8	+23.1	
507	HARDWARE, PLUMBING & HEATING EQUIP.	-1.8	+22.5	+21.0	+0.6	+4.6	-3.1	+20.6	-2.1	+4.7	
508	MACHINERY, EQUIP. & SUPPLIES.....	-2.2	+30.0	+21.4	+0.8	+4.2	+3.3	+30.3	+0.3	+4.2	
51	NONDURABLE GOODS.....	-7.9	+14.0	+15.1	+1.1	+9.3	+0.5	+14.4	+3.9	+9.3	
511	PAPER & PAPER PRODUCTS.....	-3.7	+25.7	+20.9	0.0	+21.7	+6.3	+26.6	+0.1	+21.9	
514	GROCERIES & RELATED PRODUCTS.....	-3.3	+13.7	+14.4	-0.5	+14.1	+2.9	+15.9	+1.8	+14.2	
515	FARM-PRODUCT RAW MATERIALS.....	(S)	(S)	(S)	-1.3	+17.5	(S)	(S)	+12.7	+17.5	
518	BEER, WINE, & DISTILLED BEVERAGES.	-2.4	+4.1	+2.8	+1.9	+0.4	+0.7	+6.0	0.0	+0.6	
519	MISC. NONDURABLE GOODS.....	+1.3	+18.7	+18.0	-0.2	+13.8	+8.3	+17.3	+1.5	+13.7	

(S) DATA DO NOT MEET PUBLICATION STANDARDS.

¹ ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES.

EXPLANATORY MATERIAL

Scope of Survey

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the *Standard Industrial Classification Manual*¹ and the 1977 Supplement and as covered in the 1977 Economic Censuses, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm, or professional business users; 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; and (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), who 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.

Also included in this survey are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments and manufacturers' sales branches of ferrous metal service centers SIC (505).

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.

The estimates of the coefficients of variation in percent for sales and inventories at the level of detail provided in this publication are shown in table 4. Note that 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. 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.

The coefficient of variation also 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.

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 13 percent of the sales estimates and 21 percent for inventories.

Differences between preliminary and final estimates² of seasonally adjusted sales ranged from approximately +0.8 percent to -0.5 percent for the past 12 months. During the same

¹Executive Office of the President, Office of Management and Budget, *Standard Industrial Classification Manual*, 1972, and the 1977 Supplement.

²See Sample Design and Estimation Procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983*.

period, the average of the absolute differences was 0.4 percent. The corresponding range for inventories was approximately +0.8 percent to -0.6 percent for the past 12 months. The average of the absolute differences was 0.4 percent.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventories estimates in this report reflect the results of a benchmarking³ operation which made use of 1982 estimates tabulated from the 1982 Annual Trade Survey. Monthly wholesale sales and inventories estimates were revised in a manner designed to minimize the differences in the month-to-month trends between the revised and unrevised series. The estimates for the unrevised series were derived by using composite estimating procedures. Monthly sales estimates were revised for the period January 1980 through December 1983. The revised monthly sales estimates for 1980 and 1981 were constrained to sum to the 1980 and 1981 annual estimates tabulated from the 1981 Annual Trade Survey. The revised monthly sales estimates for 1982 were constrained to sum to the 1982 annual estimates tabulated from the 1982 Annual Trade Survey. Similarly, monthly inventories were revised for the period January 1982 through December 1983 using end-of-year inventories tabulated for 1981 and 1982 as benchmarks. (For a few series, monthly inventories were revised for the period January 1978 through December 1983.)

Through the use of carry-forward factors, the effect of the revision process was applied to all composite estimates subsequent to December 1982. These factors were derived at the three-digit kind-of-business level and are held constant until the next revision and benchmarking process. Aggregate level estimates were derived by summing appropriate detail level estimates, thereby assuring additivity.

Subsequent revisions of the monthly sales and inventory series will make use of future annual surveys of wholesale trade and the 1982 Census of Wholesale Trade.

Unpublished Data

Sales and inventory estimates for unpublished three-digit wholesale trade categories are not included in this publication because the sampling variability associated with these data do not meet publication criteria. The Census Bureau on written request will release these data for individual use, though not for publication.

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 sources such as investments, rental or sale of real estate, etc.

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.

Inventories. Inventories represent stocks at cost of merchandise owned by merchant wholesalers at the end of the month regardless of location except for goods held outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included. Goods held in foreign trade zones in the United States are also included.

Stock/Sales Ratios. The stock/sales ratios are derived by dividing the dollar value of inventories 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.

Kind-of-Business Classifications

The durable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 50. This group includes establishments classified in SIC groups 501 through 509.

The nondurable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 51. This group includes establishments classified in SIC groups 511 through 519.

For a further description of the kinds of business included in the major groups see the *1972 Standard Industrial Classification Manual* and the 1977 Supplement.

Adjustment for Seasonal and Trading-Day Variation

Seasonal factors for adjusting data in this 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 estimates were also derived from the X-11 program.

Seasonal 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 conditions, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of the trading-day adjustment procedure 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 seasonal adjustment procedure may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

³For a more detailed description, see the section dealing with revisions to published data in the Current Business Report *Revised Monthly Wholesale Trade: January 1974 through December 1983*.

Table 3. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1983-August 1984

SIC code	Kind of business	1983												1984							
		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.
	Sales ¹ , total.....	0.930	0.918	1.084	0.977	1.022	1.037	0.946	1.022	1.005	1.016	1.018	1.003	0.953	0.956	1.053	0.976	1.056	1.003	0.971	1.022
50	Durable goods.....	0.886	0.907	1.077	0.981	1.005	1.056	0.953	1.048	1.028	1.040	1.015	0.984	0.902	0.948	1.045	0.988	1.038	1.014	0.981	1.048
501	Motor vehicles and auto, equip...	0.910	0.948	1.099	1.027	1.013	1.082	0.976	1.008	0.937	1.012	0.986	0.971	0.928	0.985	1.075	1.038	1.048	1.035	0.999	1.029
502	Furniture and home furnishings...	0.906	0.932	1.093	1.025	0.971	1.050	0.888	1.019	1.028	1.083	1.035	0.956	0.902	0.994	1.070	1.015	1.016	1.014	0.887	1.022
506	Electrical goods.....	0.887	0.903	1.038	0.944	0.972	1.055	0.994	1.044	1.050	1.034	1.048	1.030	0.895	0.939	1.010	0.933	1.003	1.033	1.012	1.029
507	Hardware, plumbing & heating equip.	0.910	0.867	1.018	0.981	1.002	1.052	1.009	1.084	1.045	1.062	1.015	0.933	0.932	0.906	0.983	0.996	1.027	1.008	1.045	1.078
508	Machinery, equip. and supplies...	0.863	0.913	1.078	0.998	1.019	1.058	0.942	1.055	1.036	1.007	0.999	1.010	0.834	0.955	1.050	0.995	1.049	1.028	0.966	1.055
51	Nondurable goods.....	0.947	0.922	1.090	0.975	1.026	1.037	0.943	1.002	0.991	1.001	1.022	1.020	0.975	0.956	1.060	0.971	1.058	1.009	0.968	1.002
511	Paper and paper products.....	0.954	0.943	1.085	0.960	0.990	1.024	0.927	1.045	1.038	1.015	1.008	0.988	0.980	0.981	1.052	0.953	1.034	0.985	0.954	1.050
514	Groceries and related products...	0.946	0.915	1.044	0.981	1.004	1.039	0.988	1.032	1.018	1.002	1.007	1.009	0.965	0.949	1.023	0.962	1.042	1.019	1.007	1.033
518	Beer, wine, & distilled beverages	0.750	0.790	1.015	0.969	1.003	1.115	1.007	1.072	1.032	0.975	1.097	1.161	0.776	0.834	0.982	0.952	1.062	1.069	1.022	1.101
519	Miscellaneous nondurable goods...	0.871	0.872	1.117	1.017	1.163	1.085	0.935	0.973	0.984	0.998	0.966	1.005	0.879	0.901	1.100	1.029	1.186	1.052	0.953	0.983
	Inventories ¹ , total.....	1.003	1.009	1.011	1.008	0.989	0.990	0.984	0.983	0.993	1.007	1.012	1.009	1.003	1.009	1.011	1.008	0.988	0.990	0.983	0.983
50	Durable goods.....	0.984	0.993	1.001	1.004	1.008	1.012	1.002	1.004	1.007	0.997	0.995	0.995	0.984	0.992	1.001	1.004	1.007	1.012	1.001	1.003
501	Motor vehicles and auto, equip...	1.003	1.002	1.006	1.011	0.999	0.998	0.994	0.973	0.997	1.001	1.005	1.011	1.003	1.000	1.005	1.011	0.998	0.998	0.994	0.972
502	Furniture and home furnishings...	0.982	0.997	1.018	1.011	0.995	1.011	1.012	0.999	1.023	0.993	0.977	0.981	0.982	0.998	1.017	1.010	0.995	1.010	1.012	0.999
505	Metals & minerals, ex. petroleum.	0.981	0.995	0.986	0.970	1.018	1.011	0.999	1.014	1.019	0.996	1.005	1.005	0.981	0.996	0.986	0.969	1.017	1.011	0.999	1.012
506	Electrical goods.....	0.962	0.973	0.980	0.992	1.002	1.014	1.013	1.016	1.018	1.028	1.009	0.990	0.962	0.973	0.980	0.992	1.002	1.014	1.013	1.016
507	Hardware, plumbing & heating equip.	0.990	1.004	1.016	1.044	1.020	1.015	1.013	0.999	0.986	0.985	0.958	0.969	0.991	1.004	1.015	1.043	1.020	1.014	1.013	0.999
508	Machinery, equip. and supplies...	0.976	0.992	1.005	1.010	1.013	1.018	1.005	1.004	1.006	0.991	0.988	0.991	0.976	0.992	1.005	1.010	1.013	1.017	1.005	1.003
51	Nondurable goods.....	1.043	1.035	1.026	0.998	0.963	0.953	0.945	0.949	0.971	1.028	1.047	1.041	1.043	1.035	1.025	0.998	0.963	0.954	0.944	0.949
511	Paper and paper products.....	0.990	0.993	0.991	0.990	1.008	1.010	1.013	1.003	0.997	0.994	1.010	0.999	0.991	0.993	0.990	0.989	1.008	1.009	1.013	1.004
514	Groceries and related products...	0.993	1.005	1.016	0.994	0.978	0.995	0.970	0.955	1.002	1.037	1.032	1.023	0.993	1.006	1.016	0.993	0.977	0.995	0.969	0.954
515	Farm-product raw materials.....	1.273	1.192	1.112	0.974	0.796	0.742	0.781	0.804	0.856	1.053	1.186	1.231	1.276	1.191	1.112	0.974	0.795	0.740	0.780	0.803
518	Beer, wine, & distilled beverages	0.961	0.944	0.980	0.998	1.011	1.022	1.009	0.999	0.996	1.068	1.085	0.925	0.959	0.944	0.978	0.996	1.011	1.023	1.010	1.001
519	Miscellaneous nondurable goods...	1.052	1.072	1.093	1.073	0.989	0.945	0.943	0.929	0.943	0.979	0.978	1.001	1.052	1.072	1.093	1.074	0.989	0.946	0.943	0.928

¹Adjusted sales and inventory data shown in table 1 are obtained by dividing the unadjusted data by the adjustment factors shown above for the corresponding group. Adjusted data for the totals are obtained by adding the durable and nondurable goods. Seasonal factors shown for the totals will provide an approximation of the adjusted estimates, but may show small differences from the published data.

Note: Merchant wholesalers totals and group totals include data for some groups not shown separately. The seasonal factors shown have been computed based on monthly estimates through December 1983.

Table 4. Coefficients of Variation of Sales and Inventories

(In percent)

SIC code	Kind of business	Sales						Inventories					
		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total....	1.2-1.7	1.5	1.4-1.7	1.5	0.6-0.9	0.7	1.5-1.8	1.7	1.6-1.7	1.7	0.3-0.4	0.3
50	Durable goods, total.....	1.4-1.7	1.5	1.3-1.5	1.4	0.5-0.9	0.7	1.6-2.0	2.0	1.8-2.0	1.8	0.3-0.4	0.3
501	Motor vehicles and automotive parts and supplies.....	3.2-4.3	3.8	3.3-4.1	3.5	1.1-2.0	1.6	2.8-3.5	3.4	3.0-3.8	3.2	0.8-1.5	1.0
502	Furniture and home furnishings.....	9.5-12.7	10.0	7.4-9.9	8.6	2.6-6.3	5.1	9.6-11.7	11.3	10.4-11.6	10.8	1.0-2.2	1.5
505	Metals and minerals, except petroleum (S)	(S)	(S)	(S)	(S)	(S)	(S)	4.2-4.9	4.6	4.2-4.8	4.6	0.6-1.2	0.9
506	Electrical goods.....	6.5-8.7	7.5	6.6-8.0	6.8	1.7-3.0	2.1	6.1-7.1	6.7	6.3-7.1	6.7	0.5-1.0	0.7
507	Hardware, plumbing, heating equipment, and supplies.....	6.0-7.3	6.2	5.5-6.5	6.3	1.7-2.9	2.2	6.0-6.6	6.2	5.7-6.3	6.1	0.9-1.7	1.2
508	Machinery, equipment, and supplies...	2.2-2.8	2.6	2.2-2.7	2.4	1.2-1.3	1.2	2.4-3.0	2.6	2.3-2.8	2.6	0.5-0.8	0.6
51	Nondurable goods, total.....	2.2-2.9	2.7	2.4-2.9	2.5	0.7-1.5	1.1	2.1-2.7	2.4	2.0-2.8	2.3	0.5-1.3	0.7
511	Paper and paper products.....	4.6-6.2	5.2	4.3-5.9	5.0	1.3-2.4	1.7	5.7-8.1	6.7	5.7-7.6	6.8	0.9-1.4	1.1
514	Groceries and related products.....	4.5-5.2	4.7	4.2-5.2	4.6	1.2-3.3	1.5	3.8-4.7	4.1	3.5-5.0	4.2	0.7-2.7	1.1
515	Farm-product raw materials.....	(S)	(S)	(S)	(S)	(S)	(S)	3.1-4.8	4.3	3.0-4.4	3.5	1.3-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages.....	4.4-6.1	5.2	4.7-7.6	5.3	1.2-3.6	2.2	3.6-4.7	4.5	3.8-4.5	4.1	1.1-2.4	1.7
519	Miscellaneous nondurable goods.....	3.7-5.2	4.4	3.8-4.4	4.0	1.4-3.7	3.1	4.7-5.6	5.2	4.7-5.9	5.0	1.1-2.2	1.5

S Data do not meet publication standards.

Note: Coefficients of variation are based on data unadjusted for seasonal variations or trading-day differences. The range and median coefficients of variation are based on data for August 1983 through January 1984.

METHODS OF INVENTORY VALUATION

Each firm in the December 1983 Monthly Wholesale Trade Survey was sent a supplemental form requesting the methods that were used to value the inventory reported for December 1983. Based on the reports from those firms that reported a method of valuation, 21.7 percent of the December 1983 wholesale inventory was valued by using the last-in, first-out (LIFO) method. For durable goods establishments, 22.1 percent of the inventory was valued by the LIFO method, while 21.1 percent of the inventory reported by nondurable goods establishments was based on LIFO.

The above percentages were based on those firms that reported both December 1983 inventory and a method of valuation. Also included in the percentages were firms that did not report a method of valuation in the 1983 supplement but did provide that on the 1982 supplement or the 1982 Annual Trade Survey. For these firms,

the inventory valuation methods from the 1982 surveys were substituted and tabulated in the December 1983 supplement. The firms that did not report in 1983 or 1982 were not tabulated.

Percentages are based on a weighted estimate of inventory allocated to the valuation methods indicated by the respondents. The weight is the inverse of the probability of selection in the monthly sample. This procedure is slightly different from that used to estimate the dollar value of inventories. For a full description of the sample, see Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983.

The LIFO method determines the value of the ending inventory based on the assumption that the last units purchased are the first to be sold. Other methods include first-in, first-out (FIFO), average cost, specific cost, market, and lower of cost or market.

Table 5. Methods of Inventory Valuation: December 1983

SIC code	KINDS OF BUSINESS	PERCENT OF WHOLESALE INVENTORIES	
		LIFO	OTHER METHODS
	MERCHANT WHOLESALERS, TOTAL.....	21.7	78.3
50	DURABLE GOODS.....	22.1	77.9
501	MOTOR VEHICLES & AUTO. EQUIP.....	21.0	79.0
502	FURNITURE & HOME FURNISHINGS.....	8.2	91.8
505	METALS & MINERALS.....	28.6	71.4
506	ELECTRICAL GOODS.....	16.9	83.1
507	HARDWARE, PLUMBING & HEATING EQUIP.....	27.6	72.4
508	MACHINERY, EQUIP. & SUPPLIES.....	26.0	74.0
51	NONDURABLE GOODS.....	21.1	78.9
511	PAPER & PAPER PRODUCTS.....	17.9	82.1
514	GROCERIES & RELATED PRODUCTS.....	26.2	73.8
515	FARM-PRODUCT RAW MATERIALS.....	3.1	96.9
518	BEER, WINE, & DISTILLED BEVERAGES.....	28.3	71.7
519	MISC. NONDURABLE GOODS.....	13.0	87.0

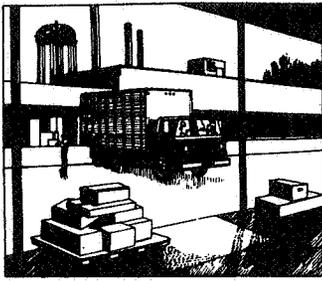
NOTE: The inventories of the firms tabulated in this survey represented approximately 75.6 percent of the inventories for December 1983.

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Monthly Wholesale Trade

Sales and Inventories

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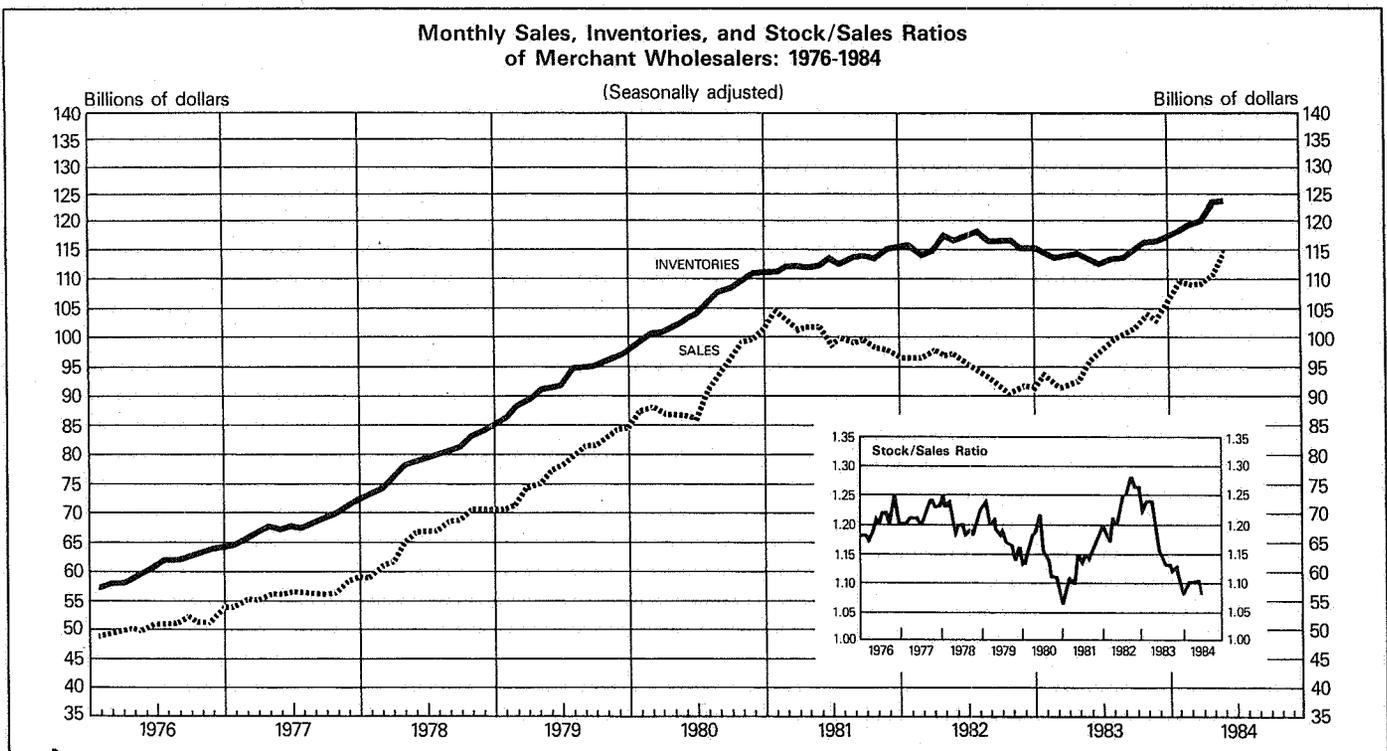
Sales May 1984 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$115.0 billion, up 3.6 percent from the revised April level of \$111.0 billion, and 19.0 percent above a year ago. This is the third consecutive positive month-to-month percent change. The April preliminary estimate was revised upward by \$252 million or about 0.2 percent. Both the durable and nondurable goods categories showed strong monthly increases, up 4.3 percent and 3.0 percent, respectively. Gains in the durable goods group were led by the sales of furniture and home furnishings, up 19.8 percent, followed by motor vehicles and automotive parts and supplies, which rose 11.8 percent. Sales of machinery, equipment, and supplies increased 6.0 percent to \$14,549 million. The nondurable goods categories recorded mixed month-to-month results, but as a group increased 13.5 percent over May 1983.

Inventories Total inventories of merchant wholesalers, after adjustment for seasonal variation but

not for price changes, were \$124.5 billion at the end of May, up 0.6 percent from the revised April level of \$123.8 billion, and 9.6 percent above a year ago. This is the eleventh consecutive positive month-to-month percent change. The April preliminary estimate was revised upward by \$208 million or about 0.2 percent. Inventories of durable goods wholesalers were up 1.0 percent from the April level, and increased 9.0 percent from a year ago. Inventories of nondurable goods wholesalers were little changed from the April level and were 10.7 percent above May 1983.

Stock/Sales Ratio The May stock/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.08, down from the April ratio of 1.11 and below the year ago ratio of 1.17.

Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling errors. A discussion of the reliability of the data is on page 3.



U.S. Department of Commerce
BUREAU OF THE CENSUS

Address inquiries concerning this report to Michael Brown, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-3916 or 763-3917.

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Table 1. Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1984 and 1983

SIC CODE	KIND OF BUSINESS	(SALES AND INVENTORIES IN MILLIONS OF DOLLARS)												TOTAL 5 MONTHS		
		1984					1983					1984	1983			
		JAN.	FEB.	MAR.	APR.	MAY	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.		
		DATA NOT ADJUSTED FOR SEASONAL VARIATION OR TRADING-DAY DIFFERENCES														
	SALES, TOTAL.....	103,878	103,183	115,399	108,662	120,671	98,304	103,032	94,672	103,062	107,862	106,051	105,762	107,361	551,793	460,988
50	DURABLE GOODS.....	43,165	44,848	50,634	48,774	53,448	40,870	44,858	40,811	44,809	44,754	46,300	45,620	45,621	240,869	192,037
501	MOTOR VEHICLES & AUTO. EQUIP.	8,859	8,640	9,802	9,573	10,802	7,997	8,867	8,425	8,541	8,195	9,030	8,953	8,963	47,676	37,840
502	FURNITURE & HOME FURNISHINGS.....	1,596	1,747	1,933	1,966	2,358	1,503	1,573	1,364	1,631	1,696	1,868	1,787	1,668	9,600	6,985
506	ELECTRICAL GOODS.....	5,713	6,063	6,824	6,418	6,814	5,089	5,685	5,585	6,054	6,269	6,249	6,332	6,537	31,832	23,432
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,611	2,623	2,886	2,885	3,052	2,540	2,726	2,667	2,979	2,875	2,887	2,834	2,626	14,057	11,593
508	MACHINERY, EQUIP. & SUPPLIES.....	11,986	12,486	14,253	13,652	15,262	11,587	12,332	10,718	12,174	12,129	11,970	12,174	12,465	67,639	54,990
51	NONDURABLE GOODS.....	60,713	58,335	64,765	59,888	67,223	57,434	58,174	53,861	58,253	58,108	59,751	60,142	61,740	310,924	268,951
511	PAPER & PAPER PRODUCTS.....	2,405	2,445	2,623	2,497	2,680	2,091	2,193	1,990	2,330	2,417	2,383	2,417	2,439	12,650	10,363
514	GROCERIES & RELATED PRODUCTS.....	17,085	17,285	18,565	18,125	19,507	16,981	17,452	16,252	17,396	17,839	17,129	17,307	17,492	90,567	78,969
518	BEER, WINE, & DISTILLED BEVERAGES.....	2,379	2,508	2,965	2,858	3,453	3,327	3,799	3,127	3,313	3,135	2,933	3,320	3,543	14,163	13,775
519	MISC. NONDURABLE GOODS.....	7,081	6,842	8,149	8,244	9,944	8,352	7,848	6,746	7,077	7,078	7,472	7,055	7,410	40,260	34,058
	INVENTORIES, TOTAL.....	119,818	121,319	122,637	124,008	123,358	112,624	112,130	112,019	112,420	114,993	117,778	118,566	119,421	(X)	(X)
50	DURABLE GOODS.....	75,185	76,295	78,266	78,752	79,764	73,228	73,371	73,339	73,368	74,769	74,582	74,417	75,432	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	12,226	12,551	12,703	12,712	12,583	12,249	12,129	12,014	11,631	12,493	12,639	12,459	12,488	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	2,329	2,395	2,409	2,421	2,464	2,187	2,259	2,250	2,306	2,354	2,233	2,264	2,324	(X)	(X)
505	METALS & MINERALS, EX. PETROLEUM.....	9,343	8,422	8,529	8,509	8,986	8,143	8,192	8,133	8,213	8,497	8,223	8,399	8,462	(X)	(X)
506	ELECTRICAL GOODS.....	9,079	9,151	9,516	10,025	10,551	8,030	8,201	8,461	8,433	8,603	8,811	8,698	8,812	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,567	4,781	4,880	4,995	5,014	4,601	4,507	4,552	4,470	4,484	4,493	4,569	4,533	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	28,417	28,525	29,376	29,384	29,474	28,045	28,045	27,587	27,389	27,729	27,914	27,684	28,534	(X)	(X)
51	NONDURABLE GOODS.....	44,633	45,024	44,371	45,256	43,594	39,396	38,759	38,680	39,052	40,224	43,196	44,149	43,989	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	2,322	2,401	2,410	2,453	2,503	2,073	2,080	2,081	2,213	2,223	2,229	2,377	2,341	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	8,660	9,219	9,093	9,192	9,211	8,174	8,085	8,012	8,265	8,401	8,775	9,073	8,726	(X)	(X)
515	FARM-PRODUCT RAW MATERIALS.....	9,450	8,773	8,217	8,079	6,539	5,808	5,417	6,038	6,617	7,227	9,106	9,639	9,439	(X)	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.....	2,954	3,067	3,295	3,322	3,181	3,409	3,382	3,459	3,329	3,196	3,506	3,482	2,916	(X)	(X)
519	MISC. NONDURABLE GOODS.....	7,504	8,024	8,455	8,524	7,928	6,596	6,386	6,310	6,113	6,317	6,594	6,582	7,021	(X)	(X)
	STOCK/SALES RATIOS, TOTAL.....	1.15	1.18	1.06	1.14	1.02	1.15	1.09	1.18	1.09	1.12	1.11	1.12	1.11	(X)	(X)
50	DURABLE GOODS.....	1.74	1.70	1.55	1.61	1.49	1.79	1.64	1.80	1.64	1.67	1.61	1.63	1.65	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	1.38	1.45	1.30	1.33	1.16	1.53	1.37	1.43	1.36	1.52	1.40	1.39	1.39	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	1.46	1.37	1.25	1.23	1.04	1.46	1.44	1.65	1.41	1.39	1.20	1.27	1.39	(X)	(X)
506	ELECTRICAL GOODS.....	1.59	1.51	1.39	1.56	1.55	1.58	1.44	1.51	1.39	1.37	1.41	1.37	1.35	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	1.75	1.81	1.69	1.73	1.64	1.81	1.65	1.71	1.50	1.56	1.56	1.61	1.73	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	2.37	2.28	2.06	2.15	1.93	2.42	2.27	2.57	2.25	2.29	2.33	2.27	2.29	(X)	(X)
51	NONDURABLE GOODS.....	0.74	0.77	0.69	0.76	0.65	0.69	0.67	0.72	0.67	0.69	0.72	0.71	0.71	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	0.97	0.98	0.92	0.98	0.93	0.99	0.95	1.05	0.95	0.92	0.94	0.98	0.96	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	0.51	0.53	0.49	0.51	0.47	0.48	0.46	0.49	0.48	0.47	0.51	0.52	0.50	(X)	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.....	1.24	1.22	1.11	1.16	0.92	1.02	0.89	1.11	1.00	1.02	1.20	1.05	0.82	(X)	(X)
519	MISC. NONDURABLE GOODS.....	1.06	1.17	1.04	1.03	0.80	0.79	0.81	0.94	0.86	0.89	0.88	0.93	0.95	(X)	(X)
		DATA ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES														
	SALES, TOTAL.....	110,125	108,328	109,553	111,043	115,029	96,646	98,577	99,941	100,894	102,171	104,210	103,793	106,892	(X)	(X)
50	DURABLE GOODS.....	47,855	47,308	48,454	49,366	51,491	40,667	42,479	42,824	42,757	43,535	44,519	44,946	46,363	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	9,546	8,772	9,118	9,223	10,307	7,894	8,195	8,632	8,473	8,746	8,923	9,080	9,231	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	1,769	1,758	1,807	1,937	2,321	1,548	1,498	1,536	1,601	1,650	1,725	1,727	1,745	(X)	(X)
506	ELECTRICAL GOODS.....	6,383	6,457	6,756	6,879	6,794	5,236	5,389	5,619	5,799	5,970	6,044	6,042	6,347	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,802	2,895	2,936	2,897	2,972	2,535	2,591	2,643	2,748	2,751	2,718	2,792	2,815	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	13,959	13,074	13,574	13,721	14,549	11,371	11,656	11,378	11,539	11,708	11,887	12,186	12,342	(X)	(X)
51	NONDURABLE GOODS.....	62,270	61,020	61,099	61,677	63,538	55,979	56,098	57,117	58,137	58,636	59,691	58,847	60,529	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	2,454	2,492	2,493	2,620	2,592	2,112	2,142	2,147	2,230	2,329	2,348	2,398	2,469	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	17,705	18,214	18,148	18,841	18,721	16,913	16,797	16,449	16,857	17,524	17,095	17,187	17,336	(X)	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.....	3,066	3,007	3,019	3,002	3,251	3,317	3,407	3,105	3,030	3,038	3,008	3,026	3,052	(X)	(X)
519	MISC. NONDURABLE GOODS.....	8,055	7,594	7,408	8,012	8,384	7,181	7,233	7,215	7,273	7,193	7,487	7,303	7,373	(X)	(X)
	INVENTORIES, TOTAL.....	119,201	120,411	121,477	123,785	124,479	113,557	113,172	114,124	114,227	115,674	116,825	116,958	118,067	(X)	(X)
50	DURABLE GOODS.....	76,408	76,910	78,188	78,438	79,210	72,647	72,501	73,193	73,076	74,249	74,806	74,791	75,811	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	12,189	12,551	12,640	12,608	12,608	12,261	12,153	12,083	11,954	12,531	12,626	12,397	12,352	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	2,372	2,400	2,369	2,397	2,476	2,198	2,234	2,308	2,308	2,301	2,249	2,317	2,369	(X)	(X)
505	METALS & MINERALS, EX. PETROLEUM.....	8,505	8,456	8,650	8,781	8,876	7,999	8,103	8,141	8,108	8,339	8,256	8,357	8,420	(X)	(X)
506	ELECTRICAL GOODS.....	9,439	9,405	9,170	10,106	10,530	8,014	8,088	8,352	8,300	8,451	8,571	8,620	8,901	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,608	4,722	4,808	4,789	4,916	4,511	4,440	4,494	4,474	4,548	4,561	4,769	4,678	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	27,116	28,755	29,230	29,093	29,096	27,685	27,549	27,450	27,280	27,564	28,168	28,020	28,793	(X)	(X)
51	NONDURABLE GOODS.....	42,793	43,501	43,289	45,347	45,269	40,910	40,671	40,931	41,151	41,425	42,019	42,167	42,256	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	2,343	2,418	2,434	2,480	2,483	2,057	2,059	2,054	2,206	2,230	2,242	2,353	2,343	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	8,721	9,164	8,950	9,257	9,428	8,358	8,126	8,260	8,654	8,384	8,462	8,792	8,530	(X)	(X)
515	FARM-PRODUCT RAW MATERIALS.....	7,406	7,366	7,389	8,295	8,225	7,296	7,301	7,731	8,230	8,443	8,648	8,107	7		

Table 2. Percent Change in Sales and Inventories of Merchant Wholesalers

SIC CODE	KIND OF BUSINESS	UNADJUSTED					ADJUSTED ¹				
		SALES			INVENTORIES, END-OF-MONTH (AT COST)		SALES			INVENTORIES, END-OF-MONTH (AT COST)	
		MAY 1984 FROM APR. 1984	MAY 1984 FROM MAY 1983	5 MONTHS FROM 5 MONTHS 1983	MAY 1984 FROM APR. 1984	MAY 1984 FROM MAY 1983	MAY 1984 FROM APR. 1984	MAY 1984 FROM MAY 1983	MAY 1984 FROM APR. 1984	MAY 1984 FROM MAY 1983	
	TOTAL.....	+11.1	+22.8	+19.7	-0.5	+9.5	+3.6	+19.0	+0.6	+9.6	
50	DURABLE GOODS.....	+9.6	+30.8	+25.4	+1.3	+8.9	+4.3	+26.6	+1.0	+9.0	
501	MOTOR VEHICLES & AUTO. EQUIP.	+12.8	+35.1	+26.0	-1.0	+2.7	+11.8	+30.6	+0.3	+2.8	
502	FURNITURE & HOME FURNISHINGS.....	+19.9	+56.9	+37.4	+1.8	+12.7	+19.8	+49.9	+3.3	+12.6	
505	METALS & MINERALS, EX. PETROLEUM.. (S)	(S)	(S)	(S)	+5.6	+10.4	(S)	(S)	+0.6	+10.5	
506	ELECTRICAL GOODS.....	+6.2	+33.9	+35.8	+5.2	+31.4	-1.2	+29.8	+4.2	+31.4	
507	HARDWARE, PLUMBING & HEATING EQUIP.	+5.8	+20.2	+21.3	+0.4	+9.0	+2.6	+17.2	+2.7	+9.0	
508	MACHINERY, EQUIP. & SUPPLIES.....	+11.8	+31.7	+23.0	+0.3	+5.1	+6.0	+27.9	0.0	+5.1	
51	NONDURABLE GOODS.....	+12.2	+17.0	+15.6	-3.7	+10.7	+3.0	+13.5	-0.2	+10.7	
511	PAPER & PAPER PRODUCTS.....	+7.3	+28.2	+22.1	+2.0	+20.7	-1.1	+22.7	+0.1	+20.7	
514	GROCERIES & RELATED PRODUCTS.....	+7.6	+14.9	+14.7	+0.2	+12.7	-0.6	+10.7	+1.8	+12.8	
515	FARM-PRODUCT RAW MATERIALS..... (S)	(S)	(S)	(S)	-19.1	+12.6	(S)	(S)	-0.8	+12.7	
518	BEER, WINE, & DISTILLED BEVERAGES.	+20.8	+3.8	+2.8	-4.2	-6.7	+8.3	-2.0	-5.7	-6.7	
519	MISC. NONDURABLE GOODS.....	+20.6	+19.1	+18.2	-7.0	+20.2	+4.6	+16.8	+1.0	+20.2	

(S) DATA DO NOT MEET PUBLICATION STANDARDS.

