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Questions concerning this report may be directed
to: Ms. Shirley Roberts (301) 763-3916/3917

CB-87-48

MONTHLY WHOLESALE TRADE REPORT: JANUARY 1987

INTENTION TO REVISE MONTHLY WHOLESALE ESTIMATES: The unadjusted and adjusted merchant wholesale sales, inventories, and stock/sales ratio estimates will be revised utilizing the results from the 1985 Annual Trade Survey.

Revised estimates for the period December 1980 through December 1986 along with the previously published estimates for the same period will be provided in the Census Bureau publication Current Business Reports, "Revised Monthly Wholesale Trade Sales and Inventories: December 1980-December 1986," scheduled for release the week of April 6. The January/February Monthly Wholesale Trade Report, scheduled for release the week of April 6, will present revised January 1987 estimates.

NOTICE: Beginning with the January/February 1987 publication, released in early April, estimates of total inventories will be on a non-LIFO basis. Comparable historic data will be available from December 1980.

(This press release is being issued on a one-time basis because of timing considerations during the revision process.)

SALES The Bureau of the Census, U.S. Department of Commerce, announced today that January sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$114.6 billion, down 2.4 percent from December, and little changed from the January 1986 level. January sales of durable goods decreased 3.1 percent from December but were 3.6 percent above a year ago. January sales of nondurable goods were little changed from the previous month and 4.4 percent below a year ago.

INVENTORIES Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$140.2 billion at the end of January, up 1.3 percent from the previous month and up 2.8 percent from January 1986. Durable goods stocks increased 2.2 percent from December and were up 4.7 percent from January 1986. Nondurable goods stocks were little changed from the previous month and the year ago level.

STOCK/SALES RATIOS The January stock/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.22, up from the December ratio of 1.18 and above the year-ago ratio of 1.18.

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

Differences between preliminary and final estimates of seasonally adjusted sales ranged from approximately +1.0 percent to -0.4 percent for the past 12 months. During the same period, the absolute average of the differences was 0.3 percent. The corresponding range for inventories was approximately +0.5 to -0.8 percent for the past 12 months. The absolute average of the differences was 0.3 percent.

Table 1. Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: January 1987

(Sales and inventories in millions of dollars)

Kind of business	Unadjusted			Adjusted ¹		
	Jan. ² 1987	Dec. 1986	Jan. 1986	Jan. ² 1987	Dec. 1986	Jan. 1986
SALES						
Merchant wholesalers, total.....	108,981	121,343	112,335	114,569	117,395	115,410
Durable goods, total.....	50,589	57,648	50,115	55,228	57,021	53,314
Nondurable goods, total.....	58,392	63,695	62,220	59,341	60,374	62,096
INVENTORIES						
Merchant wholesalers, total.....	140,749	139,648	137,103	140,245	138,450	136,436
Durable goods, total.....	90,574	89,537	86,586	91,953	89,987	87,815
Nondurable goods, total.....	50,175	50,111	50,517	48,292	48,463	48,621
STOCK/SALES RATIOS						
Merchant wholesalers, total.....	1.29	1.15	1.22	1.22	1.18	1.18
Durable goods, total.....	1.79	1.55	1.73	1.66	1.58	1.65
Nondurable goods, total.....	0.86	0.79	0.81	0.81	0.80	0.78

¹Adjusted for seasonal variations and, in the case of sales, also for trading-day differences.
estimates.

²Preliminary estimates.

**Table 2. Sales, Inventories, Percent Changes, and Stock/Sales Ratios of Merchant Wholesalers,
by Kind of Business: January 1987**

SIC code	Kind of business	Sales				Inventories (end-of-month)				Stock/sales ratios	
		Dollars (millions)		Percent change		Dollars (millions)		Percent change			
		Jan. ¹ 1987	Dec. 1986	Jan. 1987 from Dec. 1986	Jan. 1987 from Jan. 1986	Jan. ¹ 1987	Dec. 1986	Jan. 1987 from Dec. 1986	Jan. 1987 from Jan. 1986	Jan. ¹ 1987	Dec. 1986
		Data are NOT ADJUSTED for seasonal variation or trading-day differences									
	Merchant wholesalers, total.....	108,981	121,343	-10.2	-3.0	140,749	139,648	+0.8	+2.7	1.29	1.15
50	Durable goods, total.....	50,589	57,648	-12.2	+0.9	90,574	89,537	+1.2	+4.6	1.79	1.55
501	Motor vehicles and automotive parts and supplies.....	11,296	13,384	-15.6	+1.8	18,412	18,120	+1.6	+14.8	1.63	1.35
502	Furniture and home furnishings.....	2,104	2,070	+1.6	+18.1	3,534	3,456	+2.3	+5.1	1.68	1.67
503	Lumber and other construction materials....	3,584	3,957	-9.4	+3.7	(S)	(S)	(S)	(S)	(S)	(S)
505	Metals and minerals, except petroleum.....	4,616	4,728	-2.4	-5.9	7,846	8,169	-4.0	-10.6	1.70	1.73
506	Electrical goods.....	7,036	8,325	-15.5	+0.3	12,950	13,122	-1.3	+6.5	1.84	1.58
507	Hardware, plumbing, heating equipment, and supplies.....	3,336	3,744	-10.9	+1.4	5,809	5,785	+0.4	+3.1	1.74	1.55
508	Machinery, equipment, and supplies.....	12,927	15,321	-15.6	+2.2	29,811	28,719	+3.8	+0.8	2.31	1.87
509	Miscellaneous durable goods.....	4,364	4,493	-2.9	-5.4	(S)	(S)	(S)	(S)	(S)	(S)
51	Nondurable goods, total.....	58,392	63,695	-8.3	-6.2	50,175	50,111	+0.1	-0.7	0.86	0.79
511	Paper and paper products.....	3,369	3,425	-1.6	+4.4	3,313	3,345	-1.0	+6.3	0.98	0.98
512	Drugs, drug proprietaries and druggists' sundries.....	2,555	2,641	-3.3	+9.3	(S)	(S)	(S)	(S)	(S)	(S)
514	Groceries and related products.....	19,298	20,405	-5.4	+2.0	11,051	11,373	-2.8	+6.4	0.57	0.56
515	Farm-product raw materials.....	6,664	7,700	-13.5	-15.3	7,138	6,831	+4.5	-19.5	1.07	0.89
518	Beer, wine, and distilled alcoholic beverages.....	2,753	4,143	-33.6	+4.4	3,497	3,320	+5.3	+2.7	1.27	0.8
519	Miscellaneous nondurable goods.....	7,673	9,844	-22.1	-1.9	9,757	9,508	+2.6	-0.1	1.27	0.9.
		Data are ADJUSTED for seasonal variation and, in the case of sales, for trading-day differences									
	Merchant wholesalers, total.....	114,569	117,395	-2.4	-0.7	140,245	138,450	+1.3	+2.8	1.22	1.18
50	Durable goods, total.....	55,228	57,021	-3.1	+3.6	91,953	89,987	+2.2	+4.7	1.66	1.58
501	Motor vehicles and automotive parts and supplies.....	11,816	13,212	-10.6	+4.3	18,357	17,817	+3.0	+14.8	1.55	1.35
502	Furniture and home furnishings.....	2,396	2,154	+11.2	+21.6	3,506	3,372	+4.0	+5.1	1.46	1.57
503	Lumber and other construction materials....	4,425	4,502	-1.7	+8.3	(S)	(S)	(S)	(S)	(S)	(S)
505	Metals and minerals, except petroleum.....	4,783	4,820	-0.8	-1.7	7,854	8,064	-2.6	-10.8	1.64	1.67
506	Electrical goods.....	7,749	7,817	-0.9	+1.3	13,378	13,308	+0.5	+6.7	1.73	1.70
507	Hardware, plumbing, heating equipment, and supplies.....	3,618	3,888	-6.9	+4.1	5,976	6,007	-0.5	+3.3	1.65	1.55
508	Machinery, equipment, and supplies.....	14,237	14,803	-3.8	+5.1	30,296	28,805	+5.2	+0.8	2.13	1.95
509	Miscellaneous durable goods.....	4,613	4,700	-1.9	-3.7	(S)	(S)	(S)	(S)	(S)	(S)
51	Nondurable goods, total.....	59,341	60,374	-1.7	-4.4	48,292	48,463	-0.4	-0.7	0.81	0.80
511	Paper and paper products.....	3,410	3,411	-0.0	+7.2	3,336	3,372	-1.1	+6.3	0.98	0.99
512	Drugs, drug proprietaries and druggists' sundries.....	2,555	2,584	-1.1	+12.6	(S)	(S)	(S)	(S)	(S)	(S)
514	Groceries and related products.....	19,793	19,927	-0.7	+4.0	11,323	11,373	-0.4	+6.5	0.57	0.57
515	Farm-product raw materials.....	6,114	6,481	-5.7	-15.2	5,720	5,636	+1.5	-19.4	0.94	0.87
518	Beer, wine, and distilled alcoholic beverages.....	3,589	3,444	+4.2	+9.3	3,712	3,644	+1.9	+2.6	1.03	1.06
519	Miscellaneous nondurable goods.....	8,943	9,699	-7.8	+0.2	9,409	9,367	+0.4	+0.1	1.05	0.97

Note: Totals include data for some kinds of business not shown separately.

¹Preliminary estimates. S Data do not meet publication standards.

Monthly Wholesale Trade

CURRENT BUSINESS REPORTS

January/February 1987

Sales and Inventories

Issued April 1987

BW-87-02

Notice of revision to monthly wholesale sales, inventories, 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 December 1980 through December 1986 utilizing the results from the 1985 Annual Trade Survey. The data shown in this report reflect this revision. Revised estimates are shown in the publication *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 through December 1986*.

Notice: Beginning with this publication, estimates of total inventories are on a non-LIFO basis.

Sales. February 1987 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$123.7 billion, up 6.1 percent from the revised January level and up 9.1 percent from a year ago. February sales of durable goods increased 5.4 percent from January and were 10.2 percent above a year ago. February sales of nondurable goods were up 6.7 percent from January and 8.1 percent above a year ago.

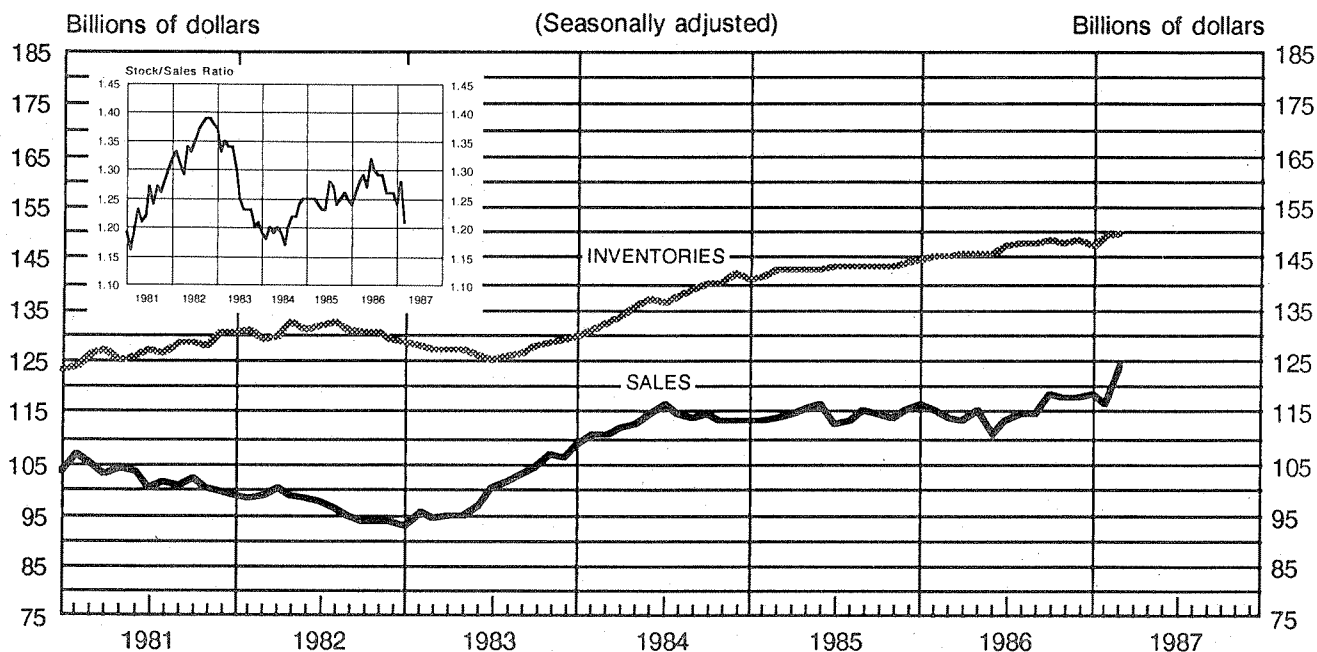
Inventories. Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$149.8 billion at the end of February, little changed from the revised January

level and showed some evidence of an increase from a year ago. Inventories of durable goods wholesalers were little changed from the January level and from a year ago. Inventories of nondurable goods wholesalers increased 1.7 percent from January and were little changed from February 1986.

Stock/Sales Ratio. The February stock/sales ratio for merchant wholesalers, based on seasonally adjusted data was 1.21.

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 4.

Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1981 - 1987



The *Monthly Wholesale Trade* Report for March is scheduled to be released May 8, 1987, at 10:00 a.m.



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.

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Postage stamps not acceptable; currency submitted at sender's risk. Annual subscription \$18.00; single copy \$1.75. Remittances from foreign countries must be by international money order or by draft on a U.S. bank. \$22.50 per year.

Table 1A. Adjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers:
1987 and 1986

(Data adjusted for seasonal variation and, in the case of sales, also for trading-day differences. Sales and inventories in millions of dollars)

SIC code	Kind of business	1987		1986											
		Jan.	Feb. ^P	Feb. ^r	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
	Sales, total	116,545	123,670	113,359	113,183	114,778	110,549	113,232	114,444	114,426	118,138	117,488	117,734	118,446	
50	Durable goods	55,893	58,932	53,489	53,403	55,741	53,932	54,783	55,697	54,747	56,998	57,102	56,758	57,833	
501	Motor vehicles & auto. equip.	11,334	13,121	11,240	11,281	11,657	11,567	12,152	12,782	12,313	12,665	12,867	12,459	12,966	
502	Furniture & home furnishings	2,377	2,381	2,075	2,059	2,092	2,178	2,247	2,195	2,260	2,463	2,260	2,170	2,227	
503	Lumber & other construction mat. .	4,543	4,609	4,174	4,059	4,325	4,345	4,102	4,280	4,235	4,318	4,396	4,391	4,635	
504	Sporting, recreational, photo- graphic, & hobby goods, toys & supplies	1,645	1,760	1,459	1,454	1,521	1,559	1,392	1,370	1,444	1,512	1,567	1,622	1,627	
505	Metals & minerals, ex. petroleum .	4,983	5,291	4,911	4,648	4,706	4,540	4,659	4,826	4,589	4,807	4,934	4,937	4,852	
506	Electrical goods	7,899	8,317	7,675	7,728	7,654	7,552	7,713	7,650	7,603	7,817	7,887	7,630	7,812	
507	Hardware, plumbing & heating equip.	3,667	3,684	3,483	3,456	3,590	3,707	3,699	3,642	3,465	3,709	3,745	3,695	3,922	
508	Machinery, equip. & supplies	14,787	15,162	13,752	13,881	14,479	13,645	13,782	14,129	13,990	14,029	14,143	14,671	15,027	
509	Miscellaneous durable goods	4,658	4,607	4,720	4,837	5,717	4,839	5,037	4,823	4,848	5,678	5,303	5,183	4,765	
51	Nondurable goods	60,652	64,738	59,870	59,780	59,037	56,617	58,449	58,747	59,679	61,140	60,386	60,976	60,613	
511	Paper & paper products	3,564	3,778	3,274	3,311	3,349	3,288	3,351	3,348	3,433	3,373	3,437	3,453	3,584	
512	Drugs, drug proprietaries and druggists' sundries	2,514	2,609	2,145	2,196	2,177	2,213	2,190	2,294	2,356	2,357	2,438	2,524	2,484	
513	Apparel, piece goods, & notions .	3,417	3,863	3,175	3,309	3,389	3,173	3,355	3,334	3,700	3,772	3,806	3,709	3,300	
514	Groceries & related products	20,429	20,477	18,599	19,061	18,908	19,000	19,415	19,656	20,441	20,241	20,104	20,094	20,023	
515	Farm-product raw materials	6,174	6,996	6,862	6,840	6,833	6,187	6,558	6,707	6,220	6,577	6,721	6,384	6,358	
516	Chemicals & allied products	2,055	2,034	2,164	2,124	2,198	2,156	2,121	2,066	2,064	2,076	2,078	2,225	2,097	
517	Petroleum & petroleum products .	10,253	11,628	11,338	10,316	9,543	9,264	9,321	8,916	9,158	10,236	8,925	9,224	9,724	
518	Beer, wine, & distilled beverages .	3,550	3,673	3,307	3,412	3,324	3,348	3,349	3,256	3,437	3,277	3,341	3,420	3,446	
519	Misc. nondurable goods	8,696	9,680	9,006	9,211	9,316	7,988	8,789	9,170	8,870	9,231	9,536	9,943	9,597	
	Inventories, total	149,347	149,807	144,967	145,643	145,961	146,012	147,129	147,850	148,050	148,599	147,754	148,204	147,375	
50	Durable goods	97,280	96,882	94,111	94,361	95,230	95,646	95,865	96,680	96,883	97,216	96,845	97,652	95,710	
501	Motor vehicles & auto. equip.	18,782	18,844	16,663	17,092	17,118	17,521	17,736	17,937	18,294	18,494	17,934	18,834	18,643	
502	Furniture & home furnishings	3,510	3,551	3,132	3,183	3,174	3,166	2,974	3,114	3,151	3,321	3,116	3,132	3,333	
503	Lumber & other construction mat. .	4,907	4,861	4,806	4,869	4,953	5,040	5,315	5,173	5,049	4,993	5,030	5,017	4,940	
504	Sporting, recreational, photo- graphic, & hobby goods, toys & supplies	3,436	3,509	2,749	2,755	2,851	2,884	3,026	3,136	3,230	3,255	3,572	3,541	3,387	
505	Metals & minerals, ex. petroleum .	9,508	9,673	10,036	9,768	9,927	9,784	9,736	9,564	9,075	9,217	9,329	9,088	9,359	
506	Electrical goods	13,864	13,982	12,797	13,026	13,299	12,744	12,986	13,294	13,230	13,574	13,502	13,815	13,576	
507	Hardware, plumbing & heating equip.	6,576	6,518	6,511	6,540	6,479	6,593	6,656	6,599	6,700	6,630	6,643	6,611	6,642	
508	Machinery, equip. & supplies	31,984	31,385	32,764	32,587	32,856	33,167	32,890	33,203	33,381	32,778	32,784	33,087	31,007	
509	Miscellaneous durable goods	4,713	4,559	4,653	4,541	4,573	4,747	4,546	4,660	4,773	4,954	4,935	4,527	4,823	
51	Nondurable goods	52,067	52,925	50,856	51,282	50,731	50,366	51,264	51,170	51,167	51,383	50,909	50,552	51,665	
511	Paper & paper products	3,595	3,609	3,311	3,368	3,359	3,287	3,330	3,345	3,339	3,346	3,418	3,383	3,570	
512	Drugs, drug proprietaries and druggists' sundries	4,385	4,490	3,710	3,776	3,740	3,883	3,861	3,826	3,888	3,935	4,076	4,143	4,246	
513	Apparel, piece goods, & notions .	7,061	6,961	6,008	6,216	6,292	6,525	6,761	7,205	7,288	7,167	6,672	6,841	6,928	
514	Groceries & related products	12,074	11,917	11,421	11,524	11,690	11,445	11,648	11,656	11,670	11,734	11,796	11,983	12,185	
515	Farm-product raw materials	5,954	6,503	7,000	7,088	7,139	6,902	7,261	7,040	6,558	6,358	6,270	5,712	5,636	
516	Chemicals & allied products	2,121	2,243	2,178	2,190	2,187	2,217	2,187	2,144	2,148	2,076	2,085	2,161	2,144	
517	Petroleum & petroleum products .	3,405	3,529	3,839	3,854	3,191	2,865	2,914	2,911	3,051	3,194	3,163	3,140	3,449	
518	Beer, wine, & distilled beverages .	4,033	4,113	3,893	3,876	3,811	3,814	3,833	3,734	3,716	3,743	3,652	3,794	3,818	
519	Misc. nondurable goods	9,439	9,560	9,496	9,390	9,322	9,428	9,469	9,309	9,509	9,830	9,777	9,395	9,689	
	Stock/sales ratios, total	1.28	1.21	1.28	1.29	1.27	1.32	1.30	1.29	1.29	1.26	1.26	1.26	1.24	
50	Durable goods	1.74	1.64	1.76	1.77	1.71	1.77	1.75	1.74	1.77	1.71	1.70	1.72	1.65	
501	Motor vehicles & auto. equip.	1.66	1.44	1.48	1.52	1.47	1.51	1.46	1.40	1.49	1.46	1.39	1.51	1.44	
502	Furniture & home furnishings	1.48	1.49	1.51	1.55	1.52	1.45	1.32	1.42	1.39	1.35	1.38	1.44	1.50	
503	Lumber & other construction mat. .	1.08	1.05	1.15	1.20	1.15	1.16	1.30	1.21	1.19	1.16	1.14	1.14	1.07	
504	Sporting, recreational, photo- graphic, & hobby goods, toys & supplies	2.09	1.99	1.88	1.89	1.87	1.85	2.17	2.29	2.24	2.15	2.28	2.18	2.08	
505	Metals & minerals, ex. petroleum .	1.91	1.83	2.04	2.10	2.11	2.16	2.09	1.98	1.98	1.92	1.89	1.84	1.93	
506	Electrical goods	1.76	1.68	1.67	1.69	1.74	1.69	1.68	1.74	1.74	1.74	1.71	1.81	1.74	
507	Hardware, plumbing & heating equip.	1.79	1.77	1.87	1.89	1.80	1.78	1.80	1.81	1.93	1.79	1.77	1.79	1.69	
508	Machinery, equip. & supplies	2.16	2.07	2.38	2.35	2.27	2.43	2.39	2.35	2.39	2.34	2.32	2.26	2.06	
509	Miscellaneous durable goods	1.01	.99	.99	.94	.80	.98	.90	.97	.98	.87	.93	.87	1.01	
51	Nondurable goods	.86	.82	.85	.86	.86	.89	.88	.87	.86	.84	.84	.83	.85	
511	Paper & paper products	1.01	.96	1.01	1.02	1.00	1.00	.99	1.00	.97	.99	.99	.98	1.00	
512	Drugs, drug proprietaries and druggists' sundries	1.74	1.72	1.73	1.72	1.72	1.75	1.76	1.67	1.65	1.67	1.67	1.64	1.71	
513	Apparel, piece goods, & notions .	2.07	1.80	1.89	1.88	1.86	2.06	2.02	2.16	1.97	1.90	1.75	1.84	2.10	
514	Groceries & related products	.59	.58	.61	.60	.62	.60	.60	.59	.57	.58	.59	.60	.61	
515	Farm-product raw materials	.96	.93	1.02	1.04	1.04	1.12	1.11	1.05	1.05	.97	.93	.89	.89	
516	Chemicals & allied products	1.03	1.10	1.01	1.03	.99	1.03	1.03	1.04	1.04	1.00	1.00	.97	1.02	
517	Petroleum & petroleum products .	.33	.30	.34	.37	.33	.31	.31	.33	.33	.31	.35	.34	.35	
518	Beer, wine, & distilled beverages .	1.14	1.12	1.18	1.14	1.15	1.14	1.14	1.15	1.08	1.14	1.09	1.11	1.11	
519	Misc. nondurable goods	1.09	.99	1.05	1.02	1.00	1.18	1.08	1.02	1.07	1.06	1.03	.94	1.01	

^rRevised.

^PPreliminary estimate. See sample design and estimation procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980-December 1986*.

NOTE: Preliminary inventories estimates have been modified prior to publication based on past relationships between preliminary and final estimates. Merchant wholesalers totals and group totals include data for some kinds of business not shown separately.

Table 1B. Unadjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1987 and 1986

(Data not adjusted for seasonal variation or trading-day differences. Sales and inventories in millions of dollars)

SIC code	Kind of business	1987		1986												Total 2 mos.	
		Jan.	Feb. ^P	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1987	1986	
	Sales, total	110,564	111,921	102,696	114,130	116,010	115,102	114,783	115,561	112,208	118,772	124,995	113,152	121,499	222,485	215,099	
50	Durable goods	51,319	52,444	47,660	53,521	56,615	55,672	56,448	56,415	54,282	58,368	62,287	54,350	58,033	103,763	98,117	
501	Motor vehicles & auto equipment	10,858	11,455	9,835	11,247	12,112	12,434	12,772	13,280	11,734	11,918	14,025	11,886	13,109	22,313	20,699	
502	Furniture & home furnishings	2,063	2,114	1,843	2,001	2,165	2,211	2,321	2,210	2,253	2,561	2,619	2,118	2,169	4,177	3,709	
503	Lumber & other construction mat.	3,684	3,673	3,331	3,730	4,390	4,640	4,516	4,704	4,620	4,655	5,060	4,185	4,060	7,357	6,875	
504	Sporting, recreational, photo- graphic, & hobby goods, toys & supplies	1,397	1,540	1,269	1,409	1,512	1,504	1,352	1,356	1,418	1,642	1,913	1,729	1,645	2,937	2,601	
505	Metals & minerals, ex. petroleum	4,824	5,037	4,665	4,931	4,810	4,594	4,794	4,739	4,543	4,994	5,156	4,404	4,770	9,861	9,612	
506	Electrical goods	7,204	7,527	6,946	7,689	7,294	7,174	7,713	7,704	7,580	8,481	8,762	7,722	8,296	14,731	13,935	
507	Hardware, plumbing & heating equip.	3,418	3,316	3,121	3,269	3,655	3,870	3,854	3,810	3,572	3,761	4,097	3,536	3,765	6,734	6,429	
508	Machinery, equip. & supplies	13,427	13,737	12,473	14,200	15,000	14,164	14,154	14,030	13,724	14,394	14,822	13,644	15,673	27,164	25,411	
509	Miscellaneous durable goods	4,444	4,045	4,177	5,045	5,677	5,081	4,972	4,582	4,838	5,962	5,833	5,126	4,546	8,489	8,846	
51	Nondurable goods	59,245	59,477	55,036	60,609	59,395	59,430	58,335	59,146	57,926	60,404	62,708	58,802	63,466	118,722	116,982	
511	Paper & paper products	3,489	3,529	3,061	3,301	3,379	3,272	3,348	3,345	3,484	3,397	3,684	3,256	3,602	7,018	6,453	
512	Drugs, drug proprietaries and druggists' sundries	2,517	2,416	1,984	2,185	2,251	2,182	2,177	2,285	2,262	2,428	2,628	2,395	2,546	4,933	4,237	
513	Apparel, piece goods, & notions	3,031	3,990	3,258	3,292	3,409	2,929	3,399	3,888	4,125	3,904	4,293	3,316	2,571	7,021	6,285	
514	Groceries & related products	19,980	18,757	17,055	19,004	19,021	19,798	19,396	20,285	20,523	20,140	20,607	19,371	20,524	38,737	36,079	
515	Farm-product raw materials	6,730	6,814	6,704	7,250	6,471	6,843	5,915	6,050	5,194	5,840	6,815	6,863	7,541	13,544	14,413	
516	Chemicals & allied products	2,037	1,890	2,006	2,118	2,202	2,208	2,216	2,025	2,060	2,172	2,282	2,034	1,950	3,927	4,240	
517	Petroleum & petroleum products	11,319	11,000	10,748	10,698	9,448	9,032	8,780	8,426	8,343	10,287	9,202	9,104	10,833	22,319	24,660	
518	Beer, wine, & distilled beverages	2,698	2,843	2,556	3,108	3,218	3,556	3,594	3,617	3,588	3,300	3,585	3,365	4,139	5,541	5,192	
519	Misc. nondurable goods	7,444	8,238	7,664	9,653	9,996	9,610	9,510	9,225	8,347	8,936	9,612	9,098	9,760	15,682	15,423	
	Inventories, total	149,548	150,661	145,928	146,987	146,788	144,662	145,977	146,279	145,882	147,964	149,009	148,804	148,245	(X)	(X)	
50	Durable goods	95,895	96,337	93,588	94,505	95,574	95,647	96,472	97,005	96,958	97,991	97,153	97,210	95,353	(X)	(X)	
501	Motor vehicles & auto. equip.	18,744	18,901	16,713	17,212	17,272	17,311	17,736	17,471	17,526	18,845	18,221	18,947	18,941	(X)	(X)	
502	Furniture & home furnishings	3,559	3,597	3,176	3,170	3,095	3,112	2,992	3,055	3,208	3,351	3,107	3,085	3,423	(X)	(X)	
503	Lumber & other construction mat.	4,716	4,846	4,796	4,986	5,067	5,040	5,379	5,209	5,099	4,978	4,929	4,942	4,920	(X)	(X)	
504	Sporting, recreational, photo- graphic, & hobby goods, toys & supplies	3,381	3,481	2,727	2,788	2,882	2,867	3,071	3,205	3,269	3,281	3,558	3,456	3,309	(X)	(X)	
505	Metals & minerals, ex. petroleum	9,575	9,770	10,126	9,670	9,709	9,725	9,863	9,688	9,257	9,254	9,161	8,970	9,481	(X)	(X)	
506	Electrical goods	13,434	13,549	12,400	12,700	13,246	12,642	12,999	13,693	13,508	14,063	13,813	13,884	13,359	(X)	(X)	
507	Hardware, plumbing & heating equip.	6,392	6,505	6,504	6,690	6,751	6,804	6,683	6,685	6,713	6,517	6,510	6,479	6,390	(X)	(X)	
508	Machinery, equip. & supplies	31,504	31,134	32,502	32,848	33,020	33,399	33,285	33,481	32,614	32,850	32,789	30,914	30,914	(X)	(X)	
509	Miscellaneous durable goods	4,590	4,554	4,644	4,441	4,532	4,747	4,464	4,730	4,897	5,088	5,004	4,658	4,616	(X)	(X)	
51	Nondurable goods	53,653	54,324	52,340	52,482	51,214	49,015	49,505	49,274	48,924	49,973	51,856	51,594	52,892	(X)	(X)	
511	Paper & paper products	3,573	3,634	3,331	3,365	3,352	3,310	3,353	3,355	3,392	3,392	3,367	3,407	3,552	(X)	(X)	
512	Drugs, drug proprietaries and druggists' sundries	4,486	4,625	3,818	3,957	3,792	3,790	3,761	3,688	3,771	3,982	4,170	4,035	4,221	(X)	(X)	
513	Apparel, piece goods, & notions	7,061	6,871	5,930	5,911	6,135	6,597	6,917	7,702	7,645	7,274	6,619	6,458	6,886	(X)	(X)	
514	Groceries & related products	11,820	11,988	11,501	11,501	11,573	11,422	11,648	11,446	11,343	11,581	12,268	12,474	12,185	(X)	(X)	
515	Farm-product raw materials	7,448	7,518	8,106	7,776	7,032	5,563	5,707	5,484	5,292	5,563	6,703	6,774	6,836	(X)	(X)	
516	Chemicals & allied products	2,100	2,261	2,189	2,170	2,270	2,208	2,194	2,198	2,124	1,991	2,116	2,170	2,108	(X)	(X)	
517	Petroleum & petroleum products	3,616	3,261	3,555	3,542	3,047	2,957	3,010	2,806	2,877	3,267	3,229	3,247	3,759	(X)	(X)	
518	Beer, wine, & distilled beverages	3,799	3,965	3,749	3,818	3,899	3,825	3,948	3,835	3,694	3,773	3,871	4,029	3,482	(X)	(X)	
519	Misc. nondurable goods	9,750	10,201	10,161	10,442	10,114	9,343	8,967	8,760	8,786	9,250	9,513	9,000	9,863	(X)	(X)	
	Stock/sales ratios, total	1.35	1.35	1.42	1.29	1.27	1.26	1.27	1.27	1.30	1.25	1.19	1.32	1.22	(X)	(X)	
50	Durable goods	1.87	1.84	1.96	1.77	1.69	1.72	1.71	1.72	1.79	1.68	1.56	1.79	1.64	(X)	(X)	
501	Motor vehicles & auto. equip.	1.73	1.65	1.70	1.53	1.43	1.39	1.39	1.32	1.49	1.58	1.30	1.59	1.44	(X)	(X)	
502	Furniture & home furnishings	1.73	1.70	1.72	1.58	1.43	1.41	1.29	1.38	1.42	1.31	1.19	1.46	1.58	(X)	(X)	
503	Lumber & other construction mat.	1.28	1.32	1.44	1.34	1.15	1.09	1.19	1.11	1.10	1.07	.97	1.18	1.21	(X)	(X)	
504	Sporting, recreational, photo- graphic, & hobby goods, toys & supplies	2.42	2.26	2.15	1.98	1.91	1.91	2.27	2.36	2.31	2.00	1.86	2.00	2.01	(X)	(X)	
505	Metals & minerals, ex. petroleum	1.98	1.94	2.17	1.96	2.02	2.12	2.06	2.04	2.04	1.85	1.78	2.04	1.99	(X)	(X)	
506	Electrical goods	1.86	1.80	1.79	1.65	1.82	1.76	1.69	1.78	1.78	1.66	1.58	1.80	1.61	(X)	(X)	
507	Hardware, plumbing & heating equip.	1.87	1.96	2.08	2.05	1.85	1.76	1.73	1.75	1.88	1.73	1.59	1.83	1.70	(X)	(X)	
508	Machinery, equip. & supplies	2.35	2.27	2.61	2.31	2.20	2.36	2.35	2.37	2.44	2.27	2.22	2.40	1.97	(X)	(X)	
509	Miscellaneous durable goods	1.03	1.13	1.11	.88	.80	.93	.90	1.03	1.01	.85	.86	.91	1.02	(X)	(X)	
51	Nondurable goods	.91	.91	.95	.87	.86	.82	.85	.83	.84	.83	.83	.88	.83	(X)	(X)	
511	Paper & paper products	1.02	1.03	1.09	1.02	.99	1.01	1.00	1.00	.97	.97	.91	1.05	.99	(X)	(X)	
512	Drugs, drug proprietaries and druggists' sundries	1.78	1.91	1.92	1.81	1.68	1.74	1.73	1.61	1.67	1.64	1.59	1.68	1.66	(X)	(X)	
513	Apparel, piece goods, & notions	2.33	1.72	1.82	1.80	1.80	2.25	2.04	1.98	1.85	1.86	1.54	1.95	2.68	(X)	(X)	
514	Groceries & related products	.59	.64	.67	.61	.61	.58	.60	.56	.55	.58	.60	.64	.59	(X)	(X)	
515	Farm-product raw materials	1.11	1.10	1.21	1.07	1.09	.81	.96	.91	1.02	.95	.98	.99	.91	(X)	(X)	
516	Chemicals & allied products	1.03	1.20	1.09	1.02	1.03	1.00	.99	1.09	1.03	.92	.93	1.07	1.08	(X)	(X)	
517	Petroleum & petroleum products	.32	.30	.33	.33	.32	.33	.34	.33	.34	.32	.35	.36	.35	(X)	(X)	
518	Beer, wine, & distilled beverages	1.41	1.39	1.47	1.23	1.21	1.08	1.10	1.06	1.03	1.14	1.08	1.20	.84	(X)	(X)	
519	Misc. nondurable goods	1.31	1.24	1.33	1.08	1.01	.97	.94	.95	1.05	1.04	.99	.99	1.01	(X)	(X)	

^PPreliminary estimate. See sample design and estimation procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980-December 1986*.
 x Cumulative data are not applicable for inventories or stock/sales ratios; cumulative seasonally adjusted sales estimates are not tabulated.

NOTE: Preliminary inventories estimates have been modified prior to publication based on past relationships between preliminary and final estimates. Merchant wholesalers totals and group totals include data for some kinds of business not shown separately.

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. 1987 from Jan. 1987	Feb. 1987 from Feb. 1986	2 months 1987 from 2 months 1986	Feb. 1987 from Jan. 1987	Feb. 1987 from Feb. 1986	Feb. 1987 from Jan. 1987	Feb. 1987 from Feb. 1986	Feb. 1987 from Jan. 1987	Feb. 1987 from Feb. 1986
	Total	+1.2	+9.0	+3.4	+7	+3.2	+6.1	+9.1	+3	+3.3
50	Durable goods	+2.2	+10.0	+5.8	+5	+2.9	+5.4	+10.2	-4	+2.9
501	Motor vehicles & auto. equip.	+5.5	+16.5	+7.8	+8	+13.1	+15.8	+16.7	+3	+13.1
502	Furniture & home furnishings	+2.5	+14.7	+12.6	+1.1	+13.3	+2	+14.7	+1.2	+13.4
503	Lumber & other construction mat	-3	+10.3	+7.0	+2.8	+1.0	+1.5	+10.4	-9	+1.1
504	Sporting, recreational, photographic, & hobby foods, toys & supplies	+10.2	+21.4	+12.9	+3.0	+27.6	+7.0	+20.6	+2.1	+27.6
505	Metals & minerals, ex. petroleum	+4.4	+8.0	+2.6	+2.0	-3.5	+6.2	+7.7	+1.7	-3.6
506	Electrical goods	+4.5	+8.4	+5.7	+9	+9.3	+5.3	+8.4	+9	+9.3
507	Hardware, plumbing & heating equip.	-3.0	+6.2	+4.7	+1.8	.0	+5	+5.8	-9	+1
508	Machinery, equip. & supplies	+2.3	+10.1	+6.9	-1.2	-4.2	+2.5	+10.3	-1.9	-4.2
509	Miscellaneous durable goods	-9.0	-3.2	-4.0	-8	-1.9	-1.1	-2.4	-3.3	-2.0
51	Nondurable goods	+4	+8.1	+1.5	+1.3	+3.8	+6.7	+8.1	+1.6	+4.1
511	Paper & paper products	+1.1	+15.3	+8.8	+1.7	+9.1	+6.0	+15.4	+4	+9.0
512	Drugs, drug proprietaries and druggists' sundries	-4.0	+21.8	+16.4	+3.1	+21.1	+3.8	+21.6	+2.4	+21.0
513	Apparel, piece goods, & notions	+31.6	+22.5	+11.7	-2.7	+15.9	+13.1	+21.7	-1.4	+15.9
514	Groceries & related products	-6.1	+10.0	+7.4	+1.4	+4.2	+2	+10.1	-1.3	+4.3
515	Farm-product raw materials	+1.2	+1.6	-6.0	+9	-7.3	+13.3	+2.0	+9.2	-7.1
516	Chemicals & allied products	-7.2	-5.8	-7.4	+7.7	+3.3	-1.0	-6.0	+5.8	+3.0
517	Petroleum & petroleum products	-2.8	+2.3	-9.5	-9.8	-8.3	+13.4	+2.6	+3.6	-8.1
518	Beer, wine, & distilled beverages	+5.4	+11.2	+6.7	+4.4	+5.8	+3.5	+11.1	+2.0	+5.7
519	Misc. nondurable goods	+10.7	+7.5	+1.7	+4.6	+4	+11.3	+7.5	+1.3	+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 1982 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.

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

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

Estimates based on a sample survey will differ from the value derived from the population because of sampling variability and nonsampling error. Sampling variability occurs 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 variability 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 3. 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 22 percent of the sales estimates and 26 percent for inventories.

For a more detailed description of sampling variability, see *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986*.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventory estimates in this report reflect the results of a benchmarking² operation which made use of 1984 and 1985 estimates tabulated from the 1985 Annual Trade Survey. The sales estimates for the period January 1984 through December 1986 were derived in a manner so that the sum of the 12 months for 1984 and 1985 were equal to the sales estimates published in the 1984 and 1985 Annual Trade Surveys. The revision process was conducted so as to minimize changes to previously published month-to-month trends. The estimates for the original series were derived by using composite estimation procedures. Using inventory results from the annual surveys for the years 1980 to 1985, monthly inventories were revised to a non-LIFO basis. Through the use of carry-forward factors, the effect of the revision process was applied to composite sales and inventory estimates subsequent to December 1985. These factors were derived at various kind-of-business levels and are held constant until the next benchmarking operation. Aggregate level estimates were derived by summing appropriate three-digit kind-of-business estimates, thereby assuring additivity.

Classification Differences Between Monthly Survey and 1977 and 1982 Censuses of Wholesale Trade

For SIC 505, the monthly survey included merchant wholesalers as well as sales branches of ferrous metals service centers with inventories. Therefore, the 1977 and 1982 census sales

estimates included the receipts of merchant wholesalers and sales branches of ferrous metals service centers with inventories.

Establishments classified in the Farm-Product Raw Materials group (SIC 515) included as sales, products purchased and transferred to other company establishments. In the monthly survey, intercompany transfers are not included in sales. Because of the differences, the 1977 and 1982 sales for the SIC were obtained from the 1977 and 1982 Annual Trade Surveys (ATS).

Inventories were not benchmarked to the census levels since the census of wholesale trade does not include inventories of auxiliary and central administrative offices of merchant wholesale establishments which are included in the monthly survey. The inventory estimates for the years 1977 and 1982 were computed by multiplying the stock/sales ratios obtained from the annual surveys by the census sales for these years.

Unpublished Data

Sales and inventory estimates for selected unpublished three-digit and all four-digit wholesale trade categories are not included in this publication because their sampling variability is so high, relative to the changes from month-to-month or between other periods, as to make them potentially misleading. The Census Bureau for a nominal fee 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 on a non-LIFO basis 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. Methods of valuation may vary according to the accounting practices of the firm.

²For a more detailed description, see the section dealing with revisions to published data in the Current Business Reports publication, *Revised Monthly Wholesale Trade: December 1980 Through December 1986*.

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 current and past experiences. Therefore, the adjusted could become less precise if 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.

Concurrent Seasonal Adjustment

Concurrent seasonal adjustment uses all available unadjusted estimates (including the latest preliminary estimates) as input to the X-11 program. After the last benchmarking operation, factors were developed and used to derive adjusted sales and inventory estimates for the period January 1984 through January 1987. When unadjusted preliminary and final estimates become available, all estimates will be used as input to the X-11 program and new factors will be applied to the preliminary and final (one month before the preliminary) estimates and to the previous year estimates that correspond to the preliminary month.

Table 4 presents, by kind of business, the combined seasonal and trading-day factors that are used to adjust inventory and sales estimates. For all kind of business, one month of projected factors are shown. These projected factors are estimates of the factors that will be used to derive adjusted estimates.

An electronic version of portions of this report is available through a commercial vendor as part of CENDATA, the Census Bureau's on-line information utility. For further information, contact Customer Services, DUSD, Bureau of the Census, Washington, DC 20233 or call (301) 763-4100.

Table 3. 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	1.1-1.6	1.2	0.9-1.4	1.3	0.3-0.6	0.4	0.9-2.2	1.5	1.0-1.9	1.3	0.2-1.6	0.4
	Durable goods, total	1.3-1.7	1.5	1.2-1.8	1.4	0.5-0.8	0.6	1.4-3.3	2.0	1.4-2.4	1.7	0.2-2.5	0.4
501	Motor vehicles and automotive parts and supplies	2.1-4.0	3.2	2.0-3.7	3.1	0.8-1.7	1.3	3.6-5.7	4.6	3.6-5.4	4.4	0.4-1.5	0.7
502	Furniture and home furnishings	6.6-9.6	7.9	5.3-8.6	7.3	2.1-6.2	3.3	5.3-12.3	10.0	5.0-12.8	10.2	0.7-3.2	1.2
503	Lumber and other construction materials	4.8-7.1	5.8	4.3-7.2	5.5	1.1-2.5	1.8	6.2-11.8	7.5	5.4-11.5	7.4	0.6-3.0	1.3
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	9.3-22.9	11.4	8.8-20.8	10.9	2.3-5.3	3.3	7.2-16.2	10.8	8.5-16.7	10.6	0.9-2.4	1.6
505	Metals and minerals, ex. petroleum	2.4-6.6	4.9	2.5-6.5	4.2	0.8-2.0	1.4	4.0-6.9	4.8	3.2-6.8	4.8	0.5-2.1	0.7
506	Electrical goods	1.9-9.2	2.2	1.4-8.6	2.3	1.1-2.5	1.7	1.6-9.2	2.6	1.7-8.7	2.3	0.5-1.1	0.7
507	Hardware, plumbing, heating equipment, and supplies	4.4-7.8	6.7	4.3-8.7	6.8	1.3-2.9	2.0	4.8-9.3	6.0	4.5-9.2	6.1	0.5-2.1	0.6
508	Machinery, equipment, and supplies	2.5-4.2	2.8	1.9-3.4	2.9	1.0-2.1	1.7	2.3-9.0	4.4	2.4-5.8	3.8	0.4-6.4	0.6
509	Miscellaneous durable goods	3.5-4.9	3.9	3.0-4.3	3.7	1.4-2.5	1.9	4.5-8.6	6.6	4.3-9.1	6.8	0.5-2.4	0.9
51	Nondurable goods, total	1.5-3.2	1.8	1.5-3.1	1.6	0.5-1.0	0.7	1.5-2.6	2.2	1.6-2.8	2.2	0.3-0.8	0.4
511	Paper and paper products	2.9-5.1	4.0	3.4-4.5	4.0	1.2-2.9	1.9	5.1-7.3	6.4	4.5-7.1	6.5	0.6-2.2	0.8
512	Drugs, drug proprietaries and druggists' sundries	4.5-9.3	7.8	4.8-9.0	7.2	0.8-2.1	1.5	4.5-9.6	7.2	4.6-9.7	7.5	0.6-2.6	1.0
513	Apparel, piece goods, & notions	4.2-7.5	4.7	3.2-7.3	4.7	1.9-4.9	2.7	3.8-11.3	8.5	4.1-11.6	8.4	0.6-2.6	1.5
514	Groceries and related products	2.6-5.8	3.6	2.1-5.6	3.5	0.6-2.8	1.2	4.6-7.6	6.2	4.4-8.8	6.1	0.5-1.8	1.0
515	Farm-product raw materials	2.9-6.3	5.0	2.5-8.5	4.0	2.5-5.3	3.8	3.7-6.8	6.1	5.2-6.3	5.7	0.8-3.3	1.5
516	Chemicals & allied products	4.6-10.1	8.2	4.3-9.3	7.4	1.4-5.1	3.1	6.6-13.0	7.5	6.3-12.9	7.0	0.4-2.9	1.7
517	Petroleum & petroleum products	2.8-10.4	3.5	2.6-11.6	3.3	0.4-3.0	1.0	2.9-12.0	4.2	2.9-14.1	4.3	0.5-6.0	1.1
518	Beer, wine, and distilled alcoholic beverages	2.9-7.3	5.0	2.4-8.8	5.4	0.9-3.8	2.0	4.9-6.1	5.2	4.9-5.7	5.0	0.8-1.8	1.1
519	Misc. nondurable goods	2.3-7.3	4.9	4.0-7.1	4.5	0.7-2.8	2.0	6.0-10.5	7.3	6.0-10.5	6.9	0.7-3.0	1.0

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 1986 through January 1987.

Table 4. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers

SIC code	Kind of business	1986											1987		
		Feb. [†]	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. [†]	Feb. [†]	Mar.
	Sales,¹ total	.904	1.013	1.011	1.043	1.015	1.003	.969	1.008	1.056	.962	1.035	.953	.904	1.039
50	Durable goods	.891	1.007	1.015	1.028	1.024	1.009	.998	1.026	1.090	.956	1.010	.920	.890	1.033
501	Motor vehicles & auto. equip.	.875	.997	1.039	1.075	1.051	1.039	.953	.941	1.090	.954	1.011	.958	.873	1.011
502	Furniture & home furnishings	.888	.972	1.035	1.015	1.033	1.007	.997	1.040	1.159	.976	.974	.868	.888	.993
503	Lumber & other construction mat.	.798	.919	1.015	1.068	1.101	1.099	1.091	1.078	1.151	.953	.876	.811	.797	.942
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	.870	.969	.994	.965	.971	.990	.982	1.086	1.221	1.066	1.011	.849	.875	.994
505	Metals & minerals, ex. petroleum	.950	1.061	1.022	1.012	1.029	.982	.990	1.039	1.045	.892	.983	.968	.952	1.086
506	Electrical goods	.905	.995	.953	.950	1.000	1.007	.997	1.085	1.111	1.012	1.062	.912	.905	1.019
507	Hardware, plumbing & heating equip.	.896	.946	1.018	1.044	1.042	1.046	1.031	1.014	1.094	.957	.960	.932	.900	.965
508	Machinery, equip. & supplies	.907	1.023	1.036	1.038	1.027	.993	.981	1.026	1.048	.930	1.043	.908	.906	1.066
509	Miscellaneous durable goods	.885	1.043	.993	1.050	.987	.950	.998	1.050	1.100	.989	.954	.954	.878	1.045
51	Nondurable goods	.920	1.017	1.000	1.055	.999	.994	.958	.993	1.030	.968	1.056	.982	.919	1.046
511	Paper & paper products	.935	.997	1.009	.995	.999	.999	1.015	1.007	1.072	.943	1.005	.979	.934	1.034
512	Drugs, drug proprietaries and druggists' sundries	.925	.995	1.034	.986	.994	.996	.960	1.030	1.078	.949	1.025	1.001	.926	1.027
513	Apparel, piece goods, and notions	1.026	.995	1.006	.923	1.013	1.166	1.115	1.035	1.128	.894	.779	.887	1.033	1.036
514	Groceries & related products	.917	.997	1.006	1.042	.999	1.032	1.004	.995	1.025	.964	1.025	.978	.916	1.011
515	Farm-product raw materials	.977	1.060	.947	1.106	.902	.902	.835	.888	1.014	1.075	1.186	1.090	.974	1.091
516	Chemicals & allied products	.927	.997	1.002	1.024	1.045	.980	.998	1.046	1.098	.914	.930	.991	.929	1.032
517	Petroleum & petroleum products	.948	1.037	.990	.975	.942	.945	.911	1.005	1.031	.987	1.114	1.104	.946	1.060
518	Beer, wine, & distilled beverages	.773	.911	.968	1.062	1.073	1.111	1.044	1.007	1.073	.984	1.201	.760	.774	.951
519	Misc. nondurable goods	.851	1.048	1.073	1.203	1.082	1.006	.941	.968	1.008	.915	1.017	.856	.851	1.085
	Inventories,¹ total	1.006	1.008	1.007	.991	.991	.987	.984	.996	1.008	1.010	1.007	1.003	1.006	1.008
50	Durable goods	.994	1.001	1.004	.999	1.006	1.004	1.002	1.010	1.001	.997	.995	.985	.994	1.001
501	Motor vehicles & auto. equip.	1.003	1.007	1.009	.988	1.000	.974	.958	1.019	1.016	1.006	1.016	.998	1.003	1.007
502	Furniture & home furnishings	1.014	.996	.975	.983	1.006	.981	1.018	1.009	.997	.985	1.027	1.014	1.013	.994
503	Lumber & other construction mat.	.998	1.024	1.023	1.000	1.012	1.007	1.010	.997	.980	.985	.996	.961	.997	1.023
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	.992	1.012	1.011	.994	1.015	1.022	1.012	1.008	.996	.976	.977	.984	.992	1.011
505	Metals & minerals, ex. petroleum	1.009	.990	.978	.994	1.013	1.013	1.020	1.004	.982	.987	1.013	1.007	1.010	.991
506	Electrical goods	.969	.975	.996	.992	1.001	1.030	1.021	1.036	1.023	1.005	.984	.969	.969	.975
507	Hardware, plumbing & heating equip.	.999	1.023	1.042	1.032	1.004	1.013	1.002	.983	.980	.980	.962	.972	.998	1.023
508	Machinery, equip. & supplies	.992	1.008	1.005	1.007	1.012	1.002	1.003	.995	1.002	.991	.997	.985	.992	1.008
509	Miscellaneous durable goods	.998	.978	.991	1.000	.982	1.015	1.026	1.027	1.014	1.029	.957	.974	.999	.981
51	Nondurable goods	1.031	1.022	1.013	.976	.964	.958	.951	.971	1.019	1.029	1.031	1.036	1.030	1.022
511	Paper & paper products	1.006	.999	.998	1.007	1.007	1.003	1.016	.984	.985	1.007	.995	.994	1.007	1.000
512	Drugs, drug proprietaries and druggists' sundries	1.029	1.048	1.014	.976	.974	.964	.970	1.012	1.023	.974	.994	1.023	1.030	1.050
513	Apparel, piece goods, & notions	.987	.951	.975	1.011	1.023	1.069	1.049	1.015	.992	.944	.994	1.000	.987	.947
514	Groceries & related products	1.007	.998	.990	.998	1.000	.982	.972	.987	1.040	1.041	1.000	.979	1.006	.998
515	Farm-product raw materials	1.158	1.097	.985	.806	.786	.779	.807	.875	1.069	1.186	1.213	1.251	1.156	1.096
516	Chemicals & allied products	1.005	.991	1.038	.996	1.003	1.025	.989	.959	1.015	1.004	.983	.990	1.008	.990
517	Petroleum & petroleum products	.926	.919	.955	1.032	1.033	.964	.943	1.023	1.021	1.034	1.090	1.062	.924	.919
518	Beer, wine, & distilled beverages	.963	.985	1.023	1.003	1.030	1.027	.994	1.008	1.060	1.062	.912	.942	.964	.985
519	Misc. nondurable goods	1.070	1.112	1.085	.991	.947	.941	.924	.941	.973	.958	1.018	1.033	1.067	1.113

[†]Revised.

¹Adjusted sales and inventory data shown in table 1A 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 the current month preliminary estimate.

Monthly Wholesale Trade

CURRENT BUSINESS REPORTS

March 1987

Issued May 1987

BW-87-03

Sales and Inventories

Sales. March 1987 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$123.9 billion, little changed from the revised February level and up 9.7 percent from a year ago. The February preliminary estimate was revised downward by \$0.4 billion or about 0.3 percent. March sales of durable goods were little changed from February and were up 12.0 percent from a year ago. March sales of nondurable goods were little changed from February and were 7.6 percent above March 1986.

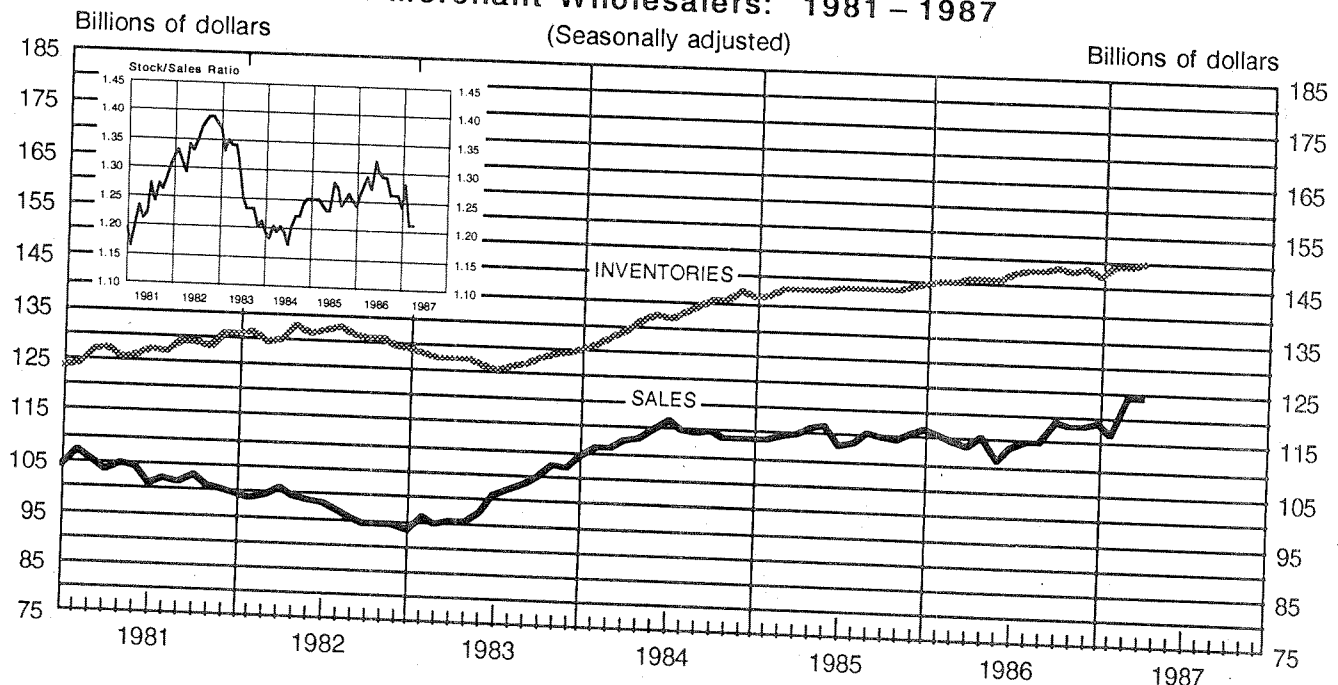
Inventories. Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$149.5

billion at the end of March, little changed from the revised February level and from a year ago. The February preliminary estimate was revised downward by \$0.4 billion or about 0.3 percent. Inventories of durable and nondurable goods wholesalers were little changed from the February level and from a year ago.

Stock/Sales Ratio. The March stock/sales ratio for merchant wholesalers, based on seasonally adjusted data was 1.21, the same as the February ratio and below the year ago ratio of 1.29.

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 4.

Monthly Sales, Inventories, and Stock/Sales Ratios
of Merchant Wholesalers: 1981 - 1987



The Monthly Wholesale Trade Report for April is scheduled to be released June 10, 1987, at 10:00 a.m.



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 1A. Adjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers:
1987 and 1986**

(Data adjusted for seasonal variation and, in the case of sales, also for trading-day differences. Sales and inventories in millions of dollars)

SIC code	Kind of business	1987				1986											
		Jan.	Feb.	Mar. ^P	Mar. ^T	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.			
	Sales, total	116,545	123,281	123,914	112,945	114,778	110,549	113,232	114,444	114,426	118,138	117,488	117,734	118,446			
50	Durable goods	55,893	59,344	59,636	53,233	55,741	53,932	54,783	55,697	54,747	56,998	57,102	56,758	57,833			
501	Motor vehicles & auto. equip.	11,334	12,931	13,016	11,270	11,657	11,567	12,152	12,782	12,313	12,665	12,867	12,459	12,966			
502	Furniture & home furnishings	2,377	2,304	2,362	2,074	2,092	2,178	2,247	2,195	2,260	2,463	2,260	2,170	2,227			
503	Lumber & other construction mat.	4,543	4,571	4,776	4,024	4,325	4,345	4,102	4,280	4,235	4,318	4,396	4,391	4,635			
504	Sporting, recreational, photo- graphic, & hobby goods, toys & supplies	1,645	1,718	1,606	1,465	1,521	1,559	1,392	1,370	1,444	1,512	1,567	1,622	1,627			
505	Metals & minerals, ex. petroleum	4,983	5,267	5,458	4,613	4,706	4,540	4,659	4,826	4,589	4,807	4,934	4,937	4,852			
506	Electrical goods	7,899	8,270	8,117	7,681	7,654	7,552	7,713	7,650	7,603	7,817	7,887	7,630	7,812			
507	Hardware, plumbing & heating equipment	3,667	3,891	4,114	3,456	3,590	3,707	3,699	3,642	3,465	3,709	3,745	3,695	3,922			
508	Machinery, equip. & supplies	14,787	15,230	15,326	13,827	14,479	13,645	13,782	14,129	13,990	14,029	14,143	14,671	15,027			
509	Miscellaneous durable goods	4,658	5,162	4,861	4,823	5,717	4,839	5,037	4,823	4,848	5,678	5,303	5,183	4,765			
51	Nondurable goods	60,652	63,937	64,278	59,712	59,037	56,617	58,449	58,747	59,679	61,140	60,386	60,976	60,613			
511	Paper & paper products	3,564	3,706	3,665	3,308	3,349	3,288	3,351	3,348	3,433	3,373	3,437	3,453	3,584			
512	Drugs, drug proprietaries and druggists' sundries	2,514	2,608	2,567	2,200	2,177	2,213	2,190	2,294	2,356	2,357	2,438	2,524	2,484			
513	Apparel, piece goods, & notions	3,417	3,852	3,843	3,285	3,389	3,173	3,355	3,334	3,700	3,772	3,806	3,709	3,300			
514	Groceries & related products	20,429	20,596	20,906	19,061	18,908	19,000	19,415	19,656	20,441	20,241	20,104	20,094	20,023			
515	Farm-product raw materials	6,174	6,496	6,779	6,769	6,833	6,187	6,558	6,707	6,220	6,577	6,721	6,384	6,358			
516	Chemicals & allied products	2,055	1,990	2,025	2,114	2,198	2,156	2,121	2,066	2,064	2,076	2,078	2,225	2,097			
517	Petroleum & petroleum products	10,253	11,297	11,412	10,326	9,543	9,264	9,321	8,916	9,158	10,236	8,925	9,224	9,724			
518	Beer, wine, & distilled beverages	3,550	3,621	3,597	3,438	3,324	3,348	3,349	3,256	3,437	3,341	3,341	3,420	3,446			
519	Misc. nondurable goods	8,696	9,771	9,484	9,211	9,316	7,988	8,789	9,170	8,870	9,231	9,536	9,943	9,597			
	Inventories, total	149,347	149,408	149,500	145,518	145,961	146,012	147,129	147,850	148,050	148,599	147,754	148,204	147,375			
50	Durable goods	97,280	96,594	96,971	94,295	95,230	95,646	95,865	96,680	96,883	97,216	96,845	97,652	95,710			
501	Motor vehicles & auto. equip.	18,782	19,176	19,503	17,042	17,118	17,521	17,736	17,937	18,294	18,494	17,934	18,834	18,643			
502	Furniture & home furnishings	3,510	3,558	3,634	3,180	3,174	3,166	2,974	3,114	3,151	3,321	3,116	3,132	3,333			
503	Lumber & other construction mat.	4,907	4,846	4,820	4,869	4,953	5,040	5,315	5,173	5,049	4,993	5,030	5,017	4,940			
504	Sporting, recreational, photo- graphic, & hobby goods, toys & supplies	3,436	3,473	3,479	2,766	2,851	2,884	3,026	3,136	3,230	3,255	3,572	3,541	3,387			
505	Metals & minerals, ex. petroleum	9,508	9,182	9,368	9,738	9,927	9,784	9,736	9,564	9,075	9,217	9,329	9,088	9,359			
506	Electrical goods	13,864	14,092	14,116	13,012	13,299	12,744	12,986	13,294	13,230	13,574	13,502	13,815	13,576			
507	Hardware, plumbing & heating equipment	6,576	6,509	6,442	6,546	6,479	6,593	6,656	6,599	6,700	6,630	6,643	6,611	6,642			
508	Machinery, equip. & supplies	31,984	31,106	30,695	32,652	32,856	33,167	32,890	33,203	33,381	32,778	32,784	33,087	31,007			
509	Miscellaneous durable goods	4,713	4,652	4,914	4,490	4,573	4,747	4,546	4,660	4,773	4,954	4,935	4,527	4,823			
51	Nondurable goods	52,067	52,814	52,529	51,223	50,731	50,366	51,264	51,170	51,167	51,383	50,909	50,552	51,665			
511	Paper & paper products	3,595	3,535	3,509	3,368	3,359	3,287	3,330	3,345	3,339	3,346	3,418	3,383	3,570			
512	Drugs, drug proprietaries and druggists' sundries	4,385	4,394	4,170	3,769	3,740	3,883	3,861	3,826	3,888	3,935	4,076	4,143	4,246			
513	Apparel, piece goods, & notions	7,061	7,142	7,327	6,229	6,292	6,525	6,761	7,205	7,288	7,167	6,672	6,841	6,928			
514	Groceries & related products	12,074	11,915	11,863	11,536	11,690	11,445	11,648	11,656	11,670	11,734	11,796	11,983	12,185			
515	Farm-product raw materials	5,954	5,978	5,942	7,063	7,139	6,902	7,261	7,040	6,558	6,358	6,270	5,712	5,636			
516	Chemicals & allied products	2,121	2,253	2,284	2,172	2,187	2,217	2,187	2,144	2,148	2,076	2,085	2,161	2,144			
517	Petroleum & petroleum products	3,405	3,468	3,459	3,858	3,191	2,865	2,914	2,911	3,051	3,194	3,163	3,140	3,449			
518	Beer, wine, & distilled beverages	4,033	4,347	4,333	3,829	3,811	3,814	3,833	3,734	3,716	3,743	3,652	3,794	3,818			
519	Misc. nondurable goods	9,439	9,782	9,642	9,399	9,322	9,428	9,469	9,309	9,509	9,830	9,777	9,395	9,689			
	Stock/sales ratios, total	1.28	1.21	1.21	1.29	1.27	1.32	1.30	1.29	1.29	1.26	1.26	1.26	1.24			
50	Durable goods	1.74	1.63	1.63	1.77	1.71	1.77	1.75	1.74	1.77	1.71	1.70	1.72	1.65			
501	Motor vehicles & auto equip.	1.66	1.48	1.50	1.51	1.47	1.51	1.46	1.40	1.49	1.46	1.39	1.51	1.44			
502	Furniture & home furnishings	1.48	1.54	1.54	1.53	1.52	1.45	1.32	1.42	1.39	1.35	1.38	1.44	1.50			
503	Lumber & other construction mat.	1.08	1.06	1.01	1.21	1.15	1.16	1.30	1.21	1.19	1.16	1.14	1.14	1.07			
504	Sporting, recreational, photo- graphic, & hobby goods, toys & supplies	2.09	2.02	2.17	1.89	1.87	1.85	2.17	2.29	2.24	2.15	2.28	2.18	2.08			
505	Metals & minerals, ex. petroleum	1.91	1.74	1.72	2.11	2.11	2.16	2.09	1.98	1.98	1.92	1.89	1.84	1.93			
506	Electrical goods	1.76	1.70	1.74	1.69	1.74	1.69	1.68	1.74	1.74	1.74	1.71	1.81	1.74			
507	Hardware, plumbing & heating equipment	1.79	1.67	1.57	1.89	1.80	1.78	1.80	1.81	1.93	1.79	1.77	1.79	1.69			
508	Machinery, equip. & supplies	2.16	2.04	2.00	2.36	2.27	2.43	2.39	2.35	2.39	2.34	2.32	2.26	2.06			
509	Miscellaneous durable goods	1.01	.90	1.01	.93	.80	.98	.90	.97	.98	.87	.93	.87	1.01			
51	Nondurable goods	.86	.83	.82	.86	.86	.89	.88	.87	.86	.84	.84	.83	.85			
511	Paper & paper products	1.01	.95	.96	1.02	1.00	1.00	.99	1.00	.97	.99	.99	.98	1.00			
512	Drugs, drug proprietaries and druggists' sundries	1.74	1.68	1.62	1.71	1.72	1.75	1.76	1.67	1.65	1.67	1.67	1.64	1.71			
513	Apparel, piece goods, & notions	2.07	1.85	1.91	1.90	1.86	2.06	2.02	2.16	1.97	1.90	1.75	1.84	2.10			
514	Groceries & related products	.59	.58	.57	.61	.62	.60	.60	.59	.57	.58	.59	.60	.61			
515	Farm-product raw materials	.96	.92	.88	1.04	1.04	1.12	1.11	1.05	1.05	.97	.93	.89	.89			
516	Chemicals & allied products	1.03	1.13	1.13	1.03	.99	1.03	1.03	1.04	1.04	1.00	1.00	.97	1.02			
517	Petroleum & petroleum products	.33	.31	.30	.37	.33	.31	.31	.33	.33	.31	.35	.34	.35			
518	Beer, wine, & distilled beverages	1.14	1.20	1.20	1.11	1.15	1.14	1.14	1.15	1.08	1.14	1.09	1.11	1.11			
519	Misc. nondurable goods	1.09	1.00	1.02	1.02	1.00	1.18	1.08	1.02	1.07	1.06	1.03	.94	1.01			

^TRevised.

^PPreliminary estimate. See sample design and estimation procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986*.

Table 1B. Unadjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers:
1987 and 1986

(Data not adjusted for seasonal variation or trading-day differences. Sales and inventories in millions of dollars)

SIC code	Kind of business	1987				1986										Total 4 mos.	
		Jan.	Feb.	Mar.	Apr. ^P	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1987	1986	
	Sales, total	110,564	111,705	126,908	126,189	116,010	115,102	114,783	115,561	112,208	118,772	124,995	113,152	121,499	475,366	445,239	
50	Durable goods	51,319	52,834	61,100	61,089	56,615	55,672	56,448	56,415	54,282	58,368	62,287	54,350	58,033	226,342	208,253	
501	Motor vehicles & auto equipment	10,858	11,263	13,070	12,851	12,112	12,434	12,772	13,280	11,734	11,918	14,025	11,886	13,109	48,042	44,058	
502	Furniture & home furnishings	2,063	2,032	2,349	2,231	2,165	2,211	2,321	2,210	2,253	2,561	2,619	2,118	2,169	8,675	7,875	
503	Lumber & other construction mat.	3,684	3,625	4,614	4,966	4,390	4,640	4,516	4,704	4,620	4,655	5,060	4,185	4,060	16,889	14,995	
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	1,397	1,507	1,524	1,518	1,512	1,504	1,352	1,356	1,418	1,642	1,913	1,729	1,645	5,946	5,522	
505	Metals & minerals, ex. petroleum	4,824	4,972	6,031	5,237	4,810	4,594	4,794	4,739	4,543	4,994	5,156	4,404	4,770	21,064	19,353	
506	Electrical goods	7,204	7,501	8,159	7,881	7,294	7,174	7,713	7,704	7,580	8,481	8,762	7,722	8,296	30,745	28,918	
507	Hardware, plumbing & heating equip.	3,418	3,510	4,057	4,204	3,655	3,870	3,854	3,810	3,572	3,761	4,097	3,536	3,765	15,189	13,353	
508	Machinery, equip. & supplies	13,427	13,814	16,131	16,010	15,000	14,164	14,154	14,030	13,724	14,394	14,822	13,644	15,673	59,382	54,611	
509	Miscellaneous durable goods	4,444	4,610	5,165	6,191	5,677	5,081	4,972	4,582	4,838	5,962	5,833	5,126	4,546	20,410	19,568	
51	Nondurable goods	59,245	58,871	65,808	65,100	59,395	59,430	58,335	59,146	57,926	60,404	62,708	58,802	63,466	249,024	236,986	
511	Paper & paper products	3,489	3,480	3,800	3,792	3,379	3,272	3,348	3,345	3,484	3,397	3,684	3,256	3,602	14,561	13,133	
512	Drugs, drug proprietaries and druggists' sundries	2,517	2,418	2,572	2,565	2,251	2,182	2,177	2,285	2,262	2,428	2,628	2,395	2,546	10,072	8,673	
513	Apparel, piece goods, & notions	3,031	4,002	4,042	3,226	3,409	2,929	3,399	3,888	4,125	3,904	4,293	3,316	2,571	14,301	12,986	
514	Groceries & related products	19,980	18,845	20,141	20,190	19,021	19,798	19,396	20,285	20,523	20,140	20,607	19,371	20,524	79,156	74,104	
515	Farm-product raw materials	6,730	6,295	7,182	6,894	6,471	6,843	5,915	6,050	5,194	5,840	6,815	6,863	7,541	27,101	28,134	
516	Chemicals & allied products	2,037	1,841	2,186	2,180	2,202	2,208	2,216	2,025	2,060	2,172	2,282	2,034	1,950	8,244	8,560	
517	Petroleum & petroleum products	11,319	10,823	12,140	11,287	9,448	9,032	8,780	8,426	8,343	10,287	9,202	9,104	10,833	45,569	44,806	
518	Beer, wine, & distilled beverages	2,698	2,803	3,327	3,668	3,218	3,556	3,594	3,617	3,588	3,300	3,585	3,365	4,139	12,496	11,518	
519	Misc. nondurable goods	7,444	8,364	10,418	11,298	9,996	9,610	9,510	9,225	8,347	8,936	9,612	9,098	9,760	37,524	35,072	
	Inventories, total	149,548	150,166	150,882	150,563	146,788	144,662	145,977	146,279	145,882	147,964	149,009	148,804	148,245	(X)	(X)	
50	Durable goods	95,895	95,989	97,667	97,992	95,574	95,647	96,472	97,005	96,958	97,991	97,153	97,210	95,353	(X)	(X)	
501	Motor vehicles & auto, equip.	18,744	19,214	19,363	19,317	17,722	17,311	17,736	17,471	17,526	18,845	18,221	18,947	18,941	(X)	(X)	
502	Furniture & home furnishings	3,559	3,601	3,675	3,831	3,095	3,112	2,992	3,055	3,208	3,351	3,107	3,085	3,423	(X)	(X)	
503	Lumber & other construction mat.	4,716	4,831	5,153	5,211	5,067	5,040	5,379	5,209	5,099	4,978	4,929	4,942	4,920	(X)	(X)	
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	3,381	3,438	3,520	3,485	2,882	2,867	3,071	3,205	3,269	3,281	3,558	3,456	3,309	(X)	(X)	
505	Metals & minerals, ex. petroleum	9,575	9,182	9,311	9,320	9,709	9,725	9,863	9,688	9,257	9,254	9,161	8,970	9,481	(X)	(X)	
506	Electrical goods	13,434	13,669	13,772	13,836	13,246	12,642	12,999	13,693	13,508	14,063	13,813	13,884	13,359	(X)	(X)	
507	Hardware, plumbing & heating equipment	6,392	6,502	6,686	6,582	6,751	6,804	6,683	6,685	6,713	6,517	6,510	6,479	6,390	(X)	(X)	
508	Machinery, equip. & supplies	31,504	30,919	31,369	31,276	33,020	33,399	33,285	33,269	33,481	32,614	32,850	32,789	30,914	(X)	(X)	
509	Miscellaneous durable goods	4,590	4,633	4,818	5,134	4,532	4,747	4,464	4,730	4,897	5,088	5,004	4,658	4,616	(X)	(X)	
51	Nondurable goods	53,653	54,177	53,215	52,571	51,214	49,015	49,505	49,274	48,924	49,973	51,856	51,594	52,892	(X)	(X)	
511	Paper & paper products	3,573	3,560	3,574	3,546	3,352	3,310	3,353	3,355	3,392	3,292	3,367	3,407	3,552	(X)	(X)	
512	Drugs, drug proprietaries and druggists' sundries	4,486	4,530	4,368	4,464	3,792	3,790	3,761	3,688	3,771	3,982	4,170	4,035	4,221	(X)	(X)	
513	Apparel, piece goods, & notions	7,061	7,042	6,930	7,016	6,135	6,597	6,917	7,702	7,645	7,274	6,619	6,458	6,886	(X)	(X)	
514	Groceries & related products	11,820	12,022	11,579	11,286	11,573	11,422	11,648	11,446	11,343	11,581	12,268	12,474	12,185	(X)	(X)	
515	Farm-product raw materials	7,448	6,916	6,254	5,987	7,032	5,563	5,707	5,484	5,292	5,563	6,703	6,774	6,836	(X)	(X)	
516	Chemicals & allied products	2,100	2,267	2,219	2,315	2,270	2,208	2,194	2,198	2,124	1,991	2,116	2,170	2,108	(X)	(X)	
517	Petroleum & petroleum products	3,616	3,194	3,230	3,046	3,047	2,957	3,010	2,806	2,877	3,267	3,229	3,247	3,759	(X)	(X)	
518	Beer, wine, & distilled beverages	3,799	4,169	4,260	4,431	3,899	3,825	3,948	3,835	3,694	3,773	3,871	4,029	3,482	(X)	(X)	
519	Misc. nondurable goods	9,750	10,477	10,801	10,480	10,114	9,343	8,967	8,760	8,786	9,250	9,513	9,000	9,863	(X)	(X)	
	Stock/sales ratios, total	1.35	1.34	1.19	1.19	1.27	1.26	1.27	1.27	1.30	1.25	1.19	1.32	1.22	(X)	(X)	
50	Durable goods	1.87	1.82	1.60	1.60	1.69	1.72	1.71	1.72	1.79	1.68	1.56	1.79	1.64	(X)	(X)	
501	Motor vehicles & auto equip.	1.73	1.71	1.48	1.50	1.43	1.39	1.39	1.32	1.49	1.58	1.30	1.59	1.44	(X)	(X)	
502	Furniture & home furnishings	1.73	1.77	1.56	1.72	1.43	1.41	1.29	1.38	1.42	1.31	1.19	1.46	1.58	(X)	(X)	
503	Lumber & other construction mat.	1.28	1.33	1.12	1.05	1.15	1.09	1.19	1.11	1.10	1.07	.97	1.18	1.21	(X)	(X)	
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	2.42	2.28	2.31	2.30	1.91	1.91	2.27	2.36	2.31	2.00	1.86	2.00	2.01	(X)	(X)	
505	Metals & minerals, ex. petroleum	1.98	1.85	1.54	1.78	2.02	2.12	2.06	2.04	2.04	1.85	1.78	2.04	1.99	(X)	(X)	
506	Electrical goods	1.86	1.82	1.69	1.76	1.82	1.76	1.69	1.78	1.78	1.66	1.58	1.80	1.61	(X)	(X)	
507	Hardware, plumbing & heating equipment	1.87	1.85	1.65	1.57	1.85	1.76	1.73	1.75	1.88	1.73	1.59	1.83	1.70	(X)	(X)	
508	Machinery, equip. & supplies	2.35	2.24	1.94	1.95	2.20	2.36	2.35	2.37	2.44	2.27	2.22	2.40	1.97	(X)	(X)	
509	Miscellaneous durable goods	1.03	1.00	.93	.83	.80	.93	.90	1.03	1.01	.85	.86	.91	1.02	(X)	(X)	
51	Nondurable goods	.91	.92	.81	.81	.86	.82	.85	.83	.84	.83	.83	.88	.83	(X)	(X)	
511	Paper & paper products	1.02	1.02	.94	.94	.99	1.01	1.00	1.00	.97	.97	.91	1.05	.99	(X)	(X)	
512	Drugs, drug proprietaries and druggists' sundries	1.78	1.87	1.70	1.74	1.68	1.74	1.73	1.61	1.67	1.64	1.59	1.68	1.66	(X)	(X)	
513	Apparel, piece goods, & notions	2.33	1.76	1.71	2.17	1.80	2.25	2.04	1.98	1.85	1.86	1.54	1.95	2.68	(X)	(X)	
514	Groceries & related products	.59	.64	.57	.56	.61	.58	.60	.56	.55	.58	.60	.64	.59	(X)	(X)	
515	Farm-product raw materials	1.11	1.10	.87	.87	1.09	.81	.96	.91	1.02	.95	.98	.99	.91	(X)	(X)	
516	Chemicals & allied products	1.03	1.23	1.02	1.06	1.03	1.00	.99	1.09	1.03	.92	.93	1.07	1.08	(X)	(X)	
517	Petroleum & petroleum products	.32	.30	.27	.27	.32	.33	.34	.33	.34	.32	.35	.36	.35	(X)	(X)	
518	Beer, wine, & distilled beverages	1.41	1.49	1.28	1.21	1.21	1.08	1.10	1.06	1.03	1.14	1.08	1.20	.84	(X)	(X)	
519	Misc. nondurable goods	1.31	1.25	1.04	.93	1.01	.97	.94	.95	1.05	1.04	.99	.99	1.01	(X)	(X)	
P Preliminary estimate. See sample design and estimation procedures.																	

^PPreliminary estimate. See sample design and estimation procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986*.
x Cumulative data are not applicable for inventories or stock/sales ratios, cumulative seasonally adjusted sales estimates are not tabulated.

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. 1987 from Mar. 1987	Apr. 1987 from Apr. 1986	4 months 1987 from 4 months 1986	Apr. 1987 from Mar. 1987	Apr. 1987 from Apr. 1986	Apr. 1987 from Mar. 1987	Apr. 1987 from Apr. 1986	Apr. 1987 from Mar. 1987	Apr. 1987 from Apr. 1986
	Total	-6	+8.8	+6.8	-2	+2.6	+2	+8.2	+1	+2.6
50	Durable goods	.0	+7.9	+8.7	+3	+2.5	-9	+7.0	+1	+2.6
501	Motor vehicles & auto. equip.	-1.7	+6.1	+9.0	-2	+11.8	-3.3	+5.9	.0	+12.0
502	Furniture & home furnishings	-5.0	+3.0	+10.2	+4.2	+23.8	-8.1	+3.2	+5.7	+24.0
503	Lumber & other construction mat.	+7.6	+13.1	+12.6	+1.1	+2.8	-1.3	+11.2	+9	+2.7
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	-4	+4	+7.7	-1.0	+20.9	-1.4	+1	-7	+21.0
505	Metals & minerals, ex. petroleum	-13.2	+8.9	+8.8	+1	-4.0	-7.4	+7.2	+7	-4.1
506	Electrical goods	-3.4	+8.0	+6.3	+5	+4.5	+3.4	+8.6	-1.2	+4.5
507	Hardware, plumbing & heating equip.	+3.6	+15.0	+13.7	-1.6	-2.5	-3.7	+13.7	-2.6	-2.5
508	Machinery, equip. & supplies	-8	+6.7	+8.7	-3	-5.3	+8	+7.5	-2	-5.2
509	Miscellaneous durable goods	+19.9	+9.1	+4.3	+6.6	+13.3	+7.1	+8	+4.4	+13.4
51	Nondurable goods	-1.1	+9.6	+5.1	-1.2	+2.6	+1.2	+9.4	+1	+2.7
511	Paper & paper products	-2	+12.2	+10.9	-8	+5.8	+1.6	+12.0	-9	+5.7
512	Drugs, drug proprietaries and druggists' sundries	-3	+13.9	+16.1	+2.2	+17.7	-1.0	+13.6	+5.7	+17.7
513	Apparel, piece goods, & notions	-20.2	-5.4	+10.1	+1.2	+14.4	-14.9	-3.2	-8	+14.6
514	Groceries & related products	+2	+6.1	+6.8	-2.5	-2.5	+5	+6.1	-1.8	-2.6
515	Farm-product raw materials	-4.0	+6.5	-3.7	-4.3	-14.9	+5.9	+5.2	+4.8	-14.9
516	Chemicals & allied products	-3	-1.0	-3.7	+4.3	+2.0	+1.7	-2.0	+1	+2.1
517	Petroleum & petroleum products	-7.0	+19.5	+1.7	-5.7	.0	+1.2	+21.2	-6.1	+5
518	Beer, wine, & distilled beverages	+10.2	+14.0	+8.5	+4.0	+13.6	+3.5	+13.2	+9	+13.6
519	Misc. nondurable goods	+8.4	+13.0	+7.0	-3.0	+3.6	+5.5	+11.2	+4	+4.1

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 1982 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

Estimates based on a sample survey will differ from the value derived from the population because of sampling variability and nonsampling error. Sampling variability occurs 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 variability 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 3. 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,

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

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 22 percent of the sales estimates and 26 percent for inventories.

For a more detailed description of sampling variability, see *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986*.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventory estimates in this report reflect the results of a benchmarking² operation which made use of 1984 and 1985 estimates tabulated from the 1985 Annual Trade Survey. The sales estimates for the period January 1984 through December 1986 were derived in a manner so that the sum of the 12 months for 1984 and 1985 were equal to the sales estimates published in the 1984 and 1985 Annual Trade Surveys. The revision process was conducted so as to minimize changes to previously published month-to-month trends. The estimates for the original series were derived by using composite estimation procedures. Using inventory results from the annual surveys for the years 1980 to 1985, monthly inventories were revised to a non-LIFO basis. Through the use of carry-forward factors, the effect of the revision process was applied to composite sales and inventory estimates subsequent to December 1985. These factors were derived at various kind-of-business levels and are held constant until the next benchmarking operation. Aggregate level estimates were derived by summing appropriate three-digit kind-of-business estimates, thereby assuring additivity.

Classification Differences Between Monthly Survey and 1977 and 1982 Censuses of Wholesale Trade

For SIC 505, the monthly survey included merchant wholesalers as well as sales branches of ferrous metals service centers with inventories. Therefore, the 1977 and 1982 census sales

estimates included the receipts of merchant wholesalers and sales branches of ferrous metals service centers with inventories.

Establishments classified in the Farm-Product Raw Materials group (SIC 515) included as sales, products purchased and transferred to other company establishments. In the monthly survey, intercompany transfers are not included in sales. Because of the differences, the 1977 and 1982 sales for the SIC were obtained from the 1977 and 1982 Annual Trade Surveys (ATS).

Inventories were not benchmarked to the census levels since the census of wholesale trade does not include inventories of auxiliary and central administrative offices of merchant wholesale establishments which are included in the monthly survey. The inventory estimates for the years 1977 and 1982 were computed by multiplying the stock/sales ratios obtained from the annual surveys by the census sales for these years.

Unpublished Data

Sales and inventory estimates for unpublished four-digit wholesale trade categories are not included in this publication because their sampling variability is so high, relative to the changes from month-to-month or between other periods, as to make them potentially misleading. The Census Bureau for a nominal fee 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 on a non-LIFO basis 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. Methods of valuation may vary according to the accounting practices of the firm.

²For a more detailed description, see the section dealing with revisions to published data in the Current Business Reports publication, *Revised Monthly Wholesale Trade: December 1980 Through December 1986*.

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 current and past experiences. Therefore, the adjusted could

become less precise if 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.

Concurrent Seasonal Adjustment

Concurrent seasonal adjustment uses all available unadjusted estimates (including the latest preliminary estimates) as input to the X-11 program. After the last benchmarking operation, factors were developed and used to derive adjusted sales estimates for the period January 1984 through January 1987. Factors were developed and used to derive non-LIFO inventory estimates for the period December 1980 through January 1987. When unadjusted preliminary and final estimates become available, all estimates will be used as input to the X-11 program and new factors will be applied to the preliminary and final (one month before the preliminary) estimates and to the previous year estimates that correspond to the preliminary month.

Table 4 presents, by kind of business, the combined seasonal and trading-day factors that are used to adjust inventory and sales estimates. For all kind of business, one month of projected factors are shown. These projected factors are estimates of the factors that will be used to derive adjusted estimates.

An electronic version of portions of this report is available through a commercial vendor as part of CENDATA, the Census Bureau's on-line information utility. For further information, contact Customer Services, DUSD, Bureau of the Census, Washington, DC 20233 or call (301) 763-4100.