¹ ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES.

EXPLANATORY MATERIAL

Scope of Survey

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the *Standard Industrial Classification Manual*¹ and the 1977 Supplement and as covered in the 1977 Economic Censuses, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm, or professional business users; 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; and (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), who 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.

Also included in this survey are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments and manufacturers' sales branches of ferrous metal service centers SIC (505).

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.

The estimates of the coefficients of variation in percent for sales and inventories at the level of detail provided in this publication are shown in table 4. Note that 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. 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.

The coefficient of variation also 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.

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 13 percent of the sales estimates and 21 percent for inventories.

Differences between preliminary and final estimates² of seasonally adjusted sales ranged from approximately +0.8 percent to -0.5 percent for the past 12 months. During the same

¹Executive Office of the President, Office of Management and Budget, *Standard Industrial Classification Manual, 1972*, and the 1977 Supplement.

²See Sample Design and Estimation Procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983*.

period, the average of the absolute differences was 0.4 percent. The corresponding range for inventories was approximately +0.8 percent to -0.6 percent for the past 12 months. The average of the absolute differences was 0.4 percent.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventories estimates in this report reflect the results of a benchmarking³ operation which made use of 1982 estimates tabulated from the 1982 Annual Trade Survey. Monthly wholesale sales and inventories estimates were revised in a manner designed to minimize the differences in the month-to-month trends between the revised and unrevised series. The estimates for the unrevised series were derived by using composite estimating procedures. Monthly sales estimates were revised for the period January 1980 through December 1983. The revised monthly sales estimates for 1980 and 1981 were constrained to sum to the 1980 and 1981 annual estimates tabulated from the 1981 Annual Trade Survey. The revised monthly sales estimates for 1982 were constrained to sum to the 1982 annual estimates tabulated from the 1982 Annual Trade Survey. Similarly, monthly inventories were revised for the period January 1982 through December 1983 using end-of-year inventories tabulated for 1981 and 1982 as benchmarks. (For a few series, monthly inventories were revised for the period January 1978 through December 1983.)

Through the use of carry-forward factors, the effect of the revision process was applied to all composite estimates subsequent to December 1982. These factors were derived at the three-digit kind-of-business level and are held constant until the next revision and benchmarking process. Aggregate level estimates were derived by summing appropriate detail level estimates, thereby assuring additivity.

Subsequent revisions of the monthly sales and inventory series will make use of future annual surveys of wholesale trade and the 1982 Census of Wholesale Trade.

Unpublished Data

Sales and inventory estimates for unpublished three-digit wholesale trade categories are not included in this publication because the sampling variability associated with these data do not meet publication criteria. The Census Bureau on written request will release these data for individual use, though not for publication.

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 sources such as investments, rental or sale of real estate, etc.

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.

Inventories. Inventories represent stocks at cost of merchandise owned by merchant wholesalers at the end of the month regardless of location except for goods held outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included. Goods held in foreign trade zones in the United States are also included.

Stock/Sales Ratios. The stock/sales ratios are derived by dividing the dollar value of inventories 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.

Kind-of-Business Classifications

The durable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 50. This group includes establishments classified in SIC groups 501 through 509.

The nondurable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 51. This group includes establishments classified in SIC groups 511 through 519.

For a further description of the kinds of business included in the major groups see the 1972 *Standard Industrial Classification Manual* and the 1977 Supplement.

Adjustment for Seasonal and Trading-Day Variation

Seasonal factors for adjusting data in this 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 estimates were also derived from the X-11 program.

Seasonal 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 conditions, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of the trading-day adjustment procedure 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 seasonal adjustment procedure may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

³For a more detailed description, see the section dealing with revisions to published data in the Current Business Report *Revised Monthly Wholesale Trade: January 1974 through December 1983*.

Table 3. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1983-August 1984

SIC code	Kind of business	1983												1984							
		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.
	Sales ¹ , total.....	0.930	0.918	1.084	0.977	1.022	1.037	0.946	1.022	1.005	1.016	1.018	1.003	0.953	0.956	1.053	0.976	1.056	1.003	0.971	1.022
50	Durable goods.....	0.886	0.907	1.077	0.981	1.005	1.056	0.953	1.048	1.028	1.040	1.015	0.984	0.902	0.948	1.045	0.988	1.038	1.014	0.981	1.048
501	Motor vehicles and auto, equip...	0.910	0.948	1.099	1.027	1.013	1.082	0.976	1.008	0.937	1.012	0.986	0.971	0.928	0.985	1.075	1.038	1.048	1.035	0.999	1.029
502	Furniture and home furnishings...	0.906	0.932	1.093	1.025	0.971	1.050	0.888	1.019	1.028	1.083	1.035	0.956	0.902	0.994	1.070	1.015	1.016	1.014	0.887	1.022
506	Electrical goods.....	0.887	0.903	1.038	0.944	0.972	1.055	0.994	1.044	1.050	1.034	1.048	1.030	0.895	0.939	1.010	0.933	1.003	1.033	1.012	1.029
507	Hardware, plumbing & heating equip.	0.910	0.867	1.018	0.981	1.002	1.052	1.009	1.084	1.045	1.062	1.015	0.933	0.932	0.906	0.983	0.996	1.027	1.008	1.045	1.078
508	Machinery, equip. and supplies...	0.863	0.913	1.078	0.998	1.019	1.058	0.942	1.055	1.036	1.007	0.999	1.010	0.834	0.955	1.050	0.995	1.049	1.028	0.966	1.055
51	Nondurable goods.....	0.947	0.922	1.090	0.975	1.026	1.037	0.943	1.002	0.991	1.001	1.022	1.020	0.975	0.956	1.060	0.971	1.058	1.009	0.968	1.002
511	Paper and paper products.....	0.954	0.943	1.085	0.960	0.990	1.024	0.927	1.045	1.038	1.015	1.008	0.988	0.980	0.981	1.052	0.953	1.034	0.985	0.954	1.050
514	Groceries and related products...	0.946	0.915	1.044	0.981	1.004	1.039	0.988	1.032	1.018	1.002	1.007	1.009	0.965	0.949	1.023	0.962	1.042	1.019	1.007	1.033
518	Beer, wine, & distilled beverages	0.750	0.790	1.015	0.969	1.003	1.115	1.007	1.072	1.032	0.975	1.097	1.161	0.776	0.834	0.982	0.952	1.062	1.069	1.022	1.101
519	Miscellaneous nondurable goods...	0.871	0.872	1.117	1.017	1.163	1.085	0.935	0.973	0.984	0.998	0.966	1.005	0.879	0.901	1.100	1.029	1.186	1.052	0.953	0.983
	Inventories ¹ , total.....	1.003	1.009	1.011	1.008	0.989	0.990	0.984	0.983	0.993	1.007	1.012	1.009	1.003	1.009	1.011	1.008	0.988	0.990	0.983	0.983
50	Durable goods.....	0.984	0.993	1.001	1.004	1.008	1.012	1.002	1.004	1.007	0.997	0.995	0.995	0.984	0.992	1.001	1.004	1.007	1.012	1.001	1.003
501	Motor vehicles and auto, equip...	1.003	1.002	1.006	1.011	0.999	0.998	0.994	0.973	0.997	1.001	1.005	1.011	1.003	1.000	1.005	1.011	0.998	0.998	0.994	0.972
502	Furniture and home furnishings...	0.982	0.997	1.018	1.011	0.995	1.011	1.012	0.999	1.023	0.993	0.977	0.981	0.982	0.998	1.017	1.010	0.995	1.010	1.012	0.999
505	Metals & minerals, ex. petroleum.	0.981	0.995	0.986	0.970	1.018	1.011	0.999	1.014	1.019	0.996	1.005	1.005	0.981	0.996	0.986	0.969	1.017	1.011	0.999	1.012
506	Electrical goods.....	0.962	0.973	0.980	0.992	1.002	1.014	1.013	1.016	1.018	1.028	1.009	0.990	0.962	0.973	0.980	0.992	1.002	1.014	1.013	1.016
507	Hardware, plumbing & heating equip.	0.990	1.004	1.016	1.044	1.020	1.015	1.013	0.999	0.986	0.985	0.958	0.969	0.991	1.004	1.015	1.043	1.020	1.014	1.013	0.999
508	Machinery, equip. and supplies...	0.976	0.992	1.005	1.010	1.013	1.018	1.005	1.004	1.006	0.991	0.988	0.991	0.976	0.992	1.005	1.010	1.013	1.017	1.005	1.003
51	Nondurable goods.....	1.043	1.035	1.026	0.998	0.963	0.953	0.945	0.949	0.971	1.028	1.047	1.041	1.043	1.035	1.025	0.998	0.963	0.954	0.944	0.949
511	Paper and paper products.....	0.990	0.993	0.991	0.990	1.008	1.010	1.013	1.003	0.997	0.994	1.010	0.999	0.991	0.993	0.990	0.989	1.008	1.009	1.013	1.004
514	Groceries and related products...	0.993	1.005	1.016	0.994	0.978	0.995	0.970	0.955	1.002	1.037	1.032	1.023	0.993	1.006	1.016	0.993	0.977	0.995	0.969	0.954
515	Farm-product raw materials.....	1.273	1.192	1.112	0.974	0.796	0.742	0.781	0.804	0.856	1.053	1.186	1.231	1.276	1.191	1.112	0.974	0.795	0.740	0.780	0.803
518	Beer, wine, & distilled beverages	0.961	0.944	0.980	0.998	1.011	1.022	1.009	0.999	0.996	1.068	1.085	0.925	0.959	0.944	0.978	0.996	1.011	1.023	1.010	1.001
519	Miscellaneous nondurable goods...	1.052	1.072	1.093	1.073	0.989	0.945	0.943	0.929	0.943	0.979	0.978	1.001	1.052	1.072	1.093	1.074	0.989	0.946	0.943	0.928

¹Adjusted sales and inventory data shown in table 1 are obtained by dividing the unadjusted data by the adjustment factors shown above for the corresponding group. Adjusted data for the totals are obtained by adding the durable and nondurable goods. Seasonal factors shown for the totals will provide an approximation of the adjusted estimates, but may show small differences from the published data.

Note: Merchant wholesalers totals and group totals include data for some groups not shown separately. The seasonal factors shown have been computed based on monthly estimates through December 1983.

Table 4. Coefficients of Variation of Sales and Inventories

(In percent)

SIC code	Kind of business	Sales						Inventories					
		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total....	1.2-1.7	1.5	1.4-1.7	1.5	0.6-0.9	0.7	1.5-1.8	1.7	1.6-1.7	1.7	0.3-0.4	0.3
50	Durable goods, total.....	1.4-1.7	1.5	1.3-1.5	1.4	0.5-0.9	0.7	1.6-2.0	2.0	1.8-2.0	1.8	0.3-0.4	0.3
501	Motor vehicles and automotive parts and supplies.....	3.2-4.3	3.8	3.3-4.1	3.5	1.1-2.0	1.6	2.8-3.5	3.4	3.0-3.8	3.2	0.8-1.5	1.0
502	Furniture and home furnishings.....	9.5-12.7	10.0	7.4-9.9	8.6	2.6-6.3	5.1	9.6-11.7	11.3	10.4-11.6	10.8	1.0-2.2	1.5
505	Metals and minerals, except petroleum (S)	(S)	(S)	(S)	(S)	(S)	(S)	4.2-4.9	4.6	4.2-4.8	4.6	0.6-1.2	0.9
506	Electrical goods.....	6.5-8.7	7.5	6.6-8.0	6.8	1.7-3.0	2.1	6.1-7.1	6.7	6.3-7.1	6.7	0.5-1.0	0.7
507	Hardware, plumbing, heating equipment, and supplies.....	6.0-7.3	6.2	5.5-6.5	6.3	1.7-2.9	2.2	6.0-6.6	6.2	5.7-6.3	6.1	0.9-1.7	1.2
508	Machinery, equipment, and supplies...	2.2-2.8	2.6	2.2-2.7	2.4	1.2-1.3	1.2	2.4-3.0	2.6	2.3-2.8	2.6	0.5-0.8	0.6
51	Nondurable goods, total.....	2.2-2.9	2.7	2.4-2.9	2.5	0.7-1.5	1.1	2.1-2.7	2.4	2.0-2.8	2.3	0.5-1.3	0.7
511	Paper and paper products.....	4.6-6.2	5.2	4.3-5.9	5.0	1.3-2.4	1.7	5.7-8.1	6.7	5.7-7.6	6.8	0.9-1.4	1.1
514	Groceries and related products.....	4.5-5.2	4.7	4.2-5.2	4.6	1.2-3.3	1.5	3.8-4.7	4.1	3.5-5.0	4.2	0.7-2.7	1.1
515	Farm-product raw materials.....	(S)	(S)	(S)	(S)	(S)	(S)	3.1-4.8	4.3	3.0-4.4	3.5	1.3-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages.....	4.4-6.1	5.2	4.7-7.6	5.3	1.2-3.6	2.2	3.6-4.7	4.5	3.8-4.5	4.1	1.1-2.4	1.7
519	Miscellaneous nondurable goods.....	3.7-5.2	4.4	3.8-4.4	4.0	1.4-3.7	3.1	4.7-5.6	5.2	4.7-5.9	5.0	1.1-2.2	1.5

S Data do not meet publication standards.

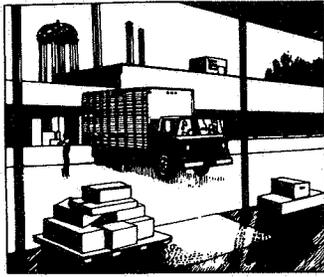
Note: Coefficients of variation are based on data unadjusted for seasonal variations or trading-day differences. The range and median coefficients of variation are based on data for August 1983 through January 1984.

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Monthly Wholesale Trade

Sales and Inventories

Issued August 1984
BW-84-06

June 1984

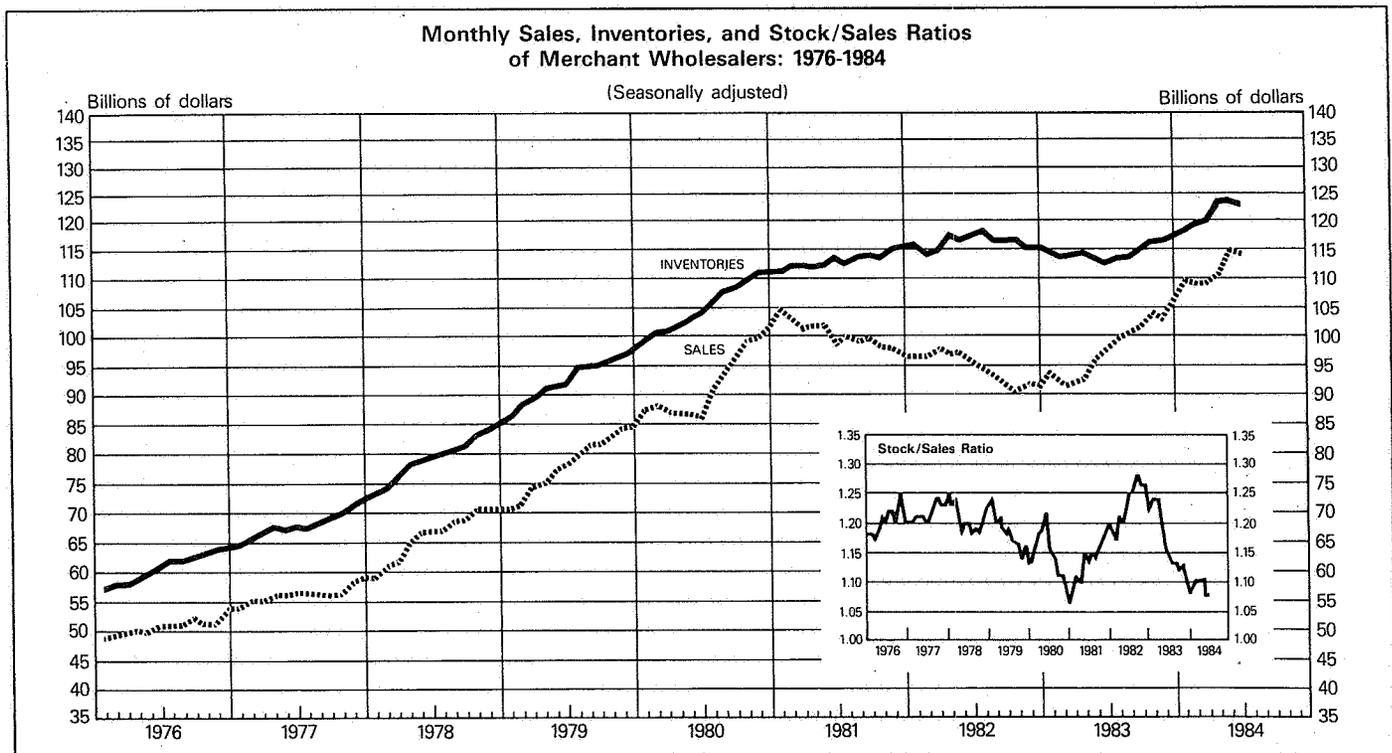
Sales June 1984 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$114.6 billion, little changed from the revised May level of \$115.1 billion, and 16.2 percent above a year ago. The May preliminary estimate was revised upward by \$83 million or about 0.1 percent. June sales of durable goods were up 1.5 percent from the revised May level and up 22.3 percent from a year ago. This is the fourth consecutive positive month-to-month percent change. Based on seasonally adjusted data, comparisons with previous month sales levels showed mixed results. June sales of nondurable goods were down 2.0 percent from the revised May level but were 11.7 percent above June 1983.

end of June, down 0.7 percent from the revised May level of \$124.4 billion, but 9.1 percent above a year ago. The May preliminary estimate was revised downward by \$111 million or about 0.1 percent. Inventories of durable goods wholesalers were up 0.6 percent from the May level, and increased 9.4 percent from a year ago. Inventories of nondurable goods wholesalers were down 3.0 percent from the May level but were 8.6 percent above June 1983.

Stock/Sales Ratio The June stock/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.08, unchanged from the May ratio and below the year ago ratio of 1.15.

Inventories Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$123.5 billion at the

Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling errors. A discussion of the reliability of the data is on page 3.



U.S. Department of Commerce
BUREAU OF THE CENSUS

Address inquiries concerning this report to Shirley Roberts, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-3916 or 763-3917.

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Table 1. Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1984 and 1983

(SALES AND INVENTORIES IN MILLIONS OF DOLLARS)

SIC CODE	KIND OF BUSINESS	1984												1983		TOTAL 6 MONTHS	
		JAN.	FEB.	MAR.	APR.	MAY	JUNE ^P	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	1984	1983	
DATA NOT ADJUSTED FOR SEASONAL VARIATION OR TRADING-DAY DIFFERENCES																	
	SALES, TOTAL.....	103,878	103,183	115,399	108,662	120,765	115,882	103,032	94,672	103,062	102,862	106,051	105,762	107,361	667,769	564,020	
50	DURABLE GOODS.....	43,165	44,848	50,634	48,774	53,133	52,683	44,858	40,811	44,809	44,754	46,300	45,620	45,621	293,237	236,895	
501	MOTOR VEHICLES & AUTO. EQUIP.	8,859	8,640	9,802	9,573	10,717	10,553	8,867	8,425	8,541	8,195	9,030	8,953	8,963	58,144	46,707	
502	FURNITURE & HOME FURNISHINGS.....	1,596	1,747	1,933	1,966	2,239	2,007	1,573	1,364	1,631	1,696	1,868	1,787	1,668	11,488	8,558	
506	ELECTRICAL GOODS.....	5,713	6,063	6,824	6,418	6,843	7,096	5,685	5,585	6,054	6,269	6,249	6,332	6,537	38,957	29,117	
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,611	2,623	2,886	2,885	3,086	3,196	2,726	2,667	2,979	2,875	2,887	2,834	2,626	17,287	14,319	
508	MACHINERY, EQUIP. & SUPPLIES.....	11,986	12,486	14,253	13,552	15,133	14,813	12,332	10,718	12,174	12,129	11,970	12,174	12,465	82,323	67,322	
51	NONDURABLE GOODS.....	60,713	58,335	64,765	59,888	67,632	63,199	58,174	53,861	58,253	58,100	59,751	60,142	61,740	374,532	327,125	
511	PAPER & PAPER PRODUCTS.....	2,405	2,445	2,623	2,497	2,725	2,800	2,193	1,990	2,330	2,417	2,383	2,417	2,439	15,495	12,556	
514	GROCERIES & RELATED PRODUCTS.....	17,085	17,288	18,565	18,125	19,791	19,115	17,452	16,252	17,396	17,839	17,129	17,307	17,492	109,966	96,421	
518	BEER, WINE, & DISTILLED BEVERAGES.	2,379	2,508	2,965	2,858	3,422	3,273	3,799	3,127	3,313	3,335	2,933	3,320	3,543	17,405	17,574	
519	MISC. NONDURABLE GOODS.....	7,081	6,842	8,149	8,244	10,033	8,952	7,848	6,746	7,077	7,078	7,472	7,055	7,410	49,301	41,906	
	INVENTORIES, TOTAL.....	119,818	121,319	122,637	124,008	123,235	122,403	112,130	112,019	112,420	114,993	117,778	118,566	119,421	(X)	(X)	
50	DURABLE GOODS.....	75,185	76,295	78,266	78,752	79,369	80,257	73,371	73,339	73,368	74,769	74,582	74,417	75,432	(X)	(X)	
501	MOTOR VEHICLES & AUTO. EQUIP.	12,226	12,551	12,703	12,712	12,438	12,217	12,129	12,014	11,631	12,493	12,639	12,459	12,488	(X)	(X)	
502	FURNITURE & HOME FURNISHINGS.....	2,329	2,395	2,409	2,421	2,456	2,558	2,259	2,250	2,306	2,354	2,233	2,264	2,324	(X)	(X)	
505	METALS & MINERALS, EX. PETROLEUM..	8,343	8,422	8,529	8,509	8,880	9,149	8,192	8,133	8,213	8,497	8,223	8,399	8,462	(X)	(X)	
506	ELECTRICAL GOODS.....	9,079	9,151	9,516	10,025	10,425	10,705	8,201	8,461	8,433	8,603	8,811	8,698	8,812	(X)	(X)	
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,567	4,741	4,880	4,995	5,010	4,940	4,507	4,552	4,470	4,484	4,493	4,569	4,533	(X)	(X)	
508	MACHINERY, EQUIP. & SUPPLIES.....	28,417	28,525	29,376	29,384	29,643	30,204	28,045	27,587	27,389	27,729	27,914	27,684	28,534	(X)	(X)	
51	NONDURABLE GOODS.....	44,633	45,024	44,371	45,256	43,866	42,146	38,759	38,680	39,052	40,224	43,196	44,149	43,989	(X)	(X)	
511	PAPER & PAPER PRODUCTS.....	2,322	2,401	2,410	2,453	2,543	2,539	2,080	2,081	2,213	2,223	2,229	2,377	2,341	(X)	(X)	
514	GROCERIES & RELATED PRODUCTS.....	8,660	9,219	9,093	9,192	9,392	9,157	8,085	8,012	8,265	8,401	8,775	9,073	8,726	(X)	(X)	
515	FARM-PRODUCT RAW MATERIALS.....	9,450	8,773	8,217	8,079	6,609	5,912	5,417	6,038	6,617	7,227	9,106	9,615	9,439	(X)	(X)	
518	BEER, WINE, & DISTILLED BEVERAGES.	2,954	3,067	3,295	3,322	3,162	3,160	3,382	3,459	3,329	3,196	3,506	3,482	2,916	(X)	(X)	
519	MISC. NONDURABLE GOODS.....	7,504	8,024	8,455	8,524	7,819	7,139	6,386	6,310	6,113	6,317	6,594	6,582	7,021	(X)	(X)	
	STOCK/SALES RATIOS, TOTAL....	1.15	1.18	1.06	1.14	1.02	1.06	1.09	1.18	1.09	1.12	1.11	1.12	1.11	(X)	(X)	
50	DURABLE GOODS.....	1.74	1.70	1.55	1.61	1.49	1.52	1.64	1.80	1.64	1.67	1.61	1.63	1.65	(X)	(X)	
501	MOTOR VEHICLES & AUTO. EQUIP.	1.38	1.45	1.30	1.33	1.16	1.16	1.37	1.43	1.36	1.52	1.40	1.39	1.39	(X)	(X)	
502	FURNITURE & HOME FURNISHINGS.....	1.46	1.37	1.25	1.23	1.10	1.27	1.44	1.65	1.41	1.39	1.20	1.27	1.39	(X)	(X)	
506	ELECTRICAL GOODS.....	1.59	1.51	1.39	1.56	1.52	1.51	1.44	1.51	1.39	1.37	1.41	1.37	1.35	(X)	(X)	
507	HARDWARE, PLUMBING & HEATING EQUIP.	1.75	1.81	1.69	1.73	1.62	1.55	1.65	1.71	1.50	1.56	1.56	1.61	1.53	(X)	(X)	
508	MACHINERY, EQUIP. & SUPPLIES.....	2.37	2.28	2.06	2.15	1.96	2.04	2.27	2.57	2.25	2.29	2.33	2.27	2.29	(X)	(X)	
51	NONDURABLE GOODS.....	0.74	0.77	0.69	0.76	0.65	0.67	0.67	0.72	0.67	0.69	0.72	0.73	0.71	(X)	(X)	
511	PAPER & PAPER PRODUCTS.....	0.97	0.98	0.92	0.98	0.93	0.91	0.95	1.05	0.95	0.92	0.94	0.98	0.96	(X)	(X)	
514	GROCERIES & RELATED PRODUCTS.....	0.51	0.53	0.49	0.51	0.47	0.48	0.46	0.49	0.48	0.47	0.51	0.52	0.50	(X)	(X)	
518	BEER, WINE, & DISTILLED BEVERAGES.	1.24	1.22	1.11	1.16	0.92	0.97	0.89	1.11	1.00	1.02	1.20	1.05	0.82	(X)	(X)	
519	MISC. NONDURABLE GOODS.....	1.08	1.17	1.04	1.03	0.78	0.80	0.81	0.94	0.86	0.89	0.88	0.93	0.95	(X)	(X)	
DATA ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES																	
	SALES, TOTAL.....	110,125	108,328	109,553	111,043	115,112	114,591	98,577	99,941	100,894	102,171	104,210	103,793	106,892	(X)	(X)	
50	DURABLE GOODS.....	47,855	47,308	48,454	49,366	51,188	51,956	42,479	42,824	42,757	43,535	44,519	44,946	46,363	(X)	(X)	
501	MOTOR VEHICLES & AUTO. EQUIP.	9,546	8,772	9,118	9,223	10,226	10,196	8,195	8,632	8,473	8,746	8,923	9,080	9,231	(X)	(X)	
502	FURNITURE & HOME FURNISHINGS.....	1,769	1,758	1,807	1,937	2,204	1,979	1,498	1,536	1,601	1,650	1,725	1,727	1,745	(X)	(X)	
506	ELECTRICAL GOODS.....	6,383	6,457	6,756	6,879	6,823	6,869	5,389	5,619	5,799	5,970	6,044	6,042	6,347	(X)	(X)	
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,802	2,895	2,936	2,897	3,005	3,171	2,591	2,643	2,799	2,751	2,718	2,792	2,815	(X)	(X)	
508	MACHINERY, EQUIP. & SUPPLIES.....	13,559	13,074	13,574	13,721	14,426	14,410	11,656	11,378	11,539	11,708	11,887	12,186	12,342	(X)	(X)	
51	NONDURABLE GOODS.....	62,270	61,020	61,099	61,677	63,924	62,635	56,098	57,117	58,137	58,636	59,691	58,847	60,529	(X)	(X)	
511	PAPER & PAPER PRODUCTS.....	2,454	2,492	2,493	2,620	2,635	2,843	2,142	2,147	2,230	2,329	2,348	2,398	2,466	(X)	(X)	
514	GROCERIES & RELATED PRODUCTS.....	17,705	18,214	18,148	18,841	18,993	18,593	16,797	16,449	16,857	17,524	17,095	17,187	17,339	(X)	(X)	
518	BEER, WINE, & DISTILLED BEVERAGES.	3,066	3,007	3,017	3,002	3,222	3,062	3,407	3,105	3,090	3,038	3,008	3,026	3,052	(X)	(X)	
519	MISC. NONDURABLE GOODS.....	8,056	7,594	7,408	8,012	8,460	8,510	7,233	7,215	7,273	7,193	7,487	7,303	7,373	(X)	(X)	
	INVENTORIES, TOTAL.....	119,201	120,411	121,477	123,785	124,368	123,483	113,172	114,124	114,227	115,674	116,825	116,958	118,067	(X)	(X)	
50	DURABLE GOODS.....	76,408	76,910	78,188	78,438	78,817	79,305	72,501	73,193	73,076	74,249	74,806	74,791	75,811	(X)	(X)	
501	MOTOR VEHICLES & AUTO. EQUIP.	12,189	12,551	12,640	12,574	12,463	12,241	12,153	12,087	11,954	12,531	12,626	12,397	12,352	(X)	(X)	
502	FURNITURE & HOME FURNISHINGS.....	2,372	2,400	2,369	2,397	2,468	2,533	2,234	2,223	2,308	2,301	2,249	2,317	2,369	(X)	(X)	
505	METALS & MINERALS, EX. PETROLEUM..	8,505	8,456	8,650	8,781	8,732	9,049	8,103	8,141	8,100	8,339	8,256	8,357	8,420	(X)	(X)	
506	ELECTRICAL GOODS.....	9,438	9,405	9,710	10,106	10,404	10,557	8,088	8,352	8,300	8,451	8,571	8,620	8,901	(X)	(X)	
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,608	4,722	4,808	4,789	4,912	4,872	4,440	4,494	4,474	4,548	4,561	4,769	4,678	(X)	(X)	
508	MACHINERY, EQUIP. & SUPPLIES.....	29,116	28,755	29,230	29,093	29,263	29,699	27,549	27,450	27,820	27,564	28,168	28,020	28,793	(X)	(X)	
51	NONDURABLE GOODS.....	42,793	43,501	43,289	45,347	45,551	44,178	40,671	40,931	41,151	41,425	42,019	42,167	42,256	(X)	(X)	
511	PAPER & PAPER PRODUCTS.....	2,343	2,418	2,434	2,480	2,523	2,516	2,059	2,054	2,206	2,230	2,242	2,353	2,343	(X)	(X)	
514	GROCERIES & RELATED PRODUCTS.....	8,721	9,164	8,950	9,257	9,613	9,203	8,126	8,260	8,613	8,584	8,462	8,792	8,530	(X)	(X)	
515	FARM-PRODUCT RAW MATERIALS.....	7,406	7,366	7,389	6,295	6,313	7,989	7,301	7,731	8,230	8,443	8,648	8,107				

Table 2. Percent Change in Sales and Inventories of Merchant Wholesalers

SIC CODE	KIND OF BUSINESS	UNADJUSTED					ADJUSTED ¹				
		SALES			INVENTORIES, END-OF-MONTH (AT COST)		SALES		INVENTORIES, END-OF-MONTH (AT COST)		
		JUNE 1984 FROM MAY 1984	JUNE 1984 FROM JUNE 1983	6 MONTHS FROM 6 MONTHS 1983	JUNE 1984 FROM MAY 1984	JUNE 1984 FROM JUNE 1983	JUNE 1984 FROM MAY 1984	JUNE 1984 FROM JUNE 1983	JUNE 1984 FROM MAY 1984	JUNE 1984 FROM JUNE 1983	JUNE 1984 FROM MAY 1983
	TOTAL.....	-4.0	+12.5	+18.4	-0.7	+9.2	-0.5	+16.2	-0.7	+9.1	
50	DURABLE GOODS.....	-0.8	+17.4	+23.8	+1.1	+9.4	+1.5	+22.3	+0.6	+9.4	
501	MOTOR VEHICLES & AUTO. EQUIP.	-1.5	+19.0	+24.5	-1.8	+0.7	-0.3	+24.4	-1.8	+0.7	
502	FURNITURE & HOME FURNISHINGS.....	-10.4	+27.6	+34.2	+4.2	+13.2	-10.2	+32.1	+2.6	+13.4	
505	METALS & MINERALS, EX. PETROLEUM.. (S)	(S)	(S)	(S)	+3.0	+11.7	(S)	(S)	+3.6	+11.7	
506	ELECTRICAL GOODS.....	+3.7	+24.8	+33.8	+2.7	+30.5	+0.7	+27.5	+1.5	+30.5	
507	HARDWARE, PLUMBING & HEATING EQUIP.	+3.6	+17.2	+20.7	-1.4	+9.6	+5.5	+22.4	-0.8	+9.7	
508	MACHINERY, EQUIP. & SUPPLIES.....	-2.1	+20.1	+22.3	+1.9	+7.7	-0.1	+23.6	+1.5	+7.8	
51	NONDURABLE GOODS.....	-6.6	+8.6	+14.5	-3.9	+8.7	-2.0	+11.7	-3.0	+8.6	
511	PAPER & PAPER PRODUCTS.....	+2.8	+27.7	+23.4	-0.2	+22.1	+7.9	+32.7	-0.3	+22.2	
514	GROCERIES & RELATED PRODUCTS.....	-3.4	+9.5	+14.0	-2.5	+13.3	-1.2	+11.7	-4.3	+13.5	
515	FARM-PRODUCT RAW MATERIALS..... (S)	(S)	(S)	(S)	-10.5	+9.1	(S)	(S)	-3.9	+9.4	
518	BEER, WINE, & DISTILLED BEVERAGES.	-4.4	-13.8	-1.0	-0.1	-6.6	-5.0	-10.1	-1.2	-6.6	
519	MISC. NONDURABLE GOODS.....	-10.8	+14.1	+17.6	-8.7	+11.8	+0.6	+17.7	-4.5	+11.7	

(S) DATA DO NOT MEET PUBLICATION STANDARDS.

¹ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES.