Table 3. 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	1.1-1.6	1.2	0.9-1.4	1.3	0.3-0.6	0.4	0.9-2.2	1.5	1.0-1.9	1.3	0.2-1.6	0.4
501	Durable goods, total	1.3-1.7	1.5	1.2-1.8	1.4	0.5-0.8	0.6	1.4-3.3	2.0	1.4-2.4	1.7	0.2-2.5	0.4
502	Motor vehicles and automotive parts and supplies	2.1-4.0	3.2	2.0-3.7	3.1	0.8-1.7	1.3	3.6-5.7	4.6	3.6-5.4	4.4	0.4-1.5	0.7
503	Furniture and home furnishings	6.6-9.6	7.9	5.3-8.6	7.3	2.1-6.2	3.3	5.3-12.3	10.0	5.0-12.8	10.2	0.7-3.2	1.2
504	Lumber and other construction materials	4.8-7.1	5.8	4.3-7.2	5.5	1.1-2.5	1.8	6.2-11.8	7.5	5.4-11.5	7.4	0.6-3.0	1.3
505	Sporting, recreational, photographic, & hobby goods, toys & supplies	9.3-22.9	11.4	8.8-20.8	10.9	2.3-5.3	3.3	7.2-16.2	10.8	8.5-16.7	10.6	0.9-2.4	1.6
506	Metals and minerals, ex. petroleum	2.4-6.6	4.9	2.5-6.5	4.2	0.8-2.0	1.4	4.0-6.9	4.8	3.2-6.8	4.8	0.5-2.1	0.7
507	Electrical goods	1.9-9.2	2.2	1.4-8.6	2.3	1.1-2.5	1.7	1.6-9.2	2.6	1.7-8.7	2.3	0.5-1.1	0.7
508	Hardware, plumbing, heating equipment, and supplies	4.4-7.8	6.7	4.3-8.7	6.8	1.3-2.9	2.0	4.8-9.3	6.0	4.5-9.2	6.1	0.5-2.1	0.6
509	Machinery, equipment, and supplies	2.5-4.2	2.8	1.9-3.4	2.9	1.0-2.1	1.7	2.3-9.0	4.4	2.4-5.8	3.8	0.4-6.4	0.6
51	Miscellaneous durable goods	3.5-4.9	3.9	3.0-4.3	3.7	1.4-2.5	1.9	4.5-8.6	6.6	4.3-9.1	6.8	0.5-2.4	0.9
51	Nondurable goods, total	1.5-3.2	1.8	1.5-3.1	1.6	0.5-1.0	0.7	1.5-2.6	2.2	1.6-2.8	2.2	0.3-0.8	0.4
511	Paper and paper products	2.9-5.1	4.0	3.4-4.5	4.0	1.2-2.9	1.9	5.1-7.3	6.4	4.5-7.1	6.5	0.6-2.2	0.8
512	Drugs, drug proprietaries and druggists' sundries	4.5-9.3	7.8	4.8-9.0	7.2	0.8-2.1	1.5	4.5-9.6	7.2	4.6-9.7	7.5	0.6-2.6	1.0
513	Apparel, piece goods, & notions	4.2-7.5	4.7	3.2-7.3	4.7	1.9-4.9	2.7	3.8-11.3	8.5	4.1-11.6	8.4	0.6-2.6	1.5
514	Groceries and related products	2.6-5.8	3.6	2.1-5.6	3.5	0.6-2.8	1.2	4.6-7.6	6.2	4.4-8.8	6.1	0.5-1.8	1.0
515	Farm-product raw materials	2.9-6.3	5.0	2.5-8.5	4.0	2.5-5.3	3.8	3.7-6.8	6.1	5.2-6.3	5.7	0.8-3.3	1.5
516	Chemicals & allied products	4.6-10.1	8.2	4.3-9.3	7.4	1.4-5.1	3.1	6.6-13.0	7.5	6.3-12.9	7.0	0.4-2.9	1.7
517	Petroleum & petroleum products	2.8-10.4	3.5	2.6-11.6	3.3	0.4-3.0	1.0	2.9-12.0	4.2	2.9-14.1	4.3	0.5-6.0	1.1
518	Beer, wine, and distilled alcoholic beverages	2.9-7.3	5.0	2.4-8.8	5.4	0.9-3.8	2.0	4.9-6.1	5.2	4.9-5.7	5.0	0.8-1.8	1.1
519	Misc. nondurable goods	2.3-7.3	4.9	4.0-7.1	4.5	0.7-2.8	2.0	6.0-10.5	7.3	6.0-10.5	6.9	0.7-3.0	1.0

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 1986 through January 1987.

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Table 4. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers

		1986										1987				
SIC code	Kind of business	Apr. ^r	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar. ^r	Apr. ^r	May	
	Sales,¹ total	1.013	1.043	1.015	1.003	.969	1.008	1.056	.962	1.035	.953	.905	1.035	1.016	1.015	
50	Durable goods	1.022	1.028	1.024	1.009	.998	1.026	1.090	.956	1.010	.920	.890	1.031	1.025	.998	
501	Motor vehicles & auto. equip	1.029	1.075	1.051	1.039	.953	.941	1.090	.954	1.011	.958	.871	1.014	1.031	1.038	
502	Furniture & home furnishings	1.026	1.015	1.033	1.007	.997	1.040	1.159	.976	.974	.868	.882	.991	1.025	.992	
503	Lumber & other construction mat	1.024	1.068	1.101	1.099	1.091	1.078	1.151	.953	.876	.811	.793	.955	1.042	1.035	
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	.987	.965	.971	.990	.982	1.086	1.221	1.066	1.011	.849	.877	.981	.990	.936	
505	Metals & minerals, ex. petroleum	1.014	1.012	1.029	.982	.990	1.039	1.045	.892	.983	.968	.944	1.098	1.030	.983	
506	Electrical goods	.955	.950	1.000	1.007	.997	1.085	1.111	1.012	1.062	.912	.907	1.017	.950	.928	
507	Hardware, plumbing & heating equip.	1.030	1.044	1.042	1.046	1.031	1.014	1.094	.957	.960	.932	.902	.968	1.042	1.007	
508	Machinery, equip. & supplies	1.057	1.038	1.027	.993	.981	1.026	1.048	.930	1.043	.908	.907	1.065	1.049	1.008	
509	Miscellaneous durable goods	1.068	1.050	.987	.950	.998	1.050	1.100	.989	.954	.954	.893	1.033	1.156	.978	
51	Nondurable goods	1.003	1.055	.999	.994	.958	.993	1.030	.968	1.056	.982	.917	1.041	1.003	1.025	
511	Paper & paper products	1.015	.995	.999	.999	1.015	1.007	1.072	.943	1.005	.979	.939	1.035	1.017	.963	
512	Drugs, drug proprietaries and druggists' sundries	1.030	.986	.994	.996	.960	1.030	1.078	.949	1.025	1.001	.927	1.026	1.033	.956	
513	Apparel, piece goods, and notions	.996	.923	1.013	1.166	1.115	1.035	1.128	.894	.779	.887	1.039	1.038	.974	.891	
514	Groceries & related products	1.003	1.042	.999	1.032	1.004	.995	1.025	.964	1.025	.978	.915	1.006	1.003	1.023	
515	Farm-product raw materials	.970	1.106	.902	.902	.835	.888	1.014	1.075	1.186	1.090	.969	1.083	.982	1.044	
516	Chemicals & allied products	1.011	1.024	1.045	.980	.998	1.046	1.098	.914	.930	.991	.925	1.041	1.021	.999	
517	Petroleum & petroleum products	.989	.975	.942	.945	.911	1.005	1.031	.987	1.114	1.104	.958	1.061	.975	.956	
518	Beer, wine, & distilled beverages	.980	1.062	1.073	1.111	1.044	1.007	1.073	.984	1.201	.760	.774	.927	.987	1.023	
519	Misc. nondurable goods	1.091	1.203	1.082	1.006	.941	.968	1.008	.915	1.017	.856	.856	1.079	1.109	1.161	
	Inventories,¹ total	1.007	.991	.991	.987	.984	.996	1.008	1.010	1.001	.997	.995	.985	.993	.999	
50	Durable goods	1.005	.999	1.006	1.004	1.002	1.010	1.001	.997	.995	.985	.993	1.002	1.005	.999	
501	Motor vehicles & auto. equip	1.007	.988	1.000	.974	.958	1.019	1.016	1.006	1.016	.998	1.002	1.008	1.006	.987	
502	Furniture & home furnishings	.982	.983	1.006	.981	1.018	1.009	.997	.985	1.027	1.014	1.012	.994	.980	.985	
503	Lumber & other construction mat.	1.027	1.000	1.012	1.007	1.010	.997	.980	.985	.996	.961	.997	1.026	1.028	1.000	
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	1.006	.994	1.015	1.022	1.012	1.008	.996	.976	.977	.984	.990	1.008	1.005	.993	
505	Metals & minerals, ex. petroleum	.986	.994	1.013	1.013	1.020	1.004	.982	.987	1.013	1.007	1.000	.993	.987	.994	
506	Electrical goods	.994	.992	1.001	1.030	1.021	1.036	1.023	1.005	.984	.969	.970	.978	.994	.990	
507	Hardware, plumbing & heating equip.	1.039	1.032	1.004	1.013	1.002	.983	.980	.980	.962	.972	.999	1.028	1.039	1.033	
508	Machinery, equip. & supplies	1.006	1.007	1.012	1.002	1.003	.995	1.002	.991	.997	.985	.994	1.006	1.005	1.006	
509	Miscellaneous durable goods	.999	1.000	.982	1.015	1.026	1.027	1.014	1.029	.957	.974	.996	.978	.998	.999	
51	Nondurable goods	1.010	.976	.964	.958	.951	.971	1.019	1.029	1.031	1.036	1.029	1.022	1.008	.979	
511	Paper & paper products	1.003	1.007	1.007	1.003	1.016	.984	.985	1.007	.995	.994	1.007	1.003	1.004	1.006	
512	Drugs, drug proprietaries and druggists' sundries	1.017	.976	.974	.964	.970	1.012	1.023	.974	.994	1.023	1.031	1.052	1.017	.978	
513	Apparel, piece goods, and notions	.969	1.011	1.023	1.069	1.049	1.015	.992	.944	.994	1.000	.986	.948	.967	1.015	
514	Groceries & related products	.989	.998	1.000	.982	.972	.987	1.040	1.041	1.000	.979	1.009	.997	.990	.999	
515	Farm-product raw materials	.994	.806	.786	.779	.807	.875	1.069	1.186	1.213	1.251	1.157	1.088	.994	.809	
516	Chemicals & allied products	1.041	.996	1.003	1.025	.989	.959	1.015	1.004	.983	.990	1.006	.998	1.040	.998	
517	Petroleum & petroleum products	.940	1.032	1.033	.964	.943	1.023	1.021	1.034	1.090	1.062	.921	.931	.935	1.027	
518	Beer, wine, & distilled beverages	1.028	1.003	1.030	1.027	.994	1.008	1.060	1.062	.912	.942	.959	.997	1.028	1.00	
519	Misc. nondurable goods	1.079	.991	.947	.941	.924	.941	.973	.958	1.018	1.033	1.071	1.111	1.074	.99	

^rRevised.

¹Adjusted sales and inventory data shown in table 1A 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: The seasonal factors shown have been computed based on monthly estimates through the current month preliminary estimate.

Monthly Wholesale Trade

CURRENT BUSINESS REPORTS

April 1987

Issued June 1987

BW-87-04

Sales and Inventories

Sales. April 1987 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$123.3 billion, little changed from the revised March level and up 8.2 percent from a year ago. The March preliminary estimate was revised downward by \$0.9 billion or about 0.7 percent. April sales of durable goods were little changed from March and increased 7.0 percent from a year ago with offsetting movements in some of the specific categories. April sales of nondurable goods showed some evidence of an increase from March and were 9.4 percent above April 1986.

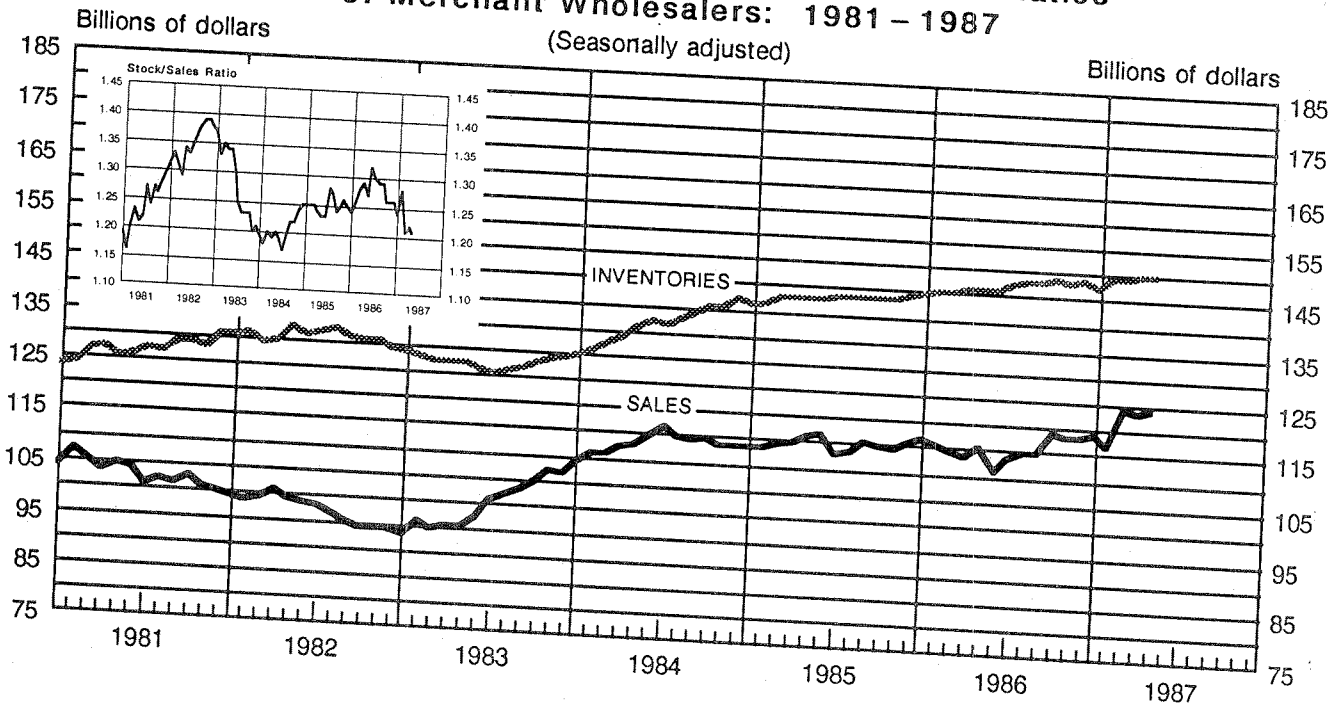
Inventories. Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$149.8 billion at the end of April, little changed from the revised March

level and from a year ago. The March preliminary estimate was revised upward by \$0.07 billion or about 0.04 percent. Inventories of durable and nondurable goods wholesalers were little changed from the March level and from a year ago. Based on seasonally adjusted data, comparisons with previous month inventory levels showed mixed results for both durable and nondurable goods categories.

Stock/Sales Ratio. The April stock/sales ratio for merchant wholesalers, based on seasonally adjusted data was 1.21, below the year ago ratio of 1.28.

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 4.

Monthly Sales, Inventories, and Stock/Sales Ratios
of Merchant Wholesalers: 1981 - 1987
(Seasonally adjusted)



The Monthly Wholesale Trade Report for May is scheduled to be released July 9, 1987, at 10:00 a.m.



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 1A. Adjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1987 and 1986

(Data adjusted for seasonal variation and, in the case of sales, also for trading-day differences. Sales and inventories in millions of dollars)

Data adjusted for seasonal variation and, in the case of sales, also for trading day differences															
SIC code	Kind of business	1987				1986									
		Jan.	Feb.	Mar.	Apr. ^P	Apr. ^T	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
	Sales, total	116,545	123,281	123,009	123,263	113,887	110,549	113,232	114,444	114,426	118,138	117,488	117,734	118,446	
50	Durable goods	55,893	59,344	59,498	58,974	55,138	53,932	54,783	55,697	54,747	56,998	57,102	56,758	57,833	
501	Motor vehicles & auto. equip.	11,334	12,931	12,890	12,465	11,771	11,567	12,152	12,782	12,313	12,665	12,867	12,459	12,966	
502	Furniture & home furnishings	2,377	2,304	2,370	2,177	2,110	2,178	2,247	2,195	2,260	2,463	2,260	2,170	2,227	
503	Lumber & other construction mat.	4,543	4,571	4,831	4,766	4,287	4,345	4,102	4,280	4,235	4,318	4,396	4,391	4,635	
504	Sporting, recreational, photo-graphic, & hobby goods, toys & supplies	1,645	1,718	1,554	1,533	1,532	1,559	1,392	1,370	1,444	1,512	1,567	1,622	1,627	
505	Metals & minerals, ex. petroleum	4,983	5,267	5,493	5,084	4,744	4,540	4,659	4,826	4,589	4,807	4,934	4,937	4,852	
506	Electrical goods	7,899	8,270	8,023	8,296	7,638	7,552	7,713	7,650	7,603	7,817	7,887	7,630	7,812	
507	Hardware, plumbing & heating equipment	3,667	3,891	4,191	4,035	3,549	3,707	3,699	3,642	3,465	3,709	3,745	3,695	3,922	
508	Machinery, equip. & supplies	14,787	15,230	15,146	15,262	14,191	13,645	13,782	14,129	13,990	14,029	14,143	14,671	15,027	
509	Miscellaneous durable goods	4,658	5,162	5,000	5,356	5,316	4,839	5,037	4,823	4,848	5,678	5,303	5,183	4,765	
51	Nondurable goods	60,652	63,937	63,511	64,289	58,749	56,617	58,449	58,747	59,679	61,140	60,386	60,976	60,613	
511	Paper & paper products	3,564	3,706	3,671	3,729	3,329	3,288	3,351	3,348	3,433	3,373	3,437	3,453	3,584	
512	Drugs, drug proprietaries and druggists' sundries	2,514	2,608	2,507	2,483	2,185	2,213	2,190	2,294	2,356	2,357	2,438	2,524	2,484	
513	Apparel, piece goods, & notions	3,417	3,852	3,894	3,312	3,423	3,173	3,355	3,334	3,700	3,772	3,806	3,709	3,300	
514	Groceries & related products	20,429	20,596	20,021	20,130	18,964	19,000	19,415	19,656	20,441	20,241	20,104	20,094	20,023	
515	Farm-product raw materials	6,174	6,496	6,632	7,020	6,671	6,187	6,558	6,707	6,220	6,577	6,721	6,384	6,358	
516	Chemicals & allied products	2,055	1,990	2,100	2,135	2,178	2,156	2,121	2,066	2,064	2,076	2,078	2,225	2,097	
517	Petroleum & petroleum products	10,253	11,297	11,442	11,576	9,553	9,264	9,321	8,916	9,158	10,236	8,925	9,224	9,724	
518	Beer, wine, & distilled beverages	3,550	3,621	3,589	3,716	3,284	3,348	3,349	3,256	3,437	3,277	3,341	3,420	3,446	
519	Misc. nondurable goods	8,696	9,771	9,655	10,188	9,162	7,988	8,789	9,170	8,870	9,231	9,536	9,943	9,597	
	Inventories, total	149,347	149,408	149,565	149,761	145,900	146,012	147,129	147,850	148,050	148,599	147,754	148,204	147,375	
50	Durable goods	97,280	96,594	97,491	97,610	95,134	95,646	95,865	96,680	96,883	97,216	96,845	97,652	95,710	
501	Motor vehicles & auto. equip.	18,782	19,176	19,209	19,202	17,152	17,521	17,736	17,937	18,294	18,494	17,934	18,834	18,643	
502	Furniture & home furnishings	3,510	3,558	3,697	3,909	3,152	3,166	2,974	3,114	3,151	3,321	3,116	3,132	3,333	
503	Lumber & other construction mat.	4,907	4,846	5,022	5,069	4,934	5,040	5,315	5,173	5,049	4,993	5,030	5,017	4,940	
504	Sporting, recreational, photo-graphic, & hobby goods, toys & supplies	3,436	3,473	3,492	3,468	2,865	2,884	3,026	3,136	3,230	3,255	3,572	3,541	3,387	
505	Metals & minerals, ex. petroleum	9,508	9,182	9,377	9,443	9,847	9,784	9,736	9,564	9,075	9,217	9,329	9,088	9,359	
506	Electrical goods	13,864	14,092	14,082	13,920	13,326	12,744	12,986	13,294	13,230	13,574	13,502	13,815	13,576	
507	Hardware, plumbing & heating equipment	6,576	6,509	6,504	6,335	6,498	6,593	6,656	6,599	6,700	6,630	6,643	6,611	6,642	
508	Machinery, equip. & supplies	31,984	31,106	31,182	31,120	32,823	33,167	32,890	33,203	33,381	32,778	32,784	33,087	31,007	
509	Miscellaneous durable goods	4,713	4,652	4,926	5,144	4,537	4,747	4,546	4,660	4,773	4,954	4,935	4,527	4,823	
51	Nondurable goods	52,067	52,814	52,074	52,151	50,766	50,366	51,264	51,170	51,167	51,383	50,909	50,552	51,665	
511	Paper & paper products	3,595	3,535	3,563	3,532	3,342	3,287	3,330	3,345	3,339	3,346	3,418	3,383	3,570	
512	Drugs, drug proprietaries and druggists' sundries	4,385	4,394	4,152	4,389	3,729	3,883	3,861	3,826	3,888	3,935	4,076	4,143	4,246	
513	Apparel, piece goods, & notions	7,061	7,142	7,310	7,255	6,331	6,525	6,761	7,205	7,288	7,167	6,672	6,841	6,928	
514	Groceries & related products	12,074	11,915	11,614	11,400	11,702	11,445	11,648	11,656	11,670	11,734	11,796	11,983	12,185	
515	Farm-product raw materials	5,954	5,978	5,748	6,023	7,074	6,902	7,261	7,040	6,558	6,358	6,270	5,712	5,636	
516	Chemicals & allied products	2,121	2,253	2,223	2,226	2,181	2,217	2,187	2,144	2,148	2,076	2,085	2,161	2,144	
517	Petroleum & petroleum products	3,405	3,468	3,469	3,258	3,241	2,865	2,914	2,911	3,051	3,194	3,163	3,140	3,449	
518	Beer, wine, & distilled beverages	4,033	4,347	4,273	4,310	3,793	3,814	3,833	3,734	3,716	3,743	3,652	3,794	3,818	
519	Misc. nondurable goods	9,439	9,782	9,722	9,758	9,373	9,428	9,469	9,309	9,509	9,830	9,777	9,395	9,689	
	Stock/sales ratios, total	1.28	1.21	1.22	1.21	1.28	1.32	1.30	1.29	1.29	1.26	1.26	1.26	1.24	
50	Durable goods	1.74	1.63	1.64	1.66	1.73	1.77	1.75	1.74	1.77	1.71	1.70	1.72	1.65	
501	Motor vehicles & auto equip.	1.66	1.48	1.49	1.54	1.46	1.51	1.46	1.40	1.49	1.46	1.39	1.51	1.44	
502	Furniture & home furnishings	1.48	1.54	1.56	1.80	1.49	1.45	1.32	1.42	1.39	1.35	1.38	1.44	1.50	
503	Lumber & other construction mat.	1.08	1.06	1.04	1.06	1.15	1.16	1.30	1.21	1.19	1.16	1.14	1.14	1.07	
504	Sporting, recreational, photo-graphic, & hobby goods, toys & supplies	2.09	2.02	2.25	2.26	1.87	1.85	2.17	2.29	2.24	2.15	2.28	2.18	2.08	
505	Metals & minerals, ex. petroleum	1.91	1.74	1.71	1.86	2.08	2.16	2.09	1.98	1.98	1.92	1.89	1.84	1.93	
506	Electrical goods	1.76	1.70	1.76	1.68	1.74	1.69	1.68	1.74	1.74	1.74	1.71	1.81	1.74	
507	Hardware, plumbing & heating equipment	1.79	1.67	1.55	1.57	1.83	1.78	1.80	1.81	1.93	1.79	1.77	1.79	1.69	
508	Machinery, equip. & supplies	2.16	2.04	2.06	2.04	2.31	2.43	2.39	2.35	2.39	2.34	2.32	2.26	2.06	
509	Miscellaneous durable goods	1.01	.90	.99	.96	.85	.98	.90	.97	.98	.87	.93	.87	1.01	
51	Nondurable goods	.86	.83	.82	.81	.86	.89	.88	.87	.86	.84	.84	.83	.85	
511	Paper & paper products	1.01	.95	.97	.95	1.00	1.00	.99	1.00	.97	.99	.99	.98	1.00	
512	Drugs, drug proprietaries and druggists' sundries	1.74	1.68	1.66	1.77	1.71	1.75	1.76	1.67	1.65	1.67	1.67	1.64	1.71	
513	Apparel, piece goods, & notions	2.07	1.85	1.88	2.19	1.85	2.06	2.02	2.16	1.97	1.90	1.75	1.84	2.10	
514	Groceries & related products	.59	.58	.58	.57	.62	.60	.60	.59	.57	.58	.59	.60	.61	
515	Farm-product raw materials	.96	.92	.87	.86	1.06	1.12	1.11	1.05	1.05	.97	.93	.89	.89	
516	Chemicals & allied products	1.03	1.13	1.06	1.04	1.00	1.03	1.03	1.04	1.04	1.00	1.00	.97	1.02	
517	Petroleum & petroleum products	.33	.31	.30	.28	.34	.31	.31	.33	.33	.31	.35	.34	.35	
518	Beer, wine, & distilled beverages	1.14	1.20	1.19	1.16	1.15	1.14	1.14	1.15	1.08	1.14	1.09	1.11	1.11	
519	Misc. nondurable goods	1.09	1.00	1.01	.96	1.02	1.18	1.08	1.02	1.07	1.06	1.03	.94	1.01	

^TRevised.

^PPreliminary estimate. See sample design and estimation procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986*.

Table 1B. Unadjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1987 and 1986

(Data not adjusted for seasonal variation or trading-day differences. Sales and inventories in millions of dollars)

SIC code	Kind of business	1987					1986										Total 5 mos.	
		Jan.	Feb.	Mar.	Apr.	May ^P	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1987	1986		
	Sales, total	110,564	111,705	126,908	126,354	125,639	115,102	114,783	115,561	112,208	118,772	124,995	113,152	121,499	601,170	560,341		
50	Durable goods	51,319	52,834	61,100	61,161	59,576	55,672	56,448	56,415	54,282	58,368	62,287	54,350	58,033	285,990	263,925		
501	Motor vehicles & auto equipment ..	10,858	11,263	13,070	12,758	12,736	12,434	12,772	12,736	11,734	11,918	14,025	11,886	13,109	60,685	56,492		
502	Furniture & home furnishings	2,063	2,032	2,349	2,218	2,195	2,211	2,321	2,210	2,253	2,561	2,619	2,118	2,169	10,857	10,086		
503	Lumber & other construction mat. .	3,684	3,625	4,614	4,903	4,829	4,640	4,516	4,704	4,620	4,655	5,060	4,185	4,060	21,655	19,635		
504	Sporting, recreational, photo-graphic, & hobby goods, toys & supplies	1,397	1,507	1,524	1,480	1,285	1,504	1,352	1,356	1,418	1,642	1,913	1,729	1,645	7,193	7,026		
505	Metals & minerals, ex. petroleum ..	4,824	4,972	6,031	5,400	5,248	4,594	4,794	4,739	4,543	4,994	5,156	4,404	4,770	26,475	23,947		
506	Electrical goods	7,204	7,501	8,159	7,788	7,616	7,174	7,713	7,704	7,580	8,481	8,762	7,722	8,296	38,268	36,092		
507	Hardware, plumbing & heating equip.	3,418	3,510	4,057	4,144	4,024	3,870	3,854	3,810	3,572	3,761	4,097	3,536	3,765	19,153	17,223		
508	Machinery, equip. & supplies	13,427	13,814	16,131	16,112	15,611	14,164	14,154	14,030	13,724	14,394	14,822	13,644	15,673	75,095	68,775		
509	Miscellaneous durable goods	4,444	4,610	5,165	6,358	6,032	5,081	4,972	4,582	4,838	5,962	5,833	5,126	4,546	26,609	24,649		
51	Nondurable goods	59,245	58,871	65,808	65,193	66,063	59,430	58,335	59,146	57,926	60,404	62,708	58,802	63,466	315,180	296,416		
511	Paper & paper products	3,489	3,480	3,800	3,772	3,558	3,272	3,348	3,345	3,484	3,397	3,684	3,256	3,602	18,099	16,405		
512	Drugs, drug proprietaries and druggists' sundries	2,517	2,418	2,572	2,588	2,503	2,182	2,177	2,285	2,262	2,428	2,628	2,395	2,546	12,598	10,855		
513	Apparel, piece goods, & notions	3,031	4,002	4,042	3,242	2,875	2,929	3,399	3,888	4,125	3,904	4,293	3,316	2,571	17,192	15,915		
514	Groceries & related products	19,980	18,845	20,141	20,769	21,311	19,798	19,396	20,285	20,523	20,140	20,607	19,371	20,524	101,046	93,902		
515	Farm-product raw materials	6,730	6,295	7,182	6,792	7,168	6,843	5,915	6,050	5,194	5,840	6,815	6,863	7,541	34,167	34,977		
516	Chemicals & allied products	2,037	1,841	2,186	2,240	2,200	2,208	2,216	2,025	2,060	2,172	2,282	2,034	1,950	10,504	10,768		
517	Petroleum & petroleum products	11,319	10,823	12,140	11,166	11,192	9,032	8,780	8,426	8,343	10,287	9,202	9,104	10,833	56,640	53,838		
518	Beer, wine, & distilled beverages ..	2,698	2,803	3,327	3,545	3,686	3,556	3,594	3,617	3,588	3,300	3,585	3,365	4,139	16,059	15,074		
519	Misc. nondurable goods	7,444	8,364	10,418	11,079	11,570	9,610	9,510	9,225	8,347	8,936	9,612	9,098	9,760	48,875	44,682		
	Inventories, total	149,548	150,166	150,882	150,853	151,777	144,662	145,977	146,279	145,882	147,964	149,009	148,804	148,245	(X)	(X)		
50	Durable goods	95,895	95,989	97,667	98,249	100,374	95,647	96,472	97,005	96,958	97,991	97,153	97,210	95,353	(X)	(X)		
501	Motor vehicles & auto. equip.	18,744	19,214	19,363	19,457	19,686	17,311	17,736	17,471	17,526	18,845	18,221	18,947	18,941	(X)	(X)		
502	Furniture & home furnishings	3,559	3,601	3,675	3,792	4,013	3,112	2,992	3,055	3,208	3,351	3,107	3,085	3,423	(X)	(X)		
503	Lumber & other construction mat. .	4,716	4,831	5,153	5,363	5,439	5,040	5,379	5,209	5,099	4,978	4,929	4,942	4,920	(X)	(X)		
504	Sporting, recreational, photo-graphic, & hobby goods, toys & supplies	3,381	3,438	3,520	3,447	3,528	2,867	3,071	3,205	3,269	3,281	3,558	3,456	3,309	(X)	(X)		
505	Metals & minerals, ex. petroleum ..	9,575	9,182	9,311	9,326	9,427	9,725	9,863	9,688	9,257	9,254	9,161	8,970	9,481	(X)	(X)		
506	Electrical goods	13,434	13,669	13,772	13,477	13,550	12,642	12,999	13,693	13,508	14,063	13,813	13,884	13,359	(X)	(X)		
507	Hardware, plumbing & heating equipment	6,392	6,502	6,686	6,447	6,576	6,804	6,683	6,685	6,713	6,517	6,510	6,479	6,390	(X)	(X)		
508	Machinery, equip. & supplies	31,504	30,919	31,369	31,712	31,839	33,399	33,285	33,269	33,481	32,614	32,850	32,789	30,914	(X)	(X)		
509	Miscellaneous durable goods	4,590	4,633	4,818	5,228	6,306	4,747	4,464	4,730	4,897	5,088	5,004	4,658	4,616	(X)	(X)		
51	Nondurable goods	53,653	54,177	53,215	52,604	51,403	49,015	49,505	49,274	48,924	49,973	51,856	51,594	52,892	(X)	(X)		
511	Paper & paper products	3,573	3,560	3,574	3,568	3,608	3,310	3,353	3,355	3,392	3,292	3,367	3,407	3,552	(X)	(X)		
512	Drugs, drug proprietaries and druggists' sundries	4,486	4,530	4,368	4,540	4,367	3,790	3,761	3,688	3,771	3,982	4,170	4,035	4,221	(X)	(X)		
513	Apparel, piece goods, & notions	7,061	7,042	6,930	6,831	7,156	6,597	6,917	7,702	7,645	7,274	6,619	6,458	6,886	(X)	(X)		
514	Groceries & related products	11,820	12,022	11,579	11,673	11,763	11,422	11,648	11,446	11,343	11,581	12,268	12,474	12,185	(X)	(X)		
515	Farm-product raw materials	7,448	6,916	6,254	6,159	5,272	5,563	5,707	5,484	5,292	5,563	6,703	6,774	6,836	(X)	(X)		
516	Chemicals & allied products	2,100	2,267	2,219	2,305	2,354	2,208	2,194	2,198	2,124	1,991	2,116	2,170	2,108	(X)	(X)		
517	Petroleum & petroleum products	3,616	3,194	3,230	3,016	3,068	2,957	3,010	2,806	2,877	3,267	3,229	3,247	3,759	(X)	(X)		
518	Beer, wine, & distilled beverages ..	3,799	4,169	4,260	4,150	4,060	3,825	3,948	3,835	3,694	3,773	3,871	4,029	3,482	(X)	(X)		
519	Misc. nondurable goods	9,750	10,477	10,801	10,362	9,755	9,343	8,967	8,760	8,786	9,250	9,513	9,000	9,863	(X)	(X)		
	Stock/sales ratios, total	1.35	1.34	1.19	1.19	1.21	1.26	1.27	1.27	1.30	1.25	1.19	1.32	1.22	(X)	(X)		
50	Durable goods	1.87	1.82	1.60	1.61	1.68	1.72	1.71	1.72	1.79	1.68	1.56	1.79	1.64	(X)	(X)		
501	Motor vehicles & auto equip.	1.73	1.71	1.48	1.53	1.55	1.39	1.39	1.32	1.49	1.58	1.30	1.59	1.44	(X)	(X)		
502	Furniture & home furnishings	1.73	1.77	1.56	1.71	1.83	1.41	1.29	1.38	1.42	1.31	1.19	1.46	1.58	(X)	(X)		
503	Lumber & other construction mat. .	1.28	1.33	1.12	1.09	1.13	1.09	1.19	1.11	1.10	1.07	.97	1.18	1.21	(X)	(X)		
504	Sporting, recreational, photo-graphic, & hobby goods, toys & supplies	2.42	2.28	2.31	2.33	2.75	1.91	2.27	2.36	2.31	2.00	1.86	2.00	2.01	(X)	(X)		
505	Metals & minerals, ex. petroleum ..	1.98	1.85	1.54	1.73	1.80	2.12	2.06	2.04	2.04	1.85	1.78	2.04	1.99	(X)	(X)		
506	Electrical goods	1.86	1.82	1.69	1.73	1.78	1.76	1.69	1.78	1.78	1.66	1.58	1.80	1.61	(X)	(X)		
507	Hardware, plumbing & heating equipment	1.87	1.85	1.65	1.56	1.63	1.76	1.73	1.75	1.88	1.73	1.59	1.83	1.70	(X)	(X)		
508	Machinery, equip. & supplies	2.35	2.24	1.94	1.97	2.04	2.36	2.35	2.37	2.44	2.27	2.22	2.40	1.97	(X)	(X)		
509	Miscellaneous durable goods	1.03	1.00	.93	.82	1.05	.93	.90	1.03	1.01	.85	.86	.91	1.02	(X)	(X)		
51	Nondurable goods	.91	.92	.81	.81	.78	.82	.85	.83	.84	.83	.83	.88	.83	(X)	(X)		
511	Paper & paper products	1.02	1.02	.94	.95	1.01	1.01	1.00	1.00	.97	.97	.91	1.05	.99	(X)	(X)		
512	Drugs, drug proprietaries and druggists' sundries	1.78	1.87	1.70	1.75	1.74	1.74	1.73	1.61	1.67	1.64	1.59	1.68	1.66	(X)	(X)		
513	Apparel, piece goods, & notions	2.33	1.76	1.71	2.11	2.49	2.25	2.04	1.98	1.85	1.86	1.54	1.95	2.68	(X)	(X)		
514	Groceries & related products	.59	.64	.57	.56	.55	.58	.60	.56	.55	.58	.60	.64	.59	(X)	(X)		
515	Farm-product raw materials	1.11	1.10	.87	.91	.74	.81	.96	.91	1.02	.95	.98	.99	.91	(X)	(X)		
516	Chemicals & allied products	1.03	1.23	1.02	1.03	1.07	1.00	.99	1.09	1.03	.92	.93	1.07	1.08	(X)	(X)		
517	Petroleum & petroleum products	.32	.30	.27	.27	.27	.33	.34	.33	.34	.32	.35	.36	.35	(X)	(X)		
518	Beer, wine, & distilled beverages ..	1.41	1.49	1.28	1.17	1.10	1.08	1.10	1.06	1.03	1.14	1.08	1.20	.84	(X)	(X)		
519	Misc. nondurable goods	1.31	1.25	1.04	.94	.84	.97	.94	.95	1.05	1.04	.99	.99	1.01	(X)	(X)		

^PPreliminary estimate. See sample design and estimation procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986*.
 x Cumulative data are not applicable for inventories or stock/sales ratios, cumulative seasonally adjusted sales estimates are not tabulated.

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 1987 from Apr. 1987	May 1987 May 1986	5 months 1987 from 5 months 1986	May 1987 from Apr. 1987	May 1987 from May 1986	May 1987 from Apr. 1987	May 1987 from May 1986	May 1987 from Apr. 1987	May 1987 from May 1986
	Total	-6	+9.2	+7.3	+6	+4.9	+7	+12.3	+1.8	+4.9
50	Durable goods	-2.6	+7.0	+8.4	+2.2	+4.9	+8	+10.2	+2.4	+5.0
501	Motor vehicles & auto. equip.	-2	+2.4	+7.4	+1.2	+13.8	-5	+6.1	+2.8	+13.8
502	Furniture & home furnishings	-1.0	-7	+7.6	+5.8	+29.0	+1.7	+2.0	+3.9	+28.9
503	Lumber & other construction mat.	-1.5	+4.1	+10.3	+1.4	+7.9	-1.1	+6.6	+4.2	+7.9
504	Sporting, recreational, photo- graphic, & hobby goods, toys & supplies	-13.2	-14.6	+2.4	+2.3	+23.1	-1.9	-11.0	+3.0	+23.2
505	Metals & minerals, ex. petroleum	-2.8	+14.2	+10.6	+1.1	-3.1	+2.9	+17.7	+2	-3.0
506	Electrical goods	-2.2	+6.2	+6.0	+5	+7.2	+4	+9.0	+1.0	+7.3
507	Hardware, plumbing & heating equip.	-2.9	+4.0	+11.2	+2.0	-3.4	-8	+6.8	+2.8	-3.3
508	Machinery, equip. & supplies	-3.1	+10.2	+9.2	+4	-4.7	+5	+13.1	.0	-4.7
509	Miscellaneous durable goods	-5.1	+18.7	+8.0	+20.6	+32.8	+6.2	+24.1	+18.3	+32.4
51	Nondurable goods	+1.3	+11.2	+6.3	-2.3	+4.9	+6	+14.4	+9	+4.8
511	Paper & paper products	-5.7	+8.7	+10.3	+1.1	+9.0	-1	+12.7	+9	+9.2
512	Drugs, drug proprietaries and druggists' sundries	-3.3	+14.7	+16.1	-3.8	+15.2	+3.7	+18.2	-5	+15.2
513	Apparel, piece goods, & notions	-11.3	-1.8	+8.0	+4.8	+8.5	-9	+1.9	+4	+8.6
514	Groceries & related products	+2.6	+7.6	+7.6	+8	+3.0	+9	+9.9	+2	+3.1
515	Farm-product raw materials	+5.5	+4.7	-2.3	-14.4	-5.2	-1.1	+10.4	+3.7	-5.3
516	Chemicals & allied products	-1.8	-4	-2.5	+2.1	+6.6	.0	+1.8	+4.7	+6.4
517	Petroleum & petroleum products	+2	+23.9	+5.2	+1.7	+3.8	+2.3	+26.6	-3.9	+4.7
518	Beer, wine, & distilled beverages	+4.0	+3.7	+6.5	-2.2	+6.1	+4	+8.1	+1	+6.4
519	Misc. nondurable goods	+4.4	+20.4	+9.4	-5.9	+4.4	-9	+24.6	+1.9	+4.5

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 1982 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.

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

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

Estimates based on a sample survey will differ from the value derived from the population because of sampling variability and nonsampling error. Sampling variability occurs 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 variability 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 3. 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 34 percent of the sales estimates and 38 percent for inventories.

For a more detailed description of sampling variability, see *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986*.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventory estimates in this report reflect the results of a benchmarking² operation which made use of 1984 and 1985 estimates tabulated from the 1985 Annual Trade Survey. The sales estimates for the period January 1984 through December 1986 were derived in a manner so that the sum of the 12 months for 1984 and 1985 were equal to the sales estimates published in the 1984 and 1985 Annual Trade Surveys. The revision process was conducted so as to minimize changes to previously published month-to-month trends. The estimates for the original series were derived by using composite estimation procedures. Using inventory results from the annual surveys for the years 1980 to 1985, monthly inventories were revised to a non-LIFO basis. Through the use of carry-forward factors, the effect of the revision process was applied to composite sales and inventory estimates subsequent to December 1985. These factors were derived at various kind-of-business levels and are held constant until the next benchmarking operation. Aggregate level estimates were derived by summing appropriate three-digit kind-of-business estimates, thereby assuring additivity.

Classification Differences Between Monthly Survey and 1977 and 1982 Censuses of Wholesale Trade

For SIC 505, the monthly survey included merchant wholesalers as well as sales branches of ferrous metals service centers with inventories. Therefore, the 1977 and 1982 census sales

estimates included the receipts of merchant wholesalers and sales branches of ferrous metals service centers with inventories.

Establishments classified in the Farm-Product Raw Materials group (SIC 515) included as sales, products purchased and transferred to other company establishments. In the monthly survey, intercompany transfers are not included in sales. Because of the differences, the 1977 and 1982 sales for the SIC were obtained from the 1977 and 1982 Annual Trade Surveys (ATS).

Inventories were not benchmarked to the census levels since the census of wholesale trade does not include inventories of auxiliary and central administrative offices of merchant wholesale establishments which are included in the monthly survey. The inventory estimates for the years 1977 and 1982 were computed by multiplying the stock/sales ratios obtained from the annual surveys by the census sales for these years.

Unpublished Data

Sales and inventory estimates for unpublished four-digit wholesale trade categories are not included in this publication because their sampling variability is so high, relative to the changes from month-to-month or between other periods, as to make them potentially misleading. The Census Bureau for a nominal fee 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 on a non-LIFO basis 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. Methods of valuation may vary according to the accounting practices of the firm.

²For a more detailed description, see the section dealing with revisions to published data in the Current Business Reports publication, *Revised Monthly Wholesale Trade: December 1980 Through December 1986*.

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 current and past experiences. Therefore, the adjusted could

become less precise if 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.

Concurrent Seasonal Adjustment

Concurrent seasonal adjustment uses all available unadjusted estimates (including the latest preliminary estimates) as input to the X-11 program. After the last benchmarking operation, factors were developed and used to derive adjusted sales estimates for the period January 1984 through January 1987. Factors were developed and used to derive non-LIFO inventory estimates for the period December 1980 through January 1987. When unadjusted preliminary and final estimates become available, all estimates will be used as input to the X-11 program and new factors will be applied to the preliminary and final (one month before the preliminary) estimates and to the previous year estimates that correspond to the preliminary month.

Table 4 presents, by kind of business, the combined seasonal and trading-day factors that are used to adjust inventory and sales estimates. For all kind of business, one month of projected factors are shown. These projected factors are estimates of the factors that will be used to derive adjusted estimates.

An electronic version of portions of this report is available through a commercial vendor as part of CENDATA, the Census Bureau's on-line information utility. For further information, contact Customer Services, DUSD, Bureau of the Census, Washington, DC 20233 or call (301) 763-4100.