EXPLANATORY MATERIAL

Scope of Survey

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the *Standard Industrial Classification Manual*¹ and the 1977 Supplement and as covered in the 1977 Economic Censuses, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm, or professional business users; 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; and (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), who 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.

Also included in this survey are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments and manufacturers' sales branches of ferrous metal service centers SIC (505).

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.

The estimates of the coefficients of variation in percent for sales and inventories at the level of detail provided in this publication are shown in table 4. Note that 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. 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.

The coefficient of variation also 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.

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 13 percent of the sales estimates and 21 percent for inventories.

Differences between preliminary and final estimates² of seasonally adjusted sales ranged from approximately +0.7 percent to -0.5 percent for the past 12 months. During the same

¹Executive Office of the President, Office of Management and Budget, *Standard Industrial Classification Manual, 1972*, and the 1977 Supplement.

²See Sample Design and Estimation Procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983*.

period, the average of the absolute differences was 0.3 percent. The corresponding range for inventories was approximately +0.8 percent to -0.6 percent for the past 12 months. The average of the absolute differences was 0.4 percent.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventories estimates in this report reflect the results of a benchmarking³ operation which made use of 1982 estimates tabulated from the 1982 Annual Trade Survey. Monthly wholesale sales and inventories estimates were revised in a manner designed to minimize the differences in the month-to-month trends between the revised and unrevised series. The estimates for the unrevised series were derived by using composite estimating procedures. Monthly sales estimates were revised for the period January 1980 through December 1983. The revised monthly sales estimates for 1980 and 1981 were constrained to sum to the 1980 and 1981 annual estimates tabulated from the 1981 Annual Trade Survey. The revised monthly sales estimates for 1982 were constrained to sum to the 1982 annual estimates tabulated from the 1982 Annual Trade Survey. Similarly, monthly inventories were revised for the period January 1982 through December 1983 using end-of-year inventories tabulated for 1981 and 1982 as benchmarks. (For a few series, monthly inventories were revised for the period January 1978 through December 1983.)

Through the use of carry-forward factors, the effect of the revision process was applied to all composite estimates subsequent to December 1982. These factors were derived at the three-digit kind-of-business level and are held constant until the next revision and benchmarking process. Aggregate level estimates were derived by summing appropriate detail level estimates, thereby assuring additivity.

Subsequent revisions of the monthly sales and inventory series will make use of future annual surveys of wholesale trade and the 1982 Census of Wholesale Trade.

Unpublished Data

Sales and inventory estimates for unpublished three-digit wholesale trade categories are not included in this publication because the sampling variability associated with these data do not meet publication criteria. The Census Bureau on written request will release these data for individual use, though not for publication.

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 sources such as investments, rental or sale of real estate, etc.

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.

Inventories. Inventories represent stocks at cost of merchandise owned by merchant wholesalers at the end of the month regardless of location except for goods held outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included. Goods held in foreign trade zones in the United States are also included.

Stock/ Sales Ratios. The stock/sales ratios are derived by dividing the dollar value of inventories 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.

Kind-of-Business Classifications

The durable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 50. This group includes establishments classified in SIC groups 501 through 509.

The nondurable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 51. This group includes establishments classified in SIC groups 511 through 519.

For a further description of the kinds of business included in the major groups see the *1972 Standard Industrial Classification Manual* and the 1977 Supplement.

Adjustment for Seasonal and Trading-Day Variation

Seasonal factors for adjusting data in this 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 estimates were also derived from the X-11 program.

Seasonal 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 conditions, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of the trading-day adjustment procedure 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 seasonal adjustment procedure may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

³For a more detailed description, see the section dealing with revisions to published data in the Current Business Report *Revised Monthly Wholesale Trade: January 1974 through December 1983*.

Table 3. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1983-August 1984

SIC code	Kind of business	1983												1984							
		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.
	Sales ¹ , total.....	0.930	0.918	1.084	0.977	1.022	1.037	0.946	1.022	1.005	1.016	1.018	1.003	0.953	0.956	1.053	0.976	1.056	1.003	0.971	1.022
50	Durable goods.....	0.886	0.907	1.077	0.981	1.005	1.056	0.953	1.048	1.028	1.040	1.015	0.984	0.902	0.948	1.045	0.988	1.038	1.014	0.981	1.048
501	Motor vehicles and auto, equip...	0.910	0.948	1.099	1.027	1.013	1.082	0.976	1.008	0.937	1.012	0.986	0.971	0.928	0.985	1.075	1.038	1.048	1.035	0.999	1.029
502	Furniture and home furnishings...	0.906	0.932	1.093	1.025	0.971	1.050	0.888	1.019	1.028	1.083	1.035	0.956	0.902	0.994	1.070	1.015	1.016	1.014	0.887	1.022
506	Electrical goods.....	0.887	0.903	1.038	0.944	0.972	1.055	0.994	1.044	1.050	1.034	1.048	1.030	0.895	0.939	1.010	0.933	1.003	1.033	1.012	1.029
507	Hardware, plumbing & heating equip.	0.910	0.867	1.018	0.981	1.002	1.052	1.009	1.084	1.045	1.062	1.015	0.933	0.932	0.906	0.983	0.996	1.027	1.008	1.045	1.078
508	Machinery, equip. and supplies...	0.863	0.913	1.078	0.998	1.019	1.058	0.942	1.055	1.036	1.007	0.999	1.010	0.834	0.955	1.050	0.995	1.049	1.028	0.966	1.055
51	Nondurable goods.....	0.947	0.922	1.090	0.975	1.026	1.037	0.943	1.002	0.991	1.001	1.022	1.020	0.975	0.956	1.060	0.971	1.058	1.009	0.968	1.002
511	Paper and paper products.....	0.954	0.943	1.085	0.960	0.990	1.024	0.927	1.045	1.038	1.015	1.008	0.988	0.980	0.981	1.052	0.953	1.034	0.985	0.954	1.050
514	Groceries and related products...	0.946	0.915	1.044	0.981	1.004	1.039	0.988	1.032	1.018	1.002	1.007	1.009	0.965	0.949	1.023	0.962	1.042	1.019	1.007	1.033
518	Beer, wine, & distilled beverages	0.750	0.790	1.015	0.969	1.003	1.115	1.007	1.072	1.032	0.975	1.097	1.161	0.776	0.834	0.982	0.952	1.062	1.069	1.022	1.101
519	Miscellaneous nondurable goods...	0.871	0.872	1.117	1.017	1.163	1.085	0.935	0.973	0.984	0.998	0.966	1.005	0.879	0.901	1.100	1.029	1.186	1.052	0.953	0.983
	Inventories ¹ , total.....	1.003	1.009	1.011	1.008	0.989	0.990	0.984	0.983	0.993	1.007	1.012	1.009	1.003	1.009	1.011	1.008	0.988	0.990	0.983	0.983
50	Durable goods.....	0.984	0.993	1.001	1.004	1.008	1.012	1.002	1.004	1.007	0.997	0.995	0.995	0.984	0.992	1.001	1.004	1.007	1.012	1.001	1.003
501	Motor vehicles and auto, equip...	1.003	1.002	1.006	1.011	0.999	0.998	0.994	0.973	0.997	1.001	1.005	1.011	1.003	1.000	1.005	1.011	0.998	0.998	0.994	0.972
502	Furniture and home furnishings...	0.982	0.997	1.018	1.011	0.995	1.011	1.012	0.999	1.023	0.993	0.977	0.981	0.982	0.998	1.017	1.010	0.995	1.010	1.012	0.999
505	Metals & minerals, ex. petroleum.	0.981	0.995	0.986	0.970	1.018	1.011	0.999	1.014	1.019	0.996	1.005	1.005	0.981	0.996	0.986	0.969	1.017	1.011	0.999	1.012
506	Electrical goods.....	0.962	0.973	0.980	0.992	1.002	1.014	1.013	1.016	1.018	1.028	1.009	0.990	0.962	0.973	0.980	0.992	1.002	1.014	1.013	1.016
507	Hardware, plumbing & heating equip.	0.990	1.004	1.016	1.044	1.020	1.015	1.013	0.999	0.986	0.985	0.958	0.969	0.991	1.004	1.015	1.043	1.020	1.014	1.013	0.999
508	Machinery, equip. and supplies...	0.976	0.992	1.005	1.010	1.013	1.018	1.005	1.004	1.006	0.991	0.988	0.991	0.976	0.992	1.005	1.010	1.013	1.017	1.005	1.003
51	Nondurable goods.....	1.043	1.035	1.026	0.998	0.963	0.953	0.945	0.949	0.971	1.028	1.047	1.041	1.043	1.035	1.025	0.998	0.963	0.954	0.944	0.949
511	Paper and paper products.....	0.990	0.993	0.991	0.990	1.008	1.010	1.013	1.003	0.997	0.994	1.010	0.999	0.991	0.993	0.990	0.989	1.008	1.009	1.013	1.004
514	Groceries and related products...	0.993	1.005	1.016	0.994	0.978	0.995	0.970	0.955	1.002	1.037	1.032	1.023	0.993	1.006	1.016	0.993	0.977	0.995	0.969	0.954
515	Farm-product raw materials.....	1.273	1.192	1.112	0.974	0.796	0.742	0.781	0.804	0.856	1.053	1.186	1.231	1.276	1.191	1.112	0.974	0.795	0.740	0.780	0.803
518	Beer, wine, & distilled beverages	0.961	0.944	0.980	0.998	1.011	1.022	1.009	0.999	0.996	1.068	1.085	0.925	0.959	0.944	0.978	0.996	1.011	1.023	1.010	1.001
519	Miscellaneous nondurable goods...	1.052	1.072	1.093	1.073	0.989	0.945	0.943	0.929	0.943	0.979	0.978	1.001	1.052	1.072	1.093	1.074	0.989	0.946	0.943	0.928

¹Adjusted sales and inventory data shown in table 1 are obtained by dividing the unadjusted data by the adjustment factors shown above for the corresponding group. Adjusted data for the totals are obtained by adding the durable and nondurable goods. Seasonal factors shown for the totals will provide an approximation of the adjusted estimates, but may show small differences from the published data.

Note: Merchant wholesalers totals and group totals include data for some groups not shown separately. The seasonal factors shown have been computed based on monthly estimates through December 1983.

Table 4. Coefficients of Variation of Sales and Inventories

(In percent)

SIC code	Kind of business	Sales						Inventories					
		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total....	1.2-1.7	1.5	1.4-1.7	1.5	0.6-0.9	0.7	1.5-1.8	1.7	1.6-1.7	1.7	0.3-0.4	0.3
50	Durable goods, total.....	1.4-1.7	1.5	1.3-1.5	1.4	0.5-0.9	0.7	1.6-2.0	2.0	1.8-2.0	1.8	0.3-0.4	0.3
501	Motor vehicles and automotive parts and supplies.....	3.2-4.3	3.8	3.3-4.1	3.5	1.1-2.0	1.6	2.8-3.5	3.4	3.0-3.8	3.2	0.8-1.5	1.0
502	Furniture and home furnishings.....	9.5-12.7	10.0	7.4-9.9	8.6	2.6-6.3	5.1	9.6-11.7	11.3	10.4-11.6	10.8	1.0-2.2	1.5
505	Metals and minerals, except petroleum (S)	(S)	(S)	(S)	(S)	(S)	(S)	4.2-4.9	4.6	4.2-4.8	4.6	0.6-1.2	0.9
506	Electrical goods.....	6.5-8.7	7.5	6.6-8.0	6.8	1.7-3.0	2.1	6.1-7.1	6.7	6.3-7.1	6.7	0.5-1.0	0.7
507	Hardware, plumbing, heating equipment, and supplies.....	6.0-7.3	6.2	5.5-6.5	6.3	1.7-2.9	2.2	6.0-6.6	6.2	5.7-6.3	6.1	0.9-1.7	1.2
508	Machinery, equipment, and supplies...	2.2-2.8	2.6	2.2-2.7	2.4	1.2-1.3	1.2	2.4-3.0	2.6	2.3-2.8	2.6	0.5-0.8	0.6
51	Nondurable goods, total.....	2.2-2.9	2.7	2.4-2.9	2.5	0.7-1.5	1.1	2.1-2.7	2.4	2.0-2.8	2.3	0.5-1.3	0.7
511	Paper and paper products.....	4.6-6.2	5.2	4.3-5.9	5.0	1.3-2.4	1.7	5.7-8.1	6.7	5.7-7.6	6.8	0.9-1.4	1.1
514	Groceries and related products.....	4.5-5.2	4.7	4.2-5.2	4.6	1.2-3.3	1.5	3.8-4.7	4.1	3.5-5.0	4.2	0.7-2.7	1.1
515	Farm-product raw materials..... (S)	(S)	(S)	(S)	(S)	(S)	(S)	3.1-4.8	4.3	3.0-4.4	3.5	1.3-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages.....	4.4-6.1	5.2	4.7-7.6	5.3	1.2-3.6	2.2	3.6-4.7	4.5	3.8-4.5	4.1	1.1-2.4	1.7
519	Miscellaneous nondurable goods.....	3.7-5.2	4.4	3.8-4.4	4.0	1.4-3.7	3.1	4.7-5.6	5.2	4.7-5.9	5.0	1.1-2.2	1.5

S Data do not meet publication standards.

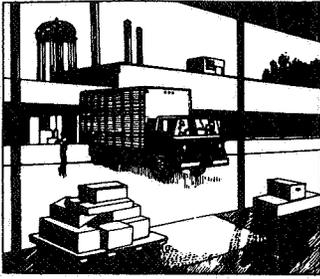
Note: Coefficients of variation are based on data unadjusted for seasonal variations or trading-day differences. The range and median coefficients of variation are based on data for August 1983 through January 1984.

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Monthly Wholesale Trade

July 1984

Sales and Inventories

Issued September 1984
BW-84-09

Sales July 1984 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$114.1 billion, little changed from the revised June level of \$114.4 billion, and 14.2 percent above a year ago. The June preliminary estimate was revised downward by \$190 million or about 0.2 percent. July sales of durable goods were down 1.8 percent from the revised June level but were 19.7 percent above a year ago. July sales of nondurable goods were up 1.1 percent from the revised June level and were up 10.0 percent from July 1983. Based on seasonally adjusted data, comparisons with previous month sales levels showed mixed results for both durable and nondurable goods categories.

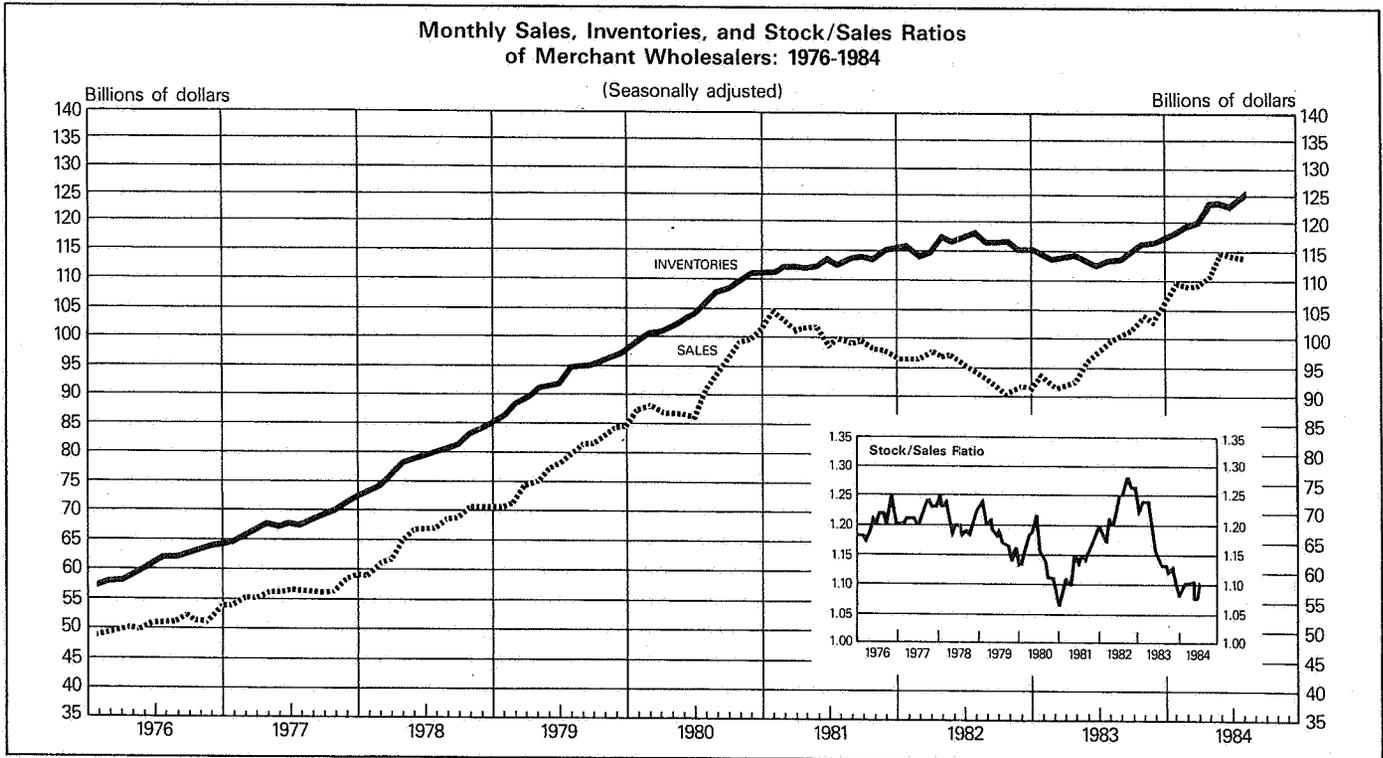
Inventories Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$126.2 billion at the end of July, up 1.8 percent from the revised June level of \$124.0 billion, and 10.6 percent above a year ago. The June preliminary estimate was revised upward by \$511 million or about 0.4 percent. Inventories of durable goods wholesalers were up 2.5

percent from the June level, and up 11.6 percent from a year ago. All but two durable goods categories contributed to the month-to-month increase. The exceptions are furniture and home furnishings, down 2.1 percent from the previous month but 11.0 percent above a year ago, and the unpublished miscellaneous durable goods category. This is the eighth consecutive positive month-to-month percent change. Inventories of nondurable goods wholesalers were little changed from the June level and were 8.9 percent above July 1983.

Stock/Sales Ratio The July stock/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.11, up from the June ratio of 1.08 and below the year ago ratio of 1.14.

Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling errors. A discussion of the reliability of the data is on page 3.

NOTICE: Beginning with this report, 1984 unpublished four-digit data are available upon written request. For further information, see page 4 of this publication.



U.S. Department of Commerce
BUREAU OF THE CENSUS

Address inquiries concerning this report to Shirley Roberts, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-3916 or 763-3917.

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Table 1. Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1984 and 1983

SIC CODE	KIND OF BUSINESS	(SALES AND INVENTORIES IN MILLIONS OF DOLLARS)												TOTAL 7 MONTHS		
		1984						1983						1984	1983	
		JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY ^P	JULY	AUG.	SEP.	OCT.	NOV.	DEC.		
		DATA NOT ADJUSTED FOR SEASONAL VARIATION OR TRADING-DAY DIFFERENCES														
	SALES, TOTAL.....	103,878	103,183	115,399	108,662	120,765	115,692	111,114	94,672	103,062	102,862	106,051	105,762	107,361	778,693	658,692
50	DURABLE GOODS.....	43,165	44,848	50,634	48,774	53,133	52,943	50,278	40,811	44,809	44,754	46,300	45,620	45,621	343,775	277,706
501	MOTOR VEHICLES & AUTO. EQUIP.	8,859	8,640	9,802	9,573	10,717	10,703	9,504	8,425	8,541	8,195	9,030	8,953	8,963	67,798	55,132
502	FURNITURE & HOME FURNISHINGS.....	1,596	1,747	1,933	1,966	2,239	1,958	1,929	1,364	1,631	1,696	1,868	1,787	1,668	13,368	9,922
506	ELECTRICAL GOODS.....	5,713	6,063	6,824	6,418	6,843	7,129	7,117	5,585	6,054	6,269	6,249	6,332	6,537	46,107	34,702
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,611	2,623	2,886	2,885	3,086	3,172	3,203	2,667	2,979	2,875	2,887	2,834	2,626	20,466	16,986
508	MACHINERY, EQUIP. & SUPPLIES.....	11,986	12,486	14,253	13,652	15,133	14,722	13,995	10,718	12,174	12,129	11,970	12,174	12,465	96,227	78,040
51	NONDURABLE GOODS.....	60,713	58,335	64,765	59,888	67,632	62,749	60,836	53,861	58,253	58,108	59,751	60,142	61,740	434,918	380,986
511	PAPER & PAPER PRODUCTS.....	2,405	2,445	2,623	2,497	2,725	2,778	2,629	1,990	2,330	2,417	2,383	2,417	2,439	18,102	14,546
514	GROCERIES & RELATED PRODUCTS.....	17,085	17,285	18,565	18,125	19,791	18,586	18,395	16,252	17,396	17,837	17,129	17,307	17,492	127,832	112,673
515	BEER, WINE, & DISTILLED BEVERAGES.	2,379	2,508	2,965	2,858	3,422	3,371	3,350	3,127	3,313	3,135	2,933	3,320	3,543	20,852	20,701
519	MISC. NONDURABLE GOODS.....	7,081	6,842	8,149	8,244	10,033	9,005	7,559	6,746	7,077	7,078	7,472	7,055	7,410	56,913	48,652
	INVENTORIES, TOTAL.....	119,818	121,319	122,637	124,008	123,235	122,912	123,813	112,019	112,420	114,993	117,778	118,566	119,421	(X)	(X)
50	DURABLE GOODS.....	75,185	76,295	78,266	78,752	79,369	80,652	81,749	73,339	73,368	74,769	74,582	74,417	75,432	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	12,226	12,551	12,703	12,712	12,438	12,442	12,811	12,014	11,631	12,493	12,639	12,459	12,488	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	2,323	2,395	2,409	2,421	2,456	2,544	2,497	2,250	2,306	2,354	2,233	2,264	2,324	(X)	(X)
505	METALS & MINERALS, EX. PETROLEUM..	8,343	8,482	8,529	8,509	8,880	8,158	9,236	8,133	8,213	8,497	8,223	8,399	8,462	(X)	(X)
506	ELECTRICAL GOODS.....	9,079	9,151	9,516	10,025	10,425	10,789	11,271	8,461	8,433	8,603	8,811	8,698	8,812	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,567	4,741	4,880	4,995	5,013	4,589	4,893	4,552	4,470	4,484	4,493	4,569	4,533	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	28,417	28,525	29,376	29,384	29,643	30,287	30,360	27,587	27,389	27,729	27,914	27,684	28,534	(X)	(X)
51	NONDURABLE GOODS.....	44,633	45,024	44,371	45,256	43,866	42,260	42,064	38,680	39,052	40,224	43,196	44,149	43,989	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	2,322	2,401	2,410	2,453	2,543	2,530	2,552	2,081	2,213	2,223	2,229	2,377	2,341	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	8,660	9,219	9,093	9,192	9,392	9,125	9,436	8,012	8,265	8,401	8,775	9,073	8,726	(X)	(X)
515	FARM-PRODUCT RAW MATERIALS.....	9,450	8,773	8,217	8,079	6,609	5,873	5,537	6,038	6,617	7,227	9,106	9,615	9,439	(X)	(X)
516	BEER, WINE, & DISTILLED BEVERAGES.	2,954	3,067	3,295	3,322	3,162	3,234	3,322	3,459	3,196	3,329	3,506	3,482	2,916	(X)	(X)
519	MISC. NONDURABLE GOODS.....	7,504	8,024	8,455	8,524	7,819	7,211	7,258	6,310	6,113	6,317	6,594	6,582	7,021	(X)	(X)
	STOCK/SALES RATIOS, TOTAL....	1.15	1.18	1.06	1.14	1.02	1.06	1.11	1.18	1.09	1.12	1.11	1.12	1.11	(X)	(X)
50	DURABLE GOODS.....	1.74	1.70	1.55	1.61	1.49	1.52	1.63	1.80	1.64	1.67	1.61	1.63	1.65	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	1.38	1.45	1.30	1.33	1.16	1.16	1.35	1.43	1.36	1.52	1.40	1.39	1.39	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	1.46	1.37	1.25	1.23	1.10	1.30	1.29	1.65	1.41	1.39	1.20	1.27	1.39	(X)	(X)
505	METALS & MINERALS, EX. PETROLEUM..	1.59	1.51	1.39	1.56	1.52	1.51	1.58	1.51	1.39	1.37	1.41	1.37	1.35	(X)	(X)
506	ELECTRICAL GOODS.....	1.75	1.81	1.69	1.73	1.62	1.54	1.53	1.71	1.50	1.56	1.56	1.61	1.73	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	2.37	2.28	2.06	2.15	1.96	2.06	2.17	2.57	2.25	2.29	2.33	2.27	2.29	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	0.74	0.77	0.69	0.76	0.65	0.67	0.69	0.72	0.67	0.69	0.72	0.73	0.71	(X)	(X)
51	NONDURABLE GOODS.....	0.97	0.98	0.92	0.98	0.93	0.91	0.97	1.05	0.95	0.92	0.94	0.98	0.96	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	0.51	0.53	0.49	0.51	0.47	0.49	0.51	0.49	0.48	0.47	0.51	0.52	0.50	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	1.24	1.22	1.11	1.16	0.92	0.96	0.99	1.11	1.00	1.02	1.20	1.05	0.82	(X)	(X)
515	FARM-PRODUCT RAW MATERIALS.....	1.06	1.17	1.04	1.03	0.78	0.80	0.94	0.94	0.86	0.89	0.88	0.93	0.95	(X)	(X)
		DATA ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES														
	SALES, TOTAL.....	110,125	108,328	109,553	111,043	115,112	114,401	114,099	99,941	100,894	102,171	104,210	103,793	106,892	(X)	(X)
50	DURABLE GOODS.....	47,855	47,308	48,544	49,366	51,188	52,212	51,252	42,824	42,757	43,535	44,519	44,946	46,363	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	9,546	8,772	9,118	9,223	10,226	10,341	9,514	8,632	8,473	8,746	8,923	9,080	9,231	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	1,759	1,756	1,807	1,937	2,204	1,931	2,175	1,536	1,601	1,650	1,725	1,727	1,745	(X)	(X)
506	ELECTRICAL GOODS.....	6,383	6,457	6,756	6,879	6,823	6,901	7,033	5,619	5,799	5,970	6,044	6,022	6,347	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,802	2,895	2,936	2,897	3,305	3,147	3,065	2,643	2,748	2,751	2,713	2,792	2,815	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	13,559	13,674	13,574	13,721	14,426	14,321	14,488	11,378	11,539	11,708	11,687	12,186	12,342	(X)	(X)
51	NONDURABLE GOODS.....	62,270	61,020	61,009	61,677	63,924	62,189	62,847	57,117	58,137	58,636	59,691	58,847	60,529	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	2,454	2,492	2,493	2,620	2,635	2,820	2,756	2,147	2,230	2,329	2,348	2,398	2,469	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	17,705	18,214	16,148	18,841	18,993	16,239	16,267	16,449	16,857	17,524	17,095	17,187	17,336	(X)	(X)
515	BEER, WINE, & DISTILLED BEVERAGES.	3,066	3,007	3,019	3,002	3,222	3,153	3,278	3,105	3,090	3,038	3,008	3,026	3,052	(X)	(X)
519	MISC. NONDURABLE GOODS.....	8,056	7,594	7,408	8,012	8,460	8,566	7,932	7,215	7,273	7,193	7,487	7,303	7,373	(X)	(X)
	INVENTORIES, TOTAL.....	119,201	120,411	121,477	123,765	124,368	123,994	126,226	114,124	114,227	115,674	116,825	116,958	116,067	(X)	(X)
50	DURABLE GOODS.....	76,408	76,910	78,188	78,438	78,817	79,696	81,667	73,193	73,076	74,249	74,806	74,791	75,811	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	12,189	12,551	12,640	12,574	12,463	12,667	12,888	12,087	11,954	12,531	12,626	12,397	12,352	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	2,372	2,400	2,369	2,397	2,468	2,519	2,467	2,223	2,308	2,301	2,249	2,317	2,369	(X)	(X)
505	METALS & MINERALS, EX. PETROLEUM..	8,505	8,456	8,650	8,781	8,732	9,058	9,245	8,141	8,100	8,339	8,256	8,357	8,420	(X)	(X)
506	ELECTRICAL GOODS.....	9,438	9,405	9,710	10,106	10,400	10,640	11,126	8,352	8,300	8,451	8,571	8,620	8,901	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,608	4,722	4,808	4,789	4,912	4,821	4,830	4,494	4,474	4,548	4,561	4,769	4,678	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	29,116	28,755	29,230	29,093	29,263	29,781	30,209	27,540	27,280	27,564	28,168	28,020	28,793	(X)	(X)
51	NONDURABLE GOODS.....	42,793	43,501	43,289	45,347	45,551	44,298	44,559	40,931	41,151	41,425	42,019	42,167	42,256	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	2,343	2,418	2,434	2,480	2,523	2,507	2,559	2,054	2,206	2,230	2,242	2,353	2,343	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	8,721	9,164	8,950	9,257	9,613	9,171	9,738	8,260	8,654	8,384	8,462	8,792	8,530	(X)	(X)
515	FARM-PRODUCT RAW MATERIALS.....	7,406	7,366	7,389	8,295	8,313	7,936	7,099	7,731	8,230	8,443	8,648	8,107			

Table 2. Percent Change in Sales and Inventories of Merchant Wholesalers

SIC CODE	KIND OF BUSINESS	UNADJUSTED					ADJUSTED ¹				
		SALES			INVENTORIES, END-OF-MONTH (AT COST)		SALES		INVENTORIES, END-OF-MONTH (AT COST)		
		JULY 1984 FROM JUNE 1984	JULY 1984 FROM JULY 1983	7 MONTHS FROM 7 MONTHS 1983	JULY 1984 FROM JUNE 1984	JULY 1984 FROM JULY 1983	JULY 1984 FROM JUNE 1984	JULY 1984 FROM JULY 1983	JULY 1984 FROM JUNE 1984	JULY 1984 FROM JULY 1983	JULY 1984 FROM JULY 1983
	TOTAL.....	-4.0	+17.4	+18.2	+0.7	+10.5	-0.3	+14.2	+1.8	+10.6	
50	DURABLE GOODS.....	-5.0	+23.2	+23.8	+1.4	+11.5	-1.8	+19.7	+2.5	+11.6	
501	MOTOR VEHICLES & AUTO. EQUIP.	-11.2	+12.8	+23.0	+3.0	+6.6	-8.0	+10.2	+3.4	+6.6	
502	FURNITURE & HOME FURNISHINGS.....	-1.5	+41.4	+34.7	-1.8	+11.0	+12.6	+41.6	-2.1	+11.0	
505	METALS & MINERALS, EX. PETROLEUM..	(S)	(S)	(S)	+0.9	+13.6	(S)	(S)	+2.1	+13.6	
506	ELECTRICAL GOODS.....	-0.2	+27.4	+32.9	+4.5	+33.2	+1.9	+25.2	+4.6	+33.2	
507	HARDWARE, PLUMBING & HEATING EQUIP.	+1.0	+20.1	+20.5	+0.1	+7.5	-2.6	+16.0	+0.2	+7.5	
508	MACHINERY, EQUIP. & SUPPLIES.....	-4.9	+30.6	+23.3	+0.2	+10.1	+1.2	+27.3	+1.4	+10.1	
51	NONDURABLE GOODS.....	-3.0	+13.0	+14.2	-0.5	+8.7	+1.1	+10.0	+0.6	+8.9	
511	PAPER & PAPER PRODUCTS.....	-5.4	+32.1	+24.4	+0.9	+22.6	-2.3	+28.4	+0.5	+22.6	
514	GROCERIES & RELATED PRODUCTS.....	-1.0	+13.2	+13.5	+3.4	+17.8	+0.2	+11.1	+6.2	+17.9	
515	FARM-PRODUCT RAW MATERIALS.....	(S)	(S)	(S)	-5.7	-8.3	(S)	(S)	-10.5	-8.2	
518	BEER, WINE, & DISTILLED BEVERAGES.	-0.6	+7.1	+0.7	+2.7	-4.0	+4.0	+5.6	+4.0	-4.1	
519	MISC. NONDURABLE GOODS.....	-10.1	+12.1	+17.0	+0.7	+15.0	-7.3	+9.9	+1.0	+15.0	

(S) DATA DO NOT MEET PUBLICATION STANDARDS.

¹ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES.

EXPLANATORY MATERIAL

Scope of Survey

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the *Standard Industrial Classification Manual*¹ and the 1977 Supplement and as covered in the 1977 Economic Censuses, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm, or professional business users; 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; and (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), who 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.

Also included in this survey are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments and manufacturers' sales branches of ferrous metal service centers SIC (505).

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.

The estimates of the coefficients of variation in percent for sales and inventories at the level of detail provided in this publication are shown in table 4. Note that 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. 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.

The coefficient of variation also 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.

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 13 percent of the sales estimates and 21 percent for inventories.

Differences between preliminary and final estimates² of seasonally adjusted sales ranged from approximately +0.7 percent to -0.5 percent for the past 12 months. During the same

¹Executive Office of the President, Office of Management and Budget, *Standard Industrial Classification Manual*, 1972, and the 1977 Supplement.

²See Sample Design and Estimation Procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983*.

period, the average of the absolute differences was 0.3 percent. The corresponding range for inventories was approximately +0.8 percent to -0.6 percent for the past 12 months. The average of the absolute differences was 0.4 percent.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventories estimates in this report reflect the results of a benchmarking³ operation which made use of 1982 estimates tabulated from the 1982 Annual Trade Survey. Monthly wholesale sales and inventories estimates were revised in a manner designed to minimize the differences in the month-to-month trends between the revised and unrevised series. The estimates for the unrevised series were derived by using composite estimating procedures. Monthly sales estimates were revised for the period January 1980 through December 1983. The revised monthly sales estimates for 1980 and 1981 were constrained to sum to the 1980 and 1981 annual estimates tabulated from the 1981 Annual Trade Survey. The revised monthly sales estimates for 1982 were constrained to sum to the 1982 annual estimates tabulated from the 1982 Annual Trade Survey. Similarly, monthly inventories were revised for the period January 1982 through December 1983 using end-of-year inventories tabulated for 1981 and 1982 as benchmarks. (For a few series, monthly inventories were revised for the period January 1978 through December 1983.)

Through the use of carry-forward factors, the effect of the revision process was applied to all composite estimates subsequent to December 1982. These factors were derived at the three-digit kind-of-business level and are held constant until the next revision and benchmarking process. Aggregate level estimates were derived by summing appropriate detail level estimates, thereby assuring additivity.

Subsequent revisions of the monthly sales and inventory series will make use of future annual surveys of wholesale trade and the 1982 Census of Wholesale Trade.

Unpublished Data

Sales and inventory estimates for unpublished three-digit and four-digit wholesale trade categories are not included in this publication because the sampling variability associated with these data do not meet publication criteria. The Census Bureau on written request will release these 1984 monthly data for individual use, though not for publication.