Table 3. 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	1.1-1.6	1.2	0.9-1.4	1.3	0.3-0.6	0.4	0.9-2.2	1.5	1.0-1.9	1.3	0.2-1.6	0.4
501	Durable goods, total	1.3-1.7	1.5	1.2-1.8	1.4	0.5-0.8	0.6	1.4-3.3	2.0	1.4-2.4	1.7	0.2-2.5	0.4
502	Motor vehicles and automotive parts and supplies	2.1-4.0	3.2	2.0-3.7	3.1	0.8-1.7	1.3	3.6-5.7	4.6	3.6-5.4	4.4	0.4-1.5	0.7
503	Furniture and home furnishings	6.6-9.6	7.9	5.3-8.6	7.3	2.1-6.2	3.3	5.3-12.3	10.0	5.0-12.8	10.2	0.7-3.2	1.2
504	Lumber and other construction materials	4.8-7.1	5.8	4.3-7.2	5.5	1.1-2.5	1.8	6.2-11.8	7.5	5.4-11.5	7.4	0.6-3.0	1.3
505	Sporting, recreational, photographic, & hobby goods, toys & supplies	9.3-22.9	11.4	8.8-20.8	10.9	2.3-5.3	3.3	7.2-16.2	10.8	8.5-16.7	10.6	0.9-2.4	1.6
506	Metals and minerals, ex. petroleum	2.4-6.6	4.9	2.5-6.5	4.2	0.8-2.0	1.4	4.0-6.9	4.8	3.2-6.8	4.8	0.5-2.1	0.7
507	Electrical goods	1.9-9.2	2.2	1.4-8.6	2.3	1.1-2.5	1.7	1.6-9.2	2.6	1.7-8.7	2.3	0.5-1.1	0.7
508	Hardware, plumbing, heating equipment, and supplies	4.4-7.8	6.7	4.3-8.7	6.8	1.3-2.9	2.0	4.8-9.3	6.0	4.5-9.2	6.1	0.5-2.1	0.6
509	Machinery, equipment, and supplies	2.5-4.2	2.8	1.9-3.4	2.9	1.0-2.1	1.7	2.3-9.0	4.4	2.4-5.8	3.8	0.4-6.4	0.6
51	Miscellaneous durable goods	3.5-4.9	3.9	3.0-4.3	3.7	1.4-2.5	1.9	4.5-8.6	6.6	4.3-9.1	6.8	0.5-2.4	0.9
511	Nondurable goods, total	1.5-3.2	1.8	1.5-3.1	1.6	0.5-1.0	0.7	1.5-2.6	2.2	1.6-2.8	2.2	0.3-0.8	0.4
512	Paper and paper products	2.9-5.1	4.0	3.4-4.5	4.0	1.2-2.9	1.9	5.1-7.3	6.4	4.5-7.1	6.5	0.6-2.2	0.8
513	Drugs, drug proprietaries and druggists' sundries	4.5-9.3	7.8	4.8-9.0	7.2	0.8-2.1	1.5	4.5-9.6	7.2	4.6-9.7	7.5	0.6-2.6	1.0
514	Apparel, piece goods, & notions	4.2-7.5	4.7	3.2-7.3	4.7	1.9-4.9	2.7	3.8-11.3	8.5	4.1-11.6	8.4	0.6-2.6	1.5
515	Groceries and related products	2.6-5.8	3.6	2.1-5.6	3.5	0.6-2.8	1.2	4.6-7.6	6.2	4.4-8.8	6.1	0.5-1.8	1.0
516	Farm-product raw materials	2.9-6.3	5.0	2.5-8.5	4.0	2.5-5.3	3.8	3.7-6.8	6.1	5.2-6.3	5.7	0.8-3.3	1.5
517	Chemicals & allied products	4.6-10.1	8.2	4.3-9.3	7.4	1.4-5.1	3.1	6.6-13.0	7.5	6.3-12.9	7.0	0.4-2.9	1.7
518	Petroleum & petroleum products	2.8-10.4	3.5	2.6-11.6	3.3	0.4-3.0	1.0	2.9-12.0	4.2	2.9-14.1	4.3	0.5-6.0	1.1
519	Beer, wine, and distilled alcoholic beverages	2.9-7.3	5.0	2.4-8.8	5.4	0.9-3.8	2.0	4.9-6.1	5.2	4.9-5.7	5.0	0.8-1.8	1.1
	Misc. nondurable goods	2.3-7.3	4.9	4.0-7.1	4.5	0.7-2.8	2.0	6.0-10.5	7.3	6.0-10.5	6.9	0.7-3.0	1.0

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 1986 through January 1987.

Table 4. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers

SIC code	Kind of business	1986								1987					
		May [†]	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. [†]	May [†]	June
	Sales,¹ total	1.043	1.015	1.003	.969	1.008	1.056	.962	1.035	.953	.905	1.035	1.019	1.010	1.045
50	Durable goods	1.029	1.024	1.009	.998	1.026	1.090	.956	1.010	.920	.890	1.031	1.027	.998	1.052
501	Motor vehicles & auto. equip.	1.074	1.051	1.039	.953	.941	1.090	.954	1.011	.958	.871	1.014	1.034	1.037	1.093
502	Furniture & home furnishings	1.012	1.033	1.007	.997	1.040	1.159	.976	.974	.868	.882	.991	1.013	.985	1.069
503	Lumber & other construction mat.	1.065	1.101	1.099	1.091	1.078	1.151	.953	.876	.811	.793	.955	1.044	1.040	1.118
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	.922	.971	.990	.982	1.086	1.221	1.066	1.011	.849	.877	.981	1.000	.885	.993
505	Metals & minerals, ex. petroleum	1.012	1.029	.982	.990	1.039	1.045	.892	.983	.968	.944	1.098	1.040	.982	1.033
506	Electrical goods	.949	1.000	1.007	.997	1.085	1.111	1.012	1.062	.912	.907	1.017	.949	.924	1.026
507	Hardware, plumbing & heating equip.	1.047	1.042	1.046	1.031	1.014	1.094	.957	.960	.932	.902	.968	1.041	1.019	1.068
508	Machinery, equip. & supplies	1.038	1.027	.993	.981	1.026	1.048	.930	1.043	.908	.907	1.065	1.050	1.012	1.061
509	Miscellaneous durable goods	1.063	.987	.950	.998	1.050	1.100	.989	.954	.954	.893	1.033	1.138	1.017	.973
51	Nondurable goods	1.049	.999	.994	.958	.993	1.030	.968	1.056	.982	.917	1.041	1.007	1.019	1.029
511	Paper & paper products	.996	.999	.999	1.015	1.007	1.072	.943	1.005	.979	.939	1.035	1.018	.961	1.034
512	Drugs, drug proprietaries and druggists' sundries	.990	.994	.996	.960	1.030	1.078	.949	1.025	1.001	.927	1.026	1.030	.961	1.018
513	Apparel, piece goods, and notions	.907	1.013	1.166	1.115	1.035	1.128	.894	.779	.887	1.039	1.038	.977	.874	1.058
514	Groceries & related products	1.045	.999	1.032	1.004	.995	1.025	.964	1.025	.978	.915	1.006	1.007	1.024	1.016
515	Farm-product raw materials	1.098	.902	.902	.835	.888	1.014	1.075	1.186	1.090	.969	1.083	.977	1.042	.942
516	Chemicals & allied products	1.026	1.045	.980	.998	1.046	1.098	.914	.930	.991	.925	1.041	1.022	1.004	1.058
517	Petroleum & petroleum products	.976	.942	.945	.911	1.005	1.031	.987	1.114	1.104	.958	1.061	.975	.955	.979
518	Beer, wine, & distilled beverages	1.063	1.073	1.111	1.044	1.007	1.073	.984	1.201	.760	.774	.927	.984	1.019	1.111
519	Misc. nondurable goods	1.200	1.082	1.006	.941	.968	1.008	.915	1.017	.856	.856	1.079	1.101	1.160	1.099
	Inventories,¹ total	.992	.991	.987	.984	.996	1.008	1.010	1.007	1.003	1.006	1.009	1.006	.992	.991
50	Durable goods	1.001	1.006	1.004	1.002	1.010	1.001	.997	.995	.985	.993	1.002	1.004	1.001	1.005
501	Motor vehicles & auto. equip.	.990	1.000	.974	.958	1.019	1.016	1.006	1.016	.998	1.002	1.008	1.005	.990	1.000
502	Furniture & home furnishings	.994	1.006	.981	1.018	1.009	.997	.985	1.027	1.014	1.012	.994	.976	.994	1.009
503	Lumber & other construction mat.	1.002	1.012	1.007	1.010	.997	.980	.985	.996	.961	.997	1.026	1.030	1.002	1.012
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	.996	1.015	1.022	1.012	1.008	.996	.976	.977	.984	.990	1.008	1.001	.995	1.013
505	Metals & minerals, ex. petroleum	.997	1.013	1.013	1.020	1.004	.982	.987	1.013	1.007	1.000	.993	.987	.996	1.014
506	Electrical goods	.991	1.001	1.030	1.021	1.036	1.023	1.005	.984	.969	.970	.978	.995	.990	.999
507	Hardware, plumbing & heating equip.	1.034	1.004	1.013	1.002	.983	.980	.980	.962	.972	.999	1.028	1.042	1.034	1.004
508	Machinery, equip. & supplies	1.009	1.012	1.002	1.003	.995	1.002	.991	.997	.985	.994	1.006	1.005	1.009	1.012
509	Miscellaneous durable goods	1.010	.982	1.015	1.026	1.027	1.014	1.029	.957	.974	.996	.978	.994	1.013	.982
51	Nondurable goods	.976	.964	.958	.951	.971	1.019	1.029	1.031	1.036	1.029	1.022	1.008	.974	.964
511	Paper & paper products	1.008	1.007	1.003	1.016	.984	.985	1.007	.995	.994	1.007	1.003	1.004	1.006	1.006
512	Drugs, drug proprietaries and druggists' sundries	.985	.974	.964	.970	1.012	1.023	.974	.994	1.023	1.031	1.052	1.019	.985	.972
513	Apparel, piece goods, and notions	1.009	1.023	1.069	1.049	1.015	.992	.944	.994	1.000	.986	.948	.966	1.008	1.025
514	Groceries & related products	1.001	1.000	.982	.972	.987	1.040	1.041	1.000	.979	1.009	.997	.994	1.000	1.000
515	Farm-product raw materials	.821	.786	.779	.807	.875	1.069	1.186	1.213	1.251	1.157	1.088	.996	.822	.789
516	Chemicals & allied products	1.008	1.003	1.025	.989	.959	1.015	1.004	.983	.990	1.006	.998	1.035	1.010	1.000
517	Petroleum & petroleum products	1.007	1.033	.964	.943	1.023	1.021	1.034	1.090	1.062	.921	.931	.943	.998	1.033
518	Beer, wine, & distilled beverages	1.001	1.030	1.027	.994	1.008	1.060	1.062	.912	.942	.959	.997	1.022	.999	1.030
519	Misc. nondurable goods	.991	.947	.941	.924	.941	.973	.958	1.018	1.033	1.071	1.111	1.072	.990	.950

[†]Revised.

¹Adjusted sales and inventory data shown in table 1A 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: The seasonal factors shown have been computed based on monthly estimates through the current month preliminary estimate.

Monthly Wholesale Trade

CURRENT BUSINESS REPORTS

May 1987

Sales and Inventories

Issued July 1987

BW-87-05

Sales. May 1987 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$124.3 billion, little changed from the revised April level and up 12.3 percent from a year ago. The April preliminary estimate was revised upward by \$0.2 billion or about 0.1 percent. May sales of durable goods were little changed from April and increased 10.2 percent from a year ago. May sales of nondurable goods were little changed from April and were 14.4 percent above May 1986.

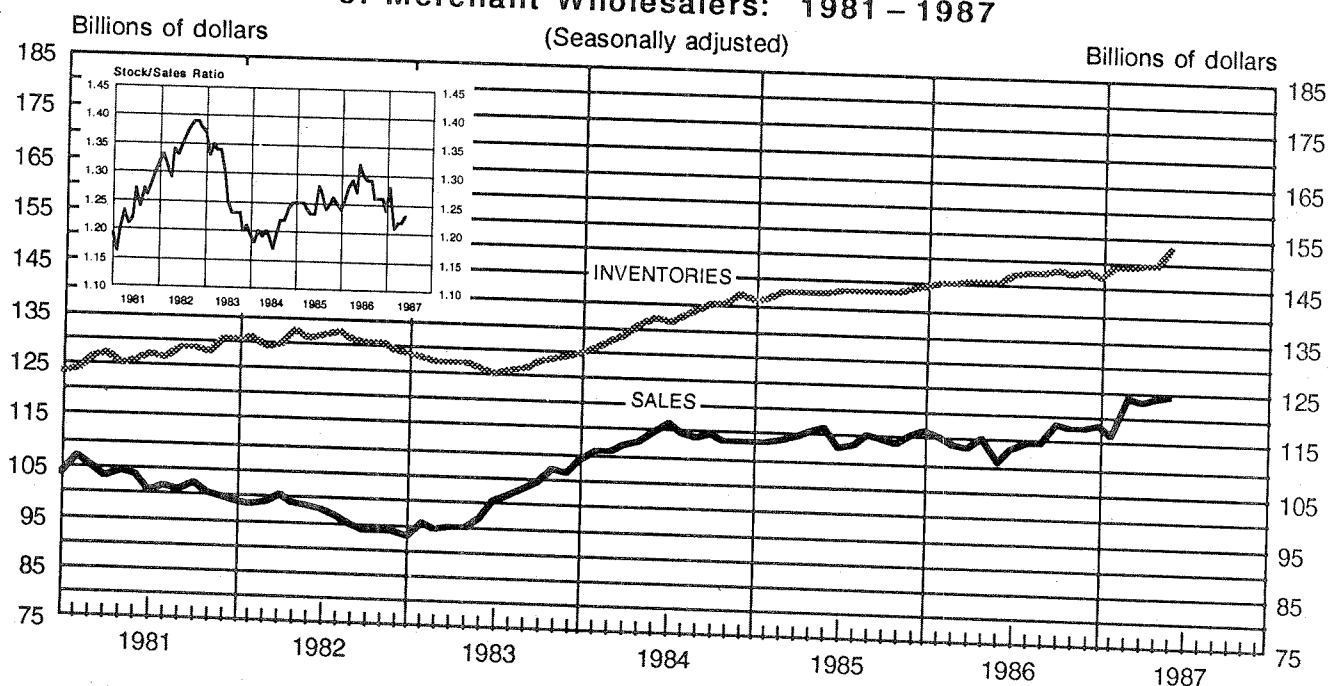
Inventories. Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$152.8 billion at the end of May, up 1.8 percent from the revised April

level and up 4.9 percent from a year ago. The April preliminary estimate was revised upward by \$0.3 billion or about 0.19 percent. Inventories of durable goods wholesalers were up 2.4 percent from the April level and increased 5.0 percent from a year ago. Inventories of nondurable goods wholesalers showed an increase of 0.9 percent from the April level and were 4.8 percent above May 1986.

Stock/Sales Ratio. The May stock/sales ratio for merchant wholesalers, based on seasonally adjusted data was 1.23, up from the April ratio of 1.22. The year ago ratio was 1.32.

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 4.

Monthly Sales, Inventories, and Stock/Sales Ratios
of Merchant Wholesalers: 1981 - 1987



The Monthly Wholesale Trade Report for June is scheduled to be released August 10, 1987, at 10:00 a.m.



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.

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Table 1A. Adjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1987 and 1986

(Data adjusted for seasonal variation and, in the case of sales, also for trading-day differences. Sales and inventories in millions of dollars)

SIC code	Kind of business	1987					1986							
		Jan.	Feb.	Mar.	Apr.	May ^D	May ^T	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Sales, total	116,545	123,281	123,009	123,439	124,285	110,625	113,232	114,444	114,426	118,138	117,488	117,734	118,446
50	Durable goods	55,893	59,344	59,498	59,016	59,497	53,971	54,783	55,697	54,747	56,998	57,102	56,758	57,833
501	Motor vehicles & auto. equip.	11,334	12,931	12,890	12,338	12,282	11,577	12,152	12,782	12,313	12,665	12,867	12,459	12,966
502	Furniture & home furnishings	2,377	2,304	2,370	2,190	2,228	2,185	2,247	2,195	2,260	2,463	2,260	2,170	2,227
503	Lumber & other construction mat.	4,543	4,571	4,831	4,696	4,643	4,357	4,102	4,280	4,235	4,318	4,396	4,391	4,635
504	Sporting, recreational, photo-graphic, & hobby goods, toys & supplies	1,645	1,718	1,554	1,480	1,452	1,631	1,392	1,370	1,444	1,512	1,567	1,622	1,627
505	Metals & minerals, ex. petroleum ..	4,983	5,267	5,493	5,192	5,344	4,540	4,659	4,826	4,589	4,807	4,934	4,937	4,852
506	Electrical goods	7,899	8,270	8,023	8,207	8,242	7,560	7,713	7,650	7,603	7,817	7,887	7,630	7,812
507	Hardware, plumbing & heating equipment	3,667	3,891	4,191	3,981	3,949	3,696	3,699	3,642	3,465	3,709	3,745	3,695	3,922
508	Machinery, equip. & supplies	14,787	15,230	15,146	15,345	15,426	13,645	13,782	14,129	13,990	14,029	14,143	14,671	15,027
509	Miscellaneous durable goods	4,658	5,162	5,000	5,587	5,931	4,780	5,037	4,823	4,848	5,678	5,303	5,183	4,765
51	Nondurable goods	60,652	63,937	63,511	64,423	64,788	56,654	58,449	58,747	59,679	61,140	60,386	60,976	60,613
511	Paper & paper products	3,564	3,706	3,671	3,705	3,702	3,285	3,351	3,348	3,433	3,373	3,437	3,453	3,584
512	Drugs, drug proprietaries and druggists' sundries	2,514	2,608	2,507	2,513	2,605	2,204	2,190	2,294	2,356	2,357	2,438	2,524	2,484
513	Apparel, piece goods, & notions	3,417	3,852	3,894	3,318	3,289	3,229	3,355	3,334	3,700	3,772	3,806	3,709	3,300
514	Groceries & related products	20,429	20,596	20,021	20,625	20,812	18,945	19,415	19,656	20,441	20,241	20,104	20,094	20,023
515	Farm-product raw materials	6,174	6,496	6,632	6,952	6,879	6,232	6,558	6,707	6,220	6,577	6,721	6,384	6,358
516	Chemicals & allied products	2,055	1,990	2,100	2,192	2,191	2,152	2,121	2,066	2,064	2,076	2,078	2,225	2,097
517	Petroleum & petroleum products	10,253	11,297	11,442	11,452	11,719	9,254	9,321	8,916	9,158	10,236	8,925	9,224	9,724
518	Beer, wine, & distilled beverages ..	3,550	3,621	3,589	3,603	3,617	3,345	3,349	3,256	3,437	3,277	3,341	3,420	3,446
519	Misc. nondurable goods	8,696	9,771	9,655	10,063	9,974	8,008	8,789	9,170	8,870	9,231	9,536	9,943	9,597
	Inventories, total	149,347	149,408	149,565	150,050	152,817	145,650	147,129	147,850	148,050	148,599	147,754	148,204	147,375
50	Durable goods	97,280	96,594	97,491	97,891	100,198	95,418	95,865	96,680	96,883	97,216	96,845	97,652	95,710
501	Motor vehicles & auto. equip.	18,782	19,176	19,209	19,360	19,895	17,486	17,736	17,937	18,294	18,494	17,934	18,834	18,643
502	Furniture & home furnishings	3,510	3,558	3,697	3,885	4,037	3,131	2,974	3,114	3,151	3,321	3,116	3,132	3,333
503	Lumber & other construction mat.	4,907	4,846	5,022	5,207	5,428	5,030	5,315	5,173	5,049	4,993	5,030	5,017	4,940
504	Sporting, recreational, photo-graphic, & hobby goods, toys & supplies	3,436	3,473	3,492	3,444	3,546	2,879	3,026	3,136	3,230	3,255	3,572	3,541	3,387
505	Metals & minerals, ex. petroleum ..	9,508	9,182	9,377	9,449	9,465	9,754	9,736	9,564	9,075	9,217	9,329	9,088	9,359
506	Electrical goods	13,864	14,092	14,082	13,545	13,687	12,757	12,986	13,294	13,230	13,574	13,502	13,815	13,576
507	Hardware, plumbing & heating equipment	6,576	6,509	6,504	6,187	6,360	6,580	6,656	6,599	6,700	6,630	6,643	6,611	6,642
508	Machinery, equip. & supplies	31,984	31,106	31,182	31,554	31,555	33,101	32,890	33,203	33,381	32,778	32,784	33,087	31,007
509	Miscellaneous durable goods	4,713	4,652	4,926	5,260	6,225	4,700	4,546	4,660	4,773	4,954	4,935	4,527	4,823
51	Nondurable goods	52,067	52,814	52,074	52,159	52,619	50,232	51,264	51,170	51,167	51,383	50,909	50,552	51,665
511	Paper & paper products	3,595	3,535	3,563	3,554	3,586	3,284	3,330	3,345	3,339	3,346	3,418	3,383	3,570
512	Drugs, drug proprietaries and druggists' sundries	4,385	4,394	4,152	4,455	4,434	3,848	3,861	3,826	3,888	3,935	4,076	4,143	4,246
513	Apparel, piece goods, & notions	7,061	7,142	7,310	7,071	7,099	6,538	6,761	7,205	7,288	7,167	6,672	6,841	6,928
514	Groceries & related products	12,074	11,915	11,614	11,743	11,763	11,411	11,648	11,656	11,670	11,734	11,796	11,983	12,185
515	Farm-product raw materials	5,954	5,978	5,748	6,184	6,414	6,776	7,261	7,040	6,558	6,358	6,270	5,712	5,636
516	Chemicals & allied products	2,121	2,253	2,223	2,227	2,331	2,190	2,187	2,144	2,148	2,076	2,085	2,161	2,144
517	Petroleum & petroleum products	3,405	3,468	3,469	3,198	3,074	2,936	2,914	2,911	3,051	3,194	3,163	3,140	3,449
518	Beer, wine, & distilled beverages ..	4,033	4,347	4,273	4,061	4,064	3,821	3,833	3,734	3,716	3,743	3,652	3,794	3,818
519	Misc. nondurable goods	9,439	9,782	9,722	9,666	9,854	9,428	9,469	9,309	9,509	9,830	9,777	9,395	9,689
	Stock/sales ratios, total	1.28	1.21	1.22	1.22	1.23	1.32	1.30	1.29	1.29	1.26	1.26	1.26	1.24
50	Durable goods	1.74	1.63	1.64	1.66	1.68	1.77	1.75	1.74	1.77	1.71	1.70	1.72	1.65
501	Motor vehicles & auto. equip.	1.66	1.48	1.49	1.57	1.62	1.51	1.46	1.40	1.49	1.46	1.39	1.51	1.44
502	Furniture & home furnishings	1.48	1.54	1.56	1.77	1.81	1.43	1.32	1.42	1.39	1.35	1.38	1.44	1.50
503	Lumber & other construction mat.	1.08	1.06	1.04	1.11	1.17	1.15	1.30	1.21	1.19	1.16	1.14	1.14	1.07
504	Sporting, recreational, photo-graphic, & hobby goods, toys & supplies	2.09	2.02	2.25	2.33	2.44	1.77	2.17	2.29	2.24	2.15	2.28	2.18	2.08
505	Metals & minerals, ex. petroleum ..	1.91	1.74	1.71	1.82	1.77	2.15	2.09	1.98	1.98	1.92	1.89	1.84	1.93
506	Electrical goods	1.76	1.70	1.76	1.65	1.66	1.69	1.68	1.74	1.74	1.74	1.71	1.81	1.74
507	Hardware, plumbing & heating equipment	1.79	1.67	1.55	1.55	1.61	1.78	1.80	1.81	1.93	1.79	1.77	1.79	1.69
508	Machinery, equip. & supplies	2.16	2.04	2.06	2.06	2.05	2.43	2.39	2.35	2.39	2.34	2.32	2.26	2.06
509	Miscellaneous durable goods	1.01	.90	.99	.94	1.05	.98	.90	.97	.98	.87	.93	.87	1.01
51	Nondurable goods	.86	.83	.82	.81	.81	.89	.88	.87	.86	.84	.84	.83	.85
511	Paper & paper products	1.01	.95	.97	.96	.97	1.00	.99	1.00	.97	.99	.99	.98	1.00
512	Drugs, drug proprietaries and druggists' sundries	1.74	1.68	1.66	1.77	1.70	1.75	1.76	1.67	1.65	1.67	1.67	1.64	1.71
513	Apparel, piece goods, & notions	2.07	1.85	1.88	2.13	2.16	2.02	2.02	2.16	1.97	1.90	1.75	1.84	2.10
514	Groceries & related products	.59	.58	.58	.57	.57	.60	.60	.59	.57	.58	.59	.60	.61
515	Farm-product raw materials	.96	.92	.87	.89	.93	1.09	1.11	1.05	1.05	.97	.93	.89	.89
516	Chemicals & allied products	1.03	1.13	1.06	1.02	1.06	1.02	1.03	1.04	1.04	1.00	1.00	.97	1.02
517	Petroleum & petroleum products	.33	.31	.30	.28	.26	.32	.31	.33	.33	.31	.35	.34	.35
518	Beer, wine, & distilled beverages ..	1.14	1.20	1.19	1.13	1.12	1.14	1.14	1.15	1.08	1.14	1.09	1.11	1.11
519	Misc. nondurable goods	1.09	1.00	1.01	.96	.99	1.18	1.08	1.02	1.07	1.06	1.03	.94	1.01

^TRevised.

^PPreliminary estimate. See sample design and estimation procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986*.

Table 1B. Unadjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1987 and 1986

(Data not adjusted for seasonal variation or trading-day differences. Sales and inventories in millions of dollars)

SIC code	Kind of business	1987						1986						Total 6 mos.		
		Jan.	Feb.	Mar.	Apr.	May	June ^P	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1987	1986
	Sales, total	110,564	111,705	126,908	126,354	125,630	130,443	114,783	115,561	112,208	118,772	124,995	113,152	121,499	731,604	675,124
50	Durable goods	51,319	52,834	61,100	61,161	59,270	63,365	56,448	56,415	54,282	58,368	62,287	54,350	58,033	349,049	320,373
501	Motor vehicles & auto equipment	10,858	11,263	13,070	12,758	12,796	13,014	12,772	13,280	11,734	11,918	14,025	11,886	13,109	73,759	69,264
502	Furniture & home furnishings	2,063	2,032	2,349	2,218	2,159	2,212	2,321	2,210	2,253	2,561	2,619	2,118	2,169	13,033	12,407
503	Lumber & other construction mat.	3,684	3,625	4,614	4,903	4,983	5,593	4,516	4,704	4,620	4,655	5,060	4,185	4,060	27,402	24,151
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	1,397	1,507	1,524	1,480	1,258	1,434	1,352	1,356	1,418	1,642	1,913	1,729	1,645	8,600	8,378
505	Metals & minerals, ex. petroleum	4,824	4,972	6,031	5,400	5,284	5,520	4,794	4,739	4,543	4,994	5,156	4,404	4,770	32,031	28,741
506	Electrical goods	7,204	7,501	8,159	7,788	7,647	8,390	7,713	7,704	7,580	8,481	8,762	7,722	8,296	46,689	43,805
507	Hardware, plumbing & heating equip.	3,418	3,510	4,057	4,144	3,976	4,444	3,854	3,810	3,572	3,761	4,097	3,536	3,765	23,549	21,077
508	Machinery, equip. & supplies	13,427	13,814	16,131	16,112	15,425	16,570	14,154	14,030	13,724	14,394	14,822	13,644	15,673	91,479	82,929
509	Miscellaneous durable goods	4,444	4,610	5,165	6,358	5,742	6,188	4,972	4,582	4,838	5,962	5,833	5,126	4,546	32,507	29,621
51	Nondurable goods	59,245	58,871	65,808	65,193	66,360	67,078	58,335	59,146	57,926	60,404	62,708	58,802	63,466	382,555	354,751
511	Paper & paper products	3,489	3,480	3,800	3,772	3,530	3,872	3,348	3,345	3,484	3,397	3,684	3,256	3,602	21,943	19,753
512	Drugs, drug proprietaries and druggists' sundries	2,517	2,418	2,572	2,588	2,512	2,734	2,177	2,285	2,262	2,428	2,628	2,395	2,546	15,341	13,032
513	Apparel, piece goods, & notions	3,031	4,002	4,042	3,242	3,055	3,821	3,399	3,888	4,125	3,904	4,293	3,316	2,571	21,193	19,314
514	Groceries & related products	19,980	18,845	20,141	20,769	21,332	21,884	19,396	20,285	20,523	20,140	20,607	19,371	20,524	122,951	113,298
515	Farm-product raw materials	6,730	6,295	7,182	6,792	7,041	7,238	5,915	6,050	5,194	5,840	6,815	6,863	7,541	41,278	40,892
516	Chemicals & allied products	2,037	1,841	2,186	2,240	2,143	2,258	2,216	2,025	2,060	2,172	2,282	2,034	1,950	12,705	12,984
517	Petroleum & petroleum products	11,319	10,823	12,140	11,166	11,041	11,142	8,780	8,426	8,343	10,287	9,202	9,104	10,833	67,631	62,618
518	Beer, wine, & distilled beverages	2,698	2,803	3,327	3,545	3,676	3,811	3,594	3,617	3,588	3,300	3,585	3,365	4,139	19,860	18,668
519	Misc. nondurable goods	7,444	8,364	10,418	11,079	12,030	10,318	9,510	9,225	8,347	8,936	9,612	9,098	9,760	59,653	54,192
	Inventories, total	149,548	150,166	150,882	150,853	151,371	152,320	145,977	146,279	145,882	147,964	149,009	148,804	148,245	(X)	(X)
50	Durable goods	95,895	95,989	97,667	98,249	100,083	99,590	96,472	97,005	96,958	97,991	97,153	97,210	95,353	(X)	(X)
501	Motor vehicles & auto equip.	18,744	19,214	19,363	19,457	20,430	20,254	17,736	17,471	17,526	18,845	18,221	18,947	18,941	(X)	(X)
502	Furniture & home furnishings	3,559	3,601	3,675	3,792	4,022	4,039	2,992	3,055	3,208	3,351	3,107	3,085	3,423	(X)	(X)
503	Lumber & other construction mat.	4,716	4,831	5,153	5,363	5,531	5,554	5,379	5,209	5,099	4,978	4,929	4,942	4,920	(X)	(X)
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	3,381	3,438	3,520	3,447	3,457	3,516	3,071	3,205	3,269	3,281	3,558	3,456	3,309	(X)	(X)
505	Metals & minerals, ex. petroleum	9,575	9,182	9,311	9,326	9,449	9,505	9,863	9,688	9,257	9,254	9,161	8,970	9,481	(X)	(X)
506	Electrical goods	13,434	13,669	13,772	13,477	13,756	13,729	12,999	13,693	13,508	14,063	13,813	13,884	13,359	(X)	(X)
507	Hardware, plumbing & heating equipment	6,392	6,502	6,686	6,447	6,459	6,309	6,683	6,685	6,713	6,517	6,510	6,479	6,390	(X)	(X)
508	Machinery, equip. & supplies	31,504	30,919	31,369	31,712	31,197	31,197	33,269	33,481	32,614	32,850	32,789	30,914	(X)	(X)	
509	Miscellaneous durable goods	4,590	4,633	4,818	5,228	5,782	5,487	4,464	4,730	4,897	5,088	5,004	4,658	4,616	(X)	(X)
51	Nondurable goods	53,653	54,177	53,215	52,604	51,288	52,730	49,505	49,274	48,924	49,973	51,856	51,594	52,892	(X)	(X)
511	Paper & paper products	3,573	3,560	3,574	3,568	3,528	3,460	3,353	3,355	3,392	3,292	3,367	3,407	3,552	(X)	(X)
512	Drugs, drug proprietaries and druggists' sundries	4,486	4,530	4,368	4,540	4,274	4,245	3,761	3,688	3,771	3,982	4,170	4,035	4,221	(X)	(X)
513	Apparel, piece goods, & notions	7,061	7,042	6,930	6,831	7,302	7,598	6,917	7,702	7,645	7,274	6,619	6,458	6,886	(X)	(X)
514	Groceries & related products	11,820	12,022	11,579	11,673	11,853	12,435	11,648	11,446	11,343	11,581	12,268	12,474	12,185	(X)	(X)
515	Farm-product raw materials	7,448	6,916	6,254	6,159	5,347	5,483	5,707	5,484	5,292	5,563	6,703	6,774	6,836	(X)	(X)
516	Chemicals & allied products	2,100	2,267	2,219	2,305	2,395	2,443	2,194	2,198	2,124	1,991	2,116	2,170	2,108	(X)	(X)
517	Petroleum & petroleum products	3,616	3,194	3,230	3,016	3,035	3,111	3,010	2,806	2,877	3,267	3,229	3,247	3,759	(X)	(X)
518	Beer, wine, & distilled beverages	3,799	4,169	4,260	4,150	4,086	4,060	3,948	3,835	3,694	3,773	3,871	4,029	3,482	(X)	(X)
519	Misc. nondurable goods	9,750	10,477	10,801	10,362	9,468	9,895	8,967	8,760	8,786	9,250	9,513	9,000	9,863	(X)	(X)
	Stock/sales ratios, total	1.35	1.34	1.19	1.19	1.20	1.17	1.27	1.27	1.30	1.25	1.19	1.32	1.22	(X)	(X)
50	Durable goods	1.87	1.82	1.60	1.61	1.69	1.57	1.71	1.72	1.79	1.68	1.56	1.79	1.64	(X)	(X)
501	Motor vehicles & auto equip.	1.73	1.71	1.48	1.53	1.60	1.56	1.39	1.32	1.49	1.58	1.30	1.59	1.44	(X)	(X)
502	Furniture & home furnishings	1.73	1.77	1.56	1.71	1.86	1.83	1.29	1.38	1.42	1.31	1.19	1.46	1.58	(X)	(X)
503	Lumber & other construction mat.	1.28	1.33	1.12	1.09	1.11	.99	1.19	1.11	1.10	1.07	.97	1.18	1.21	(X)	(X)
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	2.42	2.28	2.31	2.33	2.75	2.45	2.27	2.36	2.31	2.00	1.86	2.00	2.01	(X)	(X)
505	Metals & minerals, ex. petroleum	1.98	1.85	1.54	1.73	1.79	1.72	2.06	2.04	2.04	1.85	1.78	2.04	1.99	(X)	(X)
506	Electrical goods	1.86	1.82	1.69	1.73	1.80	1.64	1.69	1.78	1.78	1.66	1.58	1.80	1.61	(X)	(X)
507	Hardware, plumbing & heating equipment	1.87	1.85	1.65	1.56	1.62	1.42	1.73	1.75	1.88	1.73	1.59	1.83	1.70	(X)	(X)
508	Machinery, equip. & supplies	2.35	2.24	1.94	1.97	2.02	1.88	2.35	2.37	2.44	2.27	2.22	2.40	1.97	(X)	(X)
509	Miscellaneous durable goods	1.03	1.00	.93	.82	1.01	.89	.90	1.03	1.01	.85	.86	.91	1.02	(X)	(X)
51	Nondurable goods	.91	.92	.81	.81	.77	.79	.85	.83	.84	.83	.83	.88	.83	(X)	(X)
511	Paper & paper products	1.02	1.02	.94	.95	1.00	.89	1.00	1.00	.97	.97	.91	1.05	.99	(X)	(X)
512	Drugs, drug proprietaries and druggists' sundries	1.78	1.87	1.70	1.75	1.70	1.55	1.73	1.61	1.67	1.64	1.59	1.68	1.66	(X)	(X)
513	Apparel, piece goods, & notions	2.33	1.76	1.71	2.11	2.39	1.99	2.04	1.98	1.85	1.86	1.54	1.95	2.68	(X)	(X)
514	Groceries & related products	.59	.64	.57	.56	.56	.57	.60	.56	.55	.58	.60	.64	.59	(X)	(X)
515	Farm-product raw materials	1.11	1.10	.87	.91	.76	.76	.96	.91	1.02	.95	.98	.99	.91	(X)	(X)
516	Chemicals & allied products	1.03	1.23	1.02	1.03	1.12	1.08	.99	1.09	1.03	.92	.93	1.07	1.08	(X)	(X)
517	Petroleum & petroleum products	.32	.30	.27	.27	.27	.28	.34	.33	.34	.32	.35	.36	.35	(X)	(X)
518	Beer, wine, & distilled beverages	1.41	1.49	1.28	1.17	1.11	1.07	1.10	1.06	1.03	1.14	1.08	1.20	.84	(X)	(X)
519	Misc. nondurable goods	1.31	1.25	1.04	.94	.79	.96	.94	.95	1.05	1.04	.99	.99	1.01	(X)	(X)
P Preliminary estimate. See sample design and estimation.																

^PPreliminary estimate. See sample design and estimation procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986*.
 x Cumulative data are not applicable for inventories or stock/sales ratios, cumulative seasonally adjusted sales estimates are not tabulated.

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 1987 from May 1987	June 1987 from June 1986	6 months 1987 from 6 months 1986	June 1987 from May 1987	June 1987 from June 1986	June 1987 from May 1987	June 1987 from June 1986	June 1987 from May 1987	June 1987 from June 1986
	Total	+3.8	+13.6	+8.4	+6	+4.3	+1.2	+11.0	+1	+4.3
50	Durable goods	+6.9	+12.3	+9.0	-5	+3.2	+1.4	+9.8	-1.2	+3.3
501	Motor vehicles & auto. equip.	+1.7	+1.9	+6.5	-9	+14.2	-2.0	-9	-2.7	+14.0
502	Furniture & home furnishings	+2.5	-4.7	+5.0	+4	+35.0	-4.4	-7.2	+3	+35.3
503	Lumber & other construction mat	+12.2	+23.8	+13.5	+4	+3.3	+4.2	+22.3	-1.4	+3.0
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	+14.0	+6.1	+2.6	+1.7	+14.5	+2.8	+4.0	-2	+14.6
505	Metals & minerals, ex. petroleum	+4.5	+15.1	+11.4	+6	-3.6	.0	+14.8	-9	-3.5
506	Electrical goods	+9.7	+8.8	+6.6	-2	+5.6	-3	+6.3	-9	+5.7
507	Hardware, plumbing & heating equip.	+11.8	+15.3	+11.7	-2.3	-5.6	+4.5	+12.3	.0	-5.7
508	Machinery, equip. & supplies	+7.4	+17.1	+10.3	.0	-6.3	+1.9	+13.2	-4	-6.2
509	Miscellaneous durable goods	+7.8	+24.5	+9.7	-5.1	+22.9	+8.1	+24.1	-3.3	+22.7
51	Nondurable goods	+1.1	+15.0	+7.8	+2.8	+6.5	+1.0	+12.2	+2.5	+6.2
511	Paper & paper products	+9.7	+15.7	+11.1	-1.9	+3.2	+1.2	+11.5	-1.9	+3.3
512	Drugs, drug proprietaries and druggists' sundries	+8.8	+25.6	+17.7	-7	+12.9	+1.8	+22.3	+2	+13.0
513	Apparel, piece goods, & notions	+25.1	+12.4	+9.7	+4.1	+9.8	+2.8	+6.1	+2.5	+10.1
514	Groceries & related products	+2.6	+12.8	+8.5	+4.9	+6.8	+2.5	+10.6	+4.4	+6.6
515	Farm-product raw materials	+2.8	+22.4	+9	+2.5	-3.9	+8.2	+15.3	+3.7	-4.5
516	Chemicals & allied products	+5.4	+1.9	-2.1	+2.0	+11.3	-6	+4	+1.6	+11.5
517	Petroleum & petroleum products	+9	+26.9	+8.0	+2.5	+3.4	+2	+23.7	+6	+4.0
518	Beer, wine, & distilled beverages	+3.7	+6.0	+6.4	-6	+2.8	-3.4	+3.2	-3.0	+2.8
519	Misc. nondurable goods	-14.2	+8.5	+10.1	+4.5	+10.3	-4.8	+7.6	+5.4	+10.0

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 1982 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

Estimates based on a sample survey will differ from the value derived from the population because of sampling variability and nonsampling error. Sampling variability occurs 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 variability 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 3. 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,

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

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 9 out of 10 (90 percent) of these samples, the estimates would differ from the results of a complete enumeration by less than 1.65 times the percentages shown. In about 19 out of 20 (95 percent) of these samples, the estimate would differ from the results of a complete enumeration by less than twice the percentages shown.

To illustrate the computations involved in the above confidence statements, as related to dollar volume sales estimates, assume that an estimate of sales published in table 1B is \$10,750 million for a particular month and that the median coefficient of variation for this estimate as given in table 3, is 1.8 percent, or 0.018. Multiplying \$10,750 million by 0.018 yields \$194 million. Therefore a 67-percent confidence interval is \$10,556 million to \$10,944 million (\$10,750 million plus or minus \$194 million). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately 2 out of 3 (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Typical practice is to construct 90 or 95 percent confidence intervals. Continuing with the illustration, a 90-percent confidence interval is \$10,430 million to \$11,070 million (\$10,750 million plus or minus \$320 million). A 95-percent confidence interval is \$10,362 million to \$11,138 million (\$10,750 million plus or minus \$388 million).

All comparisons appearing on the front page of this publication and for which measures of sampling variability are available are accompanied by an indication of the 90-percent confidence interval. Thus a statement such as "+0.8 ($\pm$ 1.3)" indicates a 90-percent confidence interval from -0.5 to +2.1. If the confidence interval contains zero, it is uncertain whether there is an increase or decrease.

Nonsampling Errors

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 34 percent of the sales estimates and 38 percent for inventories.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventory estimates in this report reflect the results of a benchmarking² operation which made use of 1984 and 1985 estimates tabulated from the 1985 Annual Trade Survey. The sales estimates for the period January 1984 through December 1986 were derived in a manner so that the sum of the 12 months for 1984 and 1985 were equal to the sales estimates published in the 1984 and 1985 Annual Trade Surveys. The revision process was conducted so as to minimize changes to previously published month-to-month trends. The estimates for the original series were derived by using composite estimation procedures. Using inventory results from the annual surveys for the years 1980 to 1985, monthly inventories were revised to a non-LIFO basis. Through the use of carry-forward factors, the effect of the revision process was applied to composite sales and inventory estimates subsequent to December 1985. These factors were derived at various kind-of-business levels and are held constant until the next benchmarking operation. Aggregate level estimates were derived by summing appropriate three-digit kind-of-business estimates, thereby assuring additivity.

CLASSIFICATION DIFFERENCES BETWEEN MONTHLY SURVEY AND 1977 AND 1982 CENSUSES OF WHOLESALE TRADE

For SIC 505, the monthly survey included merchant wholesalers as well as sales branches of ferrous metals service centers with inventories. Therefore, the 1977 and 1982 census sales estimates included the receipts of merchant wholesalers and sales branches of ferrous metals service centers with inventories.

Establishments classified in the Farm-Product Raw Materials group (SIC 515) included as sales, products purchased and transferred to other company establishments. In the monthly survey, intercompany transfers are not included in sales. Because of the differences, the 1977 and 1982 sales for the SIC were obtained from the 1977 and 1982 Annual Trade Surveys (ATS).

Inventories were not benchmarked to the census levels since the census of wholesale trade does not include inventories of auxiliary and central administrative offices of merchant wholesale establishments which are included in the monthly survey. The inventory estimates for the years 1977 and 1982 were computed by multiplying the stock/sales ratios obtained from the annual surveys by the census sales for these years.

Unpublished Data

Sales and inventory estimates for unpublished four-digit wholesale trade categories are not included in this publication because their sampling variability is so high, relative to the changes from month-to-month or between other periods, as to make them potentially misleading. The Census Bureau, for a

²For a more detailed description, see the section dealing with revisions to published data in the Current Business Reports publication, *Revised Monthly Wholesale Trade: December 1980 Through December 1986*.

nominal fee 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 on a non-LIFO basis 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. Methods of valuation may vary according to the accounting practices of the firm.

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 current and past experiences. Therefore, the adjusted could become less precise if 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.

Concurrent Seasonal Adjustment

Concurrent seasonal adjustment uses all available unadjusted estimates (including the latest preliminary estimates) as input to the X-11 program. After the last benchmarking operation, factors were developed and used to derive adjusted sales estimates for the period January 1984 through January 1987. Factors were developed and used to derive non-LIFO inventory estimates for the period December 1980 through January 1987. When unadjusted preliminary and final estimates become available, all estimates will be used as input to the X-11 program and new factors will be applied to the preliminary and final (one month before the preliminary) estimates and to the previous year estimates that correspond to the preliminary month.

Table 4 presents, by kind of business, the combined seasonal and trading-day factors that are used to adjust inventory and sales estimates. For all kind of business, one month of projected factors are shown. These projected factors are estimates of the factors that will be used to derive adjusted estimates.

An electronic version of portions of this report is available through a commercial vendor as part of CENDATA, the Census Bureau's on-line information utility. For further information, contact Customer Services, DUSD, Bureau of the Census, Washington, DC 20233 or call (301) 763-4100.