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 deduction 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 sources such as investments, rental or sale of real estate, etc.

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.

Inventories. Inventories represent stocks at cost of merchandise owned by merchant wholesalers at the end of the month regardless of location except for goods held outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included. Goods held in foreign trade zones in the United States are also included.

Stock/ Sales Ratios. The stock/sales ratios are derived by dividing the dollar value of inventories 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.

Kind-of-Business Classifications

The durable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 50. This group includes establishments classified in SIC groups 501 through 509.

The nondurable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 51. This group includes establishments classified in SIC groups 511 through 519.

For a further description of the kinds of business included in the major groups see the *1972 Standard Industrial Classification Manual* and the 1977 Supplement.

Adjustment for Seasonal and Trading-Day Variation

Seasonal factors for adjusting data in this 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 estimates were also derived from the X-11 program.

Seasonal 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 conditions, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of the trading-day adjustment procedure 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 seasonal adjustment procedure may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

³For a more detailed description, see the section dealing with revisions to published data in the Current Business Report *Revised Monthly Wholesale Trade: January 1974 through December 1983*.

Table 3. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1983-August 1984

SIC code	Kind of business	1983												1984							
		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.
	Sales ¹ , total.....	0.930	0.918	1.084	0.977	1.022	1.037	0.946	1.022	1.005	1.016	1.018	1.003	0.953	0.956	1.053	0.976	1.056	1.003	0.971	1.022
50	Durable goods.....	0.886	0.907	1.077	0.981	1.005	1.056	0.953	1.048	1.028	1.040	1.015	0.984	0.902	0.948	1.045	0.988	1.038	1.014	0.981	1.048
501	Motor vehicles and auto, equip...	0.910	0.948	1.099	1.027	1.013	1.082	0.976	1.008	0.937	1.012	0.986	0.971	0.928	0.985	1.075	1.038	1.048	1.035	0.999	1.029
502	Furniture and home furnishings...	0.906	0.932	1.093	1.025	0.971	1.050	0.888	1.019	1.028	1.083	1.035	0.956	0.902	0.994	1.070	1.015	1.016	1.014	0.887	1.022
506	Electrical goods.....	0.887	0.903	1.038	0.944	0.972	1.055	0.994	1.044	1.050	1.034	1.048	1.030	0.895	0.939	1.010	0.933	1.003	1.033	1.012	1.029
507	Hardware, plumbing & heating equip.	0.910	0.867	1.018	0.981	1.002	1.052	1.009	1.084	1.045	1.062	1.015	0.933	0.932	0.906	0.983	0.996	1.027	1.008	1.045	1.078
508	Machinery, equip. and supplies...	0.863	0.913	1.078	0.998	1.019	1.058	0.942	1.055	1.036	1.007	0.999	1.010	0.834	0.955	1.050	0.995	1.049	1.028	0.966	1.055
51	Nondurable goods.....	0.947	0.922	1.090	0.975	1.026	1.037	0.943	1.002	0.991	1.001	1.022	1.020	0.975	0.956	1.060	0.971	1.058	1.009	0.968	1.002
511	Paper and paper products.....	0.954	0.943	1.085	0.960	0.990	1.024	0.927	1.045	1.038	1.015	1.008	0.988	0.980	0.981	1.052	0.953	1.034	0.985	0.954	1.050
514	Groceries and related products...	0.946	0.915	1.044	0.981	1.004	1.039	0.988	1.032	1.018	1.002	1.007	1.009	0.965	0.949	1.023	0.962	1.042	1.019	1.007	1.033
518	Beer, wine, & distilled beverages	0.750	0.790	1.015	0.969	1.003	1.115	1.007	1.072	1.032	0.975	1.097	1.161	0.776	0.834	0.982	0.952	1.062	1.069	1.022	1.101
519	Miscellaneous nondurable goods...	0.871	0.872	1.117	1.017	1.163	1.085	0.935	0.973	0.984	0.998	0.966	1.005	0.879	0.901	1.100	1.029	1.186	1.052	0.953	0.983
	Inventories ¹ , total.....	1.003	1.009	1.011	1.008	0.989	0.990	0.984	0.983	0.993	1.007	1.012	1.009	1.003	1.009	1.011	1.008	0.988	0.990	0.983	0.983
50	Durable goods.....	0.984	0.993	1.001	1.004	1.008	1.012	1.002	1.004	1.007	0.997	0.995	0.995	0.984	0.992	1.001	1.004	1.007	1.012	1.001	1.003
501	Motor vehicles and auto, equip...	1.003	1.002	1.006	1.011	0.999	0.998	0.994	0.973	0.997	1.001	1.005	1.011	1.003	1.000	1.005	1.011	0.998	0.998	0.994	0.972
502	Furniture and home furnishings...	0.982	0.997	1.018	1.011	0.995	1.011	1.012	0.999	1.023	0.993	0.977	0.981	0.982	0.998	1.017	1.010	0.995	1.010	1.012	0.999
505	Metals & minerals, ex. petroleum.	0.981	0.995	0.986	0.970	1.018	1.011	0.999	1.014	1.019	0.996	1.005	1.005	0.981	0.996	0.986	0.969	1.017	1.011	0.999	1.012
506	Electrical goods.....	0.962	0.973	0.980	0.992	1.002	1.014	1.013	1.016	1.018	1.028	1.009	0.990	0.962	0.973	0.980	0.992	1.002	1.014	1.013	1.016
507	Hardware, plumbing & heating equip.	0.990	1.004	1.016	1.044	1.020	1.015	1.013	0.999	0.986	0.985	0.958	0.969	0.991	1.004	1.015	1.043	1.020	1.014	1.013	0.999
508	Machinery, equip. and supplies...	0.976	0.992	1.005	1.010	1.013	1.018	1.005	1.004	1.006	0.991	0.988	0.991	0.976	0.992	1.005	1.010	1.013	1.017	1.005	1.003
51	Nondurable goods.....	1.043	1.035	1.026	0.998	0.963	0.953	0.945	0.949	0.971	1.028	1.047	1.041	1.043	1.035	1.025	0.998	0.963	0.954	0.944	0.949
511	Paper and paper products.....	0.990	0.993	0.991	0.990	1.008	1.010	1.013	1.003	0.997	0.994	1.010	0.999	0.991	0.993	0.990	0.989	1.008	1.009	1.013	1.004
514	Groceries and related products...	0.993	1.005	1.016	0.994	0.978	0.995	0.970	0.955	1.002	1.037	1.032	1.023	0.993	1.006	1.016	0.993	0.977	0.995	0.969	0.954
515	Farm-product raw materials.....	1.273	1.192	1.112	0.974	0.796	0.742	0.781	0.804	0.856	1.053	1.186	1.231	1.276	1.191	1.112	0.974	0.795	0.740	0.780	0.803
518	Beer, wine, & distilled beverages	0.961	0.944	0.980	0.998	1.011	1.022	1.009	0.999	0.996	1.068	1.085	0.925	0.959	0.944	0.978	0.996	1.011	1.023	1.010	1.001
519	Miscellaneous nondurable goods...	1.052	1.072	1.093	1.073	0.989	0.945	0.943	0.929	0.943	0.979	0.978	1.001	1.052	1.072	1.093	1.074	0.989	0.946	0.943	0.928

¹Adjusted sales and inventory data shown in table 1 are obtained by dividing the unadjusted data by the adjustment factors shown above for the corresponding group. Adjusted data for the totals are obtained by adding the durable and nondurable goods. Seasonal factors shown for the totals will provide an approximation of the adjusted estimates, but may show small differences from the published data.

Note: Merchant wholesalers totals and group totals include data for some groups not shown separately. The seasonal factors shown have been computed based on monthly estimates through December 1983.

Table 4. Coefficients of Variation of Sales and Inventories

(In percent)

SIC code	Kind of business	Sales						Inventories					
		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total....	1.2-1.7	1.5	1.4-1.7	1.5	0.6-0.9	0.7	1.5-1.8	1.7	1.6-1.7	1.7	0.3-0.4	0.3
50	Durable goods, total.....	1.4-1.7	1.5	1.3-1.5	1.4	0.5-0.9	0.7	1.6-2.0	2.0	1.8-2.0	1.8	0.3-0.4	0.3
501	Motor vehicles and automotive parts and supplies.....	3.2-4.3	3.8	3.3-4.1	3.5	1.1-2.0	1.6	2.8-3.5	3.4	3.0-3.8	3.2	0.8-1.5	1.0
502	Furniture and home furnishings.....	9.5-12.7	10.0	7.4-9.9	8.6	2.6-6.3	5.1	9.6-11.7	11.3	10.4-11.6	10.8	1.0-2.2	1.5
505	Metals and minerals, except petroleum (S)	(S)	(S)	(S)	(S)	(S)	(S)	4.2-4.9	4.6	4.2-4.8	4.6	0.6-1.2	0.9
506	Electrical goods.....	6.5-8.7	7.5	6.6-8.0	6.8	1.7-3.0	2.1	6.1-7.1	6.7	6.3-7.1	6.7	0.5-1.0	0.7
507	Hardware, plumbing, heating equipment, and supplies.....	6.0-7.3	6.2	5.5-6.5	6.3	1.7-2.9	2.2	6.0-6.6	6.2	5.7-6.3	6.1	0.9-1.7	1.2
508	Machinery, equipment, and supplies...	2.2-2.8	2.6	2.2-2.7	2.4	1.2-1.3	1.2	2.4-3.0	2.6	2.3-2.8	2.6	0.5-0.8	0.6
51	Nondurable goods, total.....	2.2-2.9	2.7	2.4-2.9	2.5	0.7-1.5	1.1	2.1-2.7	2.4	2.0-2.8	2.3	0.5-1.3	0.7
511	Paper and paper products.....	4.6-6.2	5.2	4.3-5.9	5.0	1.3-2.4	1.7	5.7-8.1	6.7	5.7-7.6	6.8	0.9-1.4	1.1
514	Groceries and related products.....	4.5-5.2	4.7	4.2-5.2	4.6	1.2-3.3	1.5	3.8-4.7	4.1	3.5-5.0	4.2	0.7-2.7	1.1
515	Farm-product raw materials.....	(S)	(S)	(S)	(S)	(S)	(S)	3.1-4.8	4.3	3.0-4.4	3.5	1.3-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages.....	4.4-6.1	5.2	4.7-7.6	5.3	1.2-3.6	2.2	3.6-4.7	4.5	3.8-4.5	4.1	1.1-2.4	1.7
519	Miscellaneous nondurable goods.....	3.7-5.2	4.4	3.8-4.4	4.0	1.4-3.7	3.1	4.7-5.6	5.2	4.7-5.9	5.0	1.1-2.2	1.5

S Data do not meet publication standards.

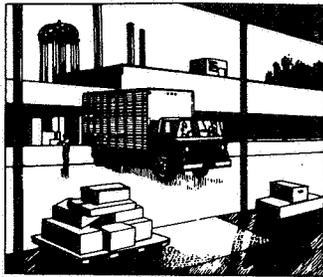
Note: Coefficients of variation are based on data unadjusted for seasonal variations or trading-day differences. The range and median coefficients of variation are based on data for August 1983 through January 1984.

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Monthly Wholesale Trade

Sales and Inventories

Issued October 1984
BW-84-08

August 1984

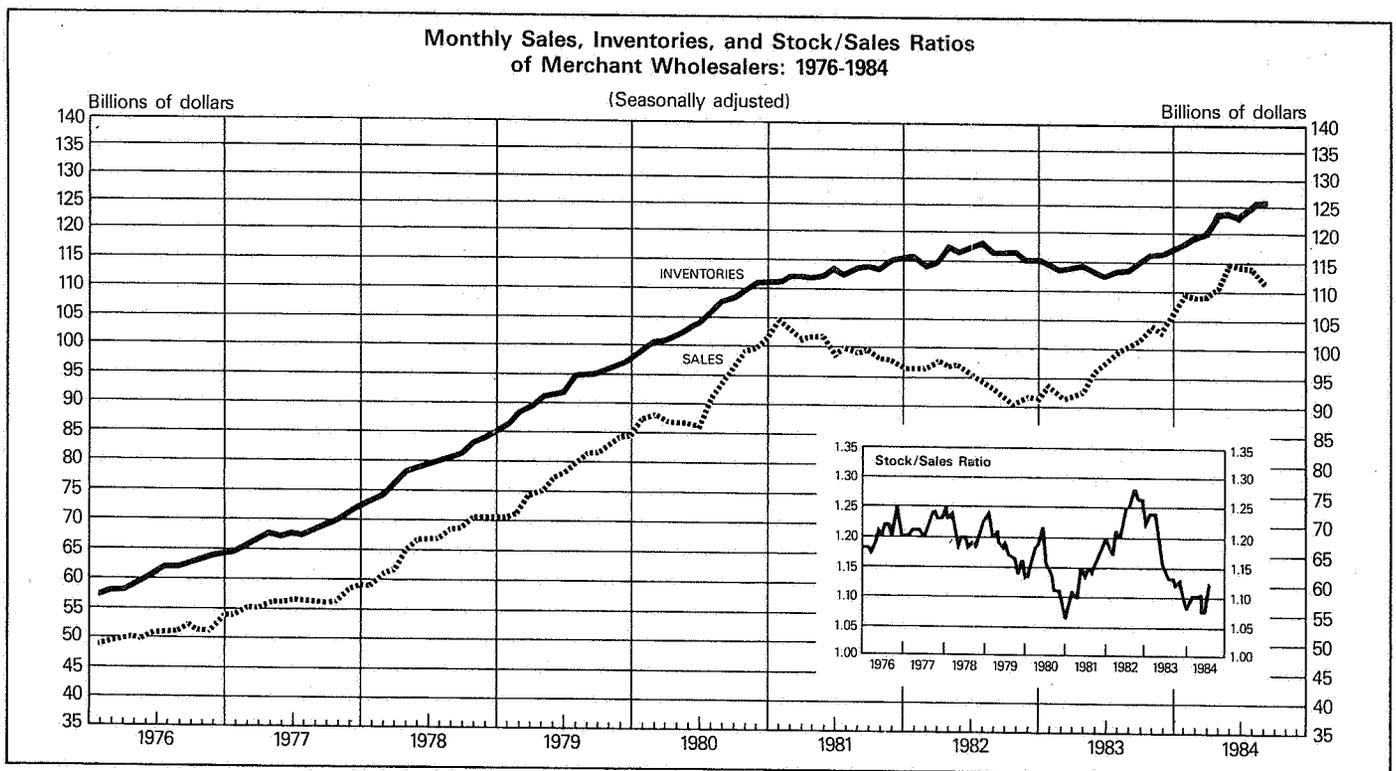
Sales August 1984 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$111.9 billion, down 1.2 percent from the revised July level of \$113.3 billion, but up 10.9 percent from a year ago. The July preliminary estimate was revised downward by \$789 million or about 0.7 percent. August sales of durable goods were down 0.7 percent from the revised July level but were 18.1 percent above a year ago. August sales of nondurable goods decreased 1.6 percent from the revised July level but were 5.7 percent above August 1983. Based on seasonally adjusted data, comparisons with previous month sales levels showed mixed results for both durable and nondurable goods categories.

Inventories Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$126.3 billion at the end of August, little changed from the revised July

level of \$126.2 billion, and 10.5 percent above a year ago. The July preliminary estimate was revised upward by \$1 million or less than 0.1 percent. Inventories of durable goods wholesalers were up 0.7 percent from the July level, and up 11.9 percent from a year ago. This is the ninth consecutive positive month-to-month percent change. Inventories of nondurable goods wholesalers decreased 1.2 percent from the July level but were 8.2 percent above August 1983.

Stock/Sales Ratio The August stock/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.13, up from the July ratio of 1.11 and the same as the year ago ratio.

Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling errors. A discussion of the reliability of the data is on page 3.



U.S. Department of Commerce
BUREAU OF THE CENSUS

Address inquiries concerning this report to Shirley Roberts, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-3916 or 763-3917.

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Table 1. Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1984 and 1983

SIC code	Kind of business	(Sales and inventories in millions of dollars)												TOTAL 8 MONTHS		
		1984						1983						1984	1983	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug. ^P	Aug.	Sep.	Oct.	Nov.	Dec.		
		Data NOT ADJUSTED for seasonal variation or trading-day differences														
	Sales, total.....	103,878	103,183	115,399	108,662	120,765	115,692	110,345	114,483	103,062	102,862	106,051	105,762	107,361	892,407	761,754
50	Durable goods.....	43,165	44,848	50,634	48,774	53,133	52,943	49,908	52,925	44,809	44,754	46,300	45,620	45,621	396,330	322,515
501	Motor vehicles & auto. equip.	8,859	8,640	9,802	9,573	10,717	10,703	9,387	9,664	8,561	8,195	9,030	8,953	8,963	77,345	63,673
502	Furniture & home furnishings.....	1,596	1,747	1,933	1,966	2,239	1,958	1,898	2,016	1,631	1,696	1,868	1,787	1,668	15,353	11,553
506	Electrical goods.....	5,713	6,063	6,824	6,418	6,843	7,129	7,038	7,494	6,054	6,269	6,249	6,332	6,537	53,522	40,756
507	Hardware,plumbing & heating equip.	2,611	2,623	2,886	2,685	3,086	3,172	3,253	3,367	2,979	2,875	2,887	2,834	2,626	23,883	19,965
508	Machinery, equip. & supplies.....	11,986	12,486	14,253	13,652	15,133	14,722	13,782	14,395	12,174	12,129	11,970	12,174	12,465	110,409	90,214
51	Nondurable goods.....	60,713	58,335	64,765	59,888	67,632	62,749	60,437	61,558	58,253	58,108	59,751	60,142	61,740	496,077	439,239
511	Paper & paper products.....	2,405	2,445	2,623	2,497	2,725	2,778	2,628	2,838	2,330	2,417	2,383	2,417	2,439	20,939	16,876
514	Groceries & related products.....	17,085	17,285	18,365	18,125	19,791	18,586	18,297	18,907	17,396	17,839	17,129	17,307	17,492	146,641	130,069
518	Beer, wine, & distilled beverages.	2,379	2,508	2,965	2,858	3,422	3,371	3,328	3,586	3,313	3,135	2,933	3,320	3,343	24,417	24,014
519	Misc. nondurable goods.....	7,081	6,842	8,149	8,244	10,033	9,005	7,584	7,944	7,077	7,078	7,472	7,055	7,410	64,882	55,729
	Inventories, total.....	119,818	121,319	122,637	124,008	123,235	122,912	123,786	124,234	112,420	114,993	117,778	118,566	119,421	(X)	(X)
50	Durable goods.....	75,185	76,295	78,266	78,752	79,369	80,652	81,272	81,990	73,368	74,769	74,582	74,417	75,432	(X)	(X)
501	Motor vehicles & auto. equip.	12,226	12,551	12,703	12,712	12,438	12,442	12,579	12,751	11,631	12,493	12,639	12,459	12,488	(X)	(X)
502	Furniture & home furnishings.....	2,329	2,395	2,409	2,421	2,456	2,544	2,441	2,475	2,306	2,354	2,233	2,264	2,324	(X)	(X)
505	Metals & minerals, ex. petroleum..	8,343	8,422	8,529	8,509	8,880	9,158	9,238	9,342	8,213	8,497	8,223	8,399	8,462	(X)	(X)
506	Electrical goods.....	9,079	9,151	9,516	10,025	10,425	10,789	11,386	11,702	8,433	8,603	8,811	8,698	8,812	(X)	(X)
507	Hardware,plumbing & heating equip.	4,567	4,741	4,880	4,995	5,010	4,889	5,051	5,189	4,470	4,484	4,493	4,569	4,533	(X)	(X)
508	Machinery, equip. & supplies.....	28,417	28,525	29,376	29,384	30,287	29,920	29,663	27,389	27,729	27,914	27,684	28,534	(X)	(X)	
51	Nondurable goods.....	44,633	45,024	44,371	45,256	43,866	42,260	42,514	42,244	39,052	40,224	43,196	44,149	43,989	(X)	(X)
511	Paper & paper products.....	2,322	2,401	2,410	2,453	2,543	2,530	2,581	2,569	2,213	2,223	2,229	2,377	2,341	(X)	(X)
514	Groceries & related products.....	8,660	9,219	9,093	9,192	9,392	9,125	9,493	9,170	8,265	8,401	8,775	9,073	8,726	(X)	(X)
515	Farm-product raw materials.....	9,450	8,773	8,217	8,079	6,609	5,873	5,463	5,887	6,617	7,227	9,106	9,615	9,439	(X)	(X)
518	Beer, wine, & distilled beverages.	2,954	3,067	3,295	3,322	3,162	3,234	3,357	3,187	3,329	3,196	3,506	3,482	2,916	(X)	(X)
519	Misc. nondurable goods.....	7,504	8,024	8,455	8,524	7,819	7,211	7,380	7,462	6,113	6,317	6,594	6,582	7,021	(X)	(X)
	Stock/sales ratios, total....	1.15	1.18	1.06	1.14	1.02	1.06	1.12	1.09	1.09	1.12	1.11	1.12	1.11	(X)	(X)
50	Durable goods.....	1.74	1.70	1.55	1.61	1.49	1.52	1.63	1.55	1.64	1.67	1.61	1.63	1.65	(X)	(X)
501	Motor vehicles & auto. equip.	1.38	1.45	1.30	1.33	1.16	1.16	1.34	1.32	1.36	1.52	1.40	1.39	1.39	(X)	(X)
502	Furniture & home furnishings.....	1.46	1.37	1.25	1.23	1.10	1.30	1.29	1.23	1.41	1.39	1.20	1.27	1.39	(X)	(X)
506	Electrical goods.....	1.59	1.51	1.39	1.56	1.52	1.51	1.62	1.56	1.39	1.37	1.41	1.37	1.35	(X)	(X)
507	Hardware,plumbing & heating equip.	1.75	1.81	1.69	1.73	1.62	1.54	1.55	1.54	1.50	1.56	1.56	1.61	1.73	(X)	(X)
508	Machinery, equip. & supplies.....	2.37	2.28	2.06	2.15	1.96	2.06	2.17	2.06	2.25	2.29	2.33	2.27	2.29	(X)	(X)
51	Nondurable goods.....	0.74	0.77	0.69	0.76	0.65	0.67	0.70	0.69	0.67	0.69	0.72	0.73	0.71	(X)	(X)
511	Paper & paper products.....	0.97	0.98	0.92	0.98	0.93	0.91	0.98	0.91	0.95	0.92	0.94	0.98	0.96	(X)	(X)
514	Groceries & related products.....	0.51	0.53	0.49	0.51	0.47	0.49	0.52	0.49	0.48	0.47	0.51	0.52	0.50	(X)	(X)
518	Beer, wine, & distilled beverages.	1.24	1.22	1.11	1.16	0.92	0.96	1.01	0.89	1.00	1.02	1.20	1.05	0.82	(X)	(X)
519	Misc. nondurable goods.....	1.06	1.17	1.04	1.03	0.78	0.80	0.97	0.94	0.86	0.89	0.88	0.93	0.95	(X)	(X)
		Data ADJUSTED for seasonal variation and, in the case of sales, also for trading-day differences														
	Sales, total.....	110,125	108,328	109,553	111,043	115,112	114,401	113,310	111,936	100,894	102,171	104,210	103,793	106,892	(X)	(X)
50	Durable goods.....	47,855	47,308	48,454	49,366	51,188	52,212	50,875	50,501	42,757	43,535	44,519	44,946	46,363	(X)	(X)
501	Motor vehicles & auto. equip.	9,546	8,772	9,118	9,223	10,226	10,341	9,396	9,392	8,473	8,746	8,923	9,080	9,231	(X)	(X)
502	Furniture & home furnishings.....	1,769	1,758	1,807	1,897	2,204	1,931	2,140	1,973	1,601	1,650	1,725	1,727	1,745	(X)	(X)
506	Electrical goods.....	6,383	6,457	6,756	6,879	6,823	6,901	6,955	7,283	5,799	5,970	6,044	6,042	6,347	(X)	(X)
507	Hardware,plumbing & heating equip.	2,802	2,895	2,936	2,897	3,005	3,147	3,113	3,123	2,748	2,751	2,718	2,792	2,815	(X)	(X)
508	Machinery, equip. & supplies.....	13,559	13,074	13,574	13,721	14,426	14,321	14,267	13,645	11,539	11,708	11,887	12,186	12,342	(X)	(X)
51	Nondurable goods.....	62,270	61,020	61,099	61,677	63,924	62,189	62,435	61,435	58,137	58,636	59,691	58,847	60,529	(X)	(X)
511	Paper & paper products.....	2,454	2,492	2,493	2,620	2,635	2,820	2,755	2,703	2,230	2,329	2,348	2,398	2,469	(X)	(X)
514	Groceries & related products.....	17,705	18,214	18,148	18,841	18,993	18,239	18,170	18,303	16,857	17,524	17,095	17,187	17,336	(X)	(X)
518	Beer, wine, & distilled beverages.	3,066	3,007	3,019	3,002	3,222	3,153	3,256	3,257	3,090	3,038	3,008	3,026	3,052	(X)	(X)
519	Misc. nondurable goods.....	8,056	7,594	7,408	8,012	8,460	8,560	7,958	8,081	7,273	7,193	7,487	7,303	7,373	(X)	(X)
	Inventories, total.....	119,201	120,411	121,477	123,785	124,368	123,994	126,227	126,259	114,227	115,674	116,825	116,958	118,067	(X)	(X)
50	Durable goods.....	76,408	76,910	78,188	78,438	78,817	79,696	81,191	81,745	73,076	74,249	74,806	74,991	75,811	(X)	(X)
501	Motor vehicles & auto. equip.	12,189	12,551	12,640	12,574	12,463	12,467	12,655	13,118	11,954	12,531	12,626	12,397	12,352	(X)	(X)
502	Furniture & home furnishings.....	2,372	2,400	2,369	2,397	2,468	2,519	2,412	2,477	2,308	2,301	2,249	2,317	2,369	(X)	(X)
505	Metals & minerals, ex. petroleum..	8,505	8,456	8,650	8,781	8,732	9,058	9,247	9,251	8,100	8,339	8,256	8,357	8,420	(X)	(X)
506	Electrical goods.....	9,438	9,405	9,710	10,106	10,404	10,640	11,240	11,518	8,300	8,451	8,571	8,620	8,901	(X)	(X)
507	Hardware,plumbing & heating equip.	4,608	4,722	4,808	4,912	4,821	4,986	5,194	4,474	4,548	4,561	4,769	4,678	(X)	(X)	
508	Machinery, equip. & supplies.....	29,116	28,755	29,230	29,093	29,263	29,781	29,771	29,574	27,280	27,564	28,168	28,020	28,793	(X)	(X)
51	Nondurable goods.....	42,793	43,501	43,289	45,347	45,551	44,298	45,036	44,514	41,151	41,423	42,019	42,167	42,256	(X)	(X)
511	Paper & paper products.....	2,343	2,418	2,434	2,480	2,523	2,507	2,548	2,559	2,206	2,230	2,242	2,353	2,343	(X)	(X)
514	Groceries & related products.....	8,721	9,164	8,950	9,257	9,613	9,171	9,797	9,612	8,654	8,384	8,462	8,792	8,530	(X)	(X)
515	Farm-product raw materials.....	7,406	7,366	7,389	6,295	5,313	7,936	7,004	7,351	8,230	8,443	8,648	8,107	7,668	(X)	(X)
518	Beer, wine, & distilled beverages.	3,080	3,249	3,369	3,335	3,128	3,161	3,324	3,184	3,332	3,209					

Table 2. Percent Change in Sales and Inventories of Merchant Wholesalers

SIC CODE	Kind of business	UNADJUSTED					ADJUSTED ¹			
		SALES			INVENTORIES, END-OF-MONTH (AT COST)		SALES		INVENTORIES, END-OF-MONTH (AT COST)	
		Aug. 1984 FROM July 1984	Aug. 1984 FROM Aug. 1983	8 MONTHS 1984 FROM 8 MONTHS 1983	Aug. 1984 FROM July 1984	Aug. 1984 FROM Aug. 1983	Aug. 1984 FROM July 1984	Aug. 1984 FROM Aug. 1983	Aug. 1984 FROM July 1984	Aug. 1984 FROM Aug. 1983
	TOTAL.....	+3.8	+11.1	+17.2	+0.4	+10.5	-1.2	+10.9	0.0	+10.5
50	Durable goods.....	+6.0	+18.1	+22.9	+0.9	+11.8	-0.7	+18.1	+0.7	+11.9
501	Motor vehicles & auto. equip.	+3.0	+13.1	+21.5	+1.4	+9.6	0.0	+10.8	+3.7	+9.7
502	Furniture & home furnishings.....	+6.2	+23.6	+32.9	+1.4	+7.3	-7.8	+23.2	+2.7	+7.3
505	Metals & minerals, ex. petroleum..	(S)	(S)	(S)	+1.1	+13.7	(S)	(S)	-0.2	+14.0
506	Electrical goods.....	+6.5	+23.8	+31.3	+2.8	+38.8	+4.7	+25.6	+2.5	+38.8
507	Hardware, plumbing & heating equip.	+3.5	+13.0	+19.6	+2.7	+16.1	+0.3	+13.6	+4.2	+16.1
508	Machinery, equip. & supplies.....	+4.4	+18.2	+22.4	-0.9	+8.3	-4.4	+18.3	-0.7	+8.4
51	Nondurable goods.....	+1.9	+5.7	+12.9	-0.6	+8.2	-1.6	+5.7	-1.2	+8.2
511	Paper & paper products.....	+8.0	+21.8	+24.1	-0.5	+16.1	-1.9	+21.2	+0.4	+16.0
514	Groceries & related products.....	+3.3	+8.7	+12.7	-3.4	+10.9	+0.7	+8.6	-1.9	+11.1
515	Farm-product raw materials.....	(S)	(S)	(S)	+7.8	-11.0	(S)	(S)	+4.7	-10.9
518	Beer, wine, & distilled beverages.	+7.8	+8.2	+1.7	-5.1	-4.3	0.0	+5.4	-4.2	-4.4
519	Misc. nondurable goods.....	+4.7	+12.3	+16.4	+1.1	+22.1	+1.5	+11.1	+2.7	+22.2

(S) DATA DO NOT MEET PUBLICATION STANDARDS.

¹ ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES.

EXPLANATORY MATERIAL

Scope of Survey

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the *Standard Industrial Classification Manual*¹ and the 1977 Supplement and as covered in the 1977 Economic Censuses, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm, or professional business users; 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; and (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), who 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.

Also included in this survey are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments and manufacturers' sales branches of ferrous metal service centers SIC (505).

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.

The estimates of the coefficients of variation in percent for sales and inventories at the level of detail provided in this publication are shown in table 4. Note that 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. 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.

The coefficient of variation also 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.

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 13 percent of the sales estimates and 21 percent for inventories.

Differences between preliminary and final estimates² of seasonally adjusted sales ranged from approximately +0.7 percent to -0.7 percent for the past 12 months. During the same

¹Executive Office of the President, Office of Management and Budget, *Standard Industrial Classification Manual*, 1972, and the 1977 Supplement.

²See Sample Design and Estimation Procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983*.

period, the average of the absolute differences was 0.4 percent. The corresponding range for inventories was approximately +0.8 percent to -0.6 percent for the past 12 months. The average of the absolute differences was 0.3 percent.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventories estimates in this report reflect the results of a benchmarking³ operation which made use of 1982 estimates tabulated from the 1982 Annual Trade Survey. Monthly wholesale sales and inventories estimates were revised in a manner designed to minimize the differences in the month-to-month trends between the revised and unrevised series. The estimates for the unrevised series were derived by using composite estimating procedures. Monthly sales estimates were revised for the period January 1980 through December 1983. The revised monthly sales estimates for 1980 and 1981 were constrained to sum to the 1980 and 1981 annual estimates tabulated from the 1981 Annual Trade Survey. The revised monthly sales estimates for 1982 were constrained to sum to the 1982 annual estimates tabulated from the 1982 Annual Trade Survey. Similarly, monthly inventories were revised for the period January 1982 through December 1983 using end-of-year inventories tabulated for 1981 and 1982 as benchmarks. (For a few series, monthly inventories were revised for the period January 1978 through December 1983.)

Through the use of carry-forward factors, the effect of the revision process was applied to all composite estimates subsequent to December 1982. These factors were derived at the three-digit kind-of-business level and are held constant until the next revision and benchmarking process. Aggregate level estimates were derived by summing appropriate detail level estimates, thereby assuring additivity.

Subsequent revisions of the monthly sales and inventory series will make use of future annual surveys of wholesale trade and the 1982 Census of Wholesale Trade.

Unpublished Data

Sales and inventory estimates for unpublished three-digit and four-digit wholesale trade categories are not included in this publication because the sampling variability associated with these data do not meet publication criteria. The Census Bureau on written request will release these 1984 monthly data for individual use, though not for publication.

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 sources such as investments, rental or sale of real estate, etc.

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.

Inventories. Inventories represent stocks at cost of merchandise owned by merchant wholesalers at the end of the month regardless of location except for goods held outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included. Goods held in foreign trade zones in the United States are also included.

Stock/Sales Ratios. The stock/sales ratios are derived by dividing the dollar value of inventories 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.

Kind-of-Business Classifications

The durable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 50. This group includes establishments classified in SIC groups 501 through 509.

The nondurable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 51. This group includes establishments classified in SIC groups 511 through 519.

For a further description of the kinds of business included in the major groups see the *1972 Standard Industrial Classification Manual* and the 1977 Supplement.

Adjustment for Seasonal and Trading-Day Variation

Seasonal factors for adjusting data in this 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 estimates were also derived from the X-11 program.

Seasonal 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 conditions, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of the trading-day adjustment procedure 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 seasonal adjustment procedure may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

³For a more detailed description, see the section dealing with revisions to published data in the Current Business Report *Revised Monthly Wholesale Trade: January 1974 through December 1983*.

Table 3. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: January 1983-August 1984

SIC code	Kind of business	1983												1984							
		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.
	Sales ¹ , total.....	0.930	0.918	1.084	0.977	1.022	1.037	0.946	1.022	1.005	1.016	1.018	1.003	0.953	0.956	1.053	0.976	1.056	1.003	0.971	1.022
50	Durable goods.....	0.886	0.907	1.077	0.981	1.005	1.056	0.953	1.048	1.028	1.040	1.015	0.984	0.902	0.948	1.045	0.988	1.038	1.014	0.981	1.048
501	Motor vehicles and auto, equip...	0.910	0.948	1.099	1.027	1.013	1.082	0.976	1.008	0.937	1.012	0.986	0.971	0.928	0.985	1.075	1.038	1.048	1.035	0.999	1.029
502	Furniture and home furnishings...	0.906	0.932	1.093	1.025	0.971	1.050	0.888	1.019	1.028	1.083	1.035	0.956	0.902	0.994	1.070	1.015	1.016	1.014	0.887	1.022
506	Electrical goods.....	0.887	0.903	1.038	0.944	0.972	1.055	0.994	1.044	1.050	1.034	1.048	1.030	0.895	0.939	1.010	0.933	1.003	1.033	1.012	1.029
507	Hardware, plumbing & heating equip.	0.910	0.867	1.018	0.981	1.002	1.052	1.009	1.084	1.045	1.062	1.015	0.933	0.932	0.906	0.983	0.996	1.027	1.008	1.045	1.078
508	Machinery, equip. and supplies...	0.863	0.913	1.078	0.998	1.019	1.058	0.942	1.055	1.036	1.007	0.999	1.010	0.834	0.955	1.050	0.995	1.049	1.028	0.966	1.055
51	Nondurable goods.....	0.947	0.922	1.090	0.975	1.026	1.037	0.943	1.002	0.991	1.001	1.022	1.020	0.975	0.956	1.060	0.971	1.058	1.009	0.968	1.002
511	Paper and paper products.....	0.954	0.943	1.085	0.960	0.990	1.024	0.927	1.045	1.038	1.015	1.008	0.988	0.980	0.981	1.052	0.953	1.034	0.985	0.954	1.050
514	Groceries and related products...	0.946	0.915	1.044	0.981	1.004	1.039	0.988	1.032	1.018	1.002	1.007	1.009	0.965	0.949	1.023	0.962	1.042	1.019	1.007	1.033
518	Beer, wine, & distilled beverages	0.750	0.790	1.015	0.969	1.003	1.115	1.007	1.072	1.032	0.975	1.097	1.161	0.776	0.834	0.982	0.952	1.062	1.069	1.022	1.101
519	Miscellaneous nondurable goods...	0.871	0.872	1.117	1.017	1.163	1.085	0.935	0.973	0.984	0.998	0.966	1.005	0.879	0.901	1.100	1.029	1.186	1.052	0.953	0.983
	Inventories ¹ , total.....	1.003	1.009	1.011	1.008	0.989	0.990	0.984	0.983	0.993	1.007	1.012	1.009	1.003	1.009	1.011	1.008	0.988	0.990	0.983	0.983
50	Durable goods.....	0.984	0.993	1.001	1.004	1.008	1.012	1.002	1.004	1.007	0.997	0.995	0.995	0.984	0.992	1.001	1.004	1.007	1.012	1.001	1.003
501	Motor vehicles and auto, equip...	1.003	1.002	1.006	1.011	0.999	0.998	0.994	0.973	0.997	1.001	1.005	1.011	1.003	1.000	1.005	1.011	0.998	0.998	0.994	0.972
502	Furniture and home furnishings...	0.982	0.997	1.018	1.011	0.995	1.011	1.012	0.999	1.023	0.993	0.977	0.981	0.982	0.998	1.017	1.010	0.995	1.010	1.012	0.999
505	Metals & minerals, ex. petroleum.	0.981	0.995	0.986	0.970	1.018	1.011	0.999	1.014	1.019	0.996	1.005	1.005	0.981	0.996	0.986	0.969	1.017	1.011	0.999	1.012
506	Electrical goods.....	0.962	0.973	0.980	0.992	1.002	1.014	1.013	1.016	1.018	1.028	1.009	0.990	0.962	0.973	0.980	0.992	1.002	1.014	1.013	1.016
507	Hardware, plumbing & heating equip.	0.990	1.004	1.016	1.044	1.020	1.015	1.013	0.999	0.986	0.985	0.958	0.969	0.991	1.004	1.015	1.043	1.020	1.014	1.013	0.999
508	Machinery, equip. and supplies...	0.976	0.992	1.005	1.010	1.013	1.018	1.005	1.004	1.006	0.991	0.988	0.991	0.976	0.992	1.005	1.010	1.013	1.017	1.005	1.003
51	Nondurable goods.....	1.043	1.035	1.026	0.998	0.963	0.953	0.945	0.949	0.971	1.028	1.047	1.041	1.043	1.035	1.025	0.998	0.963	0.954	0.944	0.949
511	Paper and paper products.....	0.990	0.993	0.991	0.990	1.008	1.010	1.013	1.003	0.997	0.994	1.010	0.999	0.991	0.993	0.990	0.989	1.008	1.009	1.013	1.004
514	Groceries and related products...	0.993	1.005	1.016	0.994	0.978	0.995	0.970	0.955	1.002	1.037	1.032	1.023	0.993	1.006	1.016	0.993	0.977	0.995	0.969	0.954
515	Farm-product raw materials.....	1.273	1.192	1.112	0.974	0.796	0.742	0.781	0.804	0.856	1.053	1.186	1.231	1.276	1.191	1.112	0.974	0.795	0.740	0.780	0.803
518	Beer, wine, & distilled beverages	0.961	0.944	0.980	0.998	1.011	1.022	1.009	0.999	0.996	1.068	1.085	0.925	0.959	0.944	0.978	0.996	1.011	1.023	1.010	1.001
519	Miscellaneous nondurable goods...	1.052	1.072	1.093	1.073	0.989	0.945	0.943	0.929	0.943	0.979	0.978	1.001	1.052	1.072	1.093	1.074	0.989	0.946	0.943	0.928

¹Adjusted sales and inventory data shown in table 1 are obtained by dividing the unadjusted data by the adjustment factors shown above for the corresponding group. Adjusted data for the totals are obtained by adding the durable and nondurable goods. Seasonal factors shown for the totals will provide an approximation of the adjusted estimates, but may show small differences from the published data.

Note: Merchant wholesalers totals and group totals include data for some groups not shown separately. The seasonal factors shown have been computed based on monthly estimates through December 1983.

Table 4. Coefficients of Variation of Sales and Inventories

(In percent)

SIC code	Kind of business	Sales						Inventories					
		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total....	1.2-1.7	1.5	1.4-1.7	1.5	0.6-0.9	0.7	1.5-1.8	1.7	1.6-1.7	1.7	0.3-0.4	0.3
50	Durable goods, total.....	1.4-1.7	1.5	1.3-1.5	1.4	0.5-0.9	0.7	1.6-2.0	2.0	1.8-2.0	1.8	0.3-0.4	0.3
501	Motor vehicles and automotive parts and supplies.....	3.2-4.3	3.8	3.3-4.1	3.5	1.1-2.0	1.6	2.8-3.5	3.4	3.0-3.8	3.2	0.8-1.5	1.0
502	Furniture and home furnishings.....	9.5-12.7	10.0	7.4-9.9	8.6	2.6-6.3	5.1	9.6-11.7	11.3	10.4-11.6	10.8	1.0-2.2	1.5
505	Metals and minerals, except petroleum (S)	(S)	(S)	(S)	(S)	(S)	(S)	4.2-4.9	4.6	4.2-4.8	4.6	0.6-1.2	0.9
506	Electrical goods.....	6.5-8.7	7.5	6.6-8.0	6.8	1.7-3.0	2.1	6.1-7.1	6.7	6.3-7.1	6.7	0.5-1.0	0.7
507	Hardware, plumbing, heating equipment, and supplies.....	6.0-7.3	6.2	5.5-6.5	6.3	1.7-2.9	2.2	6.0-6.6	6.2	5.7-6.3	6.1	0.9-1.7	1.2
508	Machinery, equipment, and supplies...	2.2-2.8	2.6	2.2-2.7	2.4	1.2-1.3	1.2	2.4-3.0	2.6	2.3-2.8	2.6	0.5-0.8	0.6
51	Nondurable goods, total.....	2.2-2.9	2.7	2.4-2.9	2.5	0.7-1.5	1.1	2.1-2.7	2.4	2.0-2.8	2.3	0.5-1.3	0.7
511	Paper and paper products.....	4.6-6.2	5.2	4.3-5.9	5.0	1.3-2.4	1.7	5.7-8.1	6.7	5.7-7.6	6.8	0.9-1.4	1.1
514	Groceries and related products.....	4.5-5.2	4.7	4.2-5.2	4.6	1.2-3.3	1.5	3.8-4.7	4.1	3.5-5.0	4.2	0.7-2.7	1.1
515	Farm-product raw materials.....	(S)	(S)	(S)	(S)	(S)	(S)	3.1-4.8	4.3	3.0-4.4	3.5	1.3-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages.....	4.4-6.1	5.2	4.7-7.6	5.3	1.2-3.6	2.2	3.6-4.7	4.5	3.8-4.5	4.1	1.1-2.4	1.7
519	Miscellaneous nondurable goods.....	3.7-5.2	4.4	3.8-4.4	4.0	1.4-3.7	3.1	4.7-5.6	5.2	4.7-5.9	5.0	1.1-2.2	1.5

S Data do not meet publication standards.

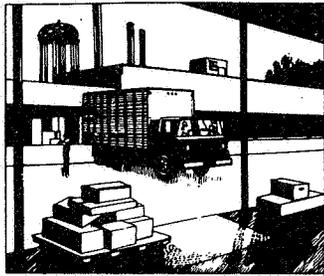
Note: Coefficients of variation are based on data unadjusted for seasonal variations or trading-day differences. The range and median coefficients of variation are based on data for August 1983 through January 1984.

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Monthly Wholesale Trade

September 1984

Sales and Inventories

Issued November 1984
BW-84-09

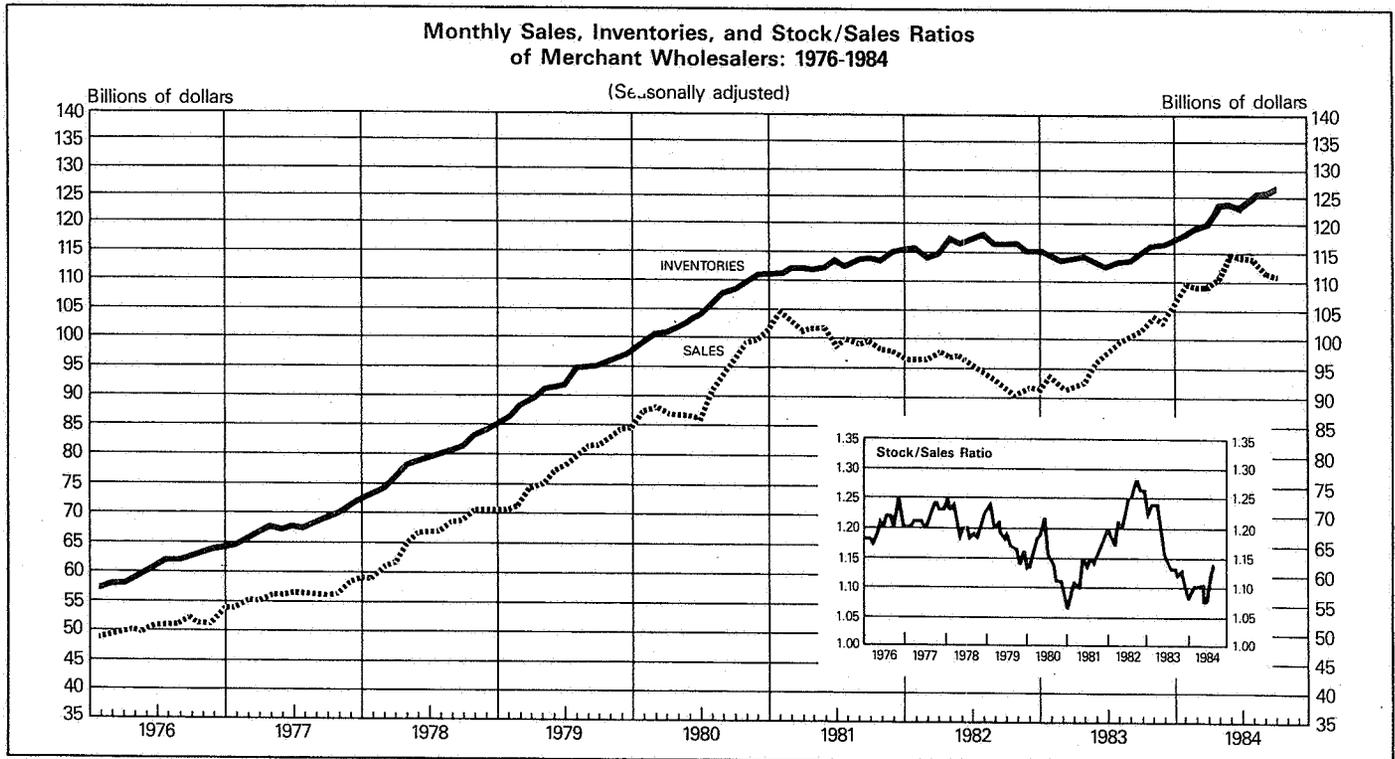
Sales September 1984 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$111.5 billion, down 1.0 percent from the revised August level of \$112.6 billion, but up 9.1 percent from a year ago. This is the fourth consecutive downward month-to-month percent change. The August preliminary estimate was revised upward by \$628 million or about 0.6 percent. September sales of durable goods were little changed from the revised August level and were 15.3 percent above a year ago. All but two durable goods categories contributed to the month-to-month decrease. The exceptions were motor vehicles and automotive parts and supplies, which was up 6.9 percent from the previous month and 14.3 percent above a year ago, and machinery, equipment, and supplies, which was up 4.4 percent from the previous month and 22.5 percent above a year ago. September sales of nondurable goods decreased 1.1 percent from the revised August level but were 4.5 percent above September 1983.

sales, after adjustment for seasonal variation but not for price changes, were \$127.6 billion at the end of September, up 0.7 percent from the revised August level of \$126.7 billion, and 10.3 percent above a year ago. The August preliminary estimate was revised upward by \$417 million or 0.3 percent. Inventories of durable goods wholesalers were up 0.9 percent from the August level, and increased 11.4 percent from a year ago. This is the tenth consecutive positive month-to-month percent change. Inventories of nondurable goods wholesalers were little changed from the August level and were 8.3 percent above September 1983.

Stock/Sales Ratio The September stock/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.14, up from the August and year ago ratios of 1.13.

Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling errors. A discussion of the reliability of the data is on page 3.

Inventories Total inventories of merchant whole-



U.S. Department of Commerce
BUREAU OF THE CENSUS

Address inquiries concerning this report to Shirley Roberts, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-3916 or 763-3917.

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Table 1. Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1984 and 1983

SIC CODE	KIND OF BUSINESS	(SALES AND INVENTORIES IN MILLIONS OF DOLLARS)												TOTAL 9 MONTHS		
		1984												1983		
		JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	SEP.	OCT.	NOV.	DEC.	1984	1983
		DATA NOT ADJUSTED FOR SEASONAL VARIATION OR TRADING-DAY DIFFERENCES														
	SALES, TOTAL.....	103,878	103,183	115,399	109,652	120,765	115,692	110,345	115,117	106,958	102,862	106,051	105,762	107,361	999,999	864,616
50	DURABLE GOODS.....	43,165	44,848	50,634	48,774	53,133	52,943	49,908	53,034	49,192	44,754	46,300	45,620	45,621	445,631	367,259
501	MOTOR VEHICLES & AUTO. EQUIP.	8,859	8,640	9,802	9,573	10,717	10,703	9,387	9,623	8,854	8,195	9,030	8,953	8,963	86,158	71,868
502	FURNITURE & HOME FURNISHINGS.....	1,536	1,747	1,933	1,966	2,239	1,956	1,898	1,984	1,897	1,696	1,868	1,787	1,668	17,218	13,249
506	ELECTRICAL GOODS.....	5,713	6,063	6,624	6,418	6,843	7,129	7,038	7,579	7,413	6,269	6,249	6,332	6,537	61,020	47,025
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,611	2,523	2,886	2,885	3,086	3,172	3,253	3,224	3,013	2,875	2,887	2,834	2,626	26,853	22,840
508	MACHINERY, EQUIP. & SUPPLIES.....	11,986	12,486	14,253	13,652	15,133	14,722	13,782	14,498	14,001	12,129	11,970	12,174	12,465	124,513	102,343
51	NONDURABLE GOODS.....	60,713	58,335	64,765	59,888	67,632	62,749	60,437	62,083	57,766	58,108	59,751	60,142	61,740	554,368	497,347
511	PAPER & PAPER PRODUCTS.....	2,435	2,443	2,623	2,497	2,725	2,778	2,628	2,875	2,540	2,417	2,383	2,417	2,439	23,556	19,293
514	GROCERIES & RELATED PRODUCTS.....	17,085	17,285	18,565	18,125	19,791	18,586	18,297	19,352	17,944	17,839	17,129	17,307	17,492	165,070	147,908
518	BEER, WINE, & DISTILLED BEVERAGES.	2,379	2,509	2,965	2,858	3,422	3,371	3,328	3,518	3,011	3,135	2,933	3,320	3,543	27,360	27,149
519	MISC. NONDURABLE GOODS.....	7,081	6,942	8,149	8,244	10,033	9,005	7,584	7,856	6,837	7,078	7,472	7,055	7,410	71,631	62,837
	INVENTORIES, TOTAL.....	119,818	121,319	122,637	124,008	123,235	122,912	123,786	124,642	126,801	114,993	117,778	118,565	119,421	(X)	(X)
50	DURABLE GOODS.....	75,185	76,295	78,266	78,752	79,369	80,652	81,272	82,217	83,273	74,769	74,582	74,417	75,432	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	12,226	12,551	12,703	12,712	12,438	12,442	12,579	12,715	13,940	12,493	12,639	12,459	12,488	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	2,329	2,395	2,409	2,421	2,456	2,544	2,441	2,506	2,546	2,354	2,233	2,264	2,324	(X)	(X)
506	METALS & MINERALS, EX. PETROLEUM.	8,343	8,422	8,529	8,509	8,880	9,158	9,238	9,365	9,075	8,497	8,223	8,399	8,462	(X)	(X)
506	ELECTRICAL GOODS.....	9,079	9,151	9,516	10,025	10,425	10,789	11,386	11,701	12,071	8,603	8,811	8,698	8,812	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,567	4,741	4,880	4,995	5,010	4,389	5,051	5,127	5,113	4,484	4,493	4,569	4,533	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	28,417	28,523	29,376	29,384	29,643	30,287	29,920	29,942	29,780	27,729	27,914	27,684	28,534	(X)	(X)
51	NONDURABLE GOODS.....	44,633	45,024	44,371	45,256	43,866	42,260	42,514	42,425	43,528	40,224	43,196	44,149	43,989	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	2,322	2,401	2,410	2,453	2,543	2,530	2,581	2,594	2,554	2,223	2,229	2,377	2,341	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	8,660	9,217	9,093	9,192	9,392	9,125	9,493	9,317	9,715	8,401	8,775	9,073	8,726	(X)	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.	2,954	3,073	3,295	3,322	3,152	3,234	3,357	3,181	3,261	3,196	3,506	3,482	2,916	(X)	(X)
519	MISC. NONDURABLE GOODS.....	7,504	8,024	8,455	8,524	7,819	7,211	7,380	7,297	7,253	6,317	6,594	6,582	7,021	(X)	(X)
	STOCK/SALES RATIOS, TOTAL....	1.15	1.13	1.06	1.14	1.02	1.06	1.12	1.08	1.19	1.12	1.11	1.12	1.11	(X)	(X)
50	DURABLE GOODS.....	1.74	1.70	1.55	1.61	1.49	1.52	1.63	1.55	1.69	1.67	1.61	1.63	1.65	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	1.38	1.45	1.30	1.33	1.16	1.16	1.34	1.32	1.58	1.52	1.40	1.39	1.39	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	1.46	1.37	1.25	1.23	1.10	1.30	1.29	1.26	1.34	1.39	1.20	1.27	1.39	(X)	(X)
506	ELECTRICAL GOODS.....	1.59	1.51	1.39	1.56	1.52	1.51	1.62	1.54	1.53	1.37	1.41	1.37	1.35	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	1.75	1.81	1.69	1.73	1.62	1.54	1.55	1.54	1.70	1.56	1.56	1.61	1.73	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	2.37	2.28	2.06	2.15	1.96	2.06	2.17	2.07	2.13	2.29	2.33	2.27	2.29	(X)	(X)
51	NONDURABLE GOODS.....	0.74	0.77	0.69	0.70	0.65	0.67	0.70	0.68	0.75	0.69	0.72	0.73	0.71	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	0.97	0.98	0.92	0.98	0.93	0.91	0.95	0.90	0.99	0.92	0.94	0.98	0.96	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	0.51	0.53	0.49	0.51	0.47	0.49	0.52	0.48	0.54	0.47	0.51	0.52	0.50	(X)	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.	1.24	1.22	1.11	1.16	0.92	0.96	1.01	0.90	1.08	1.02	1.20	1.05	0.82	(X)	(X)
519	MISC. NONDURABLE GOODS.....	1.36	1.17	1.04	1.03	0.78	0.80	0.97	0.93	1.05	0.89	0.88	0.93	0.95	(X)	(X)
		DATA ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES														
	SALES, TOTAL.....	110,125	109,328	109,553	111,043	115,112	114,401	113,310	112,564	111,454	102,171	104,210	103,793	106,892	(X)	(X)
50	DURABLE GOODS.....	47,855	47,308	48,454	49,366	51,188	52,212	50,875	50,605	50,196	43,535	44,519	44,946	46,363	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	9,546	8,772	9,118	9,223	10,226	10,341	9,396	9,352	9,993	8,746	8,923	9,080	9,231	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	1,769	1,758	1,807	1,937	2,204	1,931	2,140	1,941	1,893	1,650	1,725	1,727	1,745	(X)	(X)
506	ELECTRICAL GOODS.....	6,383	6,457	6,756	6,879	6,823	6,901	6,955	7,365	7,067	5,970	6,044	6,042	6,347	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,802	2,895	2,936	2,897	3,005	3,147	3,113	3,083	2,986	2,751	2,718	2,792	2,815	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	13,559	13,974	13,574	13,721	14,426	14,321	14,207	13,742	14,345	11,708	11,887	12,186	12,342	(X)	(X)
51	NONDURABLE GOODS.....	62,270	61,020	61,099	61,677	63,924	62,189	62,435	61,959	61,258	58,636	59,691	58,847	60,529	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	2,454	2,492	2,493	2,620	2,635	2,420	2,755	2,738	2,633	2,329	2,348	2,398	2,469	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	17,705	18,214	18,148	18,841	18,993	18,239	18,170	18,734	18,426	17,524	17,095	17,187	17,336	(X)	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.	3,066	3,007	3,019	3,002	3,222	3,153	3,256	3,195	3,213	3,008	3,026	3,052	3,052	(X)	(X)
519	MISC. NONDURABLE GOODS.....	8,056	7,594	7,408	8,012	8,460	8,060	7,958	7,992	7,227	7,193	7,487	7,303	7,373	(X)	(X)
	INVENTORIES, TOTAL.....	119,201	120,411	121,477	123,785	124,368	123,994	126,227	126,676	127,566	115,674	116,825	116,958	118,067	(X)	(X)
50	DURABLE GOODS.....	76,408	76,913	78,188	78,433	78,817	79,696	81,191	81,971	82,694	74,249	74,806	74,791	75,811	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	12,159	12,551	12,640	12,574	12,463	12,467	12,655	13,081	14,050	12,531	12,626	12,397	12,352	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	2,372	2,400	2,369	2,397	2,468	2,519	2,412	2,509	2,491	2,301	2,249	2,317	2,369	(X)	(X)
506	METALS & MINERALS, EX. PETROLEUM.	8,505	8,456	8,650	8,781	8,732	9,058	9,247	9,254	8,915	8,339	8,462	8,357	8,420	(X)	(X)
506	ELECTRICAL GOODS.....	9,438	9,405	9,710	10,106	10,400	10,640	11,240	11,517	11,858	8,451	8,571	8,620	8,901	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,638	4,722	4,808	4,789	4,912	4,821	4,986	5,132	5,190	4,548	4,561	4,769	4,678	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	29,115	28,755	29,230	29,093	29,263	29,781	29,771	29,852	29,661	27,564	28,168	28,020	28,793	(X)	(X)
51	NONDURABLE GOODS.....	42,793	43,501	43,289	45,347	45,551	44,298	45,036	44,705	44,874	41,425	42,019	42,167	42,256	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	2,343	2,414	2,434	2,480	2,523	2,507	2,548	2,584	2,557	2,230	2,242	2,353	2,343	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	8,721	9,164	8,950	9,257	9,613	9,171	9,747	9,766	9,986	8,384	8,462	8,792	8,530	(X)	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.	7,406	7,366	7,389	8,295	8,313	7,936	7,004	7,557	7,123	6,483	6,648	6,107	7,668	(X)	(X)
519	MISC. NONDURABLE GOODS.....	3,080	3,249	3,369	3,335	3,128	3,161	3,324	3,178	3,209	3,209	3,283				

Table 2. Percent Change in Sales and Inventories of Merchant Wholesalers

SIC CODE	KIND OF BUSINESS	UNADJUSTED					ADJUSTED ¹			
		SALES			INVENTORIES, END-OF-MONTH (AT COST)		SALES		INVENTORIES, END-OF-MONTH (AT COST)	
		SEP. 1984 FROM AUG. 1984	SEP. 1984 FROM SEP. 1983	9 MONTHS 1984 FROM 9 MONTHS 1983	SEP. 1984 FROM AUG. 1984	SEP. 1984 FROM SEP. 1983	SEP. 1984 FROM AUG. 1984	SEP. 1984 FROM SEP. 1983	SEP. 1984 FROM AUG. 1984	SEP. 1984 FROM SEP. 1983
	TOTAL.....	-7.1	+4.0	+15.7	+1.7	+10.3	-1.0	+9.1	+0.7	+10.3
50	DURABLE GOODS.....	-7.2	+9.9	+21.3	+1.3	+11.4	-0.8	+15.3	+0.9	+11.4
501	MOTOR VEHICLES & AUTO. EQUIP.	-8.0	+8.0	+19.9	+9.9	+11.9	+6.9	+14.3	+7.4	+12.1
502	FURNITURE & HOME FURNISHINGS.....	-4.4	+11.9	+30.0	+1.6	+8.2	-2.5	+14.7	-0.7	+8.3
505	METALS & MINERALS, EX. PETROLEUM.. (S)	(S)	(S)	(S)	-3.1	+6.8	(S)	(S)	-3.7	+6.9
506	ELECTRICAL GOODS.....	-2.2	+18.2	+29.8	+3.2	+40.3	-4.0	+18.4	+3.0	+40.3
507	HARDWARE, PLUMBING & HEATING EQUIP.	-9.4	+4.8	+17.6	-0.3	+14.0	-3.1	+8.5	+0.9	+13.9
508	MACHINERY, EQUIP. & SUPPLIES.....	-3.4	+15.4	+21.7	-0.5	+7.4	+4.4	+22.5	-0.6	+7.6
51	NONDURABLE GOODS.....	-7.0	-0.6	+11.5	+2.6	+8.2	-1.1	+4.5	+0.4	+8.3
511	PAPER & PAPER PRODUCTS.....	-10.3	+6.7	+22.1	-1.5	+14.9	-3.8	+13.1	-1.0	+14.7
514	GROCERIES & RELATED PRODUCTS.....	-7.1	+0.8	+11.6	+4.3	+15.6	-1.6	+5.1	-0.8	+15.5
515	FARM-PRODUCT RAW MATERIALS..... (S)	(S)	(S)	(S)	+1.0	-15.2	(S)	(S)	-5.7	-15.6
518	BEER, WINE, & DISTILLED BEVERAGES.	-14.4	-4.0	+0.8	+2.5	+2.0	+0.6	+5.8	+2.9	+1.9
519	MISC. NONDURABLE GOODS.....	-13.0	-3.4	+14.0	-0.6	+14.8	-9.6	+0.5	-1.6	+15.6

(S) DATA DO NOT MEET PUBLICATION STANDARDS.

¹ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES.

EXPLANATORY MATERIAL

Scope of Survey

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the *Standard Industrial Classification Manual*¹ and the 1977 Supplement and as covered in the 1977 Economic Censuses, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm, or professional business users; 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; and (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), who 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.

Also included in this survey are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments and manufacturers' sales branches of ferrous metal service centers SIC (505).

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.

The estimates of the coefficients of variation in percent for sales and inventories at the level of detail provided in this publication are shown in table 4. Note that 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. 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.

The coefficient of variation also 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.

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 13 percent of the sales estimates and 21 percent for inventories.

Differences between preliminary and final estimates² of seasonally adjusted sales ranged from approximately +0.7 percent to -0.7 percent for the past 12 months. During the same

¹Executive Office of the President, Office of Management and Budget, *Standard Industrial Classification Manual*, 1972, and the 1977 Supplement.

²See Sample Design and Estimation Procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983*.

period, the average of the absolute differences was 0.4 percent. The corresponding range for inventories was approximately +0.8 percent to -0.5 percent for the past 12 months. The average of the absolute differences was 0.3 percent.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventories estimates in this report reflect the results of a benchmarking³ operation which made use of 1982 estimates tabulated from the 1982 Annual Trade Survey. Monthly wholesale sales and inventories estimates were revised in a manner designed to minimize the differences in the month-to-month trends between the revised and unrevised series. The estimates for the unrevised series were derived by using composite estimating procedures. Monthly sales estimates were revised for the period January 1980 through December 1983. The revised monthly sales estimates for 1980 and 1981 were constrained to sum to the 1980 and 1981 annual estimates tabulated from the 1981 Annual Trade Survey. The revised monthly sales estimates for 1982 were constrained to sum to the 1982 annual estimates tabulated from the 1982 Annual Trade Survey. Similarly, monthly inventories were revised for the period January 1982 through December 1983 using end-of-year inventories tabulated for 1981 and 1982 as benchmarks. (For a few series, monthly inventories were revised for the period January 1978 through December 1983.)

Through the use of carry-forward factors, the effect of the revision process was applied to all composite estimates subsequent to December 1982. These factors were derived at the three-digit kind-of-business level and are held constant until the next revision and benchmarking process. Aggregate level estimates were derived by summing appropriate detail level estimates, thereby assuring additivity.

Subsequent revisions of the monthly sales and inventory series will make use of future annual surveys of wholesale trade and the 1982 Census of Wholesale Trade.

Unpublished Data

Sales and inventory estimates for unpublished three-digit and four-digit wholesale trade categories are not included in this publication because the sampling variability associated with these data do not meet publication criteria. The Census Bureau on written request will release these 1984 monthly data for individual use, though not for publication.

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

³For a more detailed description, see the section dealing with revisions to published data in the Current Business Report *Revised Monthly Wholesale Trade: January 1974 through December 1983*.

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 sources such as investments, rental or sale of real estate, etc.

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.

Inventories. Inventories represent stocks at cost of merchandise owned by merchant wholesalers at the end of the month regardless of location except for goods held outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included. Goods held in foreign trade zones in the United States are also included.

Stock/Sales Ratios. The stock/sales ratios are derived by dividing the dollar value of inventories 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.

Kind-of-Business Classifications

The durable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 50. This group includes establishments classified in SIC groups 501 through 509.

The nondurable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 51. This group includes establishments classified in SIC groups 511 through 519.

For a further description of the kinds of business included in the major groups see the *1972 Standard Industrial Classification Manual* and the 1977 Supplement.

Adjustment for Seasonal and Trading-Day Variation

Seasonal factors for adjusting data in this 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 estimates were also derived from the X-11 program.

Seasonal 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 conditions, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of the trading-day adjustment procedure 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 seasonal adjustment procedure may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

Table 3. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: June 1983—January 1985

SIC code	Kind of business	1983							1984											1985	
		June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
	Sales, ¹ total.....	1.037	0.946	1.022	1.005	1.016	1.018	1.003	0.953	0.956	1.053	0.976	1.056	1.003	0.971	1.022	0.958	1.064	1.014	0.973	0.982
50	Durable goods.....	1.056	0.953	1.048	1.028	1.040	1.015	0.984	0.902	0.948	1.045	0.988	1.038	1.014	0.981	1.048	0.980	1.085	1.015	0.960	0.938
501	Motor vehicles and auto. equip...	1.082	0.976	1.008	0.937	1.012	0.986	0.971	0.928	0.985	1.075	1.038	1.048	1.035	0.999	1.029	0.886	1.054	1.011	0.944	0.973
502	Furniture and home furnishings...	1.050	0.888	1.019	1.028	1.083	1.035	0.956	0.902	0.994	1.070	1.015	1.016	1.014	0.887	1.022	1.002	1.129	1.018	0.950	0.954
506	Electrical goods.....	1.055	0.994	1.044	1.050	1.034	1.048	1.030	0.895	0.939	1.010	0.933	1.003	1.033	1.012	1.029	1.049	1.061	1.022	1.014	0.917
507	Hardware, plumbing & heating equip.	1.052	1.009	1.084	1.045	1.062	1.015	0.933	0.932	0.906	0.983	0.996	1.027	1.008	1.045	1.078	1.009	1.112	1.013	0.922	0.953
508	Machinery, equip. and supplies...	1.058	0.942	1.055	1.036	1.007	0.999	1.010	0.834	0.955	1.050	0.995	1.049	1.028	0.966	1.055	0.976	1.057	0.998	0.980	0.926
51	Nondurable goods.....	1.037	0.943	1.002	0.991	1.001	1.022	1.020	0.975	0.956	1.060	0.971	1.058	1.009	0.968	1.002	0.943	1.048	1.021	0.981	1.006
511	Paper and paper products.....	1.024	0.927	1.045	1.038	1.015	1.008	0.988	0.980	0.981	1.052	0.953	1.034	0.985	0.954	1.050	0.980	1.073	1.013	0.951	1.015
514	Groceries and related products...	1.039	0.988	1.032	1.018	1.002	1.007	1.009	0.965	0.949	1.023	0.962	1.042	1.019	1.007	1.033	0.976	1.046	1.001	0.968	0.996
518	Beer, wine, & distilled beverages	1.115	1.007	1.072	1.032	0.975	1.097	1.161	0.776	0.834	0.982	0.952	1.062	1.069	1.022	1.101	0.937	1.057	1.112	1.084	0.824
519	Miscellaneous nondurable goods...	1.085	0.935	0.973	0.984	0.998	0.966	1.005	0.879	0.901	1.100	1.029	1.186	1.052	0.953	0.983	0.946	1.016	0.972	0.975	0.895
	Inventories, ¹ total.....	0.990	0.984	0.983	0.993	1.007	1.012	1.009	1.003	1.009	1.011	1.008	0.988	0.990	0.983	0.983	0.993	1.007	1.012	1.010	1.005
50	Durable goods.....	1.012	1.002	1.004	1.007	0.997	0.995	0.995	0.984	0.992	1.001	1.004	1.007	1.012	1.001	1.003	1.007	0.997	0.996	0.996	0.986
501	Motor vehicles and auto. equip...	0.998	0.994	0.973	0.997	1.001	1.005	1.011	1.003	1.000	1.005	1.011	0.998	0.998	0.994	0.972	0.995	0.999	1.012	1.016	0.997
502	Furniture and home furnishings...	1.011	1.012	0.999	1.023	0.993	0.977	0.981	0.982	0.998	1.017	1.010	0.995	1.010	1.012	0.999	1.022	0.990	0.976	0.981	0.988
505	Metals & minerals, ex. petroleum.	1.011	0.999	1.014	1.019	0.996	1.005	1.005	0.981	0.996	0.986	0.969	1.017	1.011	0.999	1.012	1.018	0.996	1.006	1.007	0.984
506	Electrical goods.....	1.014	1.013	1.016	1.018	1.028	1.009	0.990	0.962	0.973	0.980	0.992	1.002	1.014	1.013	1.016	1.018	1.027	1.005	0.984	0.970
507	Hardware, plumbing & heating equip.	1.015	1.013	0.999	0.986	0.985	0.958	0.969	0.991	1.004	1.015	1.043	1.020	1.014	1.013	0.999	0.987	0.986	0.959	0.972	0.990
508	Machinery, equip. and supplies...	1.018	1.005	1.004	1.006	0.991	0.988	0.991	0.976	0.992	1.005	1.010	1.013	1.017	1.005	1.003	1.004	0.990	0.988	0.994	0.984
51	Nondurable goods.....	0.953	0.945	0.949	0.971	1.028	1.047	1.041	1.043	1.035	1.025	0.998	0.963	0.954	0.944	0.949	0.970	1.026	1.044	1.040	1.042
511	Paper and paper products.....	1.010	1.013	1.003	0.997	0.994	1.010	0.999	0.991	0.993	0.990	0.989	1.008	1.009	1.013	1.004	0.999	0.996	1.011	1.003	0.990
514	Groceries and related products...	0.995	0.970	0.955	1.002	1.037	1.032	1.023	0.993	1.006	1.016	0.993	0.977	0.995	0.969	0.954	1.003	1.037	1.034	1.019	0.990
515	Farm-product raw materials.....	0.742	0.781	0.804	0.856	1.053	1.186	1.231	1.276	1.191	1.112	0.974	0.795	0.740	0.780	0.803	0.860	1.062	1.197	1.244	1.270
518	Beer, wine, & distilled beverages	1.022	1.009	0.999	0.996	1.068	1.085	0.925	0.959	0.944	0.978	0.996	1.011	1.023	1.010	1.001	0.997	1.068	1.084	0.918	0.952
519	Miscellaneous nondurable goods...	0.945	0.943	0.929	0.943	0.979	0.978	1.001	1.052	1.072	1.093	1.074	0.989	0.946	0.943	0.928	0.937	0.975	0.968	0.990	1.049

¹Adjusted sales and inventory data shown in table 1 are obtained by dividing the unadjusted data by the adjustment factors shown above for the corresponding group. Adjusted data for the totals are obtained by adding the durable and nondurable goods. Seasonal factors shown for the totals will provide an approximation of the adjusted estimates, but may show small differences from the published data.