Table 3. 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	1.1-1.6	1.2	0.9-1.4	1.3	0.3-0.6	0.4	0.9-2.2	1.5	1.0-1.9	1.3	0.2-1.6	0.4
501	Durable goods, total	1.3-1.7	1.5	1.2-1.8	1.4	0.5-0.8	0.6	1.4-3.3	2.0	1.4-2.4	1.7	0.2-2.5	0.4
502	Motor vehicles and automotive parts and supplies	2.1-4.0	3.2	2.0-3.7	3.1	0.8-1.7	1.3	3.6-5.7	4.6	3.6-5.4	4.4	0.4-1.5	0.7
503	Furniture and home furnishings	6.6-9.6	7.9	5.3-8.6	7.3	2.1-6.2	3.3	5.3-12.3	10.0	5.0-12.8	10.2	0.7-3.2	1.2
504	Lumber and other construction materials	4.8-7.1	5.8	4.3-7.2	5.5	1.1-2.5	1.8	6.2-11.8	7.5	5.4-11.5	7.4	0.6-3.0	1.3
505	Sporting, recreational, photographic, & hobby goods, toys & supplies	9.3-22.9	11.4	8.8-20.8	10.9	2.3-5.3	3.3	7.2-16.2	10.8	8.5-16.7	10.6	0.9-2.4	1.6
506	Metals and minerals, ex. petroleum	2.4-6.6	4.9	2.5-6.5	4.2	0.8-2.0	1.4	4.0-6.9	4.8	3.2-6.8	4.8	0.5-2.1	0.7
507	Electrical goods	1.9-9.2	2.2	1.4-8.6	2.3	1.1-2.5	1.7	1.6-9.2	2.6	1.7-8.7	2.3	0.5-1.1	0.7
508	Hardware, plumbing, heating equipment, and supplies	4.4-7.8	6.7	4.3-8.7	6.8	1.3-2.9	2.0	4.8-9.3	6.0	4.5-9.2	6.1	0.5-2.1	0.6
509	Machinery, equipment, and supplies	2.5-4.2	2.8	1.9-3.4	2.9	1.0-2.1	1.7	2.3-9.0	4.4	2.4-5.8	3.8	0.4-6.4	0.6
51	Miscellaneous durable goods	3.5-4.9	3.9	3.0-4.3	3.7	1.4-2.5	1.9	4.5-8.6	6.6	4.3-9.1	6.8	0.5-2.4	0.9
511	Nondurable goods, total	1.5-3.2	1.8	1.5-3.1	1.6	0.5-1.0	0.7	1.5-2.6	2.2	1.6-2.8	2.2	0.3-0.8	0.4
512	Paper and paper products	2.9-5.1	4.0	3.4-4.5	4.0	1.2-2.9	1.9	5.1-7.3	6.4	4.5-7.1	6.5	0.6-2.2	0.8
513	Drugs, drug proprietaries and druggists' sundries	4.5-9.3	7.8	4.8-9.0	7.2	0.8-2.1	1.5	4.5-9.6	7.2	4.6-9.7	7.5	0.6-2.6	1.0
514	Apparel, piece goods, & notions	4.2-7.5	4.7	3.2-7.3	4.7	1.9-4.9	2.7	3.8-11.3	8.5	4.1-11.6	8.4	0.6-2.6	1.5
515	Groceries and related products	2.6-5.8	3.6	2.1-5.6	3.5	0.6-2.8	1.2	4.6-7.6	6.2	4.4-8.8	6.1	0.5-1.8	1.0
516	Farm-product raw materials	2.9-6.3	5.0	2.5-8.5	4.0	2.5-5.3	3.8	3.7-6.8	6.1	5.2-6.3	5.7	0.8-3.3	1.5
517	Chemicals & allied products	4.6-10.1	8.2	4.3-9.3	7.4	1.4-5.1	3.1	6.6-13.0	7.5	6.3-12.9	7.0	0.4-2.9	1.7
518	Petroleum & petroleum products	2.8-10.4	3.5	2.6-11.6	3.3	0.4-3.0	1.0	2.9-12.0	4.2	2.9-14.1	4.3	0.5-6.0	1.1
519	Beer, wine, and distilled alcoholic beverages	2.9-7.3	5.0	2.4-8.8	5.4	0.9-3.8	2.0	4.9-6.1	5.2	4.9-5.7	5.0	0.8-1.8	1.1
	Misc. nondurable goods	2.3-7.3	4.9	4.0-7.1	4.5	0.7-2.8	2.0	6.0-10.5	7.3	6.0-10.5	6.9	0.7-3.0	1.0

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 1986 through January 1987.

Table 4. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers

SIC code	Kind of business	1986							1987						
		June ^r	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May ^r	June ^r	July
	Sales,¹ total	1.016	1.003	.969	1.008	1.056	.962	1.035	.953	.905	1.035	1.019	1.007	1.042	.997
50	Durable goods	1.024	1.009	.998	1.026	1.090	.956	1.010	.920	.890	1.031	1.027	.991	1.054	1.006
501	Motor vehicles & auto. equip.	1.046	1.039	.953	.941	1.090	.954	1.011	.958	.871	1.014	1.034	1.037	1.076	1.039
502	Furniture & home furnishings	1.034	1.007	.997	1.040	1.159	.976	.974	.868	.882	.991	1.013	.991	1.062	1.010
503	Lumber & other construction mat.	1.106	1.099	1.091	1.078	1.151	.953	.876	.811	.793	.955	1.044	1.040	1.120	1.103
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	.966	.990	.982	1.086	1.221	1.066	1.011	.849	.877	.981	1.000	.888	.985	1.006
505	Metals & minerals, ex. petroleum	1.026	.982	.990	1.039	1.045	.892	.983	.968	.944	1.098	1.040	.985	1.029	.990
506	Electrical goods	.997	1.007	.997	1.085	1.111	1.012	1.062	.912	.907	1.017	.949	.927	1.020	.991
507	Hardware, plumbing & heating equip.	1.050	1.046	1.031	1.014	1.094	.957	.960	.932	.902	.968	1.041	1.008	1.078	1.048
508	Machinery, equip. & supplies	1.025	.993	.981	1.026	1.048	.930	1.043	.908	.907	1.065	1.050	1.005	1.060	.980
509	Miscellaneous durable goods	.987	.950	.998	1.050	1.100	.989	.954	.954	.893	1.033	1.138	.993	.990	.950
51	Nondurable goods	.999	.994	.958	.993	1.030	.968	1.056	.982	.917	1.041	1.007	1.020	1.024	.990
511	Paper & paper products	1.001	.999	1.015	1.007	1.072	.943	1.005	.979	.939	1.035	1.018	.958	1.038	.996
512	Drugs, drug proprietaries and druggists' sundries	.994	.996	.960	1.030	1.078	.949	1.025	1.001	.927	1.026	1.030	.955	1.021	.985
513	Apparel, piece goods, and notions	1.009	1.166	1.115	1.035	1.128	.894	.779	.887	1.039	1.038	.977	.879	1.069	1.125
514	Groceries & related products	1.001	1.032	1.004	.995	1.025	.964	1.025	.978	.915	1.006	1.007	1.020	1.021	1.030
515	Farm-product raw materials	.913	.902	.835	.888	1.014	1.075	1.186	1.090	.969	1.083	.977	1.020	.969	.882
516	Chemicals & allied products	1.045	.980	.998	1.046	1.098	.914	.930	.991	.925	1.041	1.022	1.000	1.060	1.003
517	Petroleum & petroleum products	.940	.945	.911	1.005	1.031	.987	1.114	1.104	.958	1.061	.975	.957	.964	.947
518	Beer, wine, & distilled beverages	1.069	1.111	1.044	1.007	1.073	.984	1.201	.760	.774	.927	.984	1.024	1.099	1.109
519	Misc. nondurable goods	1.054	1.006	.941	.968	1.008	.915	1.017	.856	.856	1.079	1.101	1.180	1.063	1.006
	Inventories,¹ total	.993	.987	.984	.996	1.008	1.010	1.007	1.003	1.006	1.009	1.006	.992	.994	.988
50	Durable goods	1.006	1.004	1.002	1.010	1.001	.997	.995	.985	.993	1.002	1.004	1.000	1.006	1.003
501	Motor vehicles & auto. equip.	1.005	.974	.958	1.019	1.016	1.006	1.016	.998	1.002	1.008	1.005	.988	1.007	.974
502	Furniture & home furnishings	.999	.981	1.018	1.009	.997	.985	1.027	1.014	1.012	.994	.976	.996	.997	.985
503	Lumber & other construction mat.	1.019	1.007	1.010	.997	.980	.985	.996	.961	.997	1.026	1.030	1.002	1.021	1.007
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	1.013	1.022	1.012	1.008	.996	.976	.977	.984	.990	1.008	1.001	.993	1.012	1.023
505	Metals & minerals, ex. petroleum	1.013	1.013	1.020	1.004	.982	.987	1.013	1.007	1.000	.993	.987	.997	1.012	1.012
506	Electrical goods	1.000	1.030	1.021	1.036	1.023	1.005	.984	.969	.970	.978	.995	.992	.999	1.029
507	Hardware, plumbing & heating equip.	1.007	1.013	1.002	.983	.980	.980	.962	.972	.999	1.028	1.042	1.032	1.008	1.012
508	Machinery, equip. & supplies	1.011	1.002	1.003	.995	1.002	.991	.997	.985	.994	1.006	1.005	1.006	1.010	1.002
509	Miscellaneous durable goods	.989	1.015	1.026	1.027	1.014	1.029	.957	.974	.996	.978	.994	1.010	.991	1.017
51	Nondurable goods	.969	.958	.951	.971	1.019	1.029	1.031	1.036	1.029	1.022	1.008	.972	.970	.959
511	Paper & paper products	1.004	1.003	1.016	.984	.985	1.007	.995	.994	1.007	1.003	1.004	1.003	1.003	.999
512	Drugs, drug proprietaries and druggists' sundries	.973	.964	.970	1.012	1.023	.974	.994	1.023	1.031	1.052	1.019	.981	.972	.960
513	Apparel, piece goods, and notions	1.031	1.069	1.049	1.015	.992	.944	.994	1.000	.986	.948	.966	1.014	1.029	1.072
514	Groceries & related products	1.003	.982	.972	.987	1.040	1.041	1.000	.979	1.009	.997	.994	.999	1.004	.979
515	Farm-product raw materials	.805	.779	.807	.875	1.069	1.186	1.213	1.251	1.157	1.088	.996	.819	.810	.783
516	Chemicals & allied products	1.014	1.025	.989	.959	1.015	1.004	.983	.990	1.006	.998	1.035	1.009	1.013	1.023
517	Petroleum & petroleum products	1.021	.964	.943	1.023	1.021	1.034	1.090	.921	.931	.943	.996	1.005	1.015	.966
518	Beer, wine, & distilled beverages	1.028	1.027	.994	1.008	1.060	1.062	.912	.942	.959	.997	1.022	1.005	1.029	1.025
519	Misc. nondurable goods	.969	.941	.924	.941	.973	.958	1.018	1.033	1.071	1.111	1.072	.980	.972	.942

^rRevised.

¹Adjusted sales and inventory data shown in table 1A 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: The seasonal factors shown have been computed based on monthly estimates through the current month preliminary estimate.

Monthly Wholesale Trade

CURRENT BUSINESS REPORTS

June 1987

Issued August 1987

BW-87-06

Sales and Inventories

Sales. June 1987 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$126.0 billion, up 1.2 percent (± 0.7 percent) from the revised May level and up 11.0 percent from a year ago. The May preliminary estimate was revised upward by \$0.2 billion or about 0.2 percent. June sales of durable goods were up 1.4 percent (± 0.9 percent) from May and increased 9.8 percent from a year ago. June sales of nondurable goods were up 1.0 percent (± 1.1 percent) from May and were 12.2 percent above June 1986.

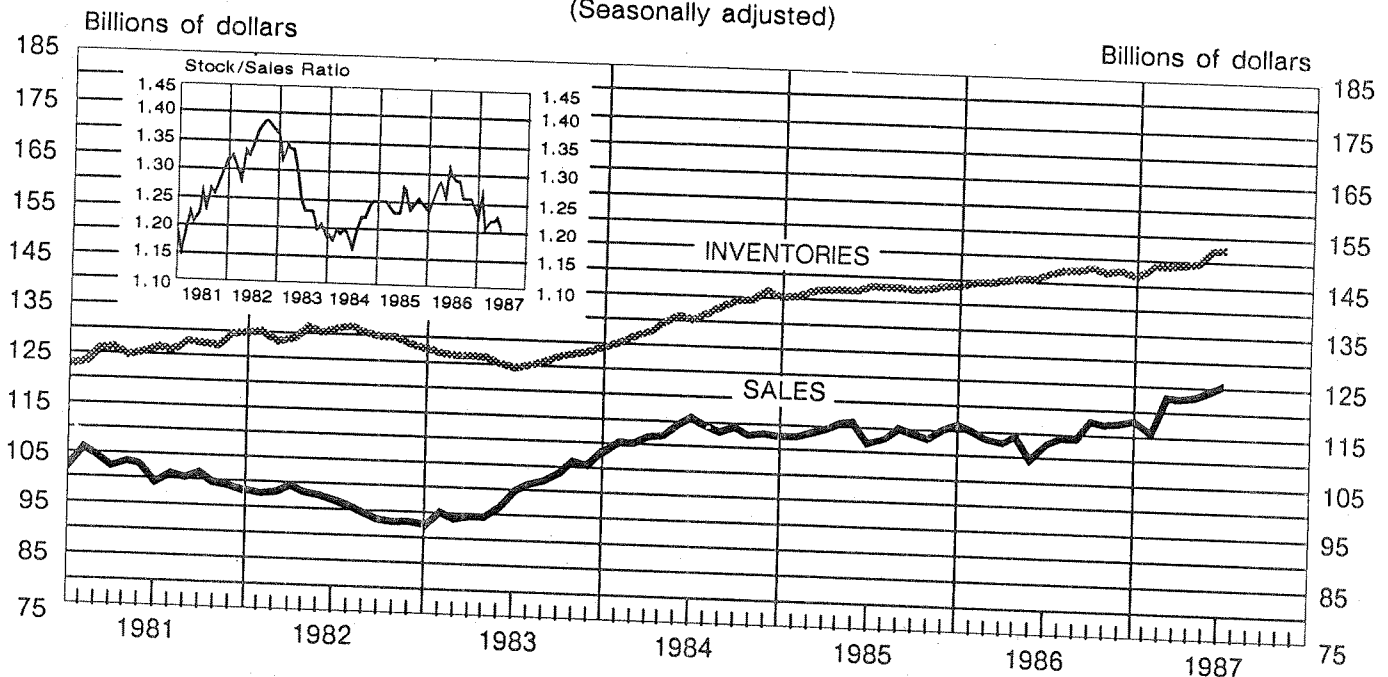
Inventories. Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$152.9 billion at the end of June, up 0.1 percent (± 0.3 percent) from the

revised May level and up 4.3 percent from a year ago. The May preliminary estimate was revised downward by \$0.1 billion or about 0.09 percent. Inventories of durable goods wholesalers were down 1.2 percent (± 0.4 percent) from the May level but were up 3.3 percent from a year ago. Inventories of nondurable goods wholesalers increased 2.5 percent (± 0.7 percent) from the May level and were 6.2 percent above June 1986.

Stock/Sales Ratio. The June stock/sales ratio for merchant wholesalers, based on seasonally adjusted data was 1.21, down from the May ratio of 1.23. The year ago ratio was 1.29.

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 4.

Monthly Sales, Inventories, and Stock/Sales Ratios
of Merchant Wholesalers: 1981-1987
(Seasonally adjusted)



The Monthly Wholesale Trade Report for July is scheduled to be released September 10, 1987, at 10:00 a.m.



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.

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Table 1A. Adjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1987 and 1986

(Data adjusted for seasonal variation and, in the case of sales, also for trading-day differences. Sales and inventories in millions of dollars)

SIC code	Kind of business	1987						1986						
		Jan.	Feb.	Mar.	Apr.	May	June ^P	June ^F	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Sales, total	116,545	123,281	123,009	123,439	124,486	125,970	113,469	114,444	114,426	118,138	117,488	117,734	118,446
50	Durable goods	55,893	59,344	59,498	59,016	59,413	60,222	54,863	55,697	54,747	56,998	57,102	56,758	57,833
501	Motor vehicles & auto. equip.	11,334	12,931	12,890	12,338	12,339	12,095	12,210	12,782	12,313	12,665	12,867	12,459	12,966
502	Furniture & home furnishings	2,377	2,304	2,370	2,190	2,179	2,083	2,245	2,195	2,260	2,463	2,260	2,170	2,227
503	Lumber & other construction mat.	4,543	4,571	4,831	4,696	4,791	4,994	4,083	4,280	4,235	4,318	4,396	4,391	4,635
504	Sporting, recreational, photo-graphic, & hobby goods, toys & supplies	1,645	1,718	1,554	1,480	1,417	1,456	1,400	1,370	1,444	1,512	1,567	1,622	1,627
505	Metals & minerals, ex. petroleum	4,983	5,267	5,493	5,192	5,364	5,364	4,673	4,826	4,589	4,807	4,934	4,937	4,852
506	Electrical goods	7,899	8,270	8,023	8,207	8,249	8,225	7,736	7,650	7,603	7,817	7,887	7,630	7,812
507	Hardware, plumbing & heating equipment	3,667	3,891	4,191	3,981	3,944	4,122	3,670	3,642	3,465	3,709	3,745	3,695	3,922
508	Machinery, equip. & supplies	14,787	15,230	15,146	15,345	15,348	15,632	13,809	14,129	13,990	14,029	14,143	14,671	15,027
509	Miscellaneous durable goods	4,658	5,162	5,000	5,587	5,782	6,251	5,037	4,823	4,848	5,678	5,303	5,183	4,765
51	Nondurable goods	60,652	63,937	63,511	64,423	65,073	65,748	58,606	58,747	59,679	61,140	60,386	60,976	60,613
511	Paper & paper products	3,564	3,706	3,671	3,705	3,685	3,730	3,345	3,348	3,433	3,373	3,437	3,453	3,584
512	Drugs, drug proprietaries and druggists' sundries	2,514	2,608	2,507	2,513	2,630	2,678	2,190	2,294	2,356	2,357	2,438	2,524	2,484
513	Apparel, piece goods, & notions	3,417	3,852	3,894	3,318	3,476	3,574	3,369	3,334	3,700	3,772	3,806	3,709	3,300
514	Groceries & related products	20,429	20,596	20,021	20,625	20,914	21,434	19,377	19,656	20,441	20,241	20,104	20,094	20,023
515	Farm-product raw materials	6,174	6,496	6,632	6,952	6,903	7,470	6,479	6,707	6,220	6,577	6,721	6,384	6,358
516	Chemicals & allied products	2,055	1,990	2,100	2,192	2,143	2,130	2,121	2,066	2,064	2,076	2,078	2,225	2,097
517	Petroleum & petroleum products	10,253	11,297	11,442	11,452	11,537	11,558	9,340	8,916	9,158	10,236	8,925	9,224	9,724
518	Beer, wine, & distilled beverages	3,550	3,621	3,589	3,603	3,590	3,468	3,362	3,256	3,437	3,277	3,341	3,420	3,446
519	Misc. nondurable goods	8,696	9,771	9,655	10,063	10,195	9,706	9,023	9,170	8,870	9,231	9,536	9,943	9,597
	Inventories, total	149,347	149,408	149,565	150,050	152,673	152,855	146,585	147,850	148,050	148,599	147,754	148,204	147,375
50	Durable goods	97,280	96,594	97,491	97,891	100,056	98,897	95,763	96,680	96,883	97,216	96,845	97,652	95,710
501	Motor vehicles & auto. equip.	18,782	19,176	19,209	19,360	20,678	20,113	17,648	17,937	18,294	18,494	17,934	18,834	18,643
502	Furniture & home furnishings	3,510	3,558	3,697	3,885	4,038	4,051	2,995	3,114	3,151	3,321	3,116	3,132	3,333
503	Lumber & other construction mat.	4,907	4,846	5,022	5,207	5,520	5,440	5,279	5,173	5,049	4,993	5,030	5,017	4,940
504	Sporting, recreational, photo-graphic, & hobby goods, toys & supplies	3,436	3,473	3,492	3,444	3,481	3,474	3,032	3,136	3,230	3,255	3,572	3,541	3,387
505	Metals & minerals, ex. petroleum	9,508	9,182	9,377	9,449	9,477	9,392	9,736	9,564	9,075	9,217	9,329	9,088	9,359
506	Electrical goods	13,864	14,092	14,082	13,545	13,867	13,743	12,999	13,294	13,230	13,574	13,502	13,815	13,576
507	Hardware, plumbing & heating equipment	6,576	6,509	6,504	6,187	6,259	6,259	6,637	6,599	6,700	6,630	6,643	6,611	6,642
508	Machinery, equip. & supplies	31,984	31,106	31,182	31,554	31,011	30,888	32,923	33,203	33,381	32,778	32,784	33,087	31,007
509	Miscellaneous durable goods	4,713	4,652	4,926	5,260	5,725	5,537	4,514	4,660	4,773	4,954	4,935	4,527	4,823
51	Nondurable goods	52,067	52,814	52,074	52,159	52,617	53,958	50,822	51,170	51,167	51,383	50,909	50,552	51,665
511	Paper & paper products	3,595	3,535	3,563	3,554	3,517	3,450	3,340	3,345	3,339	3,346	3,418	3,383	3,570
512	Drugs, drug proprietaries and druggists' sundries	4,385	4,394	4,152	4,455	4,357	4,367	3,865	3,826	3,888	3,935	4,076	4,143	4,246
513	Apparel, piece goods, & notions	7,061	7,142	7,310	7,071	7,201	7,384	6,709	7,205	7,288	7,167	6,672	6,841	6,928
514	Groceries & related products	12,074	11,915	11,614	11,743	11,865	12,385	11,613	11,656	11,670	11,734	11,796	11,983	12,185
515	Farm-product raw materials	5,954	5,978	5,748	6,184	6,529	6,769	7,089	7,040	6,558	6,358	6,270	5,712	5,636
516	Chemicals & allied products	2,121	2,253	2,223	2,227	2,374	2,412	2,164	2,144	2,148	2,076	2,085	2,161	2,144
517	Petroleum & petroleum products	3,405	3,468	3,469	3,198	3,047	3,065	2,948	2,911	3,051	3,194	3,163	3,140	3,449
518	Beer, wine, & distilled beverages	4,033	4,347	4,273	4,061	4,066	3,946	3,840	3,734	3,716	3,743	3,652	3,794	3,818
519	Misc. nondurable goods	9,439	9,782	9,722	9,666	9,661	10,180	9,254	9,309	9,509	9,830	9,777	9,395	9,689
	Stock/sales ratios, total	1.28	1.21	1.22	1.22	1.23	1.21	1.29	1.29	1.29	1.26	1.26	1.26	1.24
50	Durable goods	1.74	1.63	1.64	1.66	1.68	1.64	1.75	1.74	1.77	1.71	1.70	1.72	1.65
501	Motor vehicles & auto equip.	1.66	1.48	1.49	1.57	1.68	1.66	1.45	1.40	1.49	1.46	1.39	1.51	1.44
502	Furniture & home furnishings	1.48	1.54	1.56	1.77	1.85	1.94	1.33	1.42	1.39	1.35	1.38	1.44	1.50
503	Lumber & other construction mat.	1.08	1.06	1.04	1.11	1.15	1.09	1.29	1.21	1.19	1.16	1.14	1.14	1.07
504	Sporting, recreational, photo-graphic, & hobby goods, toys & supplies	2.09	2.02	2.25	2.33	2.46	2.39	2.17	2.29	2.24	2.15	2.28	2.18	2.08
505	Metals & minerals, ex. petroleum	1.91	1.74	1.71	1.82	1.77	1.75	2.08	1.98	1.98	1.92	1.89	1.84	1.93
506	Electrical goods	1.76	1.70	1.76	1.65	1.68	1.67	1.68	1.74	1.74	1.74	1.71	1.81	1.74
507	Hardware, plumbing & heating equipment	1.79	1.67	1.55	1.55	1.59	1.52	1.81	1.81	1.93	1.79	1.77	1.79	1.69
508	Machinery, equip. & supplies	2.16	2.04	2.06	2.06	2.02	1.98	2.38	2.35	2.39	2.34	2.32	2.26	2.06
509	Miscellaneous durable goods	1.01	.90	.99	.94	.99	.89	.90	.97	.98	.87	.93	.87	1.01
51	Nondurable goods	.86	.83	.82	.81	.81	.82	.87	.87	.86	.84	.84	.83	.85
511	Paper & paper products	1.01	.95	.97	.96	.95	.92	1.00	1.00	.97	.99	.99	.98	1.00
512	Drugs, drug proprietaries and druggists' sundries	1.74	1.68	1.66	1.77	1.66	1.63	1.76	1.67	1.65	1.67	1.67	1.64	1.71
513	Apparel, piece goods, & notions	2.07	1.85	1.88	2.13	2.07	2.07	1.99	2.16	1.97	1.90	1.75	1.84	2.10
514	Groceries & related products	.59	.58	.58	.57	.57	.58	.60	.59	.57	.58	.59	.60	.61
515	Farm-product raw materials	.96	.92	.87	.89	.95	.91	1.09	1.05	1.05	.97	.93	.89	.89
516	Chemicals & allied products	1.03	1.13	1.06	1.02	1.11	1.13	1.02	1.04	1.04	1.00	1.00	.97	1.02
517	Petroleum & petroleum products	.33	.31	.30	.28	.26	.27	.32	.33	.33	.31	.35	.34	.35
518	Beer, wine, & distilled beverages	1.14	1.20	1.19	1.13	1.13	1.14	1.14	1.15	1.08	1.14	1.09	1.11	1.11
519	Misc. nondurable goods	1.09	1.00	1.01	.96	.95	1.05	1.03	1.02	1.07	1.06	1.03	.94	1.01

^FRevised.

^PPreliminary estimate. See sample design and estimation procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986*.

Table 1B. Unadjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1987 and 1986

(Data not adjusted for seasonal variation or trading-day differences. Sales and inventories in millions of dollars)

SIC code	Kind of business	1987							1986						Total 7 mos.	
		Jan.	Feb.	Mar.	Apr.	May	June	July ^P	July	Aug.	Sept.	Oct.	Nov.	Dec.	1987	1986
	Sales, total	110,564	111,705	126,908	126,354	125,630	129,016	125,759	115,561	112,208	118,772	124,995	113,152	121,499	855,936	790,685
50	Durable goods	51,319	52,834	61,100	61,161	59,270	63,423	61,310	56,415	54,282	58,368	62,287	54,350	58,033	410,417	376,788
501	Motor vehicles & auto equipment	10,858	11,263	13,070	12,758	12,796	13,075	12,402	13,280	11,734	11,918	14,025	11,886	13,109	86,222	82,544
502	Furniture & home furnishings	2,063	2,032	2,349	2,218	2,159	2,240	2,276	2,210	2,253	2,561	2,619	2,118	2,169	15,337	14,617
503	Lumber & other construction mat.	3,684	3,625	4,614	4,903	4,983	5,791	5,904	4,704	4,620	4,655	5,060	4,185	4,060	33,504	28,855
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	1,397	1,507	1,524	1,480	1,258	1,417	1,422	1,356	1,418	1,642	1,913	1,729	1,645	10,005	9,734
505	Metals & minerals, ex. petroleum	4,824	4,972	6,031	5,400	5,284	5,712	5,629	4,739	4,543	4,994	5,156	4,404	4,770	37,852	33,480
506	Electrical goods	7,204	7,501	8,159	7,788	7,647	8,190	8,240	7,704	7,580	8,481	8,762	7,722	8,296	54,729	51,509
507	Hardware, plumbing & heating equip.	3,418	3,510	4,057	4,144	3,976	4,591	4,481	3,810	3,572	3,761	4,097	3,536	3,765	28,177	24,887
508	Machinery, equip. & supplies	13,427	13,814	16,131	16,112	15,425	16,257	15,566	14,030	13,724	14,394	14,822	13,644	15,673	106,732	96,959
509	Miscellaneous durable goods	4,444	4,610	5,165	6,358	5,742	6,150	5,390	4,582	4,838	5,962	5,833	5,126	4,546	37,859	34,203
51	Nondurable goods	59,245	58,871	65,808	65,193	66,360	65,593	64,449	59,146	57,926	60,404	62,708	58,802	63,466	445,519	413,897
511	Paper & paper products	3,489	3,480	3,800	3,772	3,530	3,979	3,980	3,345	3,484	3,397	3,684	3,256	3,602	26,030	23,098
512	Drugs, drug proprietaries and druggists' sundries	2,517	2,418	2,572	2,588	2,512	2,636	2,634	2,285	2,282	2,428	2,628	2,395	2,546	17,877	15,317
513	Apparel, piece goods, & notions	3,031	4,002	4,042	3,242	3,055	3,868	4,137	3,888	4,125	3,904	4,293	3,316	2,571	25,377	23,202
514	Groceries & related products	19,980	18,845	20,141	20,769	21,332	21,011	20,897	20,285	20,523	20,140	20,607	19,371	20,524	142,975	133,583
515	Farm-product raw materials	6,730	6,295	7,182	6,792	7,041	6,928	6,790	6,050	5,194	5,840	6,815	6,863	7,541	47,758	46,942
516	Chemicals & allied products	2,037	1,841	2,186	2,240	2,143	2,340	2,115	2,025	2,060	2,172	2,282	2,034	1,950	14,902	15,009
517	Petroleum & petroleum products	11,319	10,823	12,140	11,168	11,041	10,816	10,860	8,426	8,343	10,287	9,202	9,104	10,833	78,165	71,044
518	Beer, wine, & distilled beverages	2,698	2,803	3,327	3,545	3,676	3,779	3,854	3,617	3,588	3,300	3,585	3,365	4,139	23,682	22,285
519	Misc. nondurable goods	7,444	8,364	10,418	11,079	12,030	10,236	9,182	9,225	8,347	8,936	9,612	9,098	9,760	68,753	63,417
	Inventories, total	149,548	150,166	150,882	150,853	151,371	152,651	151,075	146,279	145,882	147,964	149,009	148,804	148,245	(X)	(X)
50	Durable goods	95,895	95,989	97,667	98,249	100,083	100,288	99,727	97,005	96,958	97,991	97,153	97,210	95,353	(X)	(X)
501	Motor vehicles & auto. equip.	18,744	19,214	19,363	19,457	20,430	20,170	20,003	17,471	17,526	18,845	18,221	18,947	18,941	(X)	(X)
502	Furniture & home furnishings	3,559	3,601	3,675	3,792	4,022	4,025	4,062	3,055	3,208	3,351	3,107	3,085	3,423	(X)	(X)
503	Lumber & other construction mat.	4,716	4,831	5,153	5,363	5,531	5,634	5,529	5,209	5,099	4,978	4,929	4,942	4,920	(X)	(X)
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	3,381	3,438	3,520	3,447	3,457	3,528	3,603	3,205	3,269	3,281	3,558	3,456	3,309	(X)	(X)
505	Metals & minerals, ex. petroleum	9,575	9,182	9,311	9,326	9,449	9,692	9,429	9,688	9,257	9,254	9,161	8,970	9,481	(X)	(X)
506	Electrical goods	13,434	13,669	13,772	13,477	13,756	13,698	13,705	13,693	13,508	14,063	13,813	13,884	13,359	(X)	(X)
507	Hardware, plumbing & heating equipment	6,392	6,502	6,686	6,447	6,459	6,498	6,614	6,685	6,713	6,517	6,510	6,479	6,390	(X)	(X)
508	Machinery, equip. & supplies	31,504	30,919	31,369	31,712	31,197	31,496	31,165	33,269	33,481	32,614	32,850	32,789	30,914	(X)	(X)
509	Miscellaneous durable goods	4,590	4,633	4,818	5,228	5,782	5,547	5,617	4,730	4,897	5,088	5,004	4,658	4,616	(X)	(X)
51	Nondurable goods	53,653	54,177	53,215	52,604	51,288	52,363	51,348	49,274	48,924	49,973	51,856	51,594	52,892	(X)	(X)
511	Paper & paper products	3,573	3,560	3,574	3,568	3,528	3,540	3,536	3,355	3,392	3,292	3,367	3,407	3,552	(X)	(X)
512	Drugs, drug proprietaries and druggists' sundries	4,486	4,530	4,368	4,540	4,274	4,285	4,412	3,688	3,771	3,982	4,170	4,035	4,221	(X)	(X)
513	Apparel, piece goods, & notions	7,061	7,042	6,930	6,831	7,302	7,747	7,923	7,702	7,645	7,274	6,619	6,458	6,886	(X)	(X)
514	Groceries & related products	11,820	12,022	11,579	11,673	11,853	12,025	11,981	11,446	11,343	11,581	12,268	12,474	12,185	(X)	(X)
515	Farm-product raw materials	7,448	6,916	6,254	6,159	5,347	5,382	4,584	5,484	5,292	5,563	6,703	6,774	6,836	(X)	(X)
516	Chemicals & allied products	2,100	2,267	2,219	2,305	2,395	2,369	2,336	2,198	2,124	1,991	2,116	2,170	2,108	(X)	(X)
517	Petroleum & petroleum products	3,616	3,194	3,230	3,016	3,035	3,122	3,251	2,806	2,877	3,267	3,229	3,247	3,759	(X)	(X)
518	Beer, wine, & distilled beverages	3,799	4,169	4,260	4,150	4,086	4,140	4,099	3,835	3,694	3,773	3,871	4,029	3,482	(X)	(X)
519	Misc. nondurable goods	9,750	10,477	10,801	10,362	9,468	9,753	9,226	8,760	8,786	9,250	9,513	9,000	9,863	(X)	(X)
	Stock/sales ratios, total	1.35	1.34	1.19	1.19	1.20	1.18	1.20	1.27	1.30	1.25	1.19	1.32	1.22	(X)	(X)
50	Durable goods	1.87	1.82	1.60	1.61	1.69	1.58	1.63	1.72	1.79	1.68	1.56	1.79	1.64	(X)	(X)
501	Motor vehicles & auto equip.	1.73	1.71	1.48	1.53	1.60	1.54	1.61	1.32	1.49	1.58	1.30	1.59	1.44	(X)	(X)
502	Furniture & home furnishings	1.73	1.77	1.56	1.71	1.86	1.80	1.78	1.38	1.42	1.31	1.19	1.46	1.58	(X)	(X)
503	Lumber & other construction mat.	1.28	1.33	1.12	1.09	1.11	.97	.94	1.11	1.10	1.07	.97	1.18	1.21	(X)	(X)
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	2.42	2.28	2.31	2.33	2.75	2.49	2.53	2.36	2.31	2.00	1.86	2.00	2.01	(X)	(X)
505	Metals & minerals, ex. petroleum	1.98	1.85	1.54	1.73	1.79	1.70	1.68	2.04	2.04	1.85	1.78	2.04	1.99	(X)	(X)
506	Electrical goods	1.86	1.82	1.69	1.73	1.80	1.67	1.66	1.78	1.78	1.66	1.58	1.80	1.61	(X)	(X)
507	Hardware, plumbing & heating equipment	1.87	1.85	1.65	1.56	1.62	1.42	1.48	1.75	1.88	1.73	1.59	1.83	1.70	(X)	(X)
508	Machinery, equip. & supplies	2.35	2.24	1.94	1.97	2.02	1.94	2.00	2.37	2.44	2.27	2.22	2.40	1.97	(X)	(X)
509	Miscellaneous durable goods	1.03	1.00	.93	.82	1.01	.90	1.04	1.03	1.01	.85	.86	.91	1.02	(X)	(X)
51	Nondurable goods	.91	.92	.81	.81	.77	.80	.80	.83	.84	.83	.83	.88	.83	(X)	(X)
511	Paper & paper products	1.02	1.02	.94	.95	1.00	.89	.89	1.00	.97	.97	.91	1.05	.99	(X)	(X)
512	Drugs, drug proprietaries and druggists' sundries	1.78	1.87	1.70	1.75	1.70	1.63	1.68	1.61	1.67	1.64	1.59	1.68	1.66	(X)	(X)
513	Apparel, piece goods, & notions	2.33	1.76	1.71	2.11	2.39	2.00	1.92	1.98	1.85	1.86	1.54	1.95	2.68	(X)	(X)
514	Groceries & related products	.59	.64	.57	.56	.56	.57	.57	.56	.55	.58	.60	.64	.59	(X)	(X)
515	Farm-product raw materials	1.11	1.10	.87	.91	.76	.78	.68	.91	1.02	.95	.98	.99	.91	(X)	(X)
516	Chemicals & allied products	1.03	1.23	1.02	1.03	1.12	1.01	1.10	.99	1.03	.92	.93	1.07	1.08	(X)	(X)
517	Petroleum & petroleum products	.32	.30	.27	.27	.27	.29	.30	.33	.34	.32	.35	.36	.35	(X)	(X)
518	Beer, wine, & distilled beverages	1.41	1.49	1.28	1.17	1.11	1.10	1.06	1.06	1.03	1.14	1.08	1.20	.84	(X)	(X)
519	Misc. nondurable goods	1.31	1.25	1.04	.94	.79	.95	1.00	.95	1.05	1.04	.99	.99	1.01	(X)	(X)

^PPreliminary estimate. See sample design and estimation procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986*.
 x Cumulative data are not applicable for inventories or stock/sales ratios, cumulative seasonally adjusted sales estimates are not tabulated.

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 1987 from June 1987	July 1987 from July 1986	7 months 1987 from 7 months 1986	July 1987 from June 1987	July 1987 from July 1986	July 1987 from June 1987	July 1987 from July 1986	July 1987 from June 1987	July 1987 from July 1986
	Total	-2.5	+8.8	+8.3	-1.0	+3.3	+4	+9.6	-.5	+3.2
50	Durable goods	-3.3	+8.7	+8.9	-.6	+2.8	+8	+9.2	-.1	+2.9
501	Motor vehicles & auto. equip.	-5.1	-6.6	+4.5	-.8	+14.5	-1.4	-6.4	+2.1	+14.6
502	Furniture & home furnishings	+1.6	+3.0	+4.9	+9	+33.0	+4.1	+2.1	+2.1	+32.9
503	Lumber & other construction mat ..	+2.0	+25.5	+16.1	-1.9	+6.1	+2.9	+24.7	-.1	+6.1
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	+4	+4.9	+2.8	+2.1	+12.4	-1.9	+3.6	+6	+12.3
505	Metals & minerals, ex. petroleum ..	-1.5	+18.8	+13.1	-2.7	-2.7	+2.4	+17.6	-1.8	-2.6
506	Electrical goods	+6	+7.0	+6.3	+1	+1	+2.6	+8.7	-2.5	+2
507	Hardware, plumbing & heating equip.	-2.4	+17.6	+13.2	+1.8	-1.1	+1.2	+18.6	+1.4	-1.1
508	Machinery, equip. & supplies	-4.3	+10.9	+10.1	-1.1	-6.3	+2.4	+12.2	-.4	-6.3
509	Miscellaneous durable goods	-12.4	+17.6	+10.7	+1.3	+18.8	-4.8	+18.0	-1.0	+18.8
51	Nondurable goods	-1.7	+9.0	+7.6	-1.9	+4.2	.0	+10.0	-1.2	+3.6
511	Paper & paper products	.0	+19.0	+12.7	-.1	+5.4	+3.0	+19.1	+5	+5.5
512	Drugs, drug proprietaries and druggists' sundries	-.1	+15.3	+16.7	+3.0	+19.6	+1.7	+16.1	+3.6	+19.8
513	Apparel, piece goods, & notions ..	+7.0	+6.4	+9.4	+2.3	+2.9	+1.1	+10.0	-2.5	+2.6
514	Groceries & related products	-.5	+3.0	+7.0	-.4	+4.7	-2.6	+3.2	+1.6	+4.7
515	Farm-product raw materials	-2.0	+12.2	+1.7	-14.8	-16.4	+5.1	+15.0	-11.3	-16.6
516	Chemicals & allied products	-9.6	+4.4	-.7	-1.4	+6.3	-1.9	+3.2	-1.7	+6.7
517	Petroleum & petroleum products ..	+4	+28.9	+10.0	+4.1	+15.9	+3.1	+29.7	+6.5	+15.3
518	Beer, wine, & distilled beverages ..	+2.0	+6.6	+6.3	-1.0	+6.9	+1.0	+6.9	+4	+7.3
519	Misc. nondurable goods	-10.3	-.5	+8.4	-5.4	+5.3	-3.6	-.4	-2.3	+5.4

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 1982 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.

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

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

Estimates based on a sample survey will differ from the value derived from the population because of sampling variability and nonsampling error. Sampling variability occurs 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 variability 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 3. 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 34 percent of the sales estimates and 38 percent for inventories.

For a more detailed description of sampling variability, see *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986*.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventory estimates in this report reflect the results of a benchmarking² operation which made use of 1984 and 1985 estimates tabulated from the 1985 Annual Trade Survey. The sales estimates for the period January 1984 through December 1986 were derived in a manner so that the sum of the 12 months for 1984 and 1985 were equal to the sales estimates published in the 1984 and 1985 Annual Trade Surveys. The revision process was conducted so as to minimize changes to previously published month-to-month trends. The estimates for the original series were derived by using composite estimation procedures. Using inventory results from the annual surveys for the years 1980 to 1985, monthly inventories were revised to a non-LIFO basis. Through the use of carry-forward factors, the effect of the revision process was applied to composite sales and inventory estimates subsequent to December 1985. These factors were derived at various kind-of-business levels and are held constant until the next benchmarking operation. Aggregate level estimates were derived by summing appropriate three-digit kind-of-business estimates, thereby assuring additivity.

Classification Differences Between Monthly Survey and 1977 and 1982 Censuses of Wholesale Trade

For SIC 505, the monthly survey included merchant wholesalers as well as sales branches of ferrous metals service centers with inventories. Therefore, the 1977 and 1982 census sales

estimates included the receipts of merchant wholesalers and sales branches of ferrous metals service centers with inventories.

Establishments classified in the Farm-Product Raw Materials group (SIC 515) included as sales, products purchased and transferred to other company establishments. In the monthly survey, intercompany transfers are not included in sales. Because of the differences, the 1977 and 1982 sales for the SIC were obtained from the 1977 and 1982 Annual Trade Surveys (ATS).

Inventories were not benchmarked to the census levels since the census of wholesale trade does not include inventories of auxiliary and central administrative offices of merchant wholesale establishments which are included in the monthly survey. The inventory estimates for the years 1977 and 1982 were computed by multiplying the stock/sales ratios obtained from the annual surveys by the census sales for these years.

Unpublished Data

Sales and inventory estimates for unpublished four-digit wholesale trade categories are not included in this publication because their sampling variability is so high, relative to the changes from month-to-month or between other periods, as to make them potentially misleading. The Census Bureau for a nominal fee 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 on a non-LIFO basis 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. Methods of valuation may vary according to the accounting practices of the firm.

²For a more detailed description, see the section dealing with revisions to published data in the Current Business Reports publication, *Revised Monthly Wholesale Trade: December 1980 Through December 1986*.

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 current and past experiences. Therefore, the adjusted could

become less precise if 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.

Concurrent Seasonal Adjustment

Concurrent seasonal adjustment uses all available unadjusted estimates (including the latest preliminary estimates) as input to the X-11 program. After the last benchmarking operation, factors were developed and used to derive adjusted sales estimates for the period January 1984 through January 1987. Factors were developed and used to derive non-LIFO inventory estimates for the period December 1980 through January 1987. When unadjusted preliminary and final estimates become available, all estimates will be used as input to the X-11 program and new factors will be applied to the preliminary and final (one month before the preliminary) estimates and to the previous year estimates that correspond to the preliminary month.

Table 4 presents, by kind of business, the combined seasonal and trading-day factors that are used to adjust inventory and sales estimates. For all kind of business, one month of projected factors are shown. These projected factors are estimates of the factors that will be used to derive adjusted estimates.

An electronic version of portions of this report is available through a commercial vendor as part of CENDATA, the Census Bureau's on-line information utility. For further information, contact Customer Services, DUSD, Bureau of the Census, Washington, DC 20233 or call (301) 763-4100.