Note: Merchant wholesalers totals and group totals include data for some groups not shown separately. The seasonal factors shown have been computed based on monthly estimates through June 1984.

Table 4. Coefficients of Variation of Sales and Inventories

(In percent)

SIC code	Kind of business	Sales						Inventories					
		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total....	1.2-1.7	1.5	1.4-1.7	1.5	0.6-0.9	0.7	1.5-1.8	1.7	1.6-1.7	1.7	0.3-0.4	0.3
50	Durable goods, total.....	1.4-1.7	1.5	1.3-1.5	1.4	0.5-0.9	0.7	1.6-2.0	2.0	1.8-2.0	1.8	0.3-0.4	0.3
501	Motor vehicles and automotive parts and supplies.....	3.2-4.3	3.8	3.3-4.1	3.5	1.1-2.0	1.6	2.8-3.5	3.4	3.0-3.8	3.2	0.8-1.5	1.0
502	Furniture and home furnishings.....	9.5-12.7	10.0	7.4-9.9	8.6	2.6-6.3	5.1	9.6-11.7	11.3	10.4-11.6	10.8	1.0-2.2	1.5
505	Metals and minerals, except petroleum (S)	(S)	(S)	(S)	(S)	(S)	(S)	4.2-4.9	4.6	4.2-4.8	4.6	0.6-1.2	0.9
506	Electrical goods.....	6.5-8.7	7.5	6.6-8.0	6.8	1.7-3.0	2.1	6.1-7.1	6.7	6.3-7.1	6.7	0.5-1.0	0.7
507	Hardware, plumbing, heating equipment, and supplies.....	6.0-7.3	6.2	5.5-6.5	6.3	1.7-2.9	2.2	6.0-6.6	6.2	5.7-6.3	6.1	0.9-1.7	1.2
508	Machinery, equipment, and supplies...	2.2-2.8	2.6	2.2-2.7	2.4	1.2-1.3	1.2	2.4-3.0	2.6	2.3-2.8	2.6	0.5-0.8	0.6
51	Nondurable goods, total.....	2.2-2.9	2.7	2.4-2.9	2.5	0.7-1.5	1.1	2.1-2.7	2.4	2.0-2.8	2.3	0.5-1.3	0.7
511	Paper and paper products.....	4.6-6.2	5.2	4.3-5.9	5.0	1.3-2.4	1.7	5.7-8.1	6.7	5.7-7.6	6.8	0.9-1.4	1.1
514	Groceries and related products.....	4.5-5.2	4.7	4.2-5.2	4.6	1.2-3.3	1.5	3.8-4.7	4.1	3.5-5.0	4.2	0.7-2.7	1.1
515	Farm-product raw materials.....	(S)	(S)	(S)	(S)	(S)	(S)	3.1-4.8	4.3	3.0-4.4	3.5	1.3-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages.....	4.4-6.1	5.2	4.7-7.6	5.3	1.2-3.6	2.2	3.6-4.7	4.5	3.8-4.5	4.1	1.1-2.4	1.7
519	Miscellaneous nondurable goods.....	3.7-5.2	4.4	3.8-4.4	4.0	1.4-3.7	3.1	4.7-5.6	5.2	4.7-5.9	5.0	1.1-2.2	1.5

S Data do not meet publication standards.

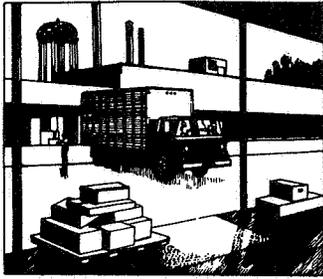
Note: Coefficients of variation are based on data unadjusted for seasonal variations or trading-day differences. The range and median coefficients of variation are based on data for August 1983 through January 1984.

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Monthly Wholesale Trade

Sales and Inventories

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BW-84-10

October 1984

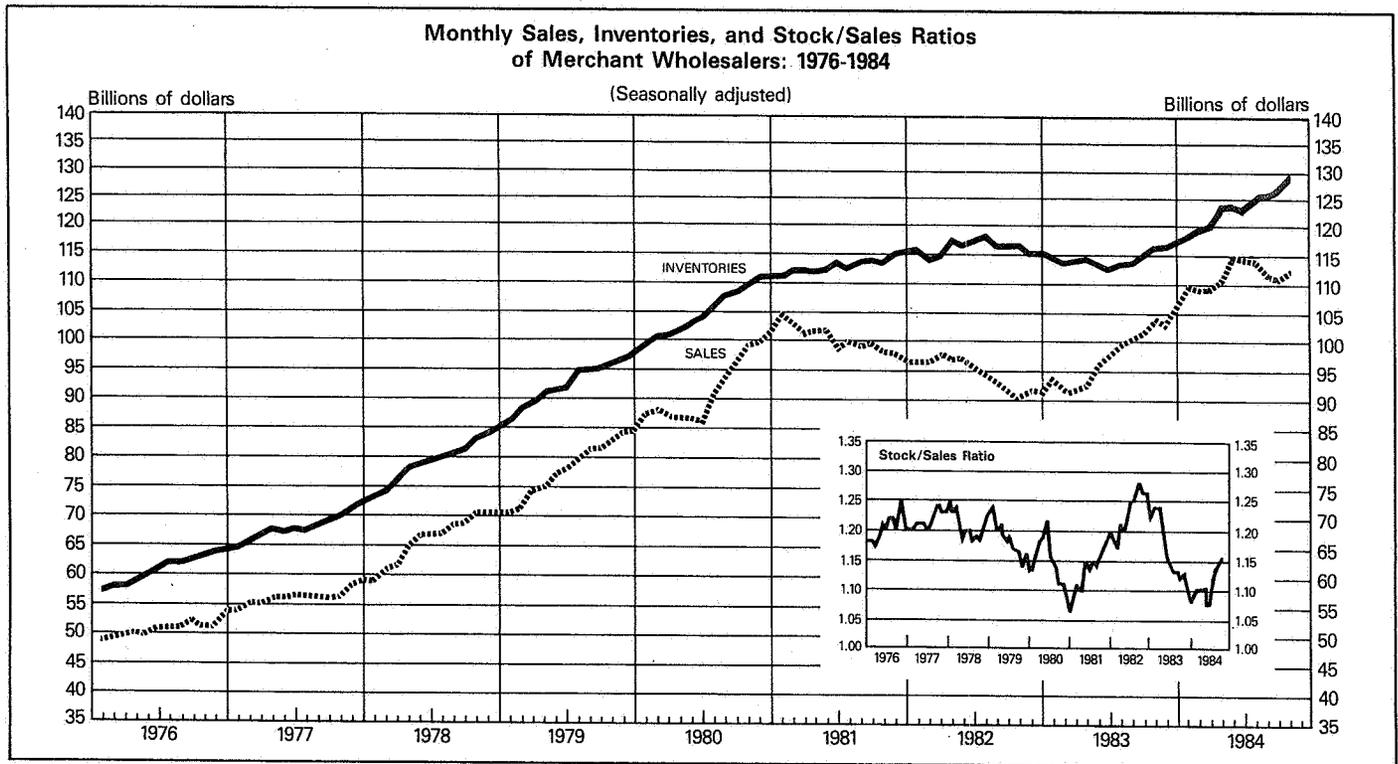
Sales October 1984 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$112.4 billion, little changed from the revised September level of \$112.1 billion, and up 7.8 percent from a year ago. The September preliminary estimate was revised upward by \$660 million or about 0.6 percent. October sales of durable goods increased 1.6 percent from the revised September level and were 15.3 percent above a year ago. Gains in the durable goods group were led by the sales of electrical goods, up 15.1 percent, followed by machinery, equipment, and supplies, which rose 4.2 percent. October sales of nondurable goods were little changed from the revised September level and were 2.3 percent above October 1983.

Inventories Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$129.8 billion at the

end of October, up 1.3 percent from the revised September level of \$128.2 billion, and 11.1 percent above a year ago. The September preliminary estimate was revised upward by \$637 million or 0.5 percent. Inventories of durable goods wholesalers were up 1.7 percent from the September level, and increased 13.1 percent from a year ago. Inventories of nondurable goods wholesalers were little changed from the September level and were 7.6 percent above October 1983.

Stock/Sales Ratio The October stock/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.16, up from the September ratio of 1.14 and above the year ago ratio of 1.12.

Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling errors. A discussion of the reliability of the data is on page 3.



U.S. Department of Commerce
BUREAU OF THE CENSUS

Address inquiries concerning this report to Shirley Roberts, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-3916 or 763-3917.

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Table 1. Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1984 and 1983

(SALES AND INVENTORIES IN MILLIONS OF DOLLARS)

SIC CODE	KIND OF BUSINESS	1984										1983			TOTAL 10 MONTHS	
		JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT. ^P	OCT.	NOV.	DEC.	1984	1983
DATA NOT ADJUSTED FOR SEASONAL VARIATION OR TRADING-DAY DIFFERENCES																
	SALES, TOTAL.....	103,878	103,183	115,399	108,662	120,765	115,692	110,345	115,117	107,592	119,656	106,051	105,762	107,361	1120289	970,667
50	DURABLE GOODS.....	43,165	44,848	50,634	48,774	53,133	52,943	49,908	53,034	49,488	55,685	46,300	45,620	45,621	501,612	413,569
501	MOTOR VEHICLES & AUTO. EQUIP.	8,859	8,640	9,802	9,573	10,717	10,703	9,387	9,623	9,006	10,621	9,030	8,953	8,963	96,931	80,898
502	FURNITURE & HOME FURNISHINGS.....	1,596	1,747	1,933	1,966	2,239	1,958	1,898	1,984	1,881	2,141	1,868	1,787	1,668	19,343	15,117
506	ELECTRICAL GOODS.....	5,713	6,063	6,824	6,418	6,839	7,129	7,038	7,579	7,669	8,931	6,249	6,332	6,537	70,207	53,274
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,611	2,623	2,886	2,885	3,086	3,172	3,253	3,324	2,971	3,257	2,887	2,834	2,626	30,068	25,727
508	MACHINERY, EQUIP. & SUPPLIES.....	11,986	12,486	14,253	13,652	15,133	14,722	13,782	14,498	13,816	15,596	11,970	12,174	12,465	139,924	114,313
51	NONDURABLE GOODS.....	60,713	58,335	64,765	59,888	67,632	62,749	60,437	62,083	58,104	63,971	59,751	60,142	61,740	618,677	557,098
511	PAPER & PAPER PRODUCTS.....	2,405	2,445	2,623	2,497	2,725	2,778	2,628	2,875	2,567	2,806	2,383	2,417	2,439	26,349	21,676
514	GROCERIES & RELATED PRODUCTS.....	17,085	17,885	18,565	18,125	19,791	18,586	18,297	19,352	17,993	18,975	17,129	17,307	17,492	184,054	165,037
518	BEER, WINE, & DISTILLED BEVERAGES.	2,379	2,508	2,965	2,858	3,422	3,371	3,328	3,518	3,031	3,512	2,933	3,320	3,443	30,892	30,082
519	MISC. NONDURABLE GOODS.....	7,081	6,842	8,149	8,244	10,033	9,005	7,584	7,856	6,968	7,899	7,472	7,055	7,410	79,661	70,279
	INVENTORIES, TOTAL.....	119,818	121,319	122,637	124,008	123,235	122,912	123,786	124,642	127,439	130,756	117,778	118,566	119,421	(X)	(X)
50	DURABLE GOODS.....	75,185	76,295	78,266	78,752	79,369	80,652	81,272	82,217	83,826	84,386	74,582	74,417	75,432	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	12,226	12,551	12,703	12,712	12,438	12,442	12,579	12,715	14,344	14,366	12,639	12,459	12,488	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	2,329	2,395	2,409	2,421	2,456	2,544	2,441	2,506	2,546	2,568	2,233	2,264	2,324	(X)	(X)
506	METALS & MINERALS, EX. PETROLEUM..	8,343	8,422	8,529	8,509	8,880	9,158	9,238	9,365	8,916	8,726	8,223	8,399	8,462	(X)	(X)
506	ELECTRICAL GOODS.....	9,079	9,151	9,516	10,025	10,425	10,789	11,386	11,701	12,164	12,298	8,811	8,698	8,812	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,567	4,741	4,880	4,995	5,010	4,889	5,051	5,127	5,128	5,149	4,493	4,569	4,533	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	28,417	28,525	29,376	29,384	29,643	30,287	29,920	29,942	29,942	30,463	27,914	27,684	28,534	(X)	(X)
51	NONDURABLE GOODS.....	44,633	45,024	44,371	45,256	43,866	42,260	42,514	42,425	43,613	46,370	43,196	44,149	43,989	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	2,322	2,401	2,410	2,453	2,543	2,530	2,581	2,594	2,519	2,590	2,229	2,377	2,341	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	8,660	9,219	9,093	9,192	9,392	9,125	9,493	9,317	9,637	10,286	8,775	9,073	8,726	(X)	(X)
515	FARM-PRODUCT RAW MATERIALS.....	9,450	8,773	8,217	9,079	6,605	5,873	5,463	6,068	6,326	7,643	9,106	9,615	9,439	(X)	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.	2,954	3,067	3,295	3,322	3,162	2,234	3,377	3,181	3,334	3,617	3,506	3,482	2,916	(X)	(X)
519	MISC. NONDURABLE GOODS.....	7,504	8,024	8,455	8,524	7,819	7,211	7,380	7,297	7,260	7,529	6,594	6,582	7,021	(X)	(X)
	STOCK/SALES RATIOS, TOTAL....	1.15	1.18	1.06	1.14	1.02	1.06	1.12	1.08	1.18	1.09	1.11	1.12	1.11	(X)	(X)
50	DURABLE GOODS.....	1.74	1.70	1.55	1.61	1.49	1.52	1.63	1.55	1.69	1.52	1.61	1.63	1.65	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	1.38	1.45	1.30	1.33	1.16	1.16	1.34	1.32	1.59	1.35	1.40	1.39	1.39	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	1.46	1.37	1.25	1.23	1.10	1.30	1.29	1.26	1.35	1.20	1.20	1.27	1.39	(X)	(X)
506	ELECTRICAL GOODS.....	1.59	1.51	1.39	1.56	1.52	1.51	1.62	1.54	1.59	1.38	1.41	1.37	1.35	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	1.75	1.81	1.69	1.73	1.62	1.54	1.55	1.54	1.73	1.58	1.56	1.61	1.73	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	2.37	2.28	2.06	2.15	1.96	2.06	2.17	2.07	2.17	1.95	2.33	2.27	2.29	(X)	(X)
51	NONDURABLE GOODS.....	0.74	0.77	0.69	0.76	0.65	0.67	0.70	0.68	0.75	0.72	0.72	0.73	0.71	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	0.97	0.98	0.92	0.98	0.93	0.91	0.98	0.90	0.98	0.92	0.94	0.98	0.96	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	0.51	0.53	0.49	0.51	0.47	0.49	0.52	0.48	0.54	0.54	0.51	0.52	0.50	(X)	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.	1.24	1.22	1.11	1.16	0.92	0.96	1.01	0.90	1.10	1.03	1.20	1.05	0.82	(X)	(X)
519	MISC. NONDURABLE GOODS.....	1.06	1.17	1.04	1.03	0.78	0.80	0.97	0.93	1.04	0.95	0.88	0.93	0.95	(X)	(X)
DATA ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES																
	SALES, TOTAL.....	110,125	108,328	109,553	111,043	115,112	114,401	113,310	112,564	112,114	112,364	104,210	103,793	106,892	(X)	(X)
50	DURABLE GOODS.....	47,855	47,308	48,454	49,366	51,188	52,212	50,875	50,605	50,498	51,323	44,519	44,946	46,363	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	9,546	8,772	9,118	9,223	10,226	10,341	9,396	9,352	10,165	10,077	8,923	9,080	9,231	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	1,769	1,758	1,807	1,937	2,204	1,931	2,140	1,941	1,877	1,896	1,725	1,727	1,745	(X)	(X)
506	ELECTRICAL GOODS.....	6,383	6,457	6,756	6,879	6,823	6,901	6,955	7,365	7,311	8,418	6,044	6,042	6,347	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,802	2,895	2,936	2,897	3,005	3,147	3,113	3,083	2,944	2,929	2,718	2,792	2,815	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	13,559	13,074	13,574	13,721	14,426	14,321	14,267	13,742	14,156	14,755	11,887	12,186	12,342	(X)	(X)
51	NONDURABLE GOODS.....	62,270	61,020	61,099	61,677	63,926	62,189	62,435	61,959	61,616	61,041	59,691	58,847	60,529	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	2,454	2,492	2,493	2,620	2,635	2,820	2,795	2,738	2,619	2,615	2,348	2,398	2,469	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	17,705	18,214	18,148	18,841	18,993	18,239	18,170	18,734	18,435	18,141	17,095	17,187	17,336	(X)	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.	3,066	3,007	3,019	3,002	3,222	3,153	3,296	3,195	3,323	3,323	3,008	3,026	3,052	(X)	(X)
519	MISC. NONDURABLE GOODS.....	8,056	7,594	7,408	8,012	8,460	8,560	7,988	7,992	7,366	7,775	7,487	7,303	7,373	(X)	(X)
	INVENTORIES, TOTAL.....	119,201	120,411	121,477	123,785	124,368	123,994	126,227	126,676	128,205	129,835	116,825	116,958	118,067	(X)	(X)
50	DURABLE GOODS.....	76,408	76,910	78,188	78,438	78,817	79,696	81,191	81,971	83,243	84,640	74,806	74,791	75,811	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	12,189	12,551	12,640	12,574	12,463	12,467	12,655	13,081	14,416	14,380	12,626	12,397	12,352	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	2,372	2,400	2,369	2,397	2,468	2,519	2,412	2,509	2,491	2,594	2,249	2,317	2,369	(X)	(X)
506	METALS & MINERALS, EX. PETROLEUM..	8,505	8,456	8,650	8,781	8,732	9,058	9,247	9,254	8,758	8,761	8,256	8,357	8,420	(X)	(X)
506	ELECTRICAL GOODS.....	9,408	9,405	9,710	10,106	10,604	10,640	11,240	11,517	11,949	11,975	8,571	8,620	8,901	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,638	4,722	4,808	4,789	4,912	4,821	4,986	5,132	5,196	5,222	4,561	4,769	4,678	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	29,116	28,755	29,230	29,093	29,263	29,781	29,771	29,852	29,823	30,771	28,168	28,020	28,793	(X)	(X)
51	NONDURABLE GOODS.....	42,793	43,501	43,289	45,347	45,551	44,298	45,036	44,705	44,962	45,195	42,019	42,167	42,256	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	2,343	2,418	2,434	2,480	2,523	2,507	2,548	2,584	2,522	2,600	2,242	2,353	2,343	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	8,721	9,164	8,950	9,257	9,613	9,171	9,797	9,766	9,608	9,919	8,462	8,792	8,530	(X)	(X)
515	FARM-PRODUCT RAW MATERIALS.....	7,406	7,366	7,389	8,295	8,313	7,936	7,004	7,557	7,356	7,197					

Table 2. Percent Change in Sales and Inventories of Merchant Wholesalers

SIC CODE	KIND OF BUSINESS	UNADJUSTED					ADJUSTED ¹			
		SALES			INVENTORIES, END-OF-MONTH (AT COST)		SALES		INVENTORIES, END-OF-MONTH (AT COST)	
		OCT. 1984 FROM SEP. 1984	OCT. 1984 FROM OCT. 1983	10 MONTHS 1984 FROM 10 MONTHS 1983	OCT. 1984 FROM SEP. 1984	OCT. 1984 FROM OCT. 1983	OCT. 1984 FROM SEP. 1984	OCT. 1984 FROM OCT. 1983	OCT. 1984 FROM SEP. 1984	OCT. 1984 FROM OCT. 1983
	TOTAL.....	+11.2	+12.8	+15.4	+2.6	+11.0	+0.2	+7.8	+1.5	+11.1
50	DURABLE GOODS.....	+12.5	+20.3	+21.3	+0.7	+13.1	+1.6	+15.3	+1.7	+13.1
501	MOTOR VEHICLES & AUTO. EQUIP.	+17.9	+17.6	+19.8	+0.2	+13.7	-0.9	+12.9	-0.2	+13.9
502	FURNITURE & HOME FURNISHINGS.....	+15.8	+14.6	+28.0	+0.9	+15.0	+1.0	+9.9	+4.1	+15.3
505	METALS & MINERALS, EX. PETROLEUM.. (S)	(S)	(S)	(S)	-2.1	+6.1	(S)	(S)	0.0	+6.1
506	ELECTRICAL GOODS.....	+16.5	+42.9	+31.8	+1.1	+39.6	+15.1	+39.3	+0.2	+39.7
507	HARDWARE, PLUMBING & HEATING EQUIP.	+9.6	+12.8	+16.9	+0.4	+14.6	-0.5	+7.8	+0.5	+14.5
508	MACHINERY, EQUIP. & SUPPLIES.....	+12.9	+30.3	+22.4	+1.7	+9.1	+4.2	+24.1	+3.2	+9.2
51	NONDURABLE GOODS.....	+10.1	+7.1	+11.1	+6.3	+7.3	-0.9	+2.3	+0.5	+7.6
511	PAPER & PAPER PRODUCTS.....	+9.3	+17.8	+21.6	+2.8	+16.2	-0.2	+11.4	+3.1	+16.0
514	GROCERIES & RELATED PRODUCTS.....	+5.5	+10.8	+11.5	+6.7	+17.2	-1.6	+6.1	+3.2	+17.2
515	FARM-PRODUCT RAW MATERIALS..... (S)	(S)	(S)	(S)	+20.6	-16.1	(S)	(S)	-2.2	-16.8
518	BEER, WINE, & DISTILLED BEVERAGES.	+15.9	+19.7	+2.7	+8.5	+3.2	+2.7	+10.5	+1.3	+3.2
519	MISC. NONDURABLE GOODS.....	+13.4	+5.7	+13.3	+3.7	+14.2	+5.6	+3.8	-0.3	+14.7

(S) DATA DO NOT MEET PUBLICATION STANDARDS.

¹ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES.

EXPLANATORY MATERIAL

Scope of Survey

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the *Standard Industrial Classification Manual*¹ and the 1977 Supplement and as covered in the 1977 Economic Censuses, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm, or professional business users; 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; and (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), who 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.

Also included in this survey are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments and manufacturers' sales branches of ferrous metal service centers SIC (505).

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.

The estimates of the coefficients of variation in percent for sales and inventories at the level of detail provided in this publication are shown in table 4. Note that 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. 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.

The coefficient of variation also 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.

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 13 percent of the sales estimates and 21 percent for inventories.

Differences between preliminary and final estimates² of seasonally adjusted sales ranged from approximately +0.6 percent to -0.7 percent for the past 12 months. During the same

¹Executive Office of the President, Office of Management and Budget, *Standard Industrial Classification Manual*, 1972, and the 1977 Supplement.

²See Sample Design and Estimation Procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983*.

period, the average of the absolute differences was 0.4 percent. The corresponding range for inventories was approximately +0.5 percent to -0.5 percent for the past 12 months. The average of the absolute differences was 0.3 percent.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventories estimates in this report reflect the results of a benchmarking³ operation which made use of 1982 estimates tabulated from the 1982 Annual Trade Survey. Monthly wholesale sales and inventories estimates were revised in a manner designed to minimize the differences in the month-to-month trends between the revised and unrevised series. The estimates for the unrevised series were derived by using composite estimating procedures. Monthly sales estimates were revised for the period January 1980 through December 1983. The revised monthly sales estimates for 1980 and 1981 were constrained to sum to the 1980 and 1981 annual estimates tabulated from the 1981 Annual Trade Survey. The revised monthly sales estimates for 1982 were constrained to sum to the 1982 annual estimates tabulated from the 1982 Annual Trade Survey. Similarly, monthly inventories were revised for the period January 1982 through December 1983 using end-of-year inventories tabulated for 1981 and 1982 as benchmarks. (For a few series, monthly inventories were revised for the period January 1978 through December 1983.)

Through the use of carry-forward factors, the effect of the revision process was applied to all composite estimates subsequent to December 1982. These factors were derived at the three-digit kind-of-business level and are held constant until the next revision and benchmarking process. Aggregate level estimates were derived by summing appropriate detail level estimates, thereby assuring additivity.

Subsequent revisions of the monthly sales and inventory series will make use of future annual surveys of wholesale trade and the 1982 Census of Wholesale Trade.

Unpublished Data

Sales and inventory estimates for unpublished three-digit and four-digit wholesale trade categories are not included in this publication because the sampling variability associated with these data do not meet publication criteria. The Census Bureau on written request will release these 1984 monthly data for individual use, though not for publication.

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 sources such as investments, rental or sale of real estate, etc.

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.

Inventories. Inventories represent stocks at cost of merchandise owned by merchant wholesalers at the end of the month regardless of location except for goods held outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included. Goods held in foreign trade zones in the United States are also included.

Stock/Sales Ratios. The stock/sales ratios are derived by dividing the dollar value of inventories 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.

Kind-of-Business Classifications

The durable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 50. This group includes establishments classified in SIC groups 501 through 509.

The nondurable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 51. This group includes establishments classified in SIC groups 511 through 519.

For a further description of the kinds of business included in the major groups see the *1972 Standard Industrial Classification Manual* and the 1977 Supplement.

Adjustment for Seasonal and Trading-Day Variation

Seasonal factors for adjusting data in this 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 estimates were also derived from the X-11 program.

Seasonal 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 conditions, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of the trading-day adjustment procedure 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 seasonal adjustment procedure may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

³For a more detailed description, see the section dealing with revisions to published data in the Current Business Report *Revised Monthly Wholesale Trade: January 1974 through December 1983*.

Table 3. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: June 1983—January 1985

SIC code	Kind of business	1983							1984												1985
		June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
	Sales, ¹ total.....	1.037	0.946	1.022	1.005	1.016	1.018	1.003	0.953	0.956	1.053	0.976	1.056	1.003	0.971	1.022	0.958	1.064	1.014	0.973	0.982
50	Durable goods.....	1.056	0.953	1.048	1.028	1.040	1.015	0.984	0.902	0.948	1.045	0.988	1.038	1.014	0.981	1.048	0.980	1.085	1.015	0.960	0.938
501	Motor vehicles and auto. equip...	1.082	0.976	1.008	0.937	1.012	0.986	0.971	0.928	0.985	1.075	1.038	1.048	1.035	0.999	1.029	0.886	1.054	1.011	0.944	0.973
502	Furniture and home furnishings...	1.050	0.888	1.019	1.028	1.083	1.035	0.956	0.902	0.994	1.070	1.015	1.016	1.014	0.887	1.022	1.002	1.129	1.018	0.950	0.954
506	Electrical goods.....	1.055	0.994	1.044	1.050	1.034	1.048	1.030	0.895	0.939	1.010	0.933	1.003	1.033	1.012	1.029	1.049	1.061	1.022	1.014	0.917
507	Hardware, plumbing & heating equip.	1.052	1.009	1.084	1.045	1.062	1.015	0.933	0.932	0.906	0.983	0.996	1.027	1.008	1.045	1.078	1.009	1.112	1.013	0.922	0.953
508	Machinery, equip. and supplies...	1.058	0.942	1.055	1.036	1.007	0.999	1.010	0.834	0.955	1.050	0.995	1.049	1.028	0.966	1.055	0.976	1.057	0.998	0.980	0.926
51	Nondurable goods.....	1.037	0.943	1.002	0.991	1.001	1.022	1.020	0.975	0.956	1.060	0.971	1.058	1.009	0.968	1.002	0.943	1.048	1.021	0.981	1.006
511	Paper and paper products.....	1.024	0.927	1.045	1.038	1.015	1.008	0.988	0.980	0.981	1.052	0.953	1.034	0.985	0.954	1.050	0.980	1.073	1.013	0.951	1.015
514	Groceries and related products...	1.039	0.988	1.032	1.018	1.002	1.007	1.009	0.965	0.949	1.023	0.962	1.042	1.019	1.007	1.033	0.976	1.046	1.001	0.968	0.996
518	Beer, wine, & distilled beverages	1.115	1.007	1.072	1.032	0.975	1.097	1.161	0.776	0.834	0.982	0.952	1.062	1.069	1.022	1.101	0.937	1.057	1.112	1.084	0.824
519	Miscellaneous nondurable goods...	1.085	0.935	0.973	0.984	0.998	0.966	1.005	0.879	0.901	1.100	1.029	1.186	1.052	0.953	0.983	0.946	1.016	0.972	0.975	0.895
	Inventories, ¹ total.....	0.990	0.984	0.983	0.993	1.007	1.012	1.009	1.003	1.009	1.011	1.008	0.988	0.990	0.983	0.983	0.993	1.007	1.012	1.010	1.005
50	Durable goods.....	1.012	1.002	1.004	1.007	0.997	0.995	0.995	0.984	0.992	1.001	1.004	1.007	1.012	1.001	1.003	1.007	0.997	0.996	0.996	0.986
501	Motor vehicles and auto. equip...	0.998	0.994	0.973	0.997	1.001	1.005	1.011	1.003	1.000	1.005	1.011	0.998	0.998	0.994	0.972	0.995	0.999	1.012	1.016	0.997
502	Furniture and home furnishings...	1.011	1.012	0.999	1.023	0.993	0.977	0.981	0.982	0.998	1.017	1.010	0.995	1.010	1.012	0.999	1.022	0.990	0.976	0.981	0.988
505	Metals & minerals, ex. petroleum.	1.011	0.999	1.014	1.019	0.996	1.005	1.005	0.981	0.996	0.986	0.969	1.017	1.011	0.999	1.012	1.018	0.996	1.006	1.007	0.984
506	Electrical goods.....	1.014	1.013	1.016	1.018	1.028	1.009	0.990	0.962	0.973	0.980	0.992	1.002	1.014	1.013	1.016	1.018	1.027	1.005	0.984	0.970
507	Hardware, plumbing & heating equip.	1.015	1.013	0.999	0.986	0.985	0.958	0.969	0.991	1.004	1.015	1.043	1.020	1.014	1.013	0.999	0.987	0.986	0.959	0.972	0.990
508	Machinery, equip. and supplies...	1.018	1.005	1.004	1.006	0.991	0.988	0.991	0.976	0.992	1.005	1.010	1.013	1.017	1.005	1.003	1.004	0.990	0.988	0.994	0.984
51	Nondurable goods.....	0.953	0.945	0.949	0.971	1.028	1.047	1.041	1.043	1.035	1.025	0.998	0.963	0.954	0.944	0.949	0.970	1.026	1.044	1.040	1.042
511	Paper and paper products.....	1.010	1.013	1.003	0.997	0.994	1.010	0.999	0.991	0.993	0.990	0.989	1.008	1.009	1.013	1.004	0.999	0.996	1.011	1.003	0.990
514	Groceries and related products...	0.995	0.970	0.955	1.002	1.037	1.032	1.023	0.993	1.006	1.016	0.993	0.977	0.995	0.969	0.954	1.003	1.037	1.034	1.019	0.990
515	Farm-product raw materials.....	0.742	0.781	0.804	0.856	1.053	1.186	1.231	1.276	1.191	1.112	0.974	0.795	0.740	0.780	0.803	0.860	1.062	1.197	1.244	1.270
518	Beer, wine, & distilled beverages	1.022	1.009	0.999	0.996	1.068	1.085	0.925	0.959	0.944	0.978	0.996	1.011	1.023	1.010	1.001	0.997	1.068	1.084	0.918	0.952
519	Miscellaneous nondurable goods...	0.945	0.943	0.929	0.943	0.979	0.978	1.001	1.052	1.072	1.093	1.074	0.989	0.946	0.943	0.928	0.937	0.975	0.968	0.990	1.049

¹Adjusted sales and inventory data shown in table 1 are obtained by dividing the unadjusted data by the adjustment factors shown above for the corresponding group. Adjusted data for the totals are obtained by adding the durable and nondurable goods. Seasonal factors shown for the totals will provide an approximation of the adjusted estimates, but may show small differences from the published data.

Note: Merchant wholesalers totals and group totals include data for some groups not shown separately. The seasonal factors shown have been computed based on monthly estimates through June 1984.

Table 4. Coefficients of Variation of Sales and Inventories

(In percent)

SIC code	Kind of business	Sales						Inventories					
		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total....	1.2-1.7	1.5	1.4-1.7	1.5	0.6-0.9	0.7	1.5-1.8	1.7	1.6-1.7	1.7	0.3-0.4	0.3
50	Durable goods, total.....	1.4-1.7	1.5	1.3-1.5	1.4	0.5-0.9	0.7	1.6-2.0	2.0	1.8-2.0	1.8	0.3-0.4	0.3
501	Motor vehicles and automotive parts and supplies.....	3.2-4.3	3.8	3.3-4.1	3.5	1.1-2.0	1.6	2.8-3.5	3.4	3.0-3.8	3.2	0.8-1.5	1.0
502	Furniture and home furnishings.....	9.5-12.7	10.0	7.4-9.9	8.6	2.6-6.3	5.1	9.6-11.7	11.3	10.4-11.6	10.8	1.0-2.2	1.5
505	Metals and minerals, except petroleum (S)	(S)	(S)	(S)	(S)	(S)	(S)	4.2-4.9	4.6	4.2-4.8	4.6	0.6-1.2	0.9
506	Electrical goods.....	6.5-8.7	7.5	6.6-8.0	6.8	1.7-3.0	2.1	6.1-7.1	6.7	6.3-7.1	6.7	0.5-1.0	0.7
507	Hardware, plumbing, heating equipment, and supplies.....	6.0-7.3	6.2	5.5-6.5	6.3	1.7-2.9	2.2	6.0-6.6	6.2	5.7-6.3	6.1	0.9-1.7	1.2
508	Machinery, equipment, and supplies...	2.2-2.8	2.6	2.2-2.7	2.4	1.2-1.3	1.2	2.4-3.0	2.6	2.3-2.8	2.6	0.5-0.8	0.6
51	Nondurable goods, total.....	2.2-2.9	2.7	2.4-2.9	2.5	0.7-1.5	1.1	2.1-2.7	2.4	2.0-2.8	2.3	0.5-1.3	0.7
511	Paper and paper products.....	4.6-6.2	5.2	4.3-5.9	5.0	1.3-2.4	1.7	5.7-8.1	6.7	5.7-7.6	6.8	0.9-1.4	1.1
514	Groceries and related products.....	4.5-5.2	4.7	4.2-5.2	4.6	1.2-3.3	1.5	3.8-4.7	4.1	3.5-5.0	4.2	0.7-2.7	1.1
515	Farm-product raw materials.....	(S)	(S)	(S)	(S)	(S)	(S)	3.1-4.8	4.3	3.0-4.4	3.5	1.3-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages.....	4.4-6.1	5.2	4.7-7.6	5.3	1.2-3.6	2.2	3.6-4.7	4.5	3.8-4.5	4.1	1.1-2.4	1.7
519	Miscellaneous nondurable goods.....	3.7-5.2	4.4	3.8-4.4	4.0	1.4-3.7	3.1	4.7-5.6	5.2	4.7-5.9	5.0	1.1-2.2	1.5

S Data do not meet publication standards.

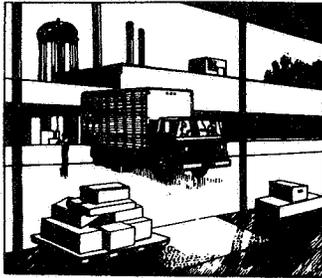
Note: Coefficients of variation are based on data unadjusted for seasonal variations or trading-day differences. The range and median coefficients of variation are based on data for August 1983 through January 1984.

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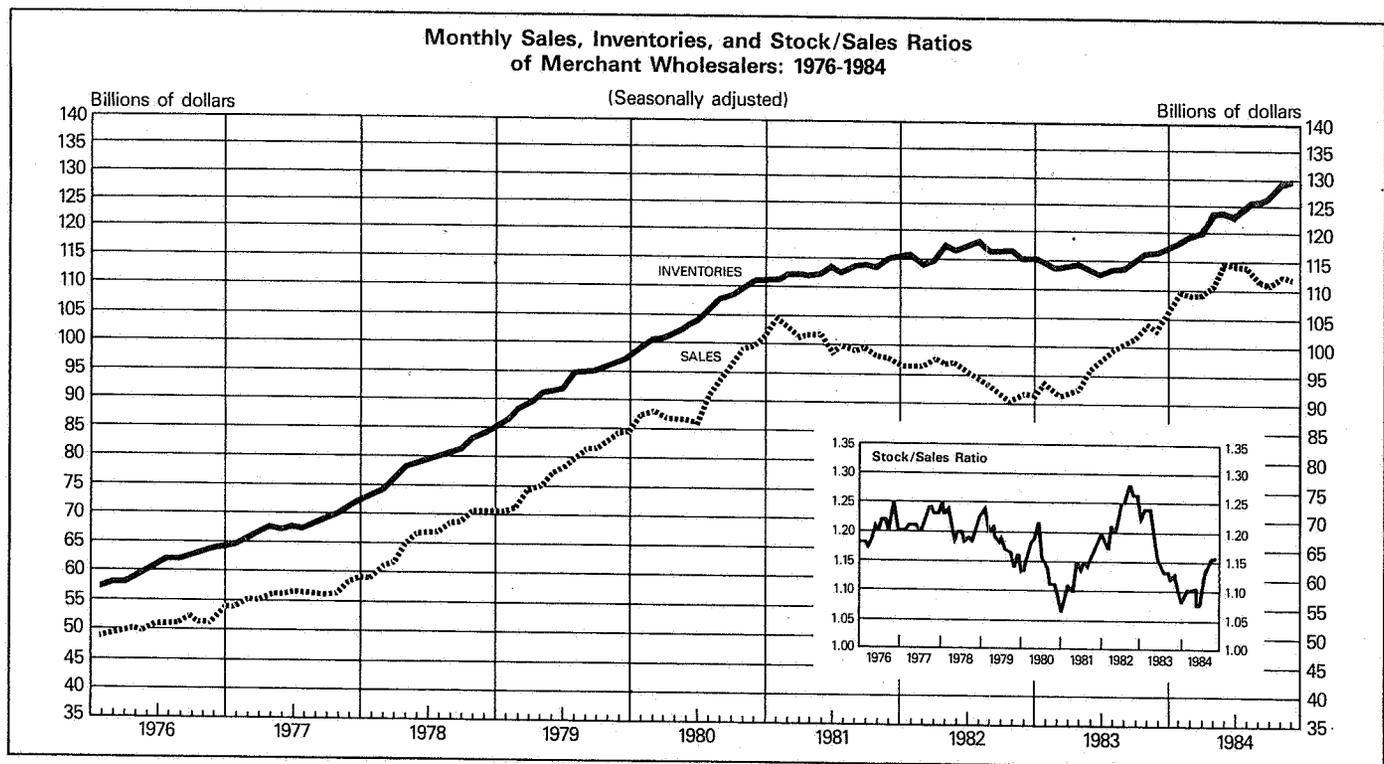
Sales November 1984 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$112.0 billion, little changed from the revised October level of \$111.4 billion, and up 7.9 percent from a year ago. The October preliminary estimate was revised downward by \$997 million or about 0.9 percent. November sales of durable goods were little changed from the revised October level and were 12.1 percent above a year ago. November sales of nondurable goods were up 1.3 percent from the revised October level and were 4.6 percent above November 1983. Based on seasonally adjusted data, comparisons with previous month sales levels showed mixed results in both durable and nondurable goods categories.

Inventories Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$129.6 billion at the

end of November, up 0.7 percent from the revised October level of \$128.7 billion, and 10.8 percent above a year ago. This is the fifth consecutive upward month-to-month percent change. The October preliminary estimate was revised downward by \$1,112 million or 0.9 percent. Inventories of durable goods wholesalers were little changed from the October level, and increased 12.2 percent from a year ago. Inventories of nondurable goods wholesalers were up 1.5 percent from the October level and were 8.3 percent above November 1983.

Stock/Sales Ratio The November stock/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.16, unchanged from the October ratio and above the year ago ratio of 1.13.

Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling errors. A discussion of the reliability of the data is on page 3.



U.S. Department of Commerce
BUREAU OF THE CENSUS

Address inquiries concerning this report to Shirley Roberts, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-3916 or 763-3917.

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Table 1. Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1984 and 1983

(SALES AND INVENTORIES IN MILLIONS OF DOLLARS)

SIC CODE	KIND OF BUSINESS	1984											1983		TOTAL 11 MONTHS	
		JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV. ^P	NOV.	DEC.	1984	1983
DATA NOT ADJUSTED FOR SEASONAL VARIATION OR TRADING-DAY DIFFERENCES																
	SALES, TOTAL.....	103,878	103,183	115,399	108,662	120,765	115,692	110,345	115,117	107,592	118,584	114,004	105,762	107,361	1,233,221	1,076,429
50	DURABLE GOODS.....	43,165	44,848	50,634	48,774	53,133	52,943	49,908	53,034	49,488	54,888	51,143	45,620	45,621	551,958	459,189
501	MOTOR VEHICLES & AUTO. EQUIP.	8,859	8,640	9,802	9,573	10,717	10,703	9,387	9,623	9,006	10,617	9,931	8,953	8,963	106,858	89,851
502	FURNITURE & HOME FURNISHINGS.....	1,596	1,747	1,933	1,966	2,239	1,958	1,898	1,984	1,881	2,126	2,038	1,767	1,668	21,366	16,904
506	ELECTRICAL GOODS.....	5,713	6,063	6,824	6,418	6,843	7,129	7,038	7,579	7,669	8,580	7,780	6,332	6,537	77,636	59,606
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,611	2,623	2,886	2,885	3,086	3,172	3,253	3,324	2,971	3,258	2,999	2,834	2,626	33,068	28,561
508	MACHINERY, EQUIP. & SUPPLIES.....	11,986	12,486	14,253	13,652	15,133	14,722	13,782	14,498	13,816	15,204	14,201	12,174	12,465	153,753	126,487
51	NONDURABLE GOODS.....	60,713	58,335	64,765	59,888	67,632	62,749	60,437	62,083	58,104	63,696	62,861	60,142	61,740	681,263	617,240
511	PAPER & PAPER PRODUCTS.....	2,405	2,445	2,623	2,497	2,725	2,778	2,628	2,875	2,567	2,797	2,630	2,417	2,439	28,970	24,093
514	GROCERIES & RELATED PRODUCTS.....	17,088	17,295	18,565	18,125	19,791	18,586	18,297	19,352	17,993	18,935	18,104	17,307	17,492	202,118	182,344
518	BEER, WINE, & DISTILLED BEVERAGES.	2,379	2,508	2,965	2,858	3,422	3,371	3,328	3,518	3,031	3,428	3,451	3,320	3,543	34,259	33,402
519	MISC. NONDURABLE GOODS.....	7,081	6,842	8,149	8,244	10,033	9,005	7,584	7,856	6,968	7,957	7,889	7,055	7,410	87,608	77,334
	INVENTORIES, TOTAL.....	119,818	121,319	122,637	124,008	123,235	122,912	123,786	124,642	127,439	129,641	131,251	118,566	119,421	(X)	(X)
50	DURABLE GOODS.....	75,185	76,295	78,266	78,752	79,369	80,652	81,272	82,217	83,826	83,496	83,580	74,417	75,432	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	12,226	12,551	12,703	12,712	12,438	12,442	12,579	12,715	14,344	13,960	14,151	12,459	12,488	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	2,329	2,395	2,409	2,421	2,456	2,544	2,544	2,506	2,546	2,592	2,558	2,264	2,324	(X)	(X)
505	METALS & MINERALS, EX. PETROLEUM..	8,343	8,422	8,529	8,509	8,880	9,158	9,238	9,365	8,916	8,712	8,825	8,399	8,462	(X)	(X)
506	ELECTRICAL GOODS.....	9,079	9,151	9,516	10,025	10,425	10,789	11,386	11,701	12,164	12,255	12,433	8,698	8,812	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,567	4,741	4,880	4,995	5,010	4,889	5,051	5,127	5,128	5,157	5,175	4,569	4,533	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	28,417	28,525	29,376	29,384	29,643	30,287	29,920	29,942	30,070	29,519	27,684	28,534	(X)	(X)	
51	NONDURABLE GOODS.....	44,633	45,024	44,371	45,256	43,866	42,260	42,514	42,425	43,613	46,145	47,671	44,149	43,989	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	2,322	2,401	2,410	2,453	2,543	2,530	2,581	2,594	2,519	2,550	2,626	2,377	2,341	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	8,660	9,219	9,093	9,192	9,392	9,125	9,493	9,317	9,637	10,200	10,215	9,073	8,726	(X)	(X)
515	FARM-PRODUCT RAW MATERIALS.....	9,450	9,773	8,217	8,079	6,609	5,873	5,463	6,068	6,326	7,505	8,808	9,615	9,439	(X)	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.	2,954	3,067	3,295	3,322	3,162	3,234	3,357	3,181	3,334	3,533	3,462	3,482	2,916	(X)	(X)
519	MISC. NONDURABLE GOODS.....	7,504	8,024	8,455	8,524	7,819	7,211	7,380	7,297	7,260	7,570	8,272	6,582	7,021	(X)	(X)
	STOCK/SALES RATIOS, TOTAL....	1.15	1.18	1.06	1.14	1.02	1.06	1.12	1.08	1.18	1.09	1.15	1.12	1.11	(X)	(X)
50	DURABLE GOODS.....	1.74	1.70	1.55	1.61	1.49	1.52	1.63	1.55	1.69	1.52	1.63	1.63	1.65	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	1.38	1.45	1.30	1.33	1.16	1.16	1.34	1.32	1.59	1.31	1.42	1.39	1.39	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	1.46	1.37	1.25	1.23	1.10	1.30	1.29	1.26	1.35	1.20	1.25	1.27	1.39	(X)	(X)
506	ELECTRICAL GOODS.....	1.59	1.51	1.39	1.56	1.52	1.51	1.62	1.54	1.59	1.43	1.60	1.37	1.35	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	1.75	1.81	1.69	1.73	1.62	1.54	1.55	1.54	1.73	1.58	1.73	1.61	1.73	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	2.37	2.28	2.06	2.15	1.96	2.06	2.17	2.07	2.17	1.98	2.08	2.27	2.29	(X)	(X)
51	NONDURABLE GOODS.....	0.74	0.77	0.69	0.76	0.65	0.67	0.70	0.68	0.75	0.72	0.76	0.73	0.71	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	0.97	0.98	0.92	0.98	0.93	0.91	0.98	0.90	0.98	0.91	1.00	0.98	0.96	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	0.51	0.53	0.49	0.51	0.47	0.49	0.52	0.48	0.54	0.54	0.56	0.52	0.50	(X)	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.	1.24	1.22	1.11	1.16	0.92	0.96	1.01	0.90	1.10	1.03	1.00	1.05	0.82	(X)	(X)
519	MISC. NONDURABLE GOODS.....	1.06	1.17	1.04	1.03	0.78	0.80	0.97	0.93	1.04	0.95	1.05	0.93	0.95	(X)	(X)
DATA ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES																
	SALES, TOTAL.....	110,125	108,328	109,553	111,043	115,112	114,401	113,310	112,564	112,114	111,367	111,955	103,793	106,892	(X)	(X)
50	DURABLE GOODS.....	47,855	47,308	48,454	49,366	51,188	52,212	50,875	50,605	50,498	50,588	50,387	44,946	46,363	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	9,546	8,772	9,118	9,223	10,226	10,341	9,396	9,352	10,165	10,073	9,823	9,080	9,231	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	1,769	1,758	1,807	1,937	2,204	1,931	2,140	1,941	1,877	1,883	2,002	1,727	1,745	(X)	(X)
506	ELECTRICAL GOODS.....	6,383	6,457	6,756	6,879	6,823	6,901	6,955	7,365	7,311	8,087	7,613	6,042	6,347	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,802	2,895	2,936	2,897	3,005	3,147	3,113	3,083	2,944	2,930	2,961	2,792	2,815	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	13,559	13,074	13,574	13,721	14,426	14,321	14,267	13,742	14,156	14,384	14,299	12,186	12,342	(X)	(X)
51	NONDURABLE GOODS.....	62,270	61,020	61,099	61,677	63,924	62,189	62,435	61,959	61,616	60,779	61,568	58,847	60,529	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	2,454	2,492	2,493	2,620	2,635	2,820	2,795	2,738	2,619	2,607	2,596	2,398	2,469	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	17,705	18,214	18,148	18,881	18,993	18,239	18,734	18,881	18,435	18,102	18,086	17,187	17,336	(X)	(X)
518	BEER, WINE, & DISTILLED BEVERAGES.	3,066	3,007	3,019	3,002	3,222	3,153	3,256	3,243	3,245	3,243	3,103	3,026	3,052	(X)	(X)
519	MISC. NONDURABLE GOODS.....	8,056	7,594	7,408	8,012	8,460	8,560	7,958	7,992	7,366	7,832	8,116	7,303	7,373	(X)	(X)
	INVENTORIES, TOTAL.....	119,201	120,411	121,477	123,785	124,368	123,994	126,227	126,676	128,205	128,723	129,578	116,958	118,067	(X)	(X)
50	DURABLE GOODS.....	76,408	76,910	78,188	78,438	78,817	79,696	81,191	81,971	83,243	83,747	83,916	74,791	75,811	(X)	(X)
501	MOTOR VEHICLES & AUTO. EQUIP.	12,189	12,551	12,640	12,574	12,463	12,467	12,655	13,081	14,416	13,974	13,983	12,397	12,352	(X)	(X)
502	FURNITURE & HOME FURNISHINGS.....	2,372	2,400	2,369	2,397	2,468	2,519	2,412	2,509	2,491	2,578	2,619	2,317	2,369	(X)	(X)
505	METALS & MINERALS, EX. PETROLEUM..	8,505	8,456	8,569	8,781	8,732	9,058	9,254	9,247	8,758	8,747	8,772	8,357	8,420	(X)	(X)
506	ELECTRICAL GOODS.....	9,438	9,405	9,710	10,106	10,404	10,640	11,240	11,517	11,949	11,933	12,371	8,620	8,901	(X)	(X)
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,608	4,722	4,808	4,789	4,912	4,821	4,986	5,132	5,196	5,230	5,396	4,769	4,678	(X)	(X)
508	MACHINERY, EQUIP. & SUPPLIES.....	29,116	28,755	29,230	29,093	29,263	29,781	29,771	29,852	29,823	30,374	29,878	28,020	28,793	(X)	(X)
51	NONDURABLE GOODS.....	42,793	43,501	43,289	45,347	45,551	44,298	45,036	44,705	44,962	44,976	45,662	42,167	42,256	(X)	(X)
511	PAPER & PAPER PRODUCTS.....	2,343	2,438	2,434	2,480	2,523	2,507	2,548	2,584	2,522	2,560	2,597	2,353	2,343	(X)	(X)
514	GROCERIES & RELATED PRODUCTS.....	8,721	9,164	8,950	9,257	9,613	9,171	9,797	9,766	9,608	9,836	9,879	8,792	8,530	(X)	(X)
515	FARM-PRODUCT RAW MATERIALS.....	7,406	7,366	7,389	8,295	8,313	7,936	7,004	7,557	7,356	7,067	7,3				

Table 2. Percent Change in Sales and Inventories of Merchant Wholesalers

SIC CODE	KIND OF BUSINESS	UNADJUSTED					ADJUSTED ¹			
		SALES			INVENTORIES, END-OF-MONTH (AT COST)		SALES		INVENTORIES, END-OF-MONTH (AT COST)	
		NOV. 1984 FROM OCT. 1984	NOV. 1984 FROM NOV. 1983	11 MONTHS FROM OCT. 1983	NOV. 1984 FROM OCT. 1984	NOV. 1984 FROM NOV. 1983	NOV. 1984 FROM OCT. 1984	NOV. 1984 FROM NOV. 1983	NOV. 1984 FROM OCT. 1984	NOV. 1984 FROM NOV. 1983
	TOTAL.....	-3.9	+7.8	+14.6	+1.2	+10.7	+0.5	+7.9	+0.7	+10.8
50	DURABLE GOODS.....	-6.8	+12.1	+20.2	+0.1	+12.3	-0.4	+12.1	+0.2	+12.2
501	MOTOR VEHICLES & AUTO. EQUIP.	-6.5	+10.9	+18.9	+1.4	+13.6	-2.5	+8.2	+0.1	+12.8
502	FURNITURE & HOME FURNISHINGS.....	-4.1	+14.0	+26.4	+0.2	+12.9	+6.3	+15.9	+1.6	+13.0
505	METALS & MINERALS, EX. PETROLEUM.. (S)	(S)	(S)	(S)	+1.3	+5.1	(S)	(S)	+0.3	+5.0
506	ELECTRICAL GOODS.....	-9.3	+22.9	+30.2	+1.5	+42.9	-5.9	+26.0	+3.7	+43.5
507	HARDWARE, PLUMBING & HEATING EQUIP.	-7.9	+5.8	+15.8	+0.3	+13.3	+1.1	+6.1	+3.2	+13.1
508	MACHINERY, EQUIP. & SUPPLIES.....	-6.6	+16.7	+21.5	-1.8	+6.6	-1.1	+16.8	-1.6	+6.6
51	NONDURABLE GOODS.....	-1.3	+4.5	+10.4	+3.3	+8.0	+1.3	+4.6	+1.5	+8.3
511	PAPER & PAPER PRODUCTS.....	-6.0	+8.8	+20.2	+3.0	+10.5	-0.4	+8.3	+1.4	+10.4
514	GROCERIES & RELATED PRODUCTS.....	-4.4	+4.6	+10.8	+0.1	+12.6	-0.1	+5.2	+0.4	+12.4
515	FARM-PRODUCT RAW MATERIALS..... (S)	(S)	(S)	(S)	+17.4	-6.4	(S)	(S)	+4.1	-9.2
518	BEER, WINE, & DISTILLED BEVERAGES.	+0.7	+3.9	+2.6	-2.0	-0.6	-4.3	+2.5	-3.4	-0.5
519	MISC. NONDURABLE GOODS.....	-0.9	+11.8	+13.3	+9.3	+25.7	+3.6	+11.1	+10.1	+27.0

(S) DATA DO NOT MEET PUBLICATION STANDARDS.

¹ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES.

EXPLANATORY MATERIAL

Scope of Survey

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the *Standard Industrial Classification Manual*¹ and the 1977 Supplement and as covered in the 1977 Economic Censuses, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm, or professional business users; 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; and (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), who 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.

Also included in this survey are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments and manufacturers' sales branches of ferrous metal service centers SIC (505).

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.

The estimates of the coefficients of variation in percent for sales and inventories at the level of detail provided in this publication are shown in table 4. Note that 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. 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.

The coefficient of variation also 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.

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 13 percent of the sales estimates and 21 percent for inventories.

Differences between preliminary and final estimates² of seasonally adjusted sales ranged from approximately +0.6 percent to -0.9 percent for the past 12 months. During the same

¹Executive Office of the President, Office of Management and Budget, *Standard Industrial Classification Manual, 1972*, and the 1977 Supplement.

²See Sample Design and Estimation Procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983*.

period, the average of the absolute differences was 0.4 percent. The corresponding range for inventories was approximately +0.5 percent to -0.9 percent for the past 12 months. The average of the absolute differences was 0.3 percent.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventories estimates in this report reflect the results of a benchmarking³ operation which made use of 1982 estimates tabulated from the 1982 Annual Trade Survey. Monthly wholesale sales and inventories estimates were revised in a manner designed to minimize the differences in the month-to-month trends between the revised and unrevised series. The estimates for the unrevised series were derived by using composite estimating procedures. Monthly sales estimates were revised for the period January 1980 through December 1983. The revised monthly sales estimates for 1980 and 1981 were constrained to sum to the 1980 and 1981 annual estimates tabulated from the 1981 Annual Trade Survey. The revised monthly sales estimates for 1982 were constrained to sum to the 1982 annual estimates tabulated from the 1982 Annual Trade Survey. Similarly, monthly inventories were revised for the period January 1982 through December 1983 using end-of-year inventories tabulated for 1981 and 1982 as benchmarks. (For a few series, monthly inventories were revised for the period January 1978 through December 1983.)

Through the use of carry-forward factors, the effect of the revision process was applied to all composite estimates subsequent to December 1982. These factors were derived at the three-digit kind-of-business level and are held constant until the next revision and benchmarking process. Aggregate level estimates were derived by summing appropriate detail level estimates, thereby assuring additivity.

Subsequent revisions of the monthly sales and inventory series will make use of future annual surveys of wholesale trade and the 1982 Census of Wholesale Trade.

Unpublished Data

Sales and inventory estimates for unpublished three-digit and four-digit wholesale trade categories are not included in this publication because the sampling variability associated with these data do not meet publication criteria. The Census Bureau on written request will release these 1984 monthly data for individual use, though not for publication.

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 sources such as investments, rental or sale of real estate, etc.

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.

Inventories. Inventories represent stocks at cost of merchandise owned by merchant wholesalers at the end of the month regardless of location except for goods held outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included. Goods held in foreign trade zones in the United States are also included.

Stock/Sales Ratios. The stock/sales ratios are derived by dividing the dollar value of inventories 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.

Kind-of-Business Classifications

The durable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 50. This group includes establishments classified in SIC groups 501 through 509.

The nondurable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 51. This group includes establishments classified in SIC groups 511 through 519.

For a further description of the kinds of business included in the major groups see the *1972 Standard Industrial Classification Manual* and the 1977 Supplement.

Adjustment for Seasonal and Trading-Day Variation

Seasonal factors for adjusting data in this 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 estimates were also derived from the X-11 program.

Seasonal 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 conditions, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of the trading-day adjustment procedure 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 seasonal adjustment procedure may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

³For a more detailed description, see the section dealing with revisions to published data in the Current Business Report *Revised Monthly Wholesale Trade: January 1974 through December 1983*.

Table 3. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: June 1983—January 1985

SIC code	Kind of business	1983							1984												1985
		June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
	Sales, ¹ total.....	1.037	0.946	1.022	1.005	1.016	1.018	1.003	0.953	0.956	1.053	0.976	1.056	1.003	0.971	1.022	0.958	1.064	1.014	0.973	0.982
50	Durable goods.....	1.056	0.953	1.048	1.028	1.040	1.015	0.984	0.902	0.948	1.045	0.988	1.038	1.014	0.981	1.048	0.980	1.085	1.015	0.960	0.938
501	Motor vehicles and auto. equip...	1.082	0.976	1.008	0.937	1.012	0.986	0.971	0.928	0.985	1.075	1.038	1.048	1.035	0.999	1.029	0.886	1.054	1.011	0.944	0.973
502	Furniture and home furnishings...	1.050	0.888	1.019	1.028	1.083	1.035	0.956	0.902	0.994	1.070	1.015	1.016	1.014	0.887	1.022	1.002	1.129	1.018	0.950	0.954
506	Electrical goods.....	1.055	0.994	1.044	1.050	1.034	1.048	1.030	0.895	0.939	1.010	0.933	1.003	1.033	1.012	1.029	1.049	1.061	1.022	1.014	0.917
507	Hardware, plumbing & heating equip.	1.052	1.009	1.084	1.045	1.062	1.015	0.933	0.932	0.906	0.983	0.996	1.027	1.008	1.045	1.078	1.009	1.112	1.013	0.922	0.953
508	Machinery, equip. and supplies...	1.058	0.942	1.055	1.036	1.007	0.999	1.010	0.834	0.955	1.050	0.995	1.049	1.028	0.966	1.055	0.976	1.057	0.998	0.980	0.926
51	Nondurable goods.....	1.037	0.943	1.002	0.991	1.001	1.022	1.020	0.975	0.956	1.060	0.971	1.058	1.009	0.968	1.002	0.943	1.048	1.021	0.981	1.006
511	Paper and paper products.....	1.024	0.927	1.045	1.038	1.015	1.008	0.988	0.980	0.981	1.052	0.953	1.034	0.985	0.954	1.050	0.980	1.073	1.013	0.951	1.015
514	Groceries and related products...	1.039	0.988	1.032	1.018	1.002	1.007	1.009	0.965	0.949	1.023	0.962	1.042	1.019	1.007	1.033	0.976	1.046	1.001	0.968	0.996
518	Beer, wine, & distilled beverages	1.115	1.007	1.072	1.032	0.975	1.097	1.161	0.776	0.834	0.982	0.952	1.062	1.069	1.022	1.101	0.937	1.057	1.112	1.084	0.824
519	Miscellaneous nondurable goods...	1.085	0.935	0.973	0.984	0.998	0.966	1.005	0.879	0.901	1.100	1.029	1.186	1.052	0.953	0.983	0.946	1.016	0.972	0.975	0.895
	Inventories, ¹ total.....	0.990	0.984	0.983	0.993	1.007	1.012	1.009	1.003	1.009	1.011	1.008	0.988	0.990	0.983	0.983	0.993	1.007	1.012	1.010	1.005
50	Durable goods.....	1.012	1.002	1.004	1.007	0.997	0.995	0.995	0.984	0.992	1.001	1.004	1.007	1.012	1.001	1.003	1.007	0.997	0.996	0.996	0.986
501	Motor vehicles and auto. equip...	0.998	0.994	0.973	0.997	1.001	1.005	1.011	1.003	1.000	1.005	1.011	0.998	0.998	0.994	0.972	0.995	0.999	1.012	1.016	0.997
502	Furniture and home furnishings...	1.011	1.012	0.999	1.023	0.993	0.977	0.981	0.982	0.998	1.017	1.010	0.995	1.010	1.012	0.999	1.022	0.990	0.976	0.981	0.988
505	Metals & minerals, ex. petroleum.	1.011	0.999	1.014	1.019	0.996	1.005	1.005	0.981	0.996	0.986	0.969	1.017	1.011	0.999	1.012	1.018	0.996	1.006	1.007	0.984
506	Electrical goods.....	1.014	1.013	1.016	1.018	1.028	1.009	0.990	0.962	0.973	0.980	0.992	1.002	1.014	1.013	1.016	1.018	1.027	1.005	0.984	0.970
507	Hardware, plumbing & heating equip.	1.015	1.013	0.999	0.986	0.985	0.958	0.969	0.991	1.004	1.015	1.043	1.020	1.014	1.013	0.999	0.987	0.986	0.959	0.972	0.990
508	Machinery, equip. and supplies...	1.018	1.005	1.004	1.006	0.991	0.988	0.991	0.976	0.992	1.005	1.010	1.013	1.017	1.005	1.003	1.004	0.990	0.988	0.994	0.984
51	Nondurable goods.....	0.953	0.945	0.949	0.971	1.028	1.047	1.041	1.043	1.035	1.025	0.998	0.963	0.954	0.944	0.949	0.970	1.026	1.044	1.040	1.042
511	Paper and paper products.....	1.010	1.013	1.003	0.997	0.994	1.010	0.999	0.991	0.993	0.990	0.989	1.008	1.009	1.013	1.004	0.999	0.996	1.011	1.003	0.990
514	Groceries and related products...	0.995	0.970	0.955	1.002	1.037	1.032	1.023	0.993	1.006	1.016	0.993	0.977	0.995	0.969	0.954	1.003	1.037	1.034	1.019	0.990
515	Farm-product raw materials.....	0.742	0.781	0.804	0.856	1.053	1.186	1.231	1.276	1.191	1.112	0.974	0.795	0.740	0.780	0.803	0.860	1.062	1.197	1.244	1.270
518	Beer, wine, & distilled beverages	1.022	1.009	0.999	0.996	1.068	1.085	0.925	0.959	0.944	0.978	0.996	1.011	1.023	1.010	1.001	0.997	1.068	1.084	0.918	0.952
519	Miscellaneous nondurable goods...	0.945	0.943	0.929	0.943	0.979	0.978	1.001	1.052	1.072	1.093	1.074	0.989	0.946	0.943	0.928	0.937	0.975	0.968	0.990	1.049

¹Adjusted sales and inventory data shown in table 1 are obtained by dividing the unadjusted data by the adjustment factors shown above for the corresponding group. Adjusted data for the totals are obtained by adding the durable and nondurable goods. Seasonal factors shown for the totals will provide an approximation of the adjusted estimates, but may show small differences from the published data.

Note: Merchant wholesalers totals and group totals include data for some groups not shown separately. The seasonal factors shown have been computed based on monthly estimates through June 1984.

Table 4. Coefficients of Variation of Sales and Inventories

(In percent)

SIC code	Kind of business	Sales						Inventories					
		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
	Merchant wholesalers, total....	1.2-1.7	1.5	1.4-1.7	1.5	0.6-0.9	0.7	1.5-1.8	1.7	1.6-1.7	1.7	0.3-0.4	0.3
50	Durable goods, total.....	1.4-1.7	1.5	1.3-1.5	1.4	0.5-0.9	0.7	1.6-2.0	2.0	1.8-2.0	1.8	0.3-0.4	0.3
501	Motor vehicles and automotive parts and supplies.....	3.2-4.3	3.8	3.3-4.1	3.5	1.1-2.0	1.6	2.8-3.5	3.4	3.0-3.8	3.2	0.8-1.5	1.0
502	Furniture and home furnishings.....	9.5-12.7	10.0	7.4-9.9	8.6	2.6-6.3	5.1	9.6-11.7	11.3	10.4-11.6	10.8	1.0-2.2	1.5
505	Metals and minerals, except petroleum (S)	(S)	(S)	(S)	(S)	(S)	(S)	4.2-4.9	4.6	4.2-4.8	4.6	0.6-1.2	0.9
506	Electrical goods.....	6.5-8.7	7.5	6.6-8.0	6.8	1.7-3.0	2.1	6.1-7.1	6.7	6.3-7.1	6.7	0.5-1.0	0.7
507	Hardware, plumbing, heating equipment, and supplies.....	6.0-7.3	6.2	5.5-6.5	6.3	1.7-2.9	2.2	6.0-6.6	6.2	5.7-6.3	6.1	0.9-1.7	1.2
508	Machinery, equipment, and supplies...	2.2-2.8	2.6	2.2-2.7	2.4	1.2-1.3	1.2	2.4-3.0	2.6	2.3-2.8	2.6	0.5-0.8	0.6
51	Nondurable goods, total.....	2.2-2.9	2.7	2.4-2.9	2.5	0.7-1.5	1.1	2.1-2.7	2.4	2.0-2.8	2.3	0.5-1.3	0.7
511	Paper and paper products.....	4.6-6.2	5.2	4.3-5.9	5.0	1.3-2.4	1.7	5.7-8.1	6.7	5.7-7.6	6.8	0.9-1.4	1.1
514	Groceries and related products.....	4.5-5.2	4.7	4.2-5.2	4.6	1.2-3.3	1.5	3.8-4.7	4.1	3.5-5.0	4.2	0.7-2.7	1.1
515	Farm-product raw materials.....	(S)	(S)	(S)	(S)	(S)	(S)	3.1-4.8	4.3	3.0-4.4	3.5	1.3-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages.....	4.4-6.1	5.2	4.7-7.6	5.3	1.2-3.6	2.2	3.6-4.7	4.5	3.8-4.5	4.1	1.1-2.4	1.7
519	Miscellaneous nondurable goods.....	3.7-5.2	4.4	3.8-4.4	4.0	1.4-3.7	3.1	4.7-5.6	5.2	4.7-5.9	5.0	1.1-2.2	1.5

S Data do not meet publication standards.

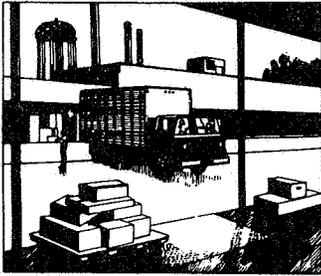
Note: Coefficients of variation are based on data unadjusted for seasonal variations or trading-day differences. The range and median coefficients of variation are based on data for August 1983 through January 1984.