Table 3. 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	1.1-1.6	1.2	0.9-1.4	1.3	0.3-0.6	0.4	0.9-2.2	1.5	1.0-1.9	1.3	0.2-1.6	0.4
50	Durable goods, total	1.3-1.7	1.5	1.2-1.8	1.4	0.5-0.8	0.6	1.4-3.3	2.0	1.4-2.4	1.7	0.2-2.5	0.4
501	Motor vehicles and automotive parts and supplies	2.1-4.0	3.2	2.0-3.7	3.1	0.8-1.7	1.3	3.6-5.7	4.6	3.6-5.4	4.4	0.4-1.5	0.7
502	Furniture and home furnishings	6.6-9.6	7.9	5.3-8.6	7.3	2.1-6.2	3.3	5.3-12.3	10.0	5.0-12.8	10.2	0.7-3.2	1.2
503	Lumber and other construction materials	4.8-7.1	5.8	4.3-7.2	5.5	1.1-2.5	1.8	6.2-11.8	7.5	5.4-11.5	7.4	0.6-3.0	1.3
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	9.3-22.9	11.4	8.8-20.8	10.9	2.3-5.3	3.3	7.2-16.2	10.8	8.5-16.7	10.6	0.9-2.4	1.6
505	Metals and minerals, ex. petroleum	2.4-6.6	4.9	2.5-6.5	4.2	0.8-2.0	1.4	4.0-6.9	4.8	3.2-6.8	4.8	0.5-2.1	0.7
506	Electrical goods	1.9-9.2	2.2	1.4-8.6	2.3	1.1-2.5	1.7	1.6-9.2	2.6	1.7-8.7	2.3	0.5-1.1	0.7
507	Hardware, plumbing, heating equipment, and supplies	4.4-7.8	6.7	4.3-8.7	6.8	1.3-2.9	2.0	4.8-9.3	6.0	4.5-9.2	6.1	0.5-2.1	0.6
508	Machinery, equipment, and supplies	2.5-4.2	2.8	1.9-3.4	2.9	1.0-2.1	1.7	2.3-9.0	4.4	2.4-5.8	3.8	0.4-6.4	0.6
509	Miscellaneous durable goods	3.5-4.9	3.9	3.0-4.3	3.7	1.4-2.5	1.9	4.5-8.6	6.6	4.3-9.1	6.8	0.5-2.4	0.9
51	Nondurable goods, total	1.5-3.2	1.8	1.5-3.1	1.6	0.5-1.0	0.7	1.5-2.6	2.2	1.6-2.8	2.2	0.3-0.8	0.4
511	Paper and paper products	2.9-5.1	4.0	3.4-4.5	4.0	1.2-2.9	1.9	5.1-7.3	6.4	4.5-7.1	6.5	0.6-2.2	0.8
512	Drugs, drug proprietaries and druggists' sundries	4.5-9.3	7.8	4.8-9.0	7.2	0.8-2.1	1.5	4.5-9.6	7.2	4.6-9.7	7.5	0.6-2.6	1.0
513	Apparel, piece goods, & notions	4.2-7.5	4.7	3.2-7.3	4.7	1.9-4.9	2.7	3.8-11.3	8.5	4.1-11.6	8.4	0.6-2.6	1.5
514	Groceries and related products	2.6-5.8	3.6	2.1-5.6	3.5	0.6-2.8	1.2	4.6-7.6	6.2	4.4-8.8	6.1	0.5-1.8	1.0
515	Farm-product raw materials	2.9-6.3	5.0	2.5-8.5	4.0	2.5-5.3	3.8	3.7-6.8	6.1	5.2-6.3	5.7	0.8-3.3	1.5
516	Chemicals & allied products	4.6-10.1	8.2	4.3-9.3	7.4	1.4-5.1	3.1	6.6-13.0	7.5	6.3-12.9	7.0	0.4-2.9	1.7
517	Petroleum & petroleum products	2.8-10.4	3.5	2.6-11.6	3.3	0.4-3.0	1.0	2.9-12.0	4.2	2.9-14.1	4.3	0.5-6.0	1.1
518	Beer, wine, and distilled alcoholic beverages	2.9-7.3	5.0	2.4-8.8	5.4	0.9-3.8	2.0	4.9-6.1	5.2	4.9-5.7	5.0	0.8-1.8	1.1
519	Misc. nondurable goods	2.3-7.3	4.9	4.0-7.1	4.5	0.7-2.8	2.0	6.0-10.5	7.3	6.0-10.5	6.9	0.7-3.0	1.0

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 1986 through January 1987.

Table 4. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers

SIC code	Kind of business	1986						1987							
		July ^r	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June ^r	July ^r	Aug.
	Sales,¹ total	1.004	.969	1.008	1.056	.962	1.035	.953	.905	1.035	1.019	1.007	1.039	.997	.975
50	Durable goods	1.011	.998	1.026	1.090	.956	1.010	.920	.890	1.031	1.027	.991	1.053	1.005	.997
501	Motor vehicles & auto. equip.	1.044	.953	.941	1.090	.954	1.011	.958	.871	1.014	1.034	1.037	1.083	1.042	.950
502	Furniture & home furnishings	1.024	.997	1.040	1.159	.976	.974	.868	.882	.991	1.013	.991	1.058	1.033	.998
503	Lumber & other construction mat.	1.103	1.091	1.078	1.151	.953	.876	.811	.793	.955	1.044	1.040	1.120	1.110	1.094
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	.988	.982	1.086	1.221	1.066	1.011	.849	.877	.981	1.000	.888	.978	1.001	.956
505	Metals & minerals, ex. petroleum	.985	.990	1.039	1.045	.892	.983	.968	.944	1.098	1.040	.985	1.034	.995	.990
506	Electrical goods	1.009	.997	1.085	1.111	1.012	1.062	.912	.907	1.017	.949	.927	1.013	.993	1.001
507	Hardware, plumbing & heating equip.	1.052	1.031	1.014	1.094	.957	.960	.932	.902	.968	1.041	1.008	1.081	1.043	1.033
508	Machinery, equip. & supplies	.996	.981	1.026	1.048	.930	1.043	.908	.907	1.065	1.050	1.005	1.053	.985	.976
509	Miscellaneous durable goods	.921	.998	1.050	1.100	.989	.954	.954	.893	1.033	1.138	.993	.997	.918	1.052
51	Nondurable goods	.996	.958	.993	1.030	.968	1.056	.982	.917	1.041	1.007	1.020	1.021	.989	.964
511	Paper & paper products	1.006	1.015	1.007	1.072	.943	1.005	.979	.939	1.035	1.018	.958	1.035	1.005	1.004
512	Drugs, drug proprietaries and druggists' sundries	.999	.960	1.030	1.078	.949	1.025	1.001	.927	1.026	1.030	.955	1.010	.992	.961
513	Apparel, piece goods, and notions	1.170	1.115	1.035	1.128	.894	.779	.887	1.039	1.038	.977	.879	1.070	1.132	1.133
514	Groceries & related products	1.035	1.004	.995	1.025	.964	1.025	.978	.915	1.006	1.007	1.020	1.012	1.033	1.003
515	Farm-product raw materials	.913	.835	.888	1.014	1.075	1.186	1.090	.969	1.083	.977	1.020	.955	.891	.847
516	Chemicals & allied products	.972	.998	1.046	1.098	.914	.930	.991	.925	1.041	1.022	1.000	1.068	.984	.989
517	Petroleum & petroleum products	.940	.911	1.005	1.031	.987	1.114	1.104	.958	1.061	.975	.957	.959	.934	.903
518	Beer, wine, & distilled beverages	1.112	1.044	1.007	1.073	.984	1.201	.760	.774	.927	.984	1.024	1.098	1.108	1.041
519	Misc. nondurable goods	.997	.941	.968	1.008	.915	1.017	.856	.856	1.079	1.101	1.180	1.070	.996	.961
	Inventories,¹ total	.988	.984	.996	1.008	1.010	1.007	1.003	1.006	1.009	1.006	.992	.995	.988	.985
50	Durable goods	1.004	1.002	1.010	1.001	.997	.995	.985	.993	1.002	1.004	1.000	1.008	1.004	1.002
501	Motor vehicles & auto. equip.	.976	.958	1.019	1.016	1.006	1.016	.998	1.002	1.008	1.005	.988	1.004	.975	.960
502	Furniture & home furnishings	.984	1.018	1.009	.997	.985	1.027	1.014	1.012	.994	.976	.996	.995	.984	1.018
503	Lumber & other construction mat.	1.008	1.010	.997	.980	.985	.996	.961	.997	1.026	1.030	1.002	1.026	1.008	1.011
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	1.026	1.012	1.008	.996	.976	.977	.984	.990	1.008	1.001	.993	1.012	1.027	1.012
505	Metals & minerals, ex. petroleum	1.008	1.020	1.004	.982	.987	1.013	1.007	1.000	.993	.987	.997	1.016	1.007	1.020
506	Electrical goods	1.027	1.021	1.036	1.023	1.005	.984	.969	.970	.978	.995	.992	1.000	1.026	1.020
507	Hardware, plumbing & heating equip.	1.015	1.002	.983	.980	.980	.962	.972	.999	1.028	1.042	1.032	1.011	1.015	1.002
508	Machinery, equip. & supplies	1.004	1.003	.995	1.002	.991	.997	.985	.994	1.006	1.005	1.006	1.011	1.004	1.005
509	Miscellaneous durable goods	1.018	1.026	1.027	1.014	1.029	.957	.974	.996	.978	.994	1.010	.995	1.018	1.031
51	Nondurable goods	.960	.951	.971	1.019	1.029	1.031	1.036	1.029	1.022	1.008	.972	.972	.961	.952
511	Paper & paper products	1.000	1.016	.984	.985	1.007	.995	.994	1.007	1.003	1.004	1.003	1.005	.999	1.011
512	Drugs, drug proprietaries and druggists' sundries	.964	.970	1.012	1.023	.974	.994	1.023	1.031	1.052	1.019	.981	.969	.963	.965
513	Apparel, piece goods, and notions	1.081	1.049	1.015	.992	.944	.994	1.000	.986	.948	.966	1.014	1.033	1.084	1.048
514	Groceries & related products	.983	.972	.987	1.040	1.041	1.000	.979	1.009	.997	.994	.999	1.002	.983	.968
515	Farm-product raw materials	.776	.807	.875	1.069	1.186	1.213	1.251	1.157	1.088	.996	.819	.810	.778	.809
516	Chemicals & allied products	1.019	.989	.959	1.015	1.004	.983	.990	1.006	.998	1.035	1.009	1.012	1.015	.990
517	Petroleum & petroleum products	.979	.943	1.023	1.021	1.034	1.090	1.062	.921	.931	.943	.996	1.006	.984	.936
518	Beer, wine, & distilled beverages	1.022	.994	1.008	1.060	1.062	.912	.942	.959	.997	1.022	1.005	1.032	1.018	.990
519	Misc. nondurable goods	.941	.924	.941	.973	.958	1.018	1.033	1.071	1.111	1.072	.980	.971	.940	.928

^rRevised.

¹Adjusted sales and inventory data shown in table 1A 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: The seasonal factors shown have been computed based on monthly estimates through the current month preliminary estimate.

Monthly Wholesale Trade

CURRENT BUSINESS REPORTS

July 1987

Sales and Inventories

Issued September 1987

BW-87-07

Sales. July 1987 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$125.4 billion, up 0.4 percent (± 0.7 percent) from the revised June level and up 9.6 percent from a year ago. The June preliminary estimate was revised downward by \$1.1 billion or about 0.9 percent. July sales of durable goods were up 0.8 percent (± 0.8 percent) from June and increased 9.2 percent from a year ago. July sales of nondurable goods were virtually unchanged from June and were 10.0 percent above July 1986.

Inventories. Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$152.4 billion at the end of July, down 0.5 percent (± 0.5 percent) from the revised June level but up 3.2 percent from

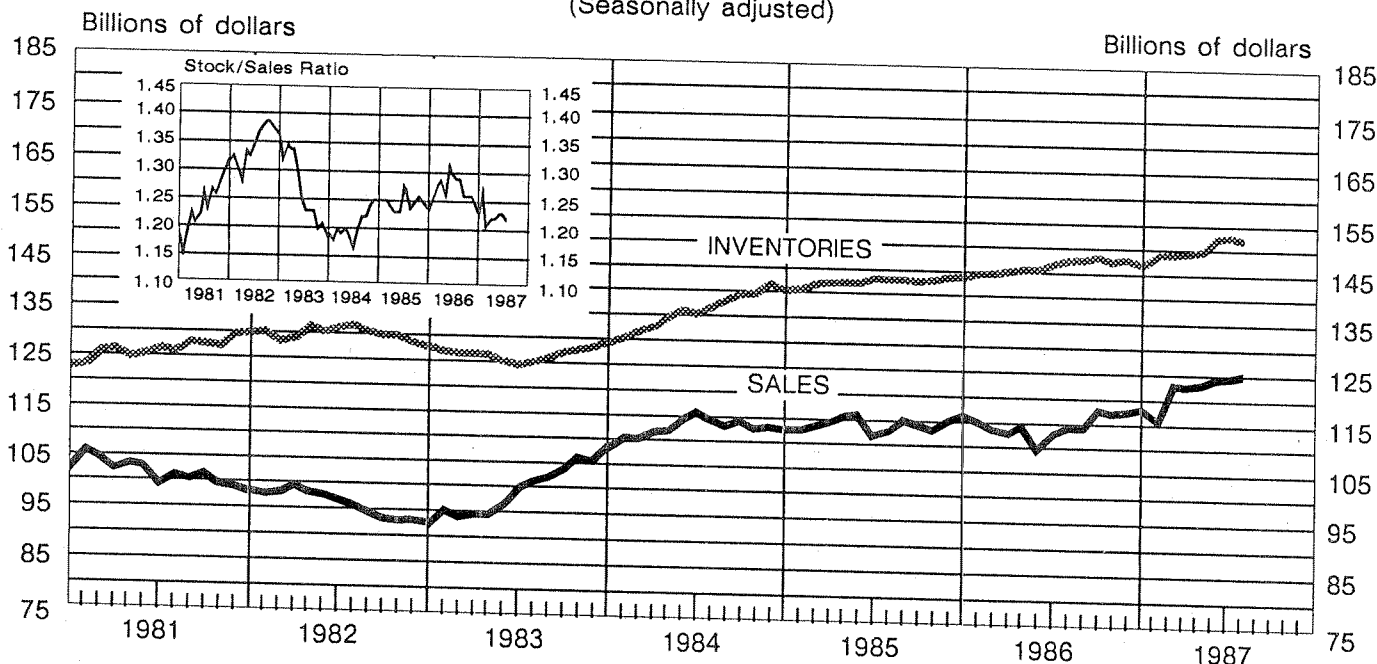
a year ago. The June preliminary estimate was revised upward by \$0.2 billion or about 0.2 percent. Inventories of durable goods wholesalers were down 0.1 percent (± 0.5 percent) from the June level but were 2.9 percent above a year ago. Inventories of nondurable goods wholesalers were down 1.2 percent (± 0.7 percent) from the June level but were 3.6 percent above July 1986.

Stock/Sales Ratio. The July stock/sales ratio for merchant wholesalers, based on seasonally adjusted data was 1.22, down from the June ratio of 1.23. The year ago ratio was 1.29.

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 4.

Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1981-1987

(Seasonally adjusted)



The Monthly Wholesale Trade Report for August is scheduled to be released October 9, 1987, at 10:00 a.m.



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.

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Table 1A. Adjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1987 and 1986

(Data adjusted for seasonal variation and, in the case of sales, also for trading-day differences. Sales and inventories in millions of dollars)

SIC code	Kind of business	1987							1986					
		Jan.	Feb.	Mar.	Apr.	May	June	July ^P	July ^T	Aug.	Sept.	Oct.	Nov.	Dec.
	Sales, total	116,545	123,281	123,009	123,439	124,486	124,836	125,363	114,358	114,426	118,138	117,488	117,734	118,446
50	Durable goods	55,893	59,344	59,498	59,016	59,413	60,274	60,770	55,644	54,747	56,998	57,102	56,758	57,833
501	Motor vehicles & auto. equip.	11,334	12,931	12,890	12,338	12,339	12,073	11,902	12,720	12,313	12,665	12,867	12,459	12,966
502	Furniture & home furnishings	2,377	2,304	2,370	2,190	2,179	2,117	2,203	2,158	2,280	2,463	2,260	2,170	2,227
503	Lumber & other construction mat.	4,543	4,571	4,831	4,696	4,791	5,171	5,319	4,265	4,235	4,318	4,396	4,391	4,635
504	Sporting, recreational, photo-graphic, & hobby goods, toys & supplies	1,645	1,718	1,554	1,480	1,417	1,449	1,421	1,372	1,444	1,512	1,567	1,622	1,627
505	Metals & minerals, ex. petroleum	4,983	5,267	5,493	5,192	5,364	5,524	5,657	4,811	4,589	4,807	4,934	4,937	4,852
506	Electrical goods	7,899	8,270	8,023	8,207	8,249	8,085	8,298	7,635	7,603	7,817	7,887	7,630	7,812
507	Hardware, plumbing & heating equipment	3,667	3,891	4,191	3,981	3,944	4,247	4,296	3,622	3,465	3,709	3,745	3,695	3,922
508	Machinery, equip. & supplies	14,787	15,230	15,146	15,345	15,348	15,439	15,803	14,086	13,990	14,029	14,143	14,671	15,027
509	Miscellaneous durable goods	4,658	5,162	5,000	5,587	5,782	6,169	5,871	4,975	4,848	5,678	5,303	5,183	4,765
51	Nondurable goods	60,652	63,937	63,511	64,423	65,073	64,562	64,593	58,714	59,679	61,140	60,386	60,976	60,613
511	Paper & paper products	3,564	3,706	3,671	3,705	3,685	3,844	3,960	3,325	3,433	3,373	3,437	3,453	3,584
512	Drugs, drug proprietaries and druggists' sundries	2,514	2,608	2,507	2,513	2,630	2,610	2,655	2,287	2,356	2,357	2,438	2,524	2,484
513	Apparel, piece goods, & notions	3,417	3,852	3,894	3,318	3,476	3,615	3,655	3,323	3,700	3,772	3,806	3,709	3,300
514	Groceries & related products	20,429	20,596	20,021	20,625	20,914	20,762	20,229	19,599	20,441	20,241	20,104	20,094	20,023
515	Farm-product raw materials	6,174	6,496	6,632	6,952	6,903	7,254	7,621	6,627	6,220	6,577	6,721	6,384	6,358
516	Chemicals & allied products	2,055	1,990	2,100	2,192	2,143	2,191	2,149	2,083	2,064	2,076	2,078	2,225	2,097
517	Petroleum & petroleum products	10,253	11,297	11,442	11,452	11,537	11,278	11,627	8,964	9,158	10,236	8,925	9,224	9,724
518	Beer, wine, & distilled beverages	3,550	3,621	3,589	3,603	3,590	3,442	3,478	3,253	3,437	3,277	3,341	3,420	3,446
519	Misc. nondurable goods	8,696	9,771	9,655	10,063	10,195	9,566	9,219	9,253	8,870	9,231	9,536	9,943	9,597
	Inventories, total	149,347	149,408	149,565	150,050	152,673	153,093	152,391	147,711	148,050	148,599	147,754	148,204	147,375
50	Durable goods	97,280	96,594	97,491	97,891	100,056	99,504	99,433	96,610	96,883	97,216	96,845	97,652	95,710
501	Motor vehicles & auto. equip.	18,782	19,176	19,209	19,360	20,678	20,090	20,516	17,901	18,294	18,494	17,934	18,834	18,643
502	Furniture & home furnishings	3,510	3,558	3,697	3,885	4,038	4,045	4,128	3,105	3,151	3,321	3,116	3,132	3,333
503	Lumber & other construction mat.	4,907	4,846	5,022	5,207	5,520	5,491	5,485	5,168	5,049	4,993	5,030	5,017	4,940
504	Sporting, recreational, photo-graphic, & hobby goods, toys & supplies	3,436	3,473	3,492	3,444	3,481	3,486	3,508	3,124	3,230	3,255	3,572	3,541	3,387
505	Metals & minerals, ex. petroleum	9,508	9,182	9,377	9,449	9,477	9,539	9,363	9,611	9,075	9,217	9,329	9,088	9,359
506	Electrical goods	13,864	14,092	14,082	13,545	13,867	13,698	13,358	13,333	13,230	13,574	13,502	13,815	13,576
507	Hardware, plumbing & heating equipment	6,576	6,509	6,504	6,187	6,259	6,427	6,516	6,586	6,700	6,630	6,643	6,611	6,642
508	Machinery, equip. & supplies	31,984	31,106	31,182	31,554	31,011	31,153	31,041	33,136	33,381	32,778	32,784	33,087	31,007
509	Miscellaneous durable goods	4,713	4,652	4,926	5,260	5,725	5,575	5,518	4,646	4,773	4,954	4,935	4,527	4,823
51	Nondurable goods	52,067	52,814	52,074	52,159	52,617	53,589	52,958	51,101	51,167	51,383	50,909	50,552	51,665
511	Paper & paper products	3,595	3,535	3,563	3,554	3,517	3,522	3,540	3,355	3,339	3,346	3,418	3,383	3,570
512	Drugs, drug proprietaries and druggists' sundries	4,385	4,394	4,152	4,455	4,357	4,422	4,582	3,826	3,888	3,935	4,076	4,143	4,246
513	Apparel, piece goods, & notions	7,061	7,142	7,310	7,071	7,201	7,500	7,309	7,125	7,288	7,167	6,672	6,841	6,928
514	Groceries & related products	12,074	11,915	11,614	11,743	11,895	12,001	12,188	11,644	11,670	11,734	11,796	11,983	12,185
515	Farm-product raw materials	5,954	5,978	5,748	6,184	6,529	6,644	5,892	7,067	6,558	6,358	6,270	5,712	5,636
516	Chemicals & allied products	2,121	2,253	2,223	2,227	2,374	2,341	2,301	2,157	2,148	2,076	2,085	2,161	2,144
517	Petroleum & petroleum products	3,405	3,468	3,469	3,198	3,047	3,103	3,304	2,866	3,051	3,194	3,163	3,140	3,449
518	Beer, wine, & distilled beverages	4,033	4,347	4,273	4,061	4,066	4,012	4,027	3,752	3,716	3,743	3,652	3,794	3,818
519	Misc. nondurable goods	9,439	9,782	9,722	9,666	9,661	10,044	9,815	9,309	9,509	9,830	9,777	9,395	9,689
	Stock/sales ratios, total	1.28	1.21	1.22	1.22	1.23	1.23	1.22	1.29	1.29	1.26	1.26	1.26	1.24
50	Durable goods	1.74	1.63	1.64	1.66	1.68	1.65	1.64	1.74	1.77	1.71	1.70	1.72	1.65
501	Motor vehicles & auto equip.	1.66	1.48	1.49	1.57	1.68	1.66	1.72	1.41	1.49	1.46	1.39	1.51	1.44
502	Furniture & home furnishings	1.48	1.54	1.56	1.77	1.85	1.91	1.87	1.44	1.39	1.35	1.38	1.44	1.50
503	Lumber & other construction mat.	1.08	1.06	1.04	1.11	1.15	1.06	1.03	1.21	1.19	1.16	1.14	1.14	1.07
504	Sporting, recreational, photo-graphic, & hobby goods, toys & supplies	2.09	2.02	2.25	2.33	2.46	2.41	2.47	2.28	2.24	2.15	2.28	2.18	2.08
505	Metals & minerals, ex. petroleum	1.91	1.74	1.71	1.82	1.77	1.73	1.66	2.00	1.98	1.92	1.89	1.84	1.93
506	Electrical goods	1.76	1.70	1.76	1.65	1.68	1.69	1.61	1.75	1.74	1.74	1.71	1.81	1.74
507	Hardware, plumbing & heating equipment	1.79	1.67	1.55	1.55	1.59	1.51	1.52	1.82	1.93	1.79	1.77	1.79	1.69
508	Machinery, equip. & supplies	2.16	2.04	2.06	2.06	2.02	2.02	1.96	2.35	2.39	2.34	2.32	2.26	2.06
509	Miscellaneous durable goods	1.01	.90	.99	.94	.99	.90	.94	.93	.98	.87	.93	.87	1.01
51	Nondurable goods	.86	.83	.82	.81	.81	.83	.82	.87	.86	.84	.84	.83	.85
511	Paper & paper products	1.01	.95	.97	.96	.95	.92	.89	1.01	.97	.99	.99	.98	1.00
512	Drugs, drug proprietaries and druggists' sundries	1.74	1.68	1.66	1.77	1.66	1.69	1.73	1.67	1.65	1.67	1.67	1.64	1.71
513	Apparel, piece goods, & notions	2.07	1.85	1.88	2.13	2.07	2.07	2.00	2.14	1.97	1.90	1.75	1.84	2.10
514	Groceries & related products	.59	.58	.58	.57	.57	.58	.60	.59	.57	.58	.59	.60	.61
515	Farm-product raw materials	.96	.92	.87	.89	.95	.92	.77	1.07	1.05	.97	.93	.89	.89
516	Chemicals & allied products	1.03	1.13	1.06	1.02	1.11	1.07	1.07	1.04	1.04	1.00	1.00	.97	1.02
517	Petroleum & petroleum products	.33	.31	.30	.28	.26	.28	.28	.32	.33	.31	.35	.34	.35
518	Beer, wine, & distilled beverages	1.14	1.20	1.19	1.13	1.13	1.17	1.16	1.15	1.08	1.14	1.09	1.11	1.11
519	Misc. nondurable goods	1.09	1.00	1.01	.96	.95	1.05	1.06	1.01	1.07	1.06	1.03	.94	1.01

^TRevised.

^PPreliminary estimate. See sample design and estimation procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986*.

Table 1B. Unadjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1987 and 1986

(Data not adjusted for seasonal variation or trading-day differences. Sales and inventories in millions of dollars)

SIC code	Kind of business	1987								1986					Total 8 mos.	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug. ^P	Aug.	Sept.	Oct.	Nov.	Dec.	1987	1986
	Sales, total	110,564	111,705	126,908	126,354	125,630	129,016	126,469	127,434	112,208	118,772	124,995	113,152	121,499	984,080	902,893
50	Durable goods	51,319	52,834	61,100	61,161	59,270	63,423	61,290	61,368	54,282	58,368	62,287	54,350	58,033	471,765	431,070
501	Motor vehicles & auto equipment ..	10,858	11,263	13,070	12,758	12,796	13,075	12,409	12,074	11,734	11,918	14,025	11,886	13,109	98,303	94,278
502	Furniture & home furnishings	2,063	2,032	2,349	2,218	2,159	2,240	2,335	2,514	2,253	2,561	2,619	2,118	2,169	17,910	16,870
503	Lumber & other construction mat.	3,684	3,625	4,614	4,903	4,983	5,791	5,846	5,570	4,620	4,655	5,060	4,185	4,060	39,016	33,475
504	Sporting, recreational, photo-graphic, & hobby goods, toys & supplies	1,397	1,507	1,524	1,480	1,258	1,417	1,490	1,613	1,418	1,642	1,913	1,729	1,645	11,686	11,152
505	Metals & minerals, ex. petroleum ..	4,824	4,972	6,031	5,400	5,284	5,712	5,539	5,787	4,543	4,994	5,156	4,404	4,770	43,549	38,023
506	Electrical goods	7,204	7,501	8,159	7,788	7,647	8,190	8,247	8,594	7,580	8,481	8,762	7,722	8,296	63,330	59,089
507	Hardware, plumbing & heating equip.	3,418	3,510	4,057	4,144	3,976	4,591	4,391	4,277	3,572	3,761	4,097	3,536	3,765	32,364	28,459
508	Machinery, equip. & supplies	13,427	13,814	16,131	16,112	15,425	16,257	15,648	15,416	13,724	14,394	14,822	13,644	15,673	122,230	110,683
509	Miscellaneous durable goods	4,444	4,610	5,165	6,358	5,742	6,150	5,385	5,523	4,838	5,962	5,833	5,126	4,546	43,377	39,041
51	Nondurable goods	59,245	58,871	65,808	65,193	66,360	65,593	65,179	66,066	57,926	60,404	62,708	58,802	63,466	512,315	471,823
511	Paper & paper products	3,489	3,480	3,800	3,772	3,530	3,979	3,930	4,080	3,484	3,397	3,684	3,256	3,602	30,060	26,582
512	Drugs, drug proprietaries and druggists' sundries	2,517	2,418	2,572	2,588	2,512	2,636	2,574	2,501	2,262	2,428	2,628	2,395	2,546	20,318	17,579
513	Apparel, piece goods, & notions	3,031	4,002	4,042	3,242	3,065	3,868	3,982	4,323	4,125	3,904	4,293	3,316	2,571	29,525	27,327
514	Groceries & related products	19,980	18,845	20,141	20,769	21,332	21,011	21,663	21,280	20,523	20,140	20,607	19,371	20,524	165,021	154,106
515	Farm-product raw materials	6,730	6,295	7,182	6,792	7,041	6,928	6,683	6,936	5,194	5,840	6,815	6,863	7,541	54,587	52,136
516	Chemicals & allied products	2,037	1,841	2,186	2,240	2,143	2,340	2,207	2,182	2,060	2,172	2,282	2,034	1,950	17,176	17,069
517	Petroleum & petroleum products	11,319	10,823	12,140	11,166	11,041	10,816	11,370	11,482	8,343	10,287	9,202	9,104	10,833	90,157	79,387
518	Beer, wine, & distilled beverages ..	2,698	2,803	3,327	3,545	3,676	3,779	3,721	3,478	3,588	3,300	3,585	3,365	4,139	27,027	25,873
519	Misc. nondurable goods	7,444	8,364	10,418	11,079	12,030	10,236	9,069	9,804	8,347	8,936	9,612	9,098	9,760	78,444	71,764
	Inventories, total	149,548	150,166	150,882	150,853	151,371	152,651	151,258	149,659	145,882	147,964	149,009	148,804	148,245	(X)	(X)
50	Durable goods	95,895	95,989	97,667	98,249	100,083	100,288	99,537	98,759	96,958	97,991	97,153	97,210	95,353	(X)	(X)
501	Motor vehicles & auto. equip.	18,744	19,214	19,363	19,457	20,430	20,170	19,699	19,121	17,526	18,845	18,221	18,947	18,941	(X)	(X)
502	Furniture & home furnishings	3,559	3,601	3,675	3,792	4,022	4,025	4,145	4,163	3,208	3,351	3,107	3,085	3,423	(X)	(X)
503	Lumber & other construction mat.	4,716	4,831	5,153	5,363	5,531	5,634	5,700	5,616	5,099	4,978	4,929	4,942	4,920	(X)	(X)
504	Sporting, recreational, photo-graphic, & hobby goods, toys & supplies	3,381	3,438	3,520	3,447	3,457	3,528	3,835	3,747	3,269	3,281	3,558	3,456	3,309	(X)	(X)
505	Metals & minerals, ex. petroleum ..	9,575	9,182	9,311	9,326	9,449	9,692	9,232	9,008	9,257	9,254	9,161	8,970	9,481	(X)	(X)
506	Electrical goods	13,434	13,669	13,712	13,477	13,756	13,698	13,654	13,602	13,508	14,063	13,813	13,884	13,359	(X)	(X)
507	Hardware, plumbing & heating equipment	6,392	6,502	6,686	6,447	6,459	6,498	6,447	6,324	6,713	6,517	6,510	6,479	6,390	(X)	(X)
508	Machinery, equip. & supplies	31,504	30,919	31,369	31,712	31,197	31,496	31,364	31,664	32,614	32,614	32,850	32,789	30,914	(X)	(X)
509	Miscellaneous durable goods	4,590	4,633	4,818	5,228	5,782	5,547	5,461	5,514	4,897	5,088	5,004	4,658	4,616	(X)	(X)
51	Nondurable goods	53,653	54,177	53,215	52,604	51,288	52,363	51,721	50,900	48,924	49,973	51,856	51,594	52,892	(X)	(X)
511	Paper & paper products	3,573	3,560	3,574	3,568	3,528	3,540	3,548	3,544	3,392	3,292	3,367	3,407	3,552	(X)	(X)
512	Drugs, drug proprietaries and druggists' sundries	4,486	4,530	4,368	4,540	4,274	4,285	4,466	4,418	3,771	3,982	4,170	4,035	4,221	(X)	(X)
513	Apparel, piece goods, & notions	7,051	7,042	6,930	6,831	7,302	7,747	7,624	7,411	7,645	7,274	6,619	6,458	6,886	(X)	(X)
514	Groceries & related products	11,820	12,022	11,579	11,673	11,853	12,025	12,430	12,220	11,343	11,581	12,268	12,474	12,185	(X)	(X)
515	Farm-product raw materials	7,448	6,916	6,254	6,159	5,347	5,382	5,024	4,676	5,292	5,563	6,703	6,774	6,836	(X)	(X)
516	Chemicals & allied products	2,100	2,267	2,219	2,305	2,395	2,369	2,315	2,368	2,124	1,991	2,116	2,170	2,108	(X)	(X)
517	Petroleum & petroleum products	3,616	3,194	3,230	3,016	3,035	3,122	3,373	3,194	2,877	3,267	3,229	3,247	3,759	(X)	(X)
518	Beer, wine, & distilled beverages ..	3,799	4,169	4,260	4,150	4,086	4,140	3,967	3,936	3,694	3,773	3,871	4,029	3,482	(X)	(X)
519	Misc. nondurable goods	9,750	10,477	10,801	10,362	9,468	9,753	8,974	9,133	8,766	9,250	9,513	9,000	9,863	(X)	(X)
	Stock/sales ratios, total	1.35	1.34	1.19	1.19	1.20	1.18	1.20	1.17	1.30	1.25	1.19	1.32	1.22	(X)	(X)
50	Durable goods	1.87	1.82	1.60	1.61	1.69	1.58	1.62	1.61	1.79	1.68	1.56	1.79	1.64	(X)	(X)
501	Motor vehicles & auto equip.	1.73	1.71	1.48	1.53	1.60	1.54	1.59	1.58	1.49	1.58	1.30	1.59	1.44	(X)	(X)
502	Furniture & home furnishings	1.73	1.77	1.56	1.71	1.86	1.80	1.78	1.66	1.42	1.31	1.19	1.46	1.58	(X)	(X)
503	Lumber & other construction mat.	1.28	1.33	1.12	1.09	1.11	.97	.98	1.01	1.10	1.07	.97	1.18	1.21	(X)	(X)
504	Sporting, recreational, photo-graphic, & hobby goods, toys & supplies	2.42	2.28	2.31	2.33	2.75	2.49	2.57	2.32	2.31	2.00	1.86	2.00	2.01	(X)	(X)
505	Metals & minerals, ex. petroleum ..	1.98	1.85	1.54	1.73	1.79	1.70	1.67	1.56	2.04	1.85	1.78	2.04	1.99	(X)	(X)
506	Electrical goods	1.86	1.82	1.69	1.73	1.80	1.67	1.66	1.58	1.78	1.66	1.58	1.80	1.61	(X)	(X)
507	Hardware, plumbing & heating equipment	1.87	1.85	1.65	1.56	1.62	1.42	1.47	1.48	1.88	1.73	1.59	1.83	1.70	(X)	(X)
508	Machinery, equip. & supplies	2.35	2.24	1.94	1.97	2.02	1.94	2.00	2.05	2.44	2.27	2.22	2.40	1.97	(X)	(X)
509	Miscellaneous durable goods	1.03	1.00	.93	.82	1.01	.90	1.01	1.00	1.01	.85	.86	.91	1.02	(X)	(X)
51	Nondurable goods	.91	.92	.81	.81	.77	.80	.79	.77	.84	.83	.83	.88	.83	(X)	(X)
511	Paper & paper products	1.02	1.02	.94	.95	1.00	.89	.90	.87	.97	.97	.91	1.05	.99	(X)	(X)
512	Drugs, drug proprietaries and druggists' sundries	1.78	1.87	1.70	1.75	1.70	1.63	1.74	1.77	1.67	1.64	1.59	1.68	1.66	(X)	(X)
513	Apparel, piece goods, & notions	2.33	1.76	1.71	2.11	2.39	2.00	1.92	1.71	1.85	1.86	1.54	1.95	2.68	(X)	(X)
514	Groceries & related products	.59	.64	.57	.56	.56	.57	.57	.57	.55	.58	.60	.64	.59	(X)	(X)
515	Farm-product raw materials	1.11	1.10	.87	.91	.76	.78	.75	.67	1.02	.95	.98	.99	.91	(X)	(X)
516	Chemicals & allied products	1.03	1.23	1.02	1.03	1.12	1.01	1.05	1.09	1.03	.92	.93	1.07	1.08	(X)	(X)
517	Petroleum & petroleum products	.32	.30	.27	.27	.27	.29	.30	.28	.34	.32	.35	.36	.35	(X)	(X)
518	Beer, wine, & distilled beverages ..	1.41	1.49	1.28	1.17	1.11	1.10	1.07	1.13	1.03	1.14	1.08	1.20	.84	(X)	(X)
519	Misc. nondurable goods	1.31	1.25	1.04	.94	.79	.95	.99	.93	1.05	1.04	.99	.99	1.01	(X)	(X)

^PPreliminary estimate. See sample design and estimation procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986*.
 x Cumulative data are not applicable for inventories or stock/sales ratios, cumulative seasonally adjusted sales estimates are not tabulated.

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. 1987 from July 1987	Aug. 1987 from Aug. 1986	8 months 1987 from 8 months 1986	Aug. 1987 from July 1987	Aug. 1987 from Aug. 1986	Aug. 1987 from July 1987	Aug. 1987 from Aug. 1986	Aug. 1987 from July 1987	Aug. 1987 from Aug. 1986
	Total	+8	+13.6	+9.0	-1.1	+2.6	+2.6	+13.5	-.6	+2.6
50	Durable goods	+1	+13.1	+9.4	-.8	+1.9	+1.2	+12.5	-.4	+1.9
501	Motor vehicles & auto. equip.	-2.7	+2.9	+4.3	-2.9	+9.1	+3.9	+2.5	-1.1	+9.2
502	Furniture & home furnishings	+7.7	+11.6	+6.2	+4	+29.8	+10.1	+11.5	-2.0	+29.6
503	Lumber & other construction mat	-4.7	+20.6	+16.6	-1.5	+10.1	-2.7	+19.9	-.6	+10.1
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	+8.3	+13.8	+4.8	-2.3	+14.6	+8.4	+13.7	-1.4	+14.6
505	Metals & minerals, ex. petroleum	+4.5	+27.4	+14.5	-2.4	-2.7	+3.5	+27.4	-1.0	-2.4
506	Electrical goods	+4.2	+13.4	+7.2	-.4	+7	+2.7	+13.2	.0	+7
507	Hardware, plumbing & heating equip.	-2.6	+19.7	+13.7	-1.9	-5.8	+1.7	+19.3	-.6	-5.8
508	Machinery, equip. & supplies	-1.5	+12.3	+10.4	+1.0	-5.4	-.6	+12.6	+4	-5.5
509	Miscellaneous durable goods	+2.6	+14.2	+11.1	+1.0	+12.6	-5.9	+10.6	+4	+12.9
51	Nondurable goods	+1.4	+14.1	+8.6	-1.6	+4.0	+3.8	+14.4	-.9	+3.8
511	Paper & paper products	+3.8	+17.1	+13.1	-.1	+4.5	+1.9	+17.3	-.9	+4.7
512	Drugs, drug proprietaries and druggists' sundries	-2.8	+10.6	+15.6	-1.1	+17.2	-.1	+10.7	-.3	+17.7
513	Apparel, piece goods, & notions	+9.1	+4.8	+8.0	-2.8	-3.1	+5.0	+2.5	-1.6	-3.5
514	Groceries & related products	-1.8	+3.7	+7.1	-1.7	+7.7	+7	+3.9	-.7	+7.8
515	Farm-product raw materials	+3.8	+33.5	+4.7	-6.9	-11.6	+6.7	+30.2	-8.7	-11.3
516	Chemicals & allied products	-1.1	+5.9	+6	+2.3	+11.5	+5	+6.9	+3.6	+11.1
517	Petroleum & petroleum products	+1.0	+37.6	+13.6	-5.3	+11.0	+3.5	+38.8	-1.5	+10.8
518	Beer, wine, & distilled beverages	-6.5	-3.1	+4.5	-.8	+6.6	-1.0	-2.2	+1.3	+6.7
519	Misc. nondurable goods	+8.1	+17.5	+9.3	+1.8	+3.9	+13.1	+15.4	+2.2	+3.8

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 1982 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.

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

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

Estimates based on a sample survey will differ from the value derived from the population because of sampling variability and nonsampling error. Sampling variability occurs 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 variability 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 3. 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 9 out of 10 (90 percent) of these samples, the estimates would differ from the results of a complete enumeration by less than 1.65 times the percentages shown. In about 19 out of 20 (95 percent) of these samples, the estimate would differ from the results of a complete enumeration by less than twice the percentages shown.

To illustrate the computations involved in the above confidence statements, as related to dollar volume sales estimates, assume that an estimate of sales published in table 1B is \$10,750 million for a particular month and that the median coefficient of variation for this estimate as given in table 3, is 1.8 percent, or 0.018. Multiplying \$10,750 million by 0.018 yields \$194 million. Therefore a 67-percent confidence interval is \$10,556 million to \$10,944 million (\$10,750 million plus or minus \$194 million). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately 2 out of 3 (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Typical practice is to construct 90 or 95 percent confidence intervals. Continuing with the illustration, a 90-percent confidence interval is \$10,430 million to \$11,070 million (\$10,750 million plus or minus \$320 million). A 95-percent confidence interval is \$10,362 million to \$11,138 million (\$10,750 million plus or minus \$388 million).

All comparisons appearing on the front page of this publication and for which measures of sampling variability are available are accompanied by an indication of the 90-percent confidence interval. Thus a statement such as "+0.8 (± 1.3)" indicates a 90-percent confidence interval from -0.5 to +2.1. If the confidence interval contains zero, it is uncertain whether there is an increase or decrease.

Nonsampling Errors

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 34 percent of the sales estimates and 38 percent for inventories.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventory estimates in this report reflect the results of a benchmarking² operation which made use of 1984 and 1985 estimates tabulated from the 1985 Annual Trade Survey. The sales estimates for the period January 1984 through December 1986 were derived in a manner so that the sum of the 12 months for 1984 and 1985 were equal to the sales estimates published in the 1984 and 1985 Annual Trade Surveys. The revision process was conducted so as to minimize changes to previously published month-to-month trends. The estimates for the original series were derived by using composite estimation procedures. Using inventory results from the annual surveys for the years 1980 to 1985, monthly inventories were revised to a non-LIFO basis. Through the use of carry-forward factors, the effect of the revision process was applied to composite sales and inventory estimates subsequent to December 1985. These factors were derived at various kind-of-business levels and are held constant until the next benchmarking operation. Aggregate level estimates were derived by summing appropriate three-digit kind-of-business estimates, thereby assuring additivity.

CLASSIFICATION DIFFERENCES BETWEEN MONTHLY SURVEY AND 1977 AND 1982 CENSUSES OF WHOLESALE TRADE

For SIC 505, the monthly survey included merchant wholesalers as well as sales branches of ferrous metals service centers with inventories. Therefore, the 1977 and 1982 census sales estimates included the receipts of merchant wholesalers and sales branches of ferrous metals service centers with inventories.

Establishments classified in the Farm-Product Raw Materials group (SIC 515) included as sales, products purchased and transferred to other company establishments. In the monthly survey, intercompany transfers are not included in sales. Because of the differences, the 1977 and 1982 sales for the SIC were obtained from the 1977 and 1982 Annual Trade Surveys (ATS).

Inventories were not benchmarked to the census levels since the census of wholesale trade does not include inventories of auxiliary and central administrative offices of merchant wholesale establishments which are included in the monthly survey. The inventory estimates for the years 1977 and 1982 were computed by multiplying the stock/sales ratios obtained from the annual surveys by the census sales for these years.

Unpublished Data

Sales and inventory estimates for unpublished four-digit wholesale trade categories are not included in this publication because their sampling variability is so high, relative to the changes from month-to-month or between other periods, as to make them potentially misleading. The Census Bureau, for a

²For a more detailed description, see the section dealing with revisions to published data in the Current Business Reports publication, *Revised Monthly Wholesale Trade: December 1980 Through December 1986*.

nominal fee 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 on a non-LIFO basis 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. Methods of valuation may vary according to the accounting practices of the firm.

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 current and past experiences. Therefore, the adjusted could become less precise if 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.

Concurrent Seasonal Adjustment

Concurrent seasonal adjustment uses all available unadjusted estimates (including the latest preliminary estimates) as input to the X-11 program. After the last benchmarking operation, factors were developed and used to derive adjusted sales estimates for the period January 1984 through January 1987. Factors were developed and used to derive non-LIFO inventory estimates for the period December 1980 through January 1987. When unadjusted preliminary and final estimates become available, all estimates will be used as input to the X-11 program and new factors will be applied to the preliminary and final (one month before the preliminary) estimates and to the previous year estimates that correspond to the preliminary month.

Table 4 presents, by kind of business, the combined seasonal and trading-day factors that are used to adjust inventory and sales estimates. For all kind of business, one month of projected factors are shown. These projected factors are estimates of the factors that will be used to derive adjusted estimates.

An electronic version of portions of this report is available through a commercial vendor as part of CENDATA, the Census Bureau's on-line information utility. For further information, contact Customer Services, DUSD, Bureau of the Census, Washington, DC 20233 or call (301) 763-4100.

Table 3. 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	1.1-1.6	1.2	0.9-1.4	1.3	0.3-0.6	0.4	0.9-2.2	1.5	1.0-1.9	1.3	0.2-1.6	0.4
501	Durable goods, total	1.3-1.7	1.5	1.2-1.8	1.4	0.5-0.8	0.6	1.4-3.3	2.0	1.4-2.4	1.7	0.2-2.5	0.4
502	Motor vehicles and automotive parts and supplies	2.1-4.0	3.2	2.0-3.7	3.1	0.8-1.7	1.3	3.6-5.7	4.6	3.6-5.4	4.4	0.4-1.5	0.7
503	Furniture and home furnishings	6.6-9.6	7.9	5.3-8.6	7.3	2.1-6.2	3.3	5.3-12.3	10.0	5.0-12.8	10.2	0.7-3.2	1.2
504	Lumber and other construction materials	4.8-7.1	5.8	4.3-7.2	5.5	1.1-2.5	1.8	6.2-11.8	7.5	5.4-11.5	7.4	0.6-3.0	1.3
505	Sporting, recreational, photographic, & hobby goods, toys & supplies	9.3-22.9	11.4	8.8-20.8	10.9	2.3-5.3	3.3	7.2-16.2	10.8	8.5-16.7	10.6	0.9-2.4	1.6
506	Metals and minerals, ex. petroleum	2.4-6.6	4.9	2.5-6.5	4.2	0.8-2.0	1.4	4.0-6.9	4.8	3.2-6.8	4.8	0.5-2.1	0.7
507	Electrical goods	1.9-9.2	2.2	1.4-8.6	2.3	1.1-2.5	1.7	1.6-9.2	2.6	1.7-8.7	2.3	0.5-1.1	0.7
508	Hardware, plumbing, heating equipment, and supplies	4.4-7.8	6.7	4.3-8.7	6.8	1.3-2.9	2.0	4.8-9.3	6.0	4.5-9.2	6.1	0.5-2.1	0.6
509	Machinery, equipment, and supplies	2.5-4.2	2.8	1.9-3.4	2.9	1.0-2.1	1.7	2.3-9.0	4.4	2.4-5.8	3.8	0.4-6.4	0.6
51	Miscellaneous durable goods	3.5-4.9	3.9	3.0-4.3	3.7	1.4-2.5	1.9	4.5-8.6	6.6	4.3-9.1	6.8	0.5-2.4	0.9
511	Nondurable goods, total	1.5-3.2	1.8	1.5-3.1	1.6	0.5-1.0	0.7	1.5-2.6	2.2	1.6-2.8	2.2	0.3-0.8	0.4
512	Paper and paper products	2.9-5.1	4.0	3.4-4.5	4.0	1.2-2.9	1.9	5.1-7.3	6.4	4.5-7.1	6.5	0.6-2.2	0.8
513	Drugs, drug proprietaries and druggists' sundries	4.5-9.3	7.8	4.8-9.0	7.2	0.8-2.1	1.5	4.5-9.6	7.2	4.6-9.7	7.5	0.6-2.6	1.0
514	Apparel, piece goods, & notions	4.2-7.5	4.7	3.2-7.3	4.7	1.9-4.9	2.7	3.8-11.3	8.5	4.1-11.6	8.4	0.6-2.6	1.5
515	Groceries and related products	2.6-5.8	3.6	2.1-5.6	3.5	0.6-2.8	1.2	4.6-7.6	6.2	4.4-8.8	6.1	0.5-1.8	1.0
516	Farm-product raw materials	2.9-6.3	5.0	2.5-8.5	4.0	2.5-5.3	3.8	3.7-6.8	6.1	5.2-6.3	5.7	0.8-3.3	1.5
517	Chemicals & allied products	4.6-10.1	8.2	4.3-9.3	7.4	1.4-5.1	3.1	6.6-13.0	7.5	6.3-12.9	7.0	0.4-2.9	1.7
518	Petroleum & petroleum products	2.8-10.4	3.5	2.6-11.6	3.3	0.4-3.0	1.0	2.9-12.0	4.2	2.9-14.1	4.3	0.5-6.0	1.1
519	Beer, wine, and distilled alcoholic beverages	2.9-7.3	5.0	2.4-8.8	5.4	0.9-3.8	2.0	4.9-6.1	5.2	4.9-5.7	5.0	0.8-1.8	1.1
	Misc. nondurable goods	2.3-7.3	4.9	4.0-7.1	4.5	0.7-2.8	2.0	6.0-10.5	7.3	6.0-10.5	6.9	0.7-3.0	1.0

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 1986 through January 1987.

Table 4. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers

SIC code	Kind of business	1986					1987								
		Aug. ^f	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July ^f	Aug. ^f	Sept.
	Sales,¹ total	.973	1.008	1.056	.962	1.035	.953	.905	1.035	1.019	1.007	1.039	.998	.978	1.007
50	Durable goods	.993	1.026	1.090	.956	1.010	.920	.890	1.031	1.027	.991	1.053	1.004	.996	1.027
501	Motor vehicles & auto. equip	.964	.941	1.090	.954	1.011	.958	.871	1.014	1.034	1.037	1.083	1.034	.968	.947
502	Furniture & home furnishings	1.009	1.040	1.159	.976	.974	.868	.882	.991	1.013	.991	1.058	1.033	1.010	1.041
503	Lumber & other construction mat	1.084	1.078	1.151	.953	.876	.811	.793	.955	1.044	1.040	1.120	1.113	1.090	1.081
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	.989	1.086	1.221	1.066	1.011	.849	.877	.981	1.000	.888	.978	.990	.989	1.089
505	Metals & minerals, ex. petroleum	.996	1.039	1.045	.892	.983	.968	.944	1.098	1.040	.985	1.034	.987	.996	1.048
506	Electrical goods	1.002	1.085	1.111	1.012	1.062	.912	.907	1.017	.949	.927	1.013	.989	1.004	1.076
507	Hardware, plumbing & heating equip.	1.001	1.014	1.094	.957	.960	.932	.902	.968	1.041	1.008	1.081	1.049	1.005	1.007
508	Machinery, equip. & supplies	.979	1.026	1.048	.930	1.043	.908	.907	1.065	1.050	1.005	1.053	.986	.977	1.022
509	Miscellaneous durable goods	.987	1.050	1.100	.989	.954	.954	.893	1.033	1.138	.993	.997	.935	1.019	1.030
51	Nondurable goods	.963	.993	1.030	.968	1.056	.982	.917	1.041	1.007	1.020	1.021	.992	.967	.990
511	Paper & paper products	1.019	1.007	1.072	.943	1.005	.979	.939	1.035	1.018	.958	1.035	.998	1.017	1.003
512	Drugs, drug proprietaries and druggists' sundries	.961	1.030	1.078	.949	1.025	1.001	.927	1.026	1.030	.955	1.010	.987	.960	1.034
513	Apparel, piece goods, and notions	1.130	1.035	1.128	.894	.779	.887	1.039	1.038	.977	.879	1.070	1.112	1.156	1.049
514	Groceries & related products	1.010	.995	1.025	.964	1.025	.978	.915	1.006	1.007	1.020	1.012	1.033	1.008	1.008
515	Farm-product raw materials	.832	.888	1.014	1.075	1.186	1.090	.969	1.083	.977	1.020	.955	.877	.853	.869
516	Chemicals & allied products	.990	1.046	1.098	.914	.930	.991	.925	1.041	1.022	1.000	1.068	.997	.981	1.047
517	Petroleum & petroleum products	.920	1.005	1.031	.987	1.114	1.104	.958	1.061	.975	.957	.959	.935	.912	.992
518	Beer, wine, & distilled beverages	1.049	1.007	1.073	.984	1.201	.760	.774	.927	.984	1.024	1.098	1.102	1.040	1.018
519	Misc. nondurable goods	.950	.968	1.008	.915	1.017	.856	.856	1.079	1.101	1.180	1.070	1.012	.967	.943
	Inventories,¹ total	.985	.996	1.008	1.010	1.007	1.003	1.006	1.009	1.006	.992	.995	.990	.984	.997
50	Durable goods	1.002	1.010	1.001	.997	.995	.985	.993	1.002	1.004	1.000	1.008	1.005	1.001	1.011
501	Motor vehicles & auto. equip	.959	1.019	1.016	1.006	1.016	.998	1.002	1.008	1.005	.988	1.004	.976	.958	1.022
502	Furniture & home furnishings	1.016	1.009	.997	.985	1.027	1.014	1.012	.994	.976	.996	.995	.992	1.017	1.006
503	Lumber & other construction mat.	1.009	.997	.980	.985	.996	.961	.997	1.026	1.030	1.002	1.026	1.018	1.009	.997
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	1.019	1.008	.996	.976	.977	.984	.990	1.008	1.001	.993	1.012	1.028	1.019	1.006
505	Metals & minerals, ex. petroleum	.997	1.004	.982	.987	1.013	1.007	1.000	.993	.987	.997	1.016	1.009	.994	1.002
506	Electrical goods	1.021	1.036	1.023	1.005	.984	.969	.970	.978	.995	.992	1.000	1.025	1.021	1.035
507	Hardware, plumbing & heating equip.	1.004	.983	.980	.980	.962	.972	.999	1.028	1.042	1.032	1.011	1.017	1.004	.982
508	Machinery, equip. & supplies	1.009	.995	1.002	.991	.997	.985	.994	1.006	1.005	1.006	1.011	1.004	1.010	.996
509	Miscellaneous durable goods	1.028	1.027	1.014	1.029	.957	.974	.996	.978	.994	1.010	.995	1.019	1.025	1.035
51	Nondurable goods	.951	.971	1.019	1.029	1.031	1.036	1.029	1.022	1.008	.972	.972	.962	.951	.970
511	Paper & paper products	1.010	.984	.985	1.007	.995	.994	1.007	1.003	1.004	1.003	1.005	1.000	1.008	.979
512	Drugs, drug proprietaries and druggists' sundries	.962	1.012	1.023	.974	.994	1.023	1.031	1.052	1.019	.981	.969	.965	.958	1.008
513	Apparel, piece goods, and notions	1.080	1.015	.992	.944	.994	1.000	.986	.948	.966	1.014	1.033	1.078	1.065	1.022
514	Groceries & related products	.972	.987	1.040	1.041	1.000	.979	1.009	.997	.994	.999	1.002	.981	.971	.984
515	Farm-product raw materials	.803	.875	1.069	1.186	1.213	1.251	1.157	1.088	.996	.819	.810	.785	.800	.875
516	Chemicals & allied products	.995	.959	1.015	1.004	.983	.990	1.006	.998	1.035	1.009	1.012	1.011	.998	.955
517	Petroleum & petroleum products	.944	1.023	1.021	1.034	1.090	1.062	.921	.931	.943	.996	1.006	.984	.946	1.026
518	Beer, wine, & distilled beverages	.991	1.008	1.060	1.062	.912	.942	.959	.997	1.022	1.005	1.032	1.011	.990	1.001
519	Misc. nondurable goods	.931	.941	.973	.958	1.018	1.033	1.071	1.111	1.072	.980	.971	.936	.932	.938

^fRevised.

¹Adjusted sales and inventory data shown in table 1A 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: The seasonal factors shown have been computed based on monthly estimates through the current month preliminary estimate.

Monthly Wholesale Trade

CURRENT BUSINESS REPORTS

August 1987

Sales and Inventories

Issued September 1987
BW-87-08

Sales. August 1987 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$129.4 billion, up 2.6 percent (± 0.8 percent) from the revised July level and up 13.5 percent from a year ago. The July preliminary estimate was revised upward by \$0.8 billion or about 0.7 percent. August sales of durable goods increased 1.2 percent (± 0.8 percent) from July and were 12.5 percent above a year ago. August sales of nondurable goods were up 3.8 percent (± 1.0 percent) from July and were up 14.4 percent from August 1986.

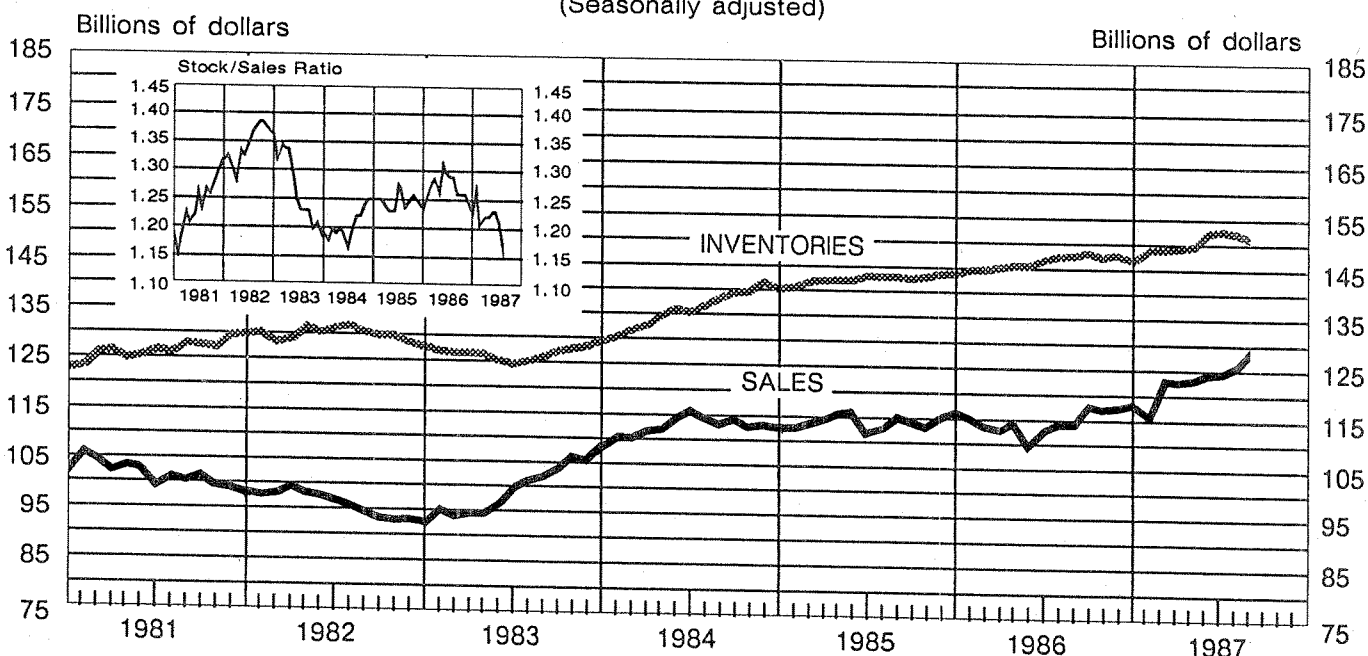
Inventories. Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$151.7 billion at the end of August, down 0.6 percent (± 0.4 percent) from the revised July level but up 2.6 percent

from a year ago. The July preliminary estimate was revised upward by \$0.3 billion or about 0.2 percent. Inventories of durable goods wholesalers were down 0.4 percent (± 0.4 percent) from the July level but were 1.9 percent above a year ago. Inventories of nondurable goods wholesalers were down 0.9 percent (± 0.9 percent) from the July level but were up 3.8 percent from August 1986.

Stock/Sales Ratio. The August stock/sales ratio for merchant wholesalers, based on seasonally adjusted data was 1.17, down from the July ratio of 1.21. The year ago ratio was 1.30.

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 4.

Monthly Sales, Inventories, and Stock/Sales Ratios
of Merchant Wholesalers: 1981-1987
(Seasonally adjusted)



The Monthly Wholesale Trade Report for September is scheduled to be released November 10, 1987, at 10:00 a.m.



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.

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Table 1A. Adjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1987 and 1986

(Data adjusted for seasonal variation and, in the case of sales, also for trading-day differences. Sales and inventories in millions of dollars)

SIC code	Kind of business	1987								1986					
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug. ^p	Aug. ^r	Sept.	Oct.	Nov.	Dec.	
	Sales, total	116,545	123,281	123,009	123,439	124,486	124,836	126,196	129,424	114,056	118,138	117,488	117,734	118,446	
50	Durable goods	55,893	59,344	59,498	59,016	59,413	60,274	60,784	61,528	54,715	56,998	57,102	56,758	57,833	
501	Motor vehicles & auto. equip.	11,334	12,931	12,890	12,338	12,339	12,073	12,001	12,473	12,172	12,665	12,867	12,459	12,966	
502	Furniture & home furnishings	2,377	2,304	2,370	2,190	2,179	2,117	2,260	2,489	2,233	2,463	2,260	2,170	2,227	
503	Lumber & other construction mat.	4,543	4,571	4,831	4,696	4,791	5,171	5,252	5,110	4,262	4,318	4,396	4,391	4,635	
504	Sporting, recreational, photo- graphic, & hobby goods, toys & supplies	1,645	1,718	1,554	1,480	1,417	1,449	1,505	1,631	1,434	1,512	1,567	1,622	1,627	
505	Metals & minerals, ex. petroleum	4,983	5,267	5,493	5,192	5,364	5,524	5,612	5,810	4,561	4,807	4,934	4,937	4,852	
506	Electrical goods	7,899	8,270	8,023	8,207	8,249	8,085	8,339	8,560	7,565	7,817	7,887	7,630	7,812	
507	Hardware, plumbing & heating equipment	3,667	3,891	4,191	3,981	3,944	4,247	4,186	4,256	3,568	3,709	3,745	3,695	3,922	
508	Machinery, equip. & supplies	14,787	15,230	15,146	15,345	15,348	15,439	15,870	15,779	14,018	14,029	14,143	14,671	15,027	
509	Miscellaneous durable goods	4,658	5,162	5,000	5,587	5,782	6,169	5,759	5,420	4,902	5,678	5,303	5,183	4,765	
51	Nondurable goods	60,652	63,937	63,511	64,423	65,073	64,562	65,412	67,896	59,341	61,140	60,386	60,976	60,613	
511	Paper & paper products	3,564	3,706	3,671	3,705	3,685	3,844	3,938	4,012	3,419	3,373	3,437	3,453	3,584	
512	Drugs, drug proprietaries and druggists' sundries	2,514	2,608	2,507	2,513	2,630	2,610	2,608	2,605	2,354	2,357	2,438	2,524	2,484	
513	Apparel, piece goods, & notions	3,417	3,852	3,894	3,318	3,476	3,615	3,563	3,740	3,650	3,772	3,806	3,709	3,300	
514	Groceries & related products	20,429	20,596	20,021	20,625	20,914	20,762	20,971	21,111	20,320	20,241	20,104	20,094	20,023	
515	Farm-product raw materials	6,174	6,496	6,632	6,952	6,903	7,254	7,620	8,131	6,243	6,577	6,721	6,384	6,358	
516	Chemicals & allied products	2,055	1,990	2,100	2,192	2,143	2,191	2,214	2,224	2,081	2,076	2,078	2,225	2,097	
517	Petroleum & petroleum products	10,253	11,297	11,442	11,452	11,537	11,278	12,160	12,590	9,068	10,236	8,925	9,224	9,724	
518	Beer, wine, & distilled beverages	3,550	3,621	3,589	3,603	3,590	3,442	3,377	3,344	3,420	3,277	3,341	3,420	3,446	
519	Misc. nondurable goods	8,696	9,771	9,655	10,063	10,195	9,566	8,961	10,139	8,786	9,231	9,536	9,943	9,597	
	Inventories, total	149,347	149,408	149,565	150,050	152,673	153,093	152,648	151,749	147,939	148,599	147,754	148,204	147,375	
50	Durable goods	97,280	96,594	97,491	97,891	100,056	99,504	99,099	98,708	96,841	97,216	96,845	97,652	95,710	
501	Motor vehicles & auto. equip.	18,782	19,176	19,209	19,360	20,678	20,090	20,183	19,959	18,275	18,494	17,934	18,834	18,643	
502	Furniture & home furnishings	3,510	3,558	3,697	3,885	4,038	4,045	4,178	4,093	3,157	3,321	3,116	3,132	3,333	
503	Lumber & other construction mat.	4,907	4,846	5,022	5,207	5,520	5,491	5,599	5,566	5,054	4,993	5,030	5,017	4,940	
504	Sporting, recreational, photo- graphic, & hobby goods, toys & supplies	3,436	3,473	3,492	3,444	3,481	3,486	3,731	3,677	3,208	3,255	3,572	3,541	3,387	
505	Metals & minerals, ex. petroleum	9,508	9,182	9,377	9,449	9,477	9,539	9,150	9,062	9,285	9,217	9,329	9,088	9,359	
506	Electrical goods	13,864	14,092	14,082	13,545	13,867	13,698	13,321	13,322	13,230	13,574	13,502	13,815	13,576	
507	Hardware, plumbing & heating equipment	6,576	6,509	6,504	6,187	6,259	6,427	6,339	6,299	6,686	6,630	6,643	6,611	6,642	
508	Machinery, equip. & supplies	31,984	31,106	31,182	31,554	31,011	31,153	31,239	31,350	33,182	32,778	32,784	33,087	31,007	
509	Miscellaneous durable goods	4,713	4,652	4,926	5,260	5,725	5,575	5,359	5,380	4,764	4,954	4,935	4,527	4,823	
51	Nondurable goods	52,067	52,814	52,074	52,159	52,617	53,589	53,549	53,041	51,098	51,383	50,909	50,552	51,665	
511	Paper & paper products	3,595	3,535	3,563	3,554	3,517	3,522	3,548	3,516	3,358	3,346	3,418	3,383	3,570	
512	Drugs, drug proprietaries and druggists' sundries	4,385	4,394	4,152	4,455	4,357	4,422	4,628	4,612	3,920	3,935	4,076	4,143	4,246	
513	Apparel, piece goods, & notions	7,061	7,142	7,310	7,071	7,201	7,500	7,072	6,959	7,212	7,167	6,672	6,841	6,928	
514	Groceries & related products	12,074	11,915	11,614	11,743	11,865	12,001	12,671	12,585	11,670	11,734	11,796	11,983	12,185	
515	Farm-product raw materials	5,954	5,978	5,748	6,184	6,529	6,644	6,400	5,845	6,590	6,358	6,270	5,712	5,636	
516	Chemicals & allied products	2,121	2,253	2,223	2,227	2,374	2,341	2,290	2,273	2,135	2,076	2,085	2,161	2,144	
517	Petroleum & petroleum products	3,405	3,468	3,469	3,198	3,047	3,103	3,428	3,376	3,048	3,194	3,163	3,140	3,449	
518	Beer, wine, & distilled beverages	4,033	4,347	4,273	4,061	4,066	4,012	3,924	3,976	3,728	3,743	3,652	3,794	3,818	
519	Misc. nondurable goods	9,439	9,782	9,722	9,666	9,661	10,044	9,588	9,799	9,437	9,830	9,777	9,395	9,689	
	Stock/sales ratios, total	1.28	1.21	1.22	1.22	1.23	1.23	1.21	1.17	1.30	1.26	1.26	1.26	1.24	
50	Durable goods	1.74	1.63	1.64	1.66	1.68	1.65	1.63	1.60	1.77	1.71	1.70	1.72	1.65	
501	Motor vehicles & auto equip.	1.66	1.48	1.49	1.57	1.68	1.66	1.68	1.60	1.50	1.46	1.39	1.51	1.44	
502	Furniture & home furnishings	1.48	1.54	1.56	1.77	1.85	1.91	1.85	1.64	1.41	1.35	1.38	1.44	1.50	
503	Lumber & other construction mat.	1.08	1.06	1.04	1.11	1.15	1.06	1.07	1.09	1.19	1.16	1.14	1.14	1.07	
504	Sporting, recreational, photo- graphic, & hobby goods, toys & supplies	2.09	2.02	2.25	2.33	2.46	2.41	2.48	2.25	2.24	2.15	2.28	2.18	2.08	
505	Metals & minerals, ex. petroleum	1.91	1.74	1.71	1.82	1.77	1.73	1.63	1.56	2.04	1.92	1.89	1.84	1.93	
506	Electrical goods	1.76	1.70	1.76	1.65	1.68	1.69	1.60	1.56	1.75	1.74	1.71	1.81	1.74	
507	Hardware, plumbing & heating equipment	1.79	1.67	1.55	1.55	1.59	1.51	1.51	1.48	1.87	1.79	1.77	1.79	1.69	
508	Machinery, equip. & supplies	2.16	2.04	2.06	2.06	2.02	2.02	1.97	1.99	2.37	2.34	2.32	2.26	2.06	
509	Miscellaneous durable goods	1.01	.90	.99	.94	.99	.90	.93	.99	.97	.87	.93	.87	1.01	
51	Nondurable goods	.86	.83	.82	.81	.81	.83	.82	.78	.86	.84	.84	.83	.85	
511	Paper & paper products	1.01	.95	.97	.96	.95	.92	.90	.88	.98	.99	.99	.98	1.00	
512	Drugs, drug proprietaries and druggists' sundries	1.74	1.68	1.66	1.77	1.66	1.69	1.77	1.77	1.67	1.67	1.67	1.64	1.71	
513	Apparel, piece goods, & notions	2.07	1.85	1.88	2.13	2.07	2.07	1.98	1.86	1.98	1.90	1.75	1.84	2.10	
514	Groceries & related products	.59	.58	.58	.57	.57	.58	.60	.60	.57	.58	.59	.60	.61	
515	Farm-product raw materials	.96	.92	.87	.89	.95	.92	.84	.72	1.06	.97	.93	.89	.89	
516	Chemicals & allied products	1.03	1.13	1.06	1.02	1.11	1.07	1.03	1.07	1.03	1.00	1.00	.97	1.02	
517	Petroleum & petroleum products	.33	.31	.30	.28	.26	.28	.28	.27	.34	.31	.35	.34	.35	
518	Beer, wine, & distilled beverages	1.14	1.20	1.19	1.13	1.13	1.17	1.16	1.19	1.09	1.14	1.09	1.11	1.11	
519	Misc. nondurable goods	1.09	1.00	1.01	.96	.95	1.05	1.07	.97	1.07	1.06	1.03	.94	1.01	

^rRevised.

^PPreliminary estimate. See sample design and estimation procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986*.

Table 1B. Unadjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers:
1987 and 1986

(Data not adjusted for seasonal variation or trading day differences. Sales and Inventories in millions of dollars)

SIC code	Kind of business	1987									1986				Total 9 mos.	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept. ^P	Sept.	Oct.	Nov.	Dec.	1987	1986
	Sales, Total	110,564	111,705	126,908	126,354	125,630	129,016	126,469	125,361	130,946	118,772	124,995	113,152	121,499	1,112,953	1,021,665
50	Durable goods	51,319	52,834	61,100	61,161	59,270	63,423	61,290	60,613	63,739	58,368	62,287	54,350	58,033	534,749	489,438
501	Motor vehicles & auto. equip.	10,858	11,283	13,070	12,758	12,796	13,075	12,409	12,130	11,405	11,918	14,025	11,886	13,109	109,764	106,196
502	Furniture & home furnishings	2,063	2,032	2,349	2,218	2,159	2,240	2,335	2,388	2,853	2,561	2,619	2,118	2,169	20,637	19,431
503	Lumber & other construction mat.	3,684	3,625	4,614	4,903	4,983	5,791	5,846	5,540	5,567	4,655	5,060	4,185	4,060	44,553	38,130
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	1,397	1,507	1,524	1,480	1,258	1,417	1,490	1,599	1,588	1,642	1,913	1,729	1,645	13,260	12,794
505	Metals & minerals, ex. petroleum	4,824	4,972	6,031	5,400	5,284	5,712	5,539	5,743	6,150	4,994	5,156	4,404	4,770	49,655	43,017
506	Electrical goods	7,204	7,501	8,159	7,788	7,647	8,190	8,247	8,373	9,062	8,481	8,762	7,722	8,296	72,171	67,570
507	Hardware, plumbing & heating equipment	3,418	3,510	4,057	4,144	3,976	4,591	4,391	4,269	4,491	3,761	4,097	3,536	3,765	36,847	32,220
508	Machinery, equip. & supplies	13,427	13,814	16,131	16,112	15,425	16,257	15,648	15,358	16,874	14,394	14,822	13,644	15,673	139,046	125,077
509	Miscellaneous durable goods	4,444	4,610	5,165	6,358	5,742	6,150	5,385	5,213	5,749	5,962	5,833	5,126	4,546	48,816	45,003
51	Nondurable goods	59,245	58,871	65,808	65,193	66,360	65,593	66,179	64,748	67,207	60,404	62,708	58,802	63,466	578,204	532,227
511	Paper & paper products	3,489	3,480	3,800	3,772	3,530	3,979	3,930	4,029	4,182	3,397	3,684	3,256	3,602	34,191	29,979
512	Drugs, drug proprietaries and druggists' sundries	2,517	2,418	2,572	2,588	2,512	2,636	2,574	2,462	2,720	2,428	2,628	2,395	2,546	22,999	20,007
513	Apparel, piece goods & notions	3,031	4,002	4,042	3,242	3,055	3,868	3,962	4,370	4,026	3,904	4,293	3,316	2,571	33,598	31,231
514	Groceries & related products	19,980	18,845	20,141	20,769	21,332	21,011	21,663	20,646	21,027	20,140	20,807	19,371	20,524	185,414	174,246
515	Farm-product raw materials	6,730	6,295	7,182	6,792	7,041	6,928	6,683	6,913	7,289	5,840	6,815	6,863	7,541	61,853	57,976
516	Chemicals & allied products	2,037	1,841	2,186	2,240	2,143	2,340	2,207	2,146	2,136	2,172	2,282	2,034	1,950	19,276	19,241
517	Petroleum & petroleum products	11,319	10,823	12,140	11,166	11,041	10,816	11,370	11,113	12,424	10,287	9,202	9,104	10,833	102,212	89,674
518	Beer, wine, & distilled beverages	2,698	2,803	3,327	3,545	3,676	3,779	3,721	3,516	3,597	3,300	3,585	3,365	4,139	30,662	29,173
519	Misc. nondurable goods	7,444	8,364	10,418	11,079	12,030	10,236	9,069	9,553	9,806	8,936	9,612	9,098	9,760	87,999	80,700
	Inventories, total	149,548	150,166	150,882	150,853	151,371	152,651	151,258	148,823	152,947	147,964	149,009	148,804	148,245	(X)	(X)
50	Durable goods	95,895	95,989	97,667	98,249	100,083	100,288	99,537	97,919	99,826	97,991	97,153	97,210	95,353	(X)	(X)
501	Motor vehicles & auto. equip.	18,744	19,214	19,363	19,457	20,430	20,170	19,699	19,533	21,446	18,845	18,221	18,947	18,941	(X)	(X)
502	Furniture & home furnishings	3,559	3,601	3,675	3,792	4,022	4,025	4,145	4,085	4,139	3,351	3,107	3,085	3,423	(X)	(X)
503	Lumber & other construction mat.	4,716	4,831	5,153	5,363	5,531	5,634	5,700	5,414	5,633	4,978	4,929	4,942	4,920	(X)	(X)
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	3,381	3,438	3,520	3,447	3,457	3,528	3,635	3,759	3,767	3,281	3,558	3,456	3,309	(X)	(X)
505	Metals & minerals, ex. petroleum	9,575	9,182	9,311	9,326	9,449	9,692	9,232	8,797	8,818	9,254	9,161	8,970	9,481	(X)	(X)
506	Electrical goods	13,434	13,669	13,772	13,477	13,756	13,698	13,654	13,645	13,338	14,063	13,813	13,359	13,359	(X)	(X)
507	Hardware, plumbing & heating equipment	6,392	6,502	6,686	6,447	6,459	6,498	6,447	6,305	6,412	6,517	6,510	6,479	6,390	(X)	(X)
508	Machinery, equip. & supplies	31,504	30,919	31,369	31,712	31,197	31,496	31,364	31,085	31,037	32,614	32,850	32,789	30,914	(X)	(X)
509	Miscellaneous durable goods	4,590	4,633	4,818	5,228	5,782	5,547	5,461	5,296	5,236	5,088	5,004	4,658	4,616	(X)	(X)
51	Nondurable goods	53,653	54,177	53,215	52,604	51,288	52,363	51,721	50,904	53,121	49,973	51,856	51,594	52,892	(X)	(X)
511	Paper & paper products	3,573	3,560	3,574	3,568	3,528	3,540	3,548	3,470	3,494	3,292	3,367	3,407	3,552	(X)	(X)
512	Drugs, drug proprietaries and druggists' sundries	4,486	4,530	4,368	4,540	4,274	4,285	4,486	4,437	4,658	3,982	4,170	4,035	4,221	(X)	(X)
513	Apparel, piece goods & notions	7,061	7,042	6,930	6,831	7,302	7,747	7,624	7,607	7,584	7,274	6,619	6,458	6,886	(X)	(X)
514	Groceries & related products	11,820	12,022	11,579	11,673	11,853	12,025	12,430	11,935	12,645	11,581	12,268	12,474	12,185	(X)	(X)
515	Farm-product raw materials	7,448	6,916	6,254	6,159	5,347	5,382	5,024	4,851	5,699	5,563	6,703	6,774	6,836	(X)	(X)
516	Chemicals & allied products	2,100	2,267	2,219	2,305	2,395	2,369	2,315	2,407	2,317	1,991	2,116	2,170	2,108	(X)	(X)
517	Petroleum & petroleum products	3,616	3,194	3,230	3,016	3,035	3,122	3,373	3,103	3,232	3,267	3,229	3,247	3,759	(X)	(X)
518	Beer, wine, & distilled beverages	3,799	4,169	4,260	4,150	4,086	4,140	3,967	3,949	4,042	3,773	3,871	4,029	3,482	(X)	(X)
519	Misc. nondurable goods	9,750	10,477	10,801	10,362	9,468	9,753	8,974	9,145	9,450	9,250	9,513	9,000	9,863	(X)	(X)
	Stock/sales ratios, total	1.35	1.34	1.19	1.19	1.20	1.18	1.20	1.19	1.17	1.25	1.19	1.32	1.22	(X)	(X)
50	Durable goods	1.87	1.82	1.60	1.61	1.69	1.58	1.62	1.62	1.57	1.68	1.56	1.79	1.64	(X)	(X)
501	Motor vehicles & auto. equip.	1.73	1.71	1.48	1.53	1.60	1.54	1.59	1.61	1.88	1.58	1.30	1.59	1.44	(X)	(X)
502	Furniture & home furnishings	1.73	1.77	1.56	1.71	1.86	1.80	1.78	1.71	1.45	1.31	1.19	1.46	1.58	(X)	(X)
503	Lumber & other construction mat.	1.28	1.33	1.12	1.09	1.11	.97	.98	.98	1.01	1.07	.97	1.18	1.21	(X)	(X)
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	2.42	2.28	2.31	2.33	2.75	2.49	2.57	2.35	2.37	2.00	1.86	2.00	2.01	(X)	(X)
505	Metals & minerals, ex. petroleum	1.98	1.85	1.54	1.73	1.79	1.70	1.67	1.53	1.43	1.85	1.78	2.04	1.99	(X)	(X)
506	Electrical goods	1.86	1.82	1.69	1.73	1.80	1.67	1.66	1.63	1.47	1.66	1.58	1.80	1.61	(X)	(X)
507	Hardware, plumbing & heating equipment	1.87	1.85	1.65	1.58	1.62	1.42	1.47	1.48	1.43	1.73	1.59	1.83	1.70	(X)	(X)
508	Machinery, equip. & supplies	2.35	2.24	1.94	1.97	2.02	1.94	2.00	2.02	1.84	2.27	2.22	2.40	1.97	(X)	(X)
509	Miscellaneous durable goods	1.03	1.00	.93	.82	1.01	.90	1.01	1.02	.91	.85	.86	.91	1.02	(X)	(X)
51	Nondurable goods	.91	.92	.81	.81	.77	.80	.79	.79	.79	.83	.83	.88	.83	(X)	(X)
511	Paper & paper products	1.02	1.02	.94	.95	1.00	.89	.90	.86	.84	.97	.91	1.05	.99	(X)	(X)
512	Drugs, drug proprietaries and druggists' sundries	1.78	1.87	1.70	1.75	1.70	1.63	1.74	1.80	1.71	1.64	1.59	1.68	1.66	(X)	(X)
513	Apparel, piece goods & notions	2.33	1.76	1.71	2.11	2.39	2.00	1.92	1.74	1.88	1.86	1.54	1.95	2.68	(X)	(X)
514	Groceries & related products	.59	.64	.57	.56	.56	.57	.57	.58	.60	.58	.60	.64	.59	(X)	(X)
515	Farm-product raw materials	1.11	1.10	.87	.91	.76	.78	.75	.70	.78	.95	.98	.99	.91	(X)	(X)
516	Chemicals & allied products	1.03	1.23	1.02	1.03	1.12	1.01	1.05	1.12	1.08	.92	.93	1.07	1.08	(X)	(X)
517	Petroleum & petroleum products	.32	.30	.27	.27	.27	.29	.30	.28	.26	.32	.35	.36	.35	(X)	(X)
518	Beer, wine, & distilled beverages	1.41	1.49	1.28	1.17	1.11	1.10	1.07	1.12	1.12	1.14	1.08	1.20	.84	(X)	(X)
519	Misc. nondurable goods	1.31	1.25	1.04	.94	.79	.95	.99	.96	.96	1.04	.99	.99	1.01	(X)	(X)

^PPreliminary estimate. See sample design and estimation procedures in Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 through December 1986.
x Cumulative data are not applicable for inventories or stock/sales ratios, cumulative seasonally adjusted sales estimates are not tabulated.

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)	
		Sept 1987 from Aug. 1987	Sept 1987 from Sept 1986	9 months 1987 from 9 months 1986	Sept 1987 from Aug. 1987	Sept 1987 from Sept 1986	Sept 1987 from Aug. 1987	Sept 1987 from Sept 1986	Sept 1987 from Aug. 1987	Sept 1987 from Sept 1986
50	Total.....	+4.5	+10.2	+8.9	+2.8	+3.4	+1.3	+10.3	+1.4	+3.4
	Durable goods.....	+5.2	+9.2	+9.3	+1.9	+1.9	+1.2	+9.0	+1.0	+1.9
501	Motor vehicles & auto. equip.....	-6.0	-4.3	+3.4	+9.8	+13.8	-3.3	-4.5	+2.7	+13.8
502	Furniture & home furnishings.....	+19.5	+11.4	+6.2	+1.3	+23.5	+9.2	+10.6	+2.7	+23.8
503	Lumber & other construction mat.	+5	+19.6	+16.8	+4.0	+13.2	+1.6	+19.6	+5.8	+13.4
504	Sporting, recreational, photographic, & hobby goods, toys & supplies ...	-7	-3.3	+3.6	+2	+14.8	-7.1	-2.7	+5	+14.8
505	Metals & minerals, ex. petroleum	+7.1	+23.1	+15.4	+2	-4.7	+3	+22.2	+4	-4.5
506	Electrical goods.....	+8.2	+6.9	+6.8	-2.2	-5.2	-4	+6.6	-3.3	-5.2
507	Hardware, plumbing & heating equipment.....	+5.2	+19.4	+14.4	+1.7	-1.6	+4.1	+20.6	+3.1	-1.5
508	Machinery, equip. & supplies.....	+9.9	+17.2	+11.2	-2	-4.8	+3.4	+16.9	+7	-4.7
509	Miscellaneous durable goods.....	+10.3	-3.6	+8.5	-1.1	+2.9	+5.9	-1.4	-1.5	+3.0
51	Nondurable goods.....	+3.8	+11.3	+8.6	+4.4	+6.3	+1.3	+11.4	+2.1	+6.2
511	Paper & paper products.....	+3.8	+23.1	+14.0	+7	+6.1	+3.8	+23.0	+3.7	+6.3
512	Drugs, drug proprietaries and druggists' sundries.....	+10.5	+12.0	+15.0	+5.0	+17.0	+2.1	+11.6	+6	+17.2
513	Apparel, piece goods & notions.....	-7.9	+3.1	+7.6	-3	+4.3	+6	+2.8	+2.4	+3.8
514	Groceries & related products.....	+1.8	+4.4	+6.4	+5.9	+9.2	+2	+3.2	+3.6	+9.4
515	Farm-product raw materials.....	+5.4	+24.8	+6.7	+17.5	+2.4	+2.8	+28.3	+5.7	+2.4
516	Chemicals & allied products.....	-5	-1.7	+2	-3.7	+16.4	-4.7	-7	+7	+16.6
517	Petroleum & petroleum products.....	+11.8	+20.8	+14.0	+4.2	-1.1	+1.0	+20.2	-1.9	-8
518	Beer, wine, & distilled beverages.....	+2.3	+9.0	+5.1	+2.4	+7.1	+2.7	+7.1	+6	+7.0
519	Misc. nondurable goods.....	+2.6	+9.7	+9.0	+3.3	+2.2	+2.9	+11.2	+3	+1.8

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 1982 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

Estimates based on a sample survey will differ from the value derived from the population because of sampling variability and nonsampling error. Sampling variability occurs 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 variability 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 3. 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 vari-

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

sampling variability table. In about 9 out of 10 (90 percent) of these samples, the estimates would differ from the results of a complete enumeration by less than 1.65 times the percentages shown. In about 19 out of 20 (95 percent) of these samples, the estimate would differ from the results of a complete enumeration by less than twice the percentages shown.

To illustrate the computations involved in the above confidence statements, as related to dollar volume sales estimates, assume that an estimate of sales published in table 1B is \$10,750 million for a particular month and that the median coefficient of variation for this estimate as given in table 3, is 1.8 percent, or 0.018. Multiplying \$10,750 million by 0.018 yields \$194 million. Therefore a 67-percent confidence interval is \$10,556 million to \$10,944 million (\$10,750 million plus or minus \$194 million). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately 2 out of 3 (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Typical practice is to construct 90 or 95 percent confidence intervals. Continuing with the illustration, a 90-percent confidence interval is \$10,430 million to \$11,070 million (\$10,750 million plus or minus \$320 million). A 95-percent confidence interval is \$10,362 million to \$11,138 million (\$10,750 million plus or minus \$388 million).

All comparisons appearing on the front page of this publication and for which measures of sampling variability are available are accompanied by an indication of the 90-percent confidence interval. Thus a statement such as "+0.8 (± 1.3)" indicates a 90-percent confidence interval from -0.5 to +2.1. If the confidence interval contains zero, it is uncertain whether there is an increase or decrease.

Nonsampling Errors

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 34 percent of the sales estimates and 38 percent for inventories.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventory estimates in this report reflect the results of a benchmarking² operation which made use of 1984 and 1985 estimates tabulated from the 1985 Annual Trade Survey. The sales estimates for the period January 1984 through December 1986 were derived in a manner so that the sum of the 12 months for 1984 and 1985 were equal to the sales estimates published in the 1984 and 1985 Annual Trade Surveys. The revision process was conducted so as to minimize changes to previously published month-to-month trends. The estimates for the original series were derived by using composite estimation procedures. Using inventory results from the annual surveys for the years 1980 to 1985, monthly inventories were revised to a non-LIFO basis. Through the use of carry-forward factors, the effect of the revision process was applied to composite sales and inventory estimates subsequent to December 1985. These factors were derived at various kind-of-business levels and are held constant until the next benchmarking operation. Aggregate level estimates were derived by summing appropriate three-digit kind-of-business estimates, thereby assuring additivity.

CLASSIFICATION DIFFERENCES BETWEEN MONTHLY SURVEY AND 1977 AND 1982 CENSUSES OF WHOLESALE TRADE

For SIC 505, the monthly survey included merchant wholesalers as well as sales branches of ferrous metals service centers with inventories. Therefore, the 1977 and 1982 census sales estimates included the receipts of merchant wholesalers and sales branches of ferrous metals service centers with inventories.