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Monthly Wholesale Trade

December 1984

Sales and Inventories

Issued February 1985

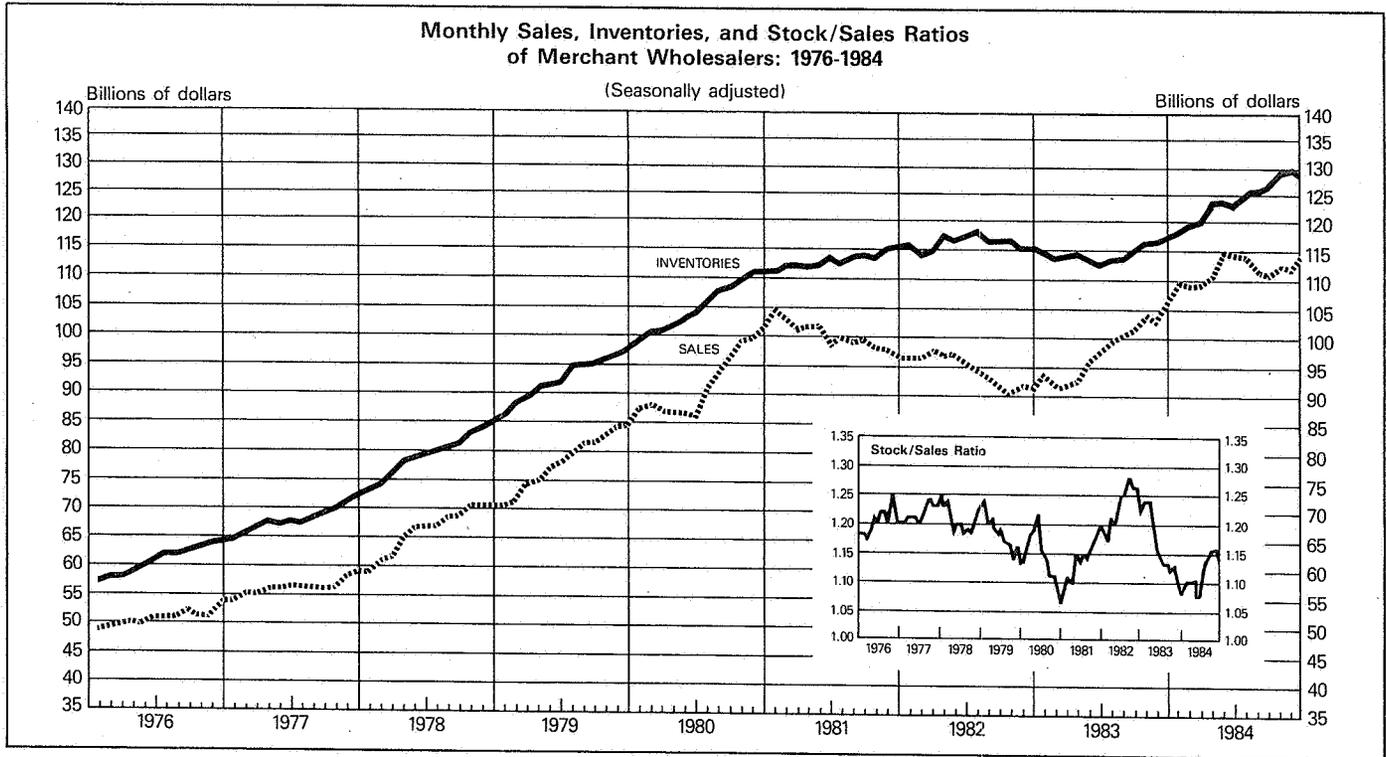
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INTENTION TO REVISE WHOLESALE ESTIMATES: The unadjusted and adjusted merchant wholesale sales, inventories, and stock/sales ratio estimates will be revised utilizing the results from the 1982 Census of Wholesale Trade and 1983 Annual Trade Survey. Revised estimates for the period January 1975 through December 1984 along with the previously published estimates for the same period are scheduled for release during the week of March 25th.

Sales December 1984 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$113.5 billion, up 1.2 percent from the revised November level of \$112.1 billion, and up 6.1 percent from a year ago. The November preliminary estimate was revised upward by \$193 million or about 0.2 percent. December sales of durable goods were down 0.8 percent from November but were 7.7 percent above a year ago. December sales of nondurable goods increased 2.8 percent from November and were 4.9 percent above December 1983.

Inventories Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$129.1 billion at the end of December, down 0.7 percent from the revised November level of \$130.0 billion, but 9.3 percent above a year ago. The November preliminary estimate was revised upward by \$418 million or 0.3 percent. Inventories of durable goods wholesalers were little changed from the November level, and increased 10.7 percent from a year ago. Inventories of nondurable goods wholesalers were down 1.8 percent from November but were up 6.9 percent from December 1983.

Stock/Sales Ratio The December stock/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.14, down from the November ratio of 1.16 but above the year ago ratio of 1.10. Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling errors. A discussion of the reliability of the data is on page 3.



U.S. Department of Commerce
BUREAU OF THE CENSUS

Address inquiries concerning this report to Shirley Roberts, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-3916 or 763-3917.

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Table 1. Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1984 and 1983

(SALES AND INVENTORIES IN MILLIONS OF DOLLARS)

SIC CODE	KIND OF BUSINESS	1984												1983		TOTAL 12 MONTHS	
		JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC. ^P	DEC.	1984	1983	
		DATA NOT ADJUSTED FOR SEASONAL VARIATION OR TRADING-DAY DIFFERENCES															
	SALES, TOTAL.....	103,878	103,183	115,399	108,662	120,765	115,692	110,345	115,117	107,592	118,584	114,201	110,250	107,361	134,368	118,370	
50	DURABLE GOODS.....	43,165	44,848	50,634	48,774	53,133	52,943	49,908	53,034	49,488	54,888	51,106	47,950	45,621	599,871	504,810	
501	MOTOR VEHICLES & AUTO. EQUIP.	8,859	8,640	9,802	9,573	10,717	10,703	9,387	9,623	9,006	10,617	9,996	9,532	8,963	116,455	98,814	
502	FURNITURE & HOME FURNISHINGS.....	1,596	1,747	1,933	1,966	2,239	1,958	1,898	1,984	2,126	2,046	1,642	1,668	1,668	23,016	18,572	
506	ELECTRICAL GOODS.....	5,713	6,063	6,824	6,418	6,843	7,129	7,038	7,579	7,669	8,580	7,743	7,433	6,537	85,032	66,143	
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,611	2,623	2,886	2,885	3,086	3,172	3,253	3,324	2,971	3,258	3,062	2,947	2,626	36,078	31,187	
508	MACHINERY, EQUIP. & SUPPLIES.....	11,986	12,486	14,253	13,652	15,133	14,722	13,782	14,498	13,816	15,204	14,050	13,878	12,465	167,460	138,982	
51	NONDURABLE GOODS.....	60,713	58,335	64,765	59,888	67,632	62,749	60,437	62,083	58,104	63,696	63,095	62,300	61,740	743,797	678,980	
511	PAPER & PAPER PRODUCTS.....	2,405	2,445	2,623	2,497	2,725	2,778	2,628	2,875	2,567	2,797	2,705	2,411	2,439	31,456	26,532	
514	GROCERIES & RELATED PRODUCTS.....	17,085	17,285	18,565	18,125	19,791	18,586	18,357	19,353	17,993	18,935	18,475	18,912	17,492	221,401	199,836	
518	BEER, WINE, & DISTILLED BEVERAGES	2,379	2,508	2,965	2,858	3,422	3,371	3,328	3,518	3,031	3,428	3,446	3,675	3,543	37,929	26,945	
519	MISC. NONDURABLE GOODS.....	7,081	6,842	8,149	8,244	10,033	9,005	7,584	7,856	6,968	7,957	7,688	7,449	7,410	94,856	84,744	
50	INVENTORIES, TOTAL.....	119,818	121,319	122,637	124,008	123,235	122,912	123,786	124,642	127,439	129,641	131,683	130,540	119,421	(X)	(X)	
50	DURABLE GOODS.....	75,185	76,295	78,266	78,752	79,369	80,652	81,272	82,217	83,826	83,496	83,691	83,575	75,432	(X)	(X)	
501	MOTOR VEHICLES & AUTO. EQUIP.	12,226	12,551	12,703	12,712	12,438	12,442	12,579	12,715	14,344	13,960	14,090	14,149	12,488	(X)	(X)	
502	FURNITURE & HOME FURNISHINGS.....	2,329	2,395	2,409	2,421	2,456	2,544	2,441	2,506	2,546	2,552	2,626	2,613	2,324	(X)	(X)	
505	METALS & MINERALS, EX. PETROLEUM	8,343	8,422	8,529	8,509	8,880	9,158	9,238	9,365	8,916	8,712	8,874	8,822	8,462	(X)	(X)	
506	ELECTRICAL GOODS.....	9,079	9,151	9,516	10,025	10,425	10,789	11,386	11,701	12,164	12,255	12,273	12,396	8,812	(X)	(X)	
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,567	4,741	4,880	4,995	5,010	4,889	5,151	5,127	5,128	5,157	5,225	5,194	4,533	(X)	(X)	
508	MACHINERY, EQUIP. & SUPPLIES.....	28,417	28,525	29,376	29,384	29,643	30,287	29,920	29,942	29,942	30,070	29,609	29,559	28,534	(X)	(X)	
51	NONDURABLE GOODS.....	44,633	45,024	44,371	45,256	43,866	42,260	42,514	42,425	43,613	46,145	47,992	46,965	43,989	(X)	(X)	
511	PAPER & PAPER PRODUCTS.....	2,322	2,401	2,410	2,453	2,543	2,530	2,581	2,594	2,519	2,550	2,636	2,576	2,341	(X)	(X)	
514	GROCERIES & RELATED PRODUCTS.....	8,650	8,719	8,093	8,192	8,392	8,125	8,493	8,317	8,637	10,200	10,371	10,031	8,726	(X)	(X)	
515	FARM-PRODUCT RAW MATERIALS.....	9,450	8,773	8,217	8,079	6,609	5,873	5,463	6,068	6,326	7,505	8,071	6,326	9,439	(X)	(X)	
518	BEER, WINE, & DISTILLED BEVERAGES	2,954	3,067	3,295	3,322	3,162	3,234	3,357	3,181	3,334	3,533	3,530	3,026	2,916	(X)	(X)	
519	MISC. NONDURABLE GOODS.....	7,504	8,024	8,455	8,524	7,819	7,211	7,380	7,297	7,260	7,570	8,202	8,471	7,021	(X)	(X)	
	STOCK/SALES RATIOS, TOTAL.....	1.15	1.18	1.06	1.14	1.02	1.06	1.12	1.08	1.18	1.09	1.15	1.18	1.11	(X)	(X)	
50	DURABLE GOODS.....	1.74	1.70	1.55	1.61	1.49	1.52	1.63	1.55	1.69	1.52	1.64	1.74	1.65	(X)	(X)	
501	MOTOR VEHICLES & AUTO. EQUIP.	1.38	1.45	1.30	1.33	1.16	1.16	1.44	1.32	1.59	1.31	1.41	1.48	1.39	(X)	(X)	
502	FURNITURE & HOME FURNISHINGS.....	1.46	1.37	1.25	1.23	1.10	1.30	1.29	1.26	1.35	1.20	1.28	1.59	1.39	(X)	(X)	
506	ELECTRICAL GOODS.....	1.59	1.51	1.39	1.56	1.52	1.51	1.52	1.54	1.59	1.43	1.59	1.67	1.35	(X)	(X)	
507	HARDWARE, PLUMBING & HEATING EQUIP.	1.75	1.81	1.69	1.73	1.62	1.54	1.55	1.54	1.73	1.58	1.71	1.76	1.73	(X)	(X)	
508	MACHINERY, EQUIP. & SUPPLIES.....	2.37	2.28	2.06	2.15	1.96	2.06	2.17	2.07	2.17	1.98	2.11	2.13	2.29	(X)	(X)	
51	NONDURABLE GOODS.....	0.74	0.77	0.69	0.76	0.65	0.67	0.70	0.68	0.75	0.72	0.76	0.75	0.71	(X)	(X)	
511	PAPER & PAPER PRODUCTS.....	0.97	0.98	0.92	0.98	0.93	0.91	0.92	0.90	0.98	0.91	0.97	1.07	0.96	(X)	(X)	
514	GROCERIES & RELATED PRODUCTS.....	0.51	0.53	0.49	0.51	0.47	0.49	0.52	0.48	0.54	0.54	0.56	0.53	0.50	(X)	(X)	
518	BEER, WINE, & DISTILLED BEVERAGES	1.24	1.22	1.11	1.16	0.92	0.96	1.01	0.90	1.10	1.03	1.02	0.82	0.82	(X)	(X)	
519	MISC. NONDURABLE GOODS.....	1.06	1.17	1.04	1.03	0.78	0.80	0.97	0.93	1.04	0.95	1.07	1.14	0.95	(X)	(X)	
		DATA ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES															
	SALES, TOTAL.....	110,125	108,328	109,553	111,043	115,112	114,401	113,310	112,564	112,114	111,367	112,148	113,455	106,892	(X)	(X)	
50	DURABLE GOODS.....	47,855	47,308	48,454	49,366	51,188	52,212	50,875	50,605	50,498	50,588	50,351	49,948	46,363	(X)	(X)	
501	MOTOR VEHICLES & AUTO. EQUIP.	9,546	8,772	9,118	9,223	10,226	10,341	9,396	9,352	10,165	10,073	9,887	10,097	9,231	(X)	(X)	
502	FURNITURE & HOME FURNISHINGS.....	1,769	1,758	1,807	1,937	2,204	1,931	2,140	1,941	1,877	1,883	2,010	1,728	1,795	(X)	(X)	
506	ELECTRICAL GOODS.....	6,383	6,457	6,756	6,879	6,823	6,901	6,955	7,365	7,311	8,087	7,576	7,330	6,347	(X)	(X)	
507	HARDWARE, PLUMBING & HEATING EQUIP.	2,802	2,895	2,936	2,897	3,005	3,147	3,113	3,083	2,944	2,930	3,023	3,196	2,815	(X)	(X)	
508	MACHINERY, EQUIP. & SUPPLIES.....	13,559	13,074	13,574	13,721	14,426	14,321	14,267	13,742	14,156	14,384	14,078	14,161	12,342	(X)	(X)	
51	NONDURABLE GOODS.....	62,270	61,020	61,099	61,677	63,924	62,189	62,435	61,959	61,616	60,779	61,797	63,507	60,529	(X)	(X)	
511	PAPER & PAPER PRODUCTS.....	2,454	2,492	2,493	2,620	2,635	2,820	2,755	2,738	2,619	2,607	2,670	2,535	2,469	(X)	(X)	
514	GROCERIES & RELATED PRODUCTS.....	17,705	18,218	18,148	18,841	19,993	18,225	18,170	18,734	18,438	18,102	18,457	19,537	17,336	(X)	(X)	
518	BEER, WINE, & DISTILLED BEVERAGES	3,066	3,007	3,019	3,002	3,222	3,153	3,256	3,195	3,235	3,243	3,099	3,290	3,052	(X)	(X)	
519	MISC. NONDURABLE GOODS.....	8,056	7,594	7,408	8,012	8,460	8,560	7,958	7,992	7,366	7,832	7,909	7,640	7,373	(X)	(X)	
50	INVENTORIES, TOTAL.....	119,201	120,411	121,477	123,785	124,368	123,994	126,227	126,676	128,205	128,723	129,996	129,070	118,067	(X)	(X)	
50	DURABLE GOODS.....	76,408	76,910	78,188	78,438	78,817	79,696	81,191	81,971	83,243	83,747	84,027	83,911	75,811	(X)	(X)	
501	MOTOR VEHICLES & AUTO. EQUIP.	12,189	12,551	12,640	12,574	12,463	12,467	12,655	13,081	14,416	13,974	13,923	13,926	12,352	(X)	(X)	
502	FURNITURE & HOME FURNISHINGS.....	2,372	2,400	2,369	2,397	2,468	2,519	2,412	2,509	2,491	2,578	2,621	2,664	2,369	(X)	(X)	
505	METALS & MINERALS, EX. PETROLEUM	8,505	8,456	8,650	8,781	8,732	9,058	9,247	9,255	8,758	8,747	8,821	8,761	8,420	(X)	(X)	
506	ELECTRICAL GOODS.....	9,438	9,405	9,710	10,106	10,404	10,640	11,240	11,517	11,949	11,933	12,212	12,598	8,901	(X)	(X)	
507	HARDWARE, PLUMBING & HEATING EQUIP.	4,608	4,722	4,808	4,789	4,912	4,821	4,986	5,132	5,196	5,230	5,448	5,344	4,678	(X)	(X)	
508	MACHINERY, EQUIP. & SUPPLIES.....	29,116	28,755	29,230	29,093	29,263	29,781	29,771	29,852	29,823	30,374	29,969	29,737	28,793	(X)	(X)	
51	NONDURABLE GOODS.....	42,793	43,501	43,289	45,347	45,551	44,298	45,036	44,705	44,962	44,976	45,969	45,159	42,256	(X)	(X)	
511	PAPER & PAPER PRODUCTS.....	2,343	2,418	2,434	2,480	2,523	2,507	2,548	2,584	2,522	2,560	2,607	2,568	2,343	(X)	(X)	
514	GROCERIES & RELATED PRODUCTS.....	8,721	9,164	8,950	9,257	9,613	9,171	9,797	9,766	9,608	9,836	10,030	9,844	8,530	(X)	(X)	
515	FARM-PRODUCT RAW MATERIALS.....	7,406	7,366	7,389	8,295	8,313	7,936	7,004	7,557	7,							

Table 2. Percent Change in Sales and Inventories of Merchant Wholesalers

SIC CODE	KIND OF BUSINESS	UNADJUSTED					ADJUSTED ¹				
		SALES			INVENTORIES, END-OF-MONTH (AT COST)		SALES		INVENTORIES, END-OF-MONTH (AT COST)		
		DEC. 1984 FROM NOV. 1984	DEC. 1984 FROM DEC. 1983	12 MONTHS FROM 12 MONTHS 1983	DEC. 1984 FROM NOV. 1984	DEC. 1984 FROM DEC. 1983	DEC. 1984 FROM NOV. 1984	DEC. 1984 FROM DEC. 1983	DEC. 1984 FROM NOV. 1984	DEC. 1984 FROM DEC. 1983	DEC. 1984 FROM NOV. 1983
	TOTAL.....	-3.5	+2.7	+13.5	-0.9	+9.3	+1.2	+6.1	-0.7	+9.3	
50	DURABLE GOODS.....	-6.2	+5.1	+18.8	-0.1	+10.8	-0.8	+7.7	-0.1	+10.7	
501	MOTOR VEHICLES & AUTO. EQUIP.	-4.6	+6.3	+17.9	+0.4	+13.3	+2.1	+9.4	0.0	+12.7	
502	FURNITURE & HOME FURNISHINGS.....	-19.7	-1.6	+23.9	-0.5	+12.4	-14.0	-1.0	-1.0	+12.5	
505	METALS & MINERALS, EX. PETROLEUM..	(S)	(S)	(S)	-0.6	+4.3	(S)	(S)	-0.7	+4.0	
506	ELECTRICAL GOODS.....	-4.0	+13.7	+28.6	+1.0	+40.7	-3.2	+15.5	+3.2	+41.5	
507	HARDWARE, PLUMBING & HEATING EQUIP.	-3.8	+12.2	+15.7	-0.6	+14.6	+5.7	+13.5	-1.9	+14.2	
508	MACHINERY, EQUIP. & SUPPLIES.....	-1.2	+11.3	+20.5	-0.2	+3.6	+0.6	+14.7	-0.8	+3.3	
51	NONDURABLE GOODS.....	-1.3	+0.9	+9.5	-2.1	+6.8	+2.8	+4.9	-1.8	+6.9	
511	PAPER & PAPER PRODUCTS.....	-10.9	-1.1	+18.6	-2.3	+10.0	-5.1	+2.7	-1.5	+9.6	
514	GROCERIES & RELATED PRODUCTS.....	+2.4	+8.1	+10.8	-3.3	+15.0	+5.9	+12.7	-1.9	+15.4	
515	FARM-PRODUCT RAW MATERIALS.....	(S)	(S)	(S)	-3.4	-8.5	(S)	(S)	-7.0	-9.4	
518	BEER, WINE, & DISTILLED BEVERAGES..	+6.6	+3.7	+2.7	-14.3	+3.8	+9.4	+11.1	+1.2	+4.6	
519	MISC. NONDURABLE GOODS.....	-3.1	+0.5	+11.9	+3.3	+20.7	-3.4	+3.6	+1.0	+22.0	

(S) DATA DO NOT MEET PUBLICATION STANDARDS.

¹ADJUSTED FOR SEASONAL VARIATION AND, IN THE CASE OF SALES, ALSO FOR TRADING-DAY DIFFERENCES.

EXPLANATORY MATERIAL

Scope of Survey

Wholesale trade, as defined in Major Groups 50 and 51 of the 1972 edition of the *Standard Industrial Classification Manual*¹ and the 1977 Supplement and as covered in the 1977 Economic Censuses, includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm, or professional business users; 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; and (3) agents, merchandise or commodity brokers, and commission merchants.

This survey is limited to merchant wholesalers (described under category 1 above), who 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.

Also included in this survey are the sales and inventories of central administrative offices and auxiliaries of merchant wholesale establishments and manufacturers' sales branches of ferrous metal service centers SIC (505).

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.

The estimates of the coefficients of variation in percent for sales and inventories at the level of detail provided in this publication are shown in table 4. Note that 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. 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.

The coefficient of variation also 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.

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 13 percent of the sales estimates and 21 percent for inventories.

Differences between preliminary and final estimates² of seasonally adjusted sales ranged from approximately +0.6 percent to -0.9 percent for the past 12 months. During the same

¹Executive Office of the President, Office of Management and Budget, *Standard Industrial Classification Manual*, 1972, and the 1977 Supplement.

²See Sample Design and Estimation Procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983*.

period, the average of the absolute differences was 0.4 percent. The corresponding range for inventories was approximately +0.5 percent to -0.9 percent for the past 12 months. The average of the absolute differences was 0.3 percent.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: January 1974-December 1983* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventories estimates in this report reflect the results of a benchmarking³ operation which made use of 1982 estimates tabulated from the 1982 Annual Trade Survey. Monthly wholesale sales and inventories estimates were revised in a manner designed to minimize the differences in the month-to-month trends between the revised and unrevised series. The estimates for the unrevised series were derived by using composite estimating procedures. Monthly sales estimates were revised for the period January 1980 through December 1983. The revised monthly sales estimates for 1980 and 1981 were constrained to sum to the 1980 and 1981 annual estimates tabulated from the 1981 Annual Trade Survey. The revised monthly sales estimates for 1982 were constrained to sum to the 1982 annual estimates tabulated from the 1982 Annual Trade Survey. Similarly, monthly inventories were revised for the period January 1982 through December 1983 using end-of-year inventories tabulated for 1981 and 1982 as benchmarks. (For a few series, monthly inventories were revised for the period January 1978 through December 1983.)

Through the use of carry-forward factors, the effect of the revision process was applied to all composite estimates subsequent to December 1982. These factors were derived at the three-digit kind-of-business level and are held constant until the next revision and benchmarking process. Aggregate level estimates were derived by summing appropriate detail level estimates, thereby assuring additivity.

Subsequent revisions of the monthly sales and inventory series will make use of future annual surveys of wholesale trade and the 1982 Census of Wholesale Trade.

Unpublished Data

Sales and inventory estimates for unpublished three-digit and four-digit wholesale trade categories are not included in this publication because the sampling variability associated with these data do not meet publication criteria. The Census Bureau on written request will release these 1984 monthly data for individual use, though not for publication.

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 sources such as investments, rental or sale of real estate, etc.

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.

Inventories. Inventories represent stocks at cost of merchandise owned by merchant wholesalers at the end of the month regardless of location except for goods held outside the United States. Goods held on consignment and items not held for sale such as fixtures, equipment, and supplies are not included. Goods held in foreign trade zones in the United States are also included.

Stock/Sales Ratios. The stock/sales ratios are derived by dividing the dollar value of inventories 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.

Kind-of-Business Classifications

The durable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 50. This group includes establishments classified in SIC groups 501 through 509.

The nondurable goods group includes establishments primarily engaged in the distribution of goods classified in SIC major group 51. This group includes establishments classified in SIC groups 511 through 519.

For a further description of the kinds of business included in the major groups see the 1972 *Standard Industrial Classification Manual* and the 1977 Supplement.

Adjustment for Seasonal and Trading-Day Variation

Seasonal factors for adjusting data in this 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 estimates were also derived from the X-11 program.

Seasonal 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 conditions, and other elements introduce significant changes in seasonal and trading-day patterns.

A description of the trading-day adjustment procedure 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 seasonal adjustment procedure may be obtained from the Chief, Business Division, Bureau of the Census, Washington, D.C. 20233.

³For a more detailed description, see the section dealing with revisions to published data in the Current Business Report *Revised Monthly Wholesale Trade: January 1974 through December 1983*.

Table 3. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers: June 1983—January 1985

SIC code	Kind of business	1983								1984											1985
		June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
	Sales, ¹ total.....	1.037	0.946	1.022	1.005	1.016	1.018	1.003	0.953	0.956	1.053	0.976	1.056	1.003	0.971	1.022	0.958	1.064	1.014	0.973	0.982
50	Durable goods.....	1.056	0.953	1.048	1.028	1.040	1.015	0.984	0.902	0.948	1.045	0.988	1.038	1.014	0.981	1.048	0.980	1.085	1.015	0.960	0.938
501	Motor vehicles and auto. equip...	1.082	0.976	1.008	0.937	1.012	0.986	0.971	0.928	0.985	1.075	1.038	1.048	1.035	0.999	1.029	0.886	1.054	1.011	0.944	0.973
502	Furniture and home furnishings...	1.050	0.888	1.019	1.028	1.083	1.035	0.956	0.902	0.994	1.070	1.015	1.016	1.014	0.887	1.022	1.002	1.129	1.018	0.950	0.954
506	Electrical goods.....	1.055	0.994	1.044	1.050	1.034	1.048	1.030	0.895	0.939	1.010	0.933	1.003	1.033	1.012	1.029	1.049	1.061	1.022	1.014	0.917
507	Hardware, plumbing & heating equip.	1.052	1.009	1.084	1.045	1.062	1.015	0.933	0.932	0.906	0.983	0.996	1.027	1.008	1.045	1.078	1.009	1.112	1.013	0.922	0.953
508	Machinery, equip. and supplies...	1.058	0.942	1.055	1.036	1.007	0.999	1.010	0.834	0.955	1.050	0.995	1.049	1.028	0.966	1.055	0.976	1.057	0.998	0.980	0.926
51	Nondurable goods.....	1.037	0.943	1.002	0.991	1.001	1.022	1.020	0.975	0.956	1.060	0.971	1.058	1.009	0.968	1.002	0.943	1.048	1.021	0.981	1.006
511	Paper and paper products.....	1.024	0.927	1.045	1.038	1.015	1.008	0.988	0.980	0.981	1.052	0.953	1.034	0.985	0.954	1.050	0.980	1.073	1.013	0.951	1.015
514	Groceries and related products...	1.039	0.988	1.032	1.018	1.002	1.007	1.009	0.965	0.949	1.023	0.962	1.042	1.019	1.007	1.033	0.976	1.046	1.001	0.968	0.996
518	Beer, wine, & distilled beverages	1.115	1.007	1.072	1.032	0.975	1.097	1.161	0.776	0.834	0.982	0.952	1.062	1.069	1.022	1.101	0.937	1.057	1.112	1.084	0.824
519	Miscellaneous nondurable goods...	1.085	0.935	0.973	0.984	0.998	0.966	1.005	0.879	0.901	1.100	1.029	1.186	1.052	0.953	0.983	0.946	1.016	0.972	0.975	0.895
	Inventories, ¹ total.....	0.990	0.984	0.983	0.993	1.007	1.012	1.009	1.003	1.009	1.011	1.008	0.988	0.990	0.983	0.983	0.993	1.007	1.012	1.010	1.005
50	Durable goods.....	1.012	1.002	1.004	1.007	0.997	0.995	0.995	0.984	0.992	1.001	1.004	1.007	1.012	1.001	1.003	1.007	0.997	0.996	0.996	0.986
501	Motor vehicles and auto. equip...	0.998	0.994	0.973	0.997	1.001	1.005	1.011	1.003	1.000	1.005	1.011	0.998	0.998	0.994	0.972	0.995	0.999	1.012	1.016	0.997
502	Furniture and home furnishings...	1.011	1.012	0.999	1.023	0.993	0.977	0.981	0.982	0.998	1.017	1.010	0.995	1.010	1.012	0.999	1.022	0.990	0.976	0.981	0.988
505	Metals & minerals, ex. petroleum.	1.011	0.999	1.014	1.019	0.996	1.005	1.005	0.981	0.996	0.986	0.969	1.017	1.011	0.999	1.012	1.018	0.996	1.006	1.007	0.984
506	Electrical goods.....	1.014	1.013	1.016	1.018	1.028	1.009	0.990	0.962	0.973	0.980	0.992	1.002	1.014	1.013	1.016	1.018	1.027	1.005	0.984	0.970
507	Hardware, plumbing & heating equip.	1.015	1.013	0.999	0.986	0.985	0.958	0.969	0.991	1.004	1.015	1.043	1.020	1.014	1.013	0.999	0.987	0.986	0.959	0.972	0.990
508	Machinery, equip. and supplies...	1.018	1.005	1.004	1.006	0.991	0.988	0.991	0.976	0.992	1.005	1.010	1.013	1.017	1.005	1.003	1.004	0.990	0.988	0.994	0.984
51	Nondurable goods.....	0.953	0.945	0.949	0.971	1.028	1.047	1.041	1.043	1.035	1.025	0.998	0.963	0.954	0.944	0.949	0.970	1.026	1.044	1.040	1.042
511	Paper and paper products.....	1.010	1.013	1.003	0.997	0.994	1.010	0.999	0.991	0.993	0.990	0.989	1.008	1.009	1.013	1.004	0.999	0.996	1.011	1.003	0.990
514	Groceries and related products...	0.995	0.970	0.955	1.002	1.037	1.032	1.023	0.993	1.006	1.016	0.993	0.977	0.995	0.969	0.954	1.003	1.037	1.034	1.019	0.990
515	Farm-product raw materials.....	0.742	0.781	0.804	0.856	1.053	1.186	1.231	1.276	1.191	1.112	0.974	0.795	0.740	0.780	0.803	0.860	1.062	1.197	1.244	1.270
518	Beer, wine, & distilled beverages	1.022	1.009	0.999	0.996	1.068	1.085	0.925	0.959	0.944	0.978	0.996	1.011	1.023	1.010	1.001	0.997	1.068	1.084	0.918	0.952
519	Miscellaneous nondurable goods...	0.945	0.943	0.929	0.943	0.979	0.978	1.001	1.052	1.072	1.093	1.074	0.989	0.946	0.943	0.928	0.937	0.975	0.968	0.990	1.049

¹Adjusted sales and inventory data shown in table 1 are obtained by dividing the unadjusted data by the adjustment factors shown above for the corresponding group. Adjusted data for the totals are obtained by adding the durable and nondurable goods. Seasonal factors shown for the totals will provide an approximation of the adjusted estimates, but may show small differences from the published data.

Note: Merchant wholesalers totals and group totals include data for some groups not shown separately. The seasonal factors shown have been computed based on monthly estimates through June 1984.

Table 4. Coefficients of Variation of Sales and Inventories

(In percent)

SIC code	Kind of business	Sales						Inventories					
		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months		Coefficients of variation of the preliminary estimates		Coefficients of variation of the final estimates		Coefficients of variation of the ratio of two consecutive months	
		Range	Median	Range	Median	Range	Median	Range	Median	Range	Median	Range	Median
50	Merchant wholesalers, total....	1.2-1.7	1.5	1.4-1.7	1.5	0.6-0.9	0.7	1.5-1.8	1.7	1.6-1.7	1.7	0.3-0.4	0.3
	Durable goods, total.....	1.4-1.7	1.5	1.3-1.5	1.4	0.5-0.9	0.7	1.6-2.0	2.0	1.8-2.0	1.8	0.3-0.4	0.3
501	Motor vehicles and automotive parts and supplies.....	3.2-4.3	3.8	3.3-4.1	3.5	1.1-2.0	1.6	2.8-3.5	3.4	3.0-3.8	3.2	0.8-1.5	1.0
502	Furniture and home furnishings.....	9.5-12.7	10.0	7.4-9.9	8.6	2.6-6.3	5.1	9.6-11.7	11.3	10.4-11.6	10.8	1.0-2.2	1.5
505	Metals and minerals, except petroleum	(S)	(S)	(S)	(S)	(S)	(S)	4.2-4.9	4.6	4.2-4.8	4.6	0.6-1.2	0.9
506	Electrical goods.....	6.5-8.7	7.5	6.6-8.0	6.8	1.7-3.0	2.1	6.1-7.1	6.7	6.3-7.1	6.7	0.5-1.0	0.7
507	Hardware, plumbing, heating equipment, and supplies.....	6.0-7.3	6.2	5.5-6.5	6.3	1.7-2.9	2.2	6.0-6.6	6.2	5.7-6.3	6.1	0.9-1.7	1.2
508	Machinery, equipment, and supplies...	2.2-2.8	2.6	2.2-2.7	2.4	1.2-1.3	1.2	2.4-3.0	2.6	2.3-2.8	2.6	0.5-0.8	0.6
51	Nondurable goods, total.....	2.2-2.9	2.7	2.4-2.9	2.5	0.7-1.5	1.1	2.1-2.7	2.4	2.0-2.8	2.3	0.5-1.3	0.7
511	Paper and paper products.....	4.6-6.2	5.2	4.3-5.9	5.0	1.3-2.4	1.7	5.7-8.1	6.7	5.7-7.6	6.8	0.9-1.4	1.1
514	Groceries and related products.....	4.5-5.2	4.7	4.2-5.2	4.6	1.2-3.3	1.5	3.8-4.7	4.1	3.5-5.0	4.2	0.7-2.7	1.1
515	Farm-product raw materials.....	(S)	(S)	(S)	(S)	(S)	(S)	3.1-4.8	4.3	3.0-4.4	3.5	1.3-3.9	2.2
518	Beer, wine, and distilled alcoholic beverages.....	4.4-6.1	5.2	4.7-7.6	5.3	1.2-3.6	2.2	3.6-4.7	4.5	3.8-4.5	4.1	1.1-2.4	1.7
519	Miscellaneous nondurable goods.....	3.7-5.2	4.4	3.8-4.4	4.0	1.4-3.7	3.1	4.7-5.6	5.2	4.7-5.9	5.0	1.1-2.2	1.5

S Data do not meet publication standards.

Note: Coefficients of variation are based on data unadjusted for seasonal variations or trading-day differences. The range and median coefficients of variation are based on data for August 1983 through January 1984.

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