Establishments classified in the Farm-Product Raw Materials group (SIC 515) included as sales, products purchased and transferred to other company establishments. In the monthly survey, intercompany transfers are not included in sales. Because of the differences, the 1977 and 1982 sales for the SIC were obtained from the 1977 and 1982 Annual Trade Surveys (ATS).

Inventories were not benchmarked to the census levels since the census of wholesale trade does not include inventories of auxiliary and central administrative offices of merchant wholesale establishments which are included in the monthly survey. The inventory estimates for the years 1977 and 1982 were computed by multiplying the stock/sales ratios obtained from the annual surveys by the census sales for these years.

Unpublished Data

Sales and inventory estimates for unpublished four-digit wholesale trade categories are not included in this publication because their sampling variability is so high, relative to

²For a more detailed description, see the section dealing with revisions to published data in the Current Business Reports publication, *Revised Monthly Wholesale Trade: December 1980 Through December 1986*.

the changes from month-to-month or between other periods, as to make them potentially misleading. The Census Bureau, for a nominal fee 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 on a non-LIFO basis 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. Methods of valuation may vary according to the accounting practices of the firm.

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 current and past experiences. Therefore, the adjusted could become less precise if 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.

Concurrent Seasonal Adjustment

Concurrent seasonal adjustment uses all available unadjusted estimates (including the latest preliminary estimates) as input to the X-11 program. After the last benchmarking operation, factors were developed and used to derive adjusted sales estimates for the period January 1984 through January 1987. Factors were developed and used to derive non-LIFO inventory estimates for the period December 1980 through January 1987. When unadjusted preliminary and final estimates become available, all estimates will be used as input to the X-11 program and new factors will be applied to the preliminary and final (one month before the preliminary) estimates and to the previous year estimates that correspond to the preliminary month.

Table 4 presents, by kind of business, the combined seasonal and trading-day factors that are used to adjust inventory and sales estimates. For all kind of business, one month of projected factors are shown. These projected factors are estimates of the factors that will be used to derive adjusted estimates.

Table 3. 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	1.1-1.6	1.2	0.9-1.4	1.3	0.3-0.6	0.4	0.9-2.2	1.5	1.0-1.9	1.3	0.2-1.6	0.4
501	Durable goods, total	1.3-1.7	1.5	1.2-1.8	1.4	0.5-0.8	0.6	1.4-3.3	2.0	1.4-2.4	1.7	0.2-2.5	0.4
502	Motor vehicles and automotive parts and supplies	2.1-4.0	3.2	2.0-3.7	3.1	0.8-1.7	1.3	3.6-5.7	4.6	3.6-5.4	4.4	0.4-1.5	0.7
503	Furniture and home furnishings	6.6-9.6	7.9	5.3-8.6	7.3	2.1-6.2	3.3	5.3-12.3	10.0	5.0-12.8	10.2	0.7-3.2	1.2
504	Lumber and other construction materials	4.8-7.1	5.8	4.3-7.2	5.5	1.1-2.5	1.8	6.2-11.8	7.5	5.4-11.5	7.4	0.6-3.0	1.3
505	Sporting, recreational, photographic, & hobby goods, toys & supplies	9.3-22.9	11.4	8.8-20.8	10.9	2.3-5.3	3.3	7.2-16.2	10.8	8.5-16.7	10.6	0.9-2.4	1.6
506	Metals and minerals, ex. petroleum	2.4-6.6	4.9	2.5-6.5	4.2	0.8-2.0	1.4	4.0-6.9	4.8	3.2-6.8	4.8	0.5-2.1	0.7
507	Electrical goods	1.9-9.2	2.2	1.4-8.6	2.3	1.1-2.5	1.7	1.6-9.2	2.6	1.7-8.7	2.3	0.5-1.1	0.7
508	Hardware, plumbing, heating equipment, and supplies	4.4-7.8	6.7	4.3-8.7	6.8	1.3-2.9	2.0	4.8-9.3	6.0	4.5-9.2	6.1	0.5-2.1	0.6
509	Machinery, equipment, and supplies	2.5-4.2	2.8	1.9-3.4	2.9	1.0-2.1	1.7	2.3-9.0	4.4	2.4-5.8	3.8	0.4-6.4	0.6
51	Miscellaneous durable goods	3.5-4.9	3.9	3.0-4.3	3.7	1.4-2.5	1.9	4.5-8.6	6.6	4.3-9.1	6.8	0.5-2.4	0.9
511	Nondurable goods, total	1.5-3.2	1.8	1.5-3.1	1.6	0.5-1.0	0.7	1.5-2.6	2.2	1.6-2.8	2.2	0.3-0.8	0.4
512	Paper and paper products	2.9-5.1	4.0	3.4-4.5	4.0	1.2-2.9	1.9	5.1-7.3	6.4	4.5-7.1	6.5	0.6-2.2	0.8
513	Drugs, drug proprietaries and druggists' sundries	4.5-9.3	7.8	4.8-9.0	7.2	0.8-2.1	1.5	4.5-9.6	7.2	4.6-9.7	7.5	0.6-2.6	1.0
514	Apparel, piece goods, & notions	4.2-7.5	4.7	3.2-7.3	4.7	1.9-4.9	2.7	3.8-11.3	8.5	4.1-11.6	8.4	0.6-2.6	1.5
515	Groceries and related products	2.6-5.8	3.6	2.1-5.6	3.5	0.6-2.8	1.2	4.6-7.6	6.2	4.4-8.8	6.1	0.5-1.8	1.0
516	Farm-product raw materials	2.9-6.3	5.0	2.5-8.5	4.0	2.5-5.3	3.8	3.7-6.8	6.1	5.2-6.3	5.7	0.8-3.3	1.5
517	Chemicals & allied products	4.6-10.1	8.2	4.3-9.3	7.4	1.4-5.1	3.1	6.6-13.0	7.5	6.3-12.9	7.0	0.4-2.9	1.7
518	Petroleum & petroleum products	2.8-10.4	3.5	2.6-11.6	3.3	0.4-3.0	1.0	2.9-12.0	4.2	2.9-14.1	4.3	0.5-6.0	1.1
519	Beer, wine, and distilled alcoholic beverages	2.9-7.3	5.0	2.4-8.8	5.4	0.9-3.8	2.0	4.9-6.1	5.2	4.9-5.7	5.0	0.8-1.8	1.1
	Misc. nondurable goods	2.3-7.3	4.9	4.0-7.1	4.5	0.7-2.8	2.0	6.0-10.5	7.3	6.0-10.5	6.9	0.7-3.0	1.0

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 1986 through January 1987.

Table 4. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers

SIC code	Kind of business	1986				1987									
		Sept. ¹	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug. ¹	Sept. ¹	Oct.
	Sales, Total	1.008	1.056	.962	1.035	.953	.905	1.035	1.019	1.007	1.039	.998	.976	1.010	1.032
50	Durable goods	1.031	1.090	.956	1.010	.920	.890	1.031	1.027	.991	1.053	1.004	.985	1.030	1.065
501	Motor vehicles & auto. equip.	.940	1.090	.954	1.011	.958	.871	1.014	1.034	1.037	1.083	1.034	.969	.942	1.067
502	Furniture & home furnishings	1.092	1.159	.976	.974	.868	.882	.991	1.013	.991	1.058	1.033	1.005	1.100	1.116
503	Lumber & other construction mat.	1.078	1.151	.953	.876	.811	.793	.955	1.044	1.040	1.120	1.113	1.090	1.078	1.104
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	1.072	1.221	1.066	1.011	.849	.877	.981	1.000	.888	.978	.990	.996	1.065	1.183
505	Metals & minerals, ex. petroleum ..	1.050	1.045	.892	.983	.968	.944	1.098	1.040	.985	1.034	.987	.991	1.058	1.002
506	Electrical goods	1.083	1.111	1.012	1.062	.912	.907	1.017	.949	.927	1.013	.989	.999	1.086	1.104
507	Hardware, plumbing & heating equipment	1.021	1.094	.957	.960	.932	.902	.968	1.041	1.008	1.081	1.049	1.000	1.011	1.068
508	Machinery, equip. & supplies	1.026	1.048	.930	1.043	.908	.907	1.065	1.050	1.005	1.053	.986	.968	1.029	1.019
509	Miscellaneous durable goods	1.074	1.100	.989	.954	.954	.893	1.033	1.138	.993	.997	.935	1.008	1.050	1.074
51	Nondurable goods	.995	1.030	.968	1.056	.982	.917	1.041	1.007	1.020	1.021	.992	.968	.994	1.009
511	Paper & paper products	1.008	1.072	.943	1.005	.979	.939	1.035	1.018	.958	1.035	.998	1.009	1.009	1.041
512	Drugs, drug proprietaries and druggists' sundries.	1.030	1.078	.949	1.025	1.001	.927	1.026	1.030	.955	1.010	.987	.955	1.034	1.048
513	Apparel, piece goods & notions ..	1.055	1.128	.894	.779	.887	1.039	1.038	.977	.879	1.070	1.112	1.155	1.058	1.094
514	Groceries & related products	.999	1.025	.964	1.025	.978	.915	1.006	1.007	1.020	1.012	1.033	.995	1.011	1.007
515	Farm-product raw materials	.894	1.014	1.075	1.186	1.090	.969	1.083	.977	1.020	.955	.877	.848	.870	1.014
516	Chemicals & allied products	1.040	1.098	.914	.930	.991	.925	1.041	1.022	1.000	1.068	.997	.986	1.030	1.052
517	Petroleum & petroleum products ..	.995	1.031	.987	1.114	1.104	.958	1.061	.975	.957	.959	.935	.903	1.000	1.019
518	Beer, wine, & distilled beverages ..	1.016	1.073	.984	1.201	.760	.774	.927	.984	1.024	1.098	1.102	1.038	1.034	1.025
519	Misc. nondurable goods	.969	1.008	.915	1.017	.856	.856	1.079	1.101	1.180	1.070	1.012	.958	.956	.977
	Inventories, total	.998	1.008	1.010	1.007	1.003	1.006	1.009	1.006	.992	.995	.990	.985	.997	1.007
50	Durable goods	1.011	1.001	.997	.995	.985	.993	1.002	1.004	1.000	1.008	1.005	1.002	1.011	1.001
501	Motor vehicles & auto. equip.	1.025	1.016	1.006	1.016	.998	1.002	1.008	1.005	.988	1.004	.976	.959	1.025	1.017
502	Furniture & home furnishings	1.002	.997	.985	1.027	1.014	1.012	.994	.976	.996	.995	.992	1.014	1.000	.995
503	Lumber & other construction mat.	.997	.980	.985	.996	.961	.997	1.026	1.030	1.002	1.026	1.018	1.012	.995	.981
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	1.013	.996	.976	.977	.984	.990	1.008	1.001	.993	1.012	1.028	1.016	1.013	1.000
505	Metals & minerals, ex. petroleum ..	.997	.982	.987	1.013	1.007	1.000	.993	.987	.997	1.016	1.009	.997	.995	.978
506	Electrical goods	1.034	1.023	1.005	.984	.969	.970	.978	.995	.992	1.000	1.025	1.023	1.034	1.020
507	Hardware, plumbing & heating equipment	.987	.980	.980	.962	.972	.999	1.028	1.042	1.032	1.011	1.017	1.000	.986	.980
508	Machinery, equip. & supplies	.998	1.002	.991	.997	.985	.994	1.006	1.005	1.006	1.011	1.004	1.006	.997	1.003
509	Miscellaneous durable goods	1.030	1.014	1.029	.957	.974	.996	.978	.994	1.010	.995	1.019	1.025	1.029	1.019
51	Nondurable goods	.973	1.019	1.029	1.031	1.036	1.029	1.022	1.008	.972	.972	.962	.950	.973	1.017
511	Paper & paper products	.979	.985	1.007	.995	.994	1.007	1.003	1.004	1.003	1.005	1.000	1.006	.977	.982
512	Drugs, drug proprietaries and druggists' sundries.	1.005	1.023	.974	.994	1.023	1.031	1.052	1.019	.981	.969	.965	.961	1.003	1.022
513	Apparel, piece goods & notions ..	1.033	.992	.944	.994	1.000	.986	.948	.966	1.014	1.033	1.078	1.065	1.037	.987
514	Groceries & related products	.989	1.040	1.041	1.000	.979	1.009	.997	.994	.999	1.002	.981	.965	.987	1.040
515	Farm-product raw materials	.880	1.069	1.186	1.213	1.251	1.157	1.088	.996	.819	.810	.785	.792	.880	1.067
516	Chemicals & allied products	.956	1.015	1.004	.983	.990	1.006	.998	1.035	1.009	1.012	1.011	.998	.954	1.012
517	Petroleum & petroleum products ..	1.003	1.021	1.034	1.090	1.062	.921	.931	.943	.996	1.006	.984	.942	1.000	1.019
518	Beer, wine, & distilled beverages ..	1.003	1.060	1.062	.912	.942	.959	.997	1.022	1.005	1.032	1.011	.987	1.004	1.058
519	Misc. nondurable goods	.955	.973	.958	1.018	1.033	1.071	1.111	1.072	.980	.971	.936	.930	.958	.969

¹Revised

¹Adjusted sales and inventory data shown in table 1A 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: The seasonal factors shown have been computed based on monthly estimates through the current month preliminary estimates.



Monthly Wholesale Trade Sales and Inventories

September 1987

U.S. Department of Commerce
BUREAU OF THE CENSUS

BW-87-09
Issued November 1987

Sales. September 1987 sales of merchant wholesalers, after adjustment for seasonal variation and trading day differences but not for price changes, were \$129.8 billion, up 1.3 percent (± 0.7 percent) from the revised August level and up 10.3 percent from a year ago. The August preliminary estimate was revised downward by \$1.3 billion or about 1.0 percent. September sales of durable goods increased 1.2 percent (± 0.8 percent) from August and were 9.0 percent above a year ago. September sales of nondurable goods were up 1.3 percent (± 1.0 percent) from August and were 11.4 percent above September 1986.

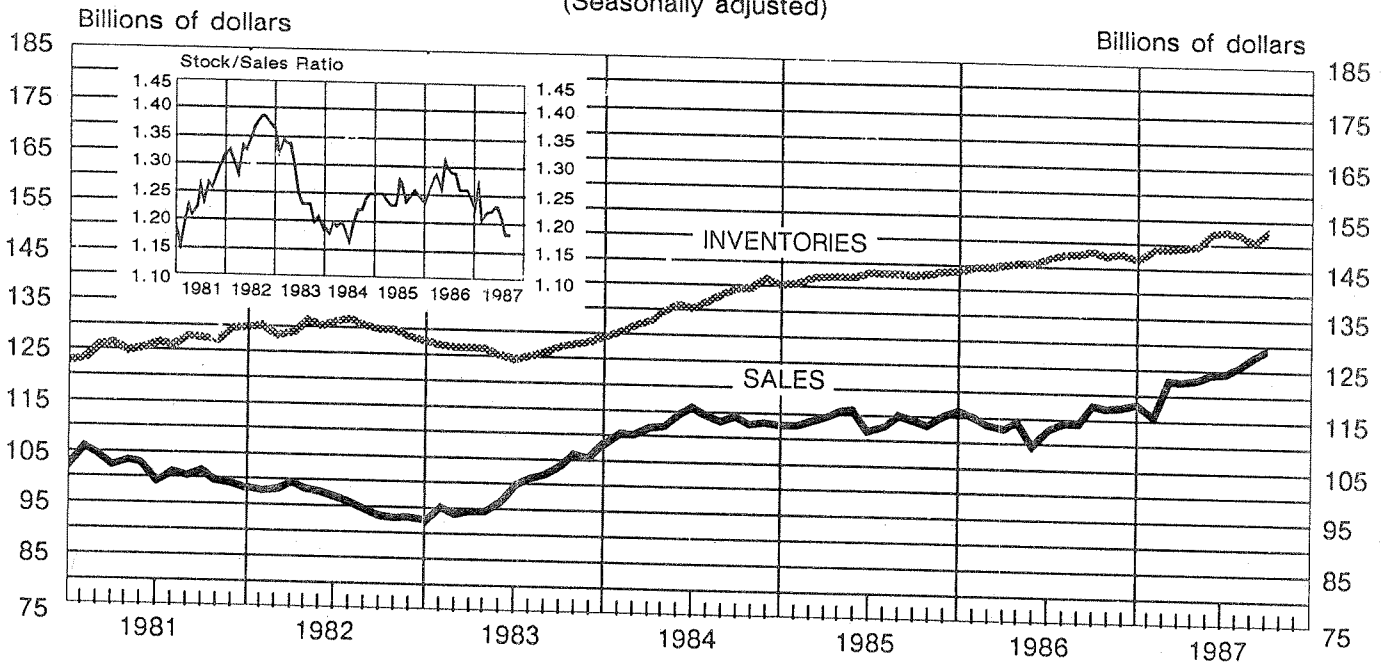
Inventories. Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$153.3 billion at the end of September, up 1.4 percent (± 0.5 percent) from the revised August level

and up 3.4 percent from a year ago. The August preliminary estimate was revised downward by \$0.5 billion or about 0.4 percent. Inventories of durable goods wholesalers were up 1.0 percent (± 0.3 percent) from the August level and were 1.9 percent above a year ago. Inventories of nondurable goods wholesalers increased 2.1 percent (± 0.5 percent) from the August level and were up 6.2 percent from September 1986.

Stock/Sales Ratio. The September stock/sales ratio for merchant wholesalers, based on seasonally adjusted data was 1.18, virtually the same as the August ratio. The year ago ratio was 1.26.

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 4.

Monthly Sales, Inventories, and Stock/Sales Ratios
of Merchant Wholesalers: 1981-1987
(Seasonally adjusted)



The Monthly Wholesale Trade Report for October is scheduled to be released December 11, 1987 at 10:00 a.m.

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.

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Table 1A. Adjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1987 and 1986

(Data adjusted for seasonal variation and, in the case of sales, also for trading day differences. Sales and Inventories in millions of dollars)

SIC code	Kind of business	1987									1986			
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept. ^P	Sept. ^r	Oct.	Nov.	Dec.
	Sales, Total.	116,545	123,281	123,009	123,439	124,486	124,836	126,196	128,164	129,819	117,741	117,488	117,734	118,446
50	Durable goods	55,893	59,344	59,498	59,016	59,413	60,274	60,784	61,065	61,828	56,725	57,102	56,758	57,833
501	Motor vehicles & auto. equip.	11,334	12,931	12,890	12,338	12,339	12,073	12,001	12,518	12,107	12,679	12,867	12,459	12,966
502	Furniture & home furnishings	2,377	2,304	2,370	2,190	2,179	2,117	2,260	2,376	2,594	2,345	2,260	2,170	2,227
503	Lumber & other construction mat.	4,543	4,571	4,831	4,696	4,791	5,171	5,252	5,083	5,164	4,318	4,396	4,391	4,635
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	1,645	1,718	1,554	1,480	1,417	1,449	1,505	1,605	1,491	1,532	1,567	1,622	1,627
505	Metals & minerals, ex. petroleum	4,983	5,267	5,493	5,192	5,364	5,524	5,612	5,795	5,813	4,756	4,934	4,937	4,852
506	Electrical goods	7,899	8,270	8,023	8,207	8,249	8,085	8,339	8,381	8,344	7,831	7,887	7,630	7,812
507	Hardware, plumbing & heating equipment	3,667	3,891	4,191	3,981	3,944	4,247	4,186	4,269	4,442	3,684	3,745	3,695	3,922
508	Machinery, equip. & supplies	14,787	15,230	15,146	15,345	15,348	15,439	15,870	15,866	16,398	14,029	14,143	14,671	15,027
509	Miscellaneous durable goods	4,658	5,162	5,000	5,587	5,782	6,169	5,759	5,172	5,475	5,551	5,303	5,183	4,765
51	Nondurable goods	60,652	63,937	63,511	64,423	65,073	64,562	65,412	67,099	67,991	61,016	60,386	60,976	60,613
511	Paper & paper products	3,564	3,706	3,671	3,705	3,685	3,844	3,938	3,993	4,145	3,370	3,437	3,453	3,584
512	Drugs, drug proprietaries and druggists' sundries	2,514	2,608	2,507	2,513	2,630	2,610	2,608	2,578	2,631	2,357	2,438	2,524	2,484
513	Apparel, piece goods & notions	3,417	3,852	3,894	3,318	3,476	3,615	3,563	3,784	3,805	3,700	3,806	3,709	3,300
514	Groceries & related products	20,429	20,596	20,021	20,625	20,914	20,762	20,971	20,750	20,798	20,160	20,104	20,094	20,023
515	Farm-product raw materials	6,174	6,496	6,632	6,952	6,903	7,254	7,620	8,152	8,378	6,532	6,721	6,384	6,358
516	Chemicals & allied products	2,055	1,990	2,100	2,192	2,143	2,191	2,214	2,176	2,074	2,088	2,078	2,225	2,097
517	Petroleum & petroleum products	10,253	11,297	11,442	11,452	11,537	11,278	12,160	12,307	12,424	10,339	8,925	9,224	9,724
518	Beer, wine, & distilled beverages	3,550	3,621	3,589	3,603	3,590	3,442	3,377	3,387	3,479	3,248	3,341	3,420	3,446
519	Misc. nondurable goods	8,696	9,771	9,655	10,063	10,195	9,566	8,961	9,972	10,257	9,222	9,536	9,943	9,597
	Inventories, total	149,347	149,408	149,565	150,050	152,673	153,093	152,648	151,222	153,296	148,253	147,754	148,204	147,375
50	Durable goods	97,280	96,594	97,491	97,891	100,056	99,504	99,099	97,980	98,924	97,066	96,845	97,652	95,710
501	Motor vehicles & auto. equip.	18,782	19,176	19,209	19,360	20,678	20,090	20,183	20,368	20,923	18,385	17,934	18,834	18,643
502	Furniture & home furnishings	3,510	3,558	3,697	3,885	4,538	4,045	4,178	4,029	4,139	3,344	3,116	3,132	3,333
503	Lumber & other construction mat.	4,907	4,846	5,022	5,207	5,020	5,491	5,599	5,350	5,661	4,993	5,030	5,017	4,940
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	3,436	3,473	3,492	3,444	3,481	3,486	3,731	3,700	3,719	3,239	3,572	3,541	3,387
505	Metals & minerals, ex. petroleum	9,508	9,182	9,377	9,449	9,477	9,539	9,150	8,823	8,862	9,282	9,329	9,088	9,359
506	Electrical goods	13,864	14,092	14,082	13,545	13,867	13,698	13,321	13,338	12,899	13,601	13,502	13,815	13,576
507	Hardware, plumbing & heating equipment	6,576	6,509	6,504	6,187	6,259	6,427	6,339	6,305	6,503	6,603	6,643	6,611	6,642
508	Machinery, equip. & supplies	31,984	31,106	31,182	31,554	31,011	31,153	31,239	30,900	31,130	32,679	32,784	33,087	31,007
509	Miscellaneous durable goods	4,713	4,652	4,926	5,260	5,725	5,575	5,359	5,167	5,088	4,940	4,935	4,527	4,823
51	Nondurable goods	52,067	52,814	52,074	52,159	52,617	53,589	53,549	53,242	54,372	51,187	50,909	50,552	51,665
511	Paper & paper products	3,595	3,535	3,563	3,554	3,517	3,522	3,548	3,449	3,576	3,363	3,418	3,383	3,570
512	Drugs, drug proprietaries and druggists' sundries	4,385	4,394	4,152	4,455	4,357	4,422	4,628	4,617	4,644	3,962	4,076	4,143	4,246
513	Apparel, piece goods & notions	7,061	7,142	7,310	7,071	7,201	7,500	7,072	7,143	7,313	7,042	6,672	6,841	6,928
514	Groceries & related products	12,074	11,915	11,614	11,743	11,865	12,001	12,671	12,368	12,812	11,710	11,796	11,983	12,185
515	Farm-product raw materials	5,954	5,978	5,748	6,184	6,529	6,644	6,400	6,125	6,476	6,322	6,270	5,712	5,636
516	Chemicals & allied products	2,121	2,253	2,223	2,227	2,374	2,341	2,290	2,412	2,429	2,083	2,085	2,161	2,144
517	Petroleum & petroleum products	3,405	3,468	3,469	3,198	3,047	3,103	3,428	3,294	3,232	3,257	3,163	3,140	3,449
518	Beer, wine, & distilled beverages	4,033	4,347	4,273	4,061	4,066	4,012	3,924	4,001	4,026	3,762	3,652	3,794	3,818
519	Misc. nondurable goods	9,439	9,782	9,722	9,666	9,661	10,044	9,588	9,833	9,864	9,686	9,777	9,395	9,689
	Stock/sales ratios, total	1.28	1.21	1.22	1.22	1.23	1.23	1.21	1.18	1.18	1.26	1.26	1.26	1.24
50	Durable goods	1.74	1.63	1.64	1.66	1.68	1.65	1.63	1.60	1.60	1.71	1.70	1.72	1.65
501	Motor vehicles & auto. equip.	1.66	1.48	1.49	1.57	1.68	1.66	1.68	1.63	1.73	1.45	1.39	1.51	1.44
502	Furniture & home furnishings	1.48	1.54	1.56	1.77	1.85	1.91	1.85	1.70	1.60	1.43	1.38	1.44	1.50
503	Lumber & other construction mat.	1.08	1.06	1.04	1.11	1.15	1.06	1.07	1.05	1.10	1.16	1.14	1.14	1.07
504	Sporting, recreational, photographic, & hobby goods, toys & supplies	2.09	2.02	2.25	2.33	2.46	2.41	2.48	2.31	2.49	2.11	2.28	2.18	2.08
505	Metals & minerals, ex. petroleum	1.91	1.74	1.71	1.82	1.77	1.73	1.63	1.52	1.52	1.95	1.89	1.84	1.93
506	Electrical goods	1.76	1.70	1.76	1.65	1.68	1.69	1.60	1.59	1.55	1.74	1.71	1.81	1.74
507	Hardware, plumbing & heating equipment	1.79	1.67	1.55	1.55	1.59	1.51	1.51	1.48	1.46	1.79	1.77	1.79	1.69
508	Machinery, equip. & supplies	2.16	2.04	2.06	2.06	2.02	2.02	1.97	1.95	1.90	2.33	2.32	2.26	2.06
509	Miscellaneous durable goods	1.01	.90	.99	.94	.99	.90	.93	1.00	.93	.89	.93	.87	1.01
51	Nondurable goods	.86	.83	.82	.81	.81	.83	.82	.79	.80	.84	.84	.83	.85
511	Paper & paper products	1.01	.95	.97	.96	.95	.92	.90	.86	.86	1.00	.99	.98	1.00
512	Drugs, drug proprietaries and druggists' sundries	1.74	1.68	1.66	1.77	1.66	1.69	1.77	1.79	1.77	1.68	1.67	1.64	1.71
513	Apparel, piece goods & notions	2.07	1.85	1.88	2.13	2.07	2.07	1.98	1.89	1.92	1.90	1.75	1.84	2.10
514	Groceries & related products	.59	.58	.58	.57	.57	.58	.60	.60	.62	.58	.59	.60	.61
515	Farm-product raw materials	.96	.92	.87	.89	.95	.92	.84	.75	.77	.97	.93	.89	.89
516	Chemicals & allied products	1.03	1.13	1.06	1.02	1.11	1.07	1.03	1.11	1.17	1.00	1.00	.97	1.02
517	Petroleum & petroleum products	.33	.31	.30	.28	.26	.28	.28	.27	.26	.32	.35	.34	.35
518	Beer, wine, & distilled beverages	1.14	1.20	1.19	1.13	1.13	1.17	1.16	1.18	1.16	1.16	1.09	1.11	1.11
519	Misc. nondurable goods	1.09	1.00	1.01	.96	.95	1.05	1.07	.99	.96	1.05	1.03	.94	1.01

^rRevised.

^PPreliminary estimate. See sample design and estimation procedures in Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 through December 1986.

Table 1B. Unadjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers:
1987 and 1986

Data not adjusted for seasonal variation or trading day differences. Sales and Inventories in millions of dollars)

SIC code	Kind of business	1987										1986			Total 10 mos.	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct. ^P	Oct.	Nov.	Dec.	1987	1986
	Sales, Total	110,564	111,705	126,908	126,354	125,630	129,016	126,469	125,361	130,767	135,577	124,995	113,152	121,499	1,248,358	1,146,660
50	Durable goods	51,319	52,834	61,100	61,161	59,270	63,423	61,290	60,613	63,936	66,700	62,287	54,350	58,033	601,646	551,725
501	Motor vehicles & auto. equip.	10,858	11,263	13,070	12,758	12,796	13,075	12,409	12,130	11,956	13,905	14,025	11,886	13,109	124,220	120,221
502	Furniture & home furnishings	2,063	2,032	2,349	2,218	2,159	2,240	2,335	2,388	2,865	2,683	2,619	2,118	2,169	23,332	22,050
503	Lumber & other construction mat.	3,684	3,625	4,614	4,903	4,983	5,791	5,846	5,540	5,757	5,771	5,060	4,185	4,060	50,514	43,190
504	Sporting, recreational, photographic & hobby goods, toys & supplies	1,397	1,507	1,524	1,480	1,258	1,417	1,490	1,599	1,590	1,716	1,913	1,729	1,645	14,978	14,707
505	Metals & minerals, ex. petroleum	4,824	4,972	6,031	5,400	5,284	5,712	5,539	5,743	6,091	5,776	5,156	4,404	4,770	55,372	48,173
506	Electrical goods	7,204	7,501	8,159	7,788	7,647	8,190	8,247	8,373	8,587	8,931	8,762	7,722	8,296	80,627	76,332
507	Hardware, plumbing & heating equipment	3,418	3,510	4,057	4,144	3,976	4,591	4,391	4,269	4,619	4,807	4,097	3,536	3,765	41,782	36,317
508	Machinery, equip. & supplies	13,427	13,814	16,131	16,112	15,425	16,257	15,648	15,358	16,624	16,153	14,822	13,644	15,673	154,949	139,899
509	Miscellaneous durable goods	4,444	4,610	5,165	6,358	5,742	6,150	5,385	5,213	5,847	6,958	5,833	5,126	4,546	55,872	50,836
51	Nondurable goods	59,245	58,871	65,808	65,193	66,360	65,593	65,179	64,748	66,831	68,877	62,708	58,802	63,466	646,705	594,935
511	Paper & paper products	3,489	3,480	3,800	3,772	3,530	3,979	3,930	4,029	4,226	4,489	3,684	3,256	3,602	38,724	33,663
512	Drugs, drug proprietaries and druggists' sundries	2,517	2,418	2,572	2,588	2,512	2,636	2,574	2,462	2,707	2,671	2,628	2,395	2,546	25,657	22,635
513	Apparel, piece goods & notions	3,031	4,002	4,042	3,242	3,055	3,868	3,962	4,370	4,163	4,626	4,293	3,316	2,571	38,361	35,524
514	Groceries & related products	19,980	18,845	20,141	20,769	21,332	21,011	21,663	20,646	20,518	20,678	20,607	19,371	20,524	205,583	194,853
515	Farm-product raw materials	6,730	6,295	7,182	6,792	7,041	6,928	6,683	6,913	7,289	8,517	6,815	6,863	7,541	70,370	64,791
516	Chemicals & allied products	2,037	1,841	2,186	2,240	2,143	2,340	2,207	2,146	2,290	2,412	2,282	2,034	1,950	21,842	21,523
517	Petroleum & petroleum products	11,319	10,823	12,140	11,166	11,041	10,816	11,370	11,113	12,282	11,739	9,202	9,104	10,833	113,809	98,876
518	Beer, wine, & distilled beverages	2,698	2,803	3,327	3,545	3,676	3,779	3,721	3,616	3,520	3,665	3,585	3,365	4,139	34,250	32,758
519	Misc. nondurable goods	7,444	8,364	10,418	11,079	12,030	10,236	9,069	9,553	9,836	10,080	9,612	9,098	9,760	98,109	90,312
	Inventories, total	149,548	150,166	150,882	150,853	151,371	152,651	151,258	148,823	152,788	157,145	149,009	148,804	148,245	(X)	(X)
50	Durable goods	95,895	95,989	97,667	98,249	100,083	100,288	99,537	97,919	99,294	100,397	97,153	97,210	95,353	(X)	(X)
501	Motor vehicles & auto. equip.	18,744	19,214	19,363	19,457	20,430	20,170	19,699	19,533	20,763	20,686	18,221	18,947	18,941	(X)	(X)
502	Furniture & home furnishings	3,559	3,601	3,675	3,792	4,022	4,025	4,145	4,085	4,218	4,086	3,107	3,085	3,423	(X)	(X)
503	Lumber & other construction mat.	4,716	4,831	5,153	5,363	5,531	5,634	5,700	5,414	5,599	5,482	4,929	4,942	4,920	(X)	(X)
504	Sporting, recreational, photographic & hobby goods, toys & supplies	3,381	3,438	3,520	3,447	3,457	3,528	3,835	3,759	3,754	3,698	3,558	3,456	3,309	(X)	(X)
505	Metals & minerals, ex. petroleum	9,575	9,182	9,311	9,326	9,449	9,692	9,232	8,797	8,909	8,975	9,161	8,970	9,481	(X)	(X)
506	Electrical goods	13,434	13,669	13,772	13,477	13,756	13,698	13,654	13,645	13,283	13,569	13,813	13,884	13,359	(X)	(X)
507	Hardware, plumbing & heating equipment	6,392	6,502	6,686	6,447	6,459	6,498	6,447	6,305	6,524	6,842	6,510	6,479	6,390	(X)	(X)
508	Machinery, equip. & supplies	31,504	30,919	31,369	31,712	31,197	31,496	31,364	31,085	31,011	31,701	32,850	32,789	30,914	(X)	(X)
509	Miscellaneous durable goods	4,590	4,633	4,818	5,228	5,782	5,547	5,461	5,296	5,233	5,358	5,004	4,658	4,616	(X)	(X)
51	Nondurable goods	53,653	54,177	53,215	52,604	51,288	52,363	51,721	50,904	53,494	56,748	51,856	51,594	52,892	(X)	(X)
511	Paper & paper products	3,573	3,560	3,574	3,568	3,528	3,540	3,548	3,470	3,515	3,544	3,367	3,407	3,552	(X)	(X)
512	Drugs, drug proprietaries and druggists' sundries	4,486	4,530	4,368	4,540	4,274	4,285	4,466	4,437	4,651	5,055	4,170	4,035	4,221	(X)	(X)
513	Apparel, piece goods & notions	7,061	7,042	6,930	6,831	7,302	7,747	7,624	7,807	7,733	7,719	6,619	6,458	6,886	(X)	(X)
514	Groceries & related products	11,820	12,022	11,579	11,673	11,853	12,025	12,430	11,935	12,611	12,925	12,268	12,474	12,185	(X)	(X)
515	Farm-product raw materials	7,448	6,916	6,254	6,159	5,347	5,382	5,024	4,851	5,548	7,090	6,703	6,774	6,836	(X)	(X)
516	Chemicals & allied products	2,100	2,267	2,219	2,305	2,395	2,369	2,315	2,407	2,307	2,314	2,116	2,170	2,108	(X)	(X)
517	Petroleum & petroleum products	3,616	3,194	3,230	3,016	3,035	3,122	3,373	3,103	3,309	3,372	3,229	3,247	3,759	(X)	(X)
518	Beer, wine, & distilled beverages	3,799	4,169	4,260	4,150	4,086	4,140	3,967	3,949	4,124	4,403	3,871	4,029	3,482	(X)	(X)
519	Misc. nondurable goods	9,750	10,477	10,801	10,362	9,468	9,753	8,974	9,145	9,696	10,326	9,513	9,000	9,863	(X)	(X)
	Stock/sales ratios, total	1.35	1.34	1.19	1.19	1.20	1.18	1.20	1.19	1.17	1.16	1.19	1.32	1.22	(X)	(X)
50	Durable goods	1.87	1.82	1.60	1.61	1.69	1.58	1.62	1.62	1.55	1.51	1.56	1.79	1.64	(X)	(X)
501	Motor vehicles & auto. equip.	1.73	1.71	1.48	1.53	1.60	1.54	1.59	1.61	1.74	1.49	1.30	1.59	1.44	(X)	(X)
502	Furniture & home furnishings	1.73	1.77	1.56	1.71	1.86	1.80	1.78	1.71	1.47	1.52	1.19	1.46	1.58	(X)	(X)
503	Lumber & other construction mat.	1.28	1.33	1.12	1.09	1.11	.97	.98	.98	.97	.95	.97	1.18	1.21	(X)	(X)
504	Sporting, recreational, photographic & hobby goods, toys & supplies	2.42	2.28	2.31	2.33	2.75	2.49	2.57	2.35	2.36	2.16	1.86	2.00	2.01	(X)	(X)
505	Metals & minerals, ex. petroleum	1.98	1.85	1.54	1.73	1.79	1.70	1.67	1.53	1.46	1.55	1.78	2.04	1.99	(X)	(X)
506	Electrical goods	1.86	1.82	1.69	1.73	1.80	1.67	1.66	1.63	1.55	1.52	1.58	1.80	1.61	(X)	(X)
507	Hardware, plumbing & heating equipment	1.87	1.85	1.65	1.56	1.62	1.42	1.47	1.48	1.41	1.42	1.59	1.83	1.70	(X)	(X)
508	Machinery, equip. & supplies	2.35	2.24	1.94	1.97	2.02	1.94	2.00	2.02	1.87	1.96	2.22	2.40	1.97	(X)	(X)
509	Miscellaneous durable goods	1.03	1.00	.93	.82	1.01	.90	1.01	1.02	.89	.77	.86	.91	1.02	(X)	(X)
51	Nondurable goods	.91	.92	.81	.81	.77	.80	.79	.79	.80	.82	.83	.88	.83	(X)	(X)
511	Paper & paper products	1.02	1.02	.94	.95	1.00	.89	.90	.86	.83	.79	.91	1.05	.99	(X)	(X)
512	Drugs, drug proprietaries and druggists' sundries	1.78	1.87	1.70	1.75	1.70	1.63	1.74	1.80	1.72	1.89	1.59	1.68	1.66	(X)	(X)
513	Apparel, piece goods & notions	2.33	1.76	1.71	2.11	2.39	2.00	1.92	1.74	1.86	1.67	1.54	1.95	2.68	(X)	(X)
514	Groceries & related products	.59	.64	.57	.56	.56	.57	.57	.58	.61	.63	.60	.64	.59	(X)	(X)
515	Farm-product raw materials	1.11	1.10	.87	.91	.76	.78	.75	.70	.76	.83	.98	.99	.91	(X)	(X)
516	Chemicals & allied products	1.03	1.23	1.02	1.03	1.12	1.01	1.05	1.12	1.01	.96	.93	1.07	1.08	(X)	(X)
517	Petroleum & petroleum products	.32	.30	.27	.27	.27	.29	.30	.28	.27	.29	.35	.36	.35	(X)	(X)
518	Beer, wine, & distilled beverages	1.41	1.49	1.28	1.17	1.11	1.10	1.07	1.12	1.17	1.20	1.08	1.20	.84	(X)	(X)
519	Misc. nondurable goods	1.31	1.25	1.04	.94	.79	.95	.99	.96	.99	1.02	.99	.99	1.01	(X)	(X)

^PPreliminary estimate. See sample design and estimation procedures in *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 through December 1986*.
X Cumulative data are not applicable for inventories or stock/sales ratios, cumulative seasonally adjusted sales estimates are not tabulated.

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. 1987 from Sept. 1987	Oct. 1987 from Oct. 1986	10 months 1987 from 10 months 1986	Oct. 1987 from Sept. 1987	Oct. 1987 from Oct. 1986	Oct. 1987 from Sept. 1987	Oct. 1987 from Oct. 1986	Oct. 1987 from Sept. 1987	Oct. 1987 from Oct. 1986
	Total	+3.7	+8.5	+8.9	+2.9	+5.5	+4	+11.3	+1.3	+5.4
50	Durable goods	+4.3	+7.1	+9.0	+1.1	+3.3	+7	+10.0	+1.4	+3.4
501	Motor vehicles & auto. equip.	+16.3	-.9	+3.3	-.4	+13.5	+2.4	+7	+3	+13.6
502	Furniture & home furnishings	-6.4	+2.4	+5.8	-3.1	+31.5	-9.7	+6.3	-1.9	+31.4
503	Lumber & other construction mat.	+2	+14.1	+17.0	-2.1	+11.2	-.5	+19.6	-.5	+11.2
504	Sporting, recreational, photographic, & hobby goods, toys & supplies.	+7.9	-10.3	+1.8	-1.5	+3.9	-.5	-6.7	-.5	+3.6
505	Metals & minerals, ex. petroleum	-5.2	+12.0	+14.9	+7	-2.0	-.2	+16.4	+2.0	-1.9
506	Electrical goods	+4.0	+1.9	+5.6	+2.2	-1.8	+2	+2.9	+3.5	-1.7
507	Hardware, plumbing & heating equipment	+4.1	+17.3	+15.0	+4.9	+5.1	-1.2	+20.0	+5.2	+5.1
508	Machinery, equip. & supplies	-2.8	+9.0	+10.8	+2.2	-3.5	-1.2	+12.5	+1.1	-3.5
509	Miscellaneous durable goods	+19.0	+19.3	+9.9	+2.4	+7.1	+11.6	+21.7	+2.5	+7.0
51	Nondurable goods	+3.1	+9.8	+8.7	+6.1	+9.4	+2	+12.5	+1.2	+9.4
511	Paper & paper products	+6.2	+21.9	+15.0	+.8	+5.3	+2.4	+25.1	+.2	+5.2
512	Drugs, drug proprietaries and druggists' sundries	-1.3	+1.6	+13.4	+8.7	+21.2	-2.1	+4.8	+5.5	+21.1
513	Apparel, piece goods & notions	+11.1	+7.8	+8.0	-.2	+16.6	+4.7	+9.8	+2.3	+16.5
514	Groceries & related products	+.8	+.3	+5.5	+2.5	+5.4	+.8	+2.6	-2.3	+5.4
515	Farm-product raw materials	+16.8	+25.0	+8.6	+27.8	+5.8	+1.2	+25.7	+3.5	+5.8
516	Chemicals & allied products	+5.3	+5.7	+1.5	+.3	+9.4	+2.9	+10.5	-3.5	+9.9
517	Petroleum & petroleum products	-4.4	+27.6	+15.1	+1.9	+4.4	-3.9	+30.4	+1.3	+4.4
518	Beer, wine, & distilled beverages	+4.1	+2.2	+4.6	+6.8	+13.7	+1.8	+6.2	+.8	+13.9
519	Misc. nondurable goods	+2.5	+4.9	+8.6	+6.5	+8.5	+.2	+8.1	+3.0	+8.3

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 1982 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

Estimates based on a sample survey will differ from the value derived from the population because of sampling variability and nonsampling error. Sampling variability occurs 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 variability 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 3. 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 correspond-

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

ing percent for that estimate shown in the sampling variability table. In about 9 out of 10 (90 percent) of these samples, the estimates would differ from the results of a complete enumeration by less than 1.65 times the percentages shown. In about 19 out of 20 (95 percent) of these samples, the estimate would differ from the results of a complete enumeration by less than twice the percentages shown.

To illustrate the computations involved in the above confidence statements, as related to dollar volume sales estimates, assume that an estimate of sales published in table 1B is \$10,750 million for a particular month and that the median coefficient of variation for this estimate as given in table 3, is 1.8 percent, or 0.018. Multiplying \$10,750 million by 0.018 yields \$194 million. Therefore a 67-percent confidence interval is \$10,556 million to \$10,944 million (\$10,750 million plus or minus \$194 million). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately 2 out of 3 (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Typical practice is to construct 90 or 95 percent confidence intervals. Continuing with the illustration, a 90-percent confidence interval is \$10,430 million to \$11,070 million (\$10,750 million plus or minus \$320 million). A 95-percent confidence interval is \$10,362 million to \$11,138 million (\$10,750 million plus or minus \$388 million).

All comparisons appearing on the front page of this publication and for which measures of sampling variability are available are accompanied by an indication of the 90-percent confidence interval. Thus a statement such as "+0.8 (± 1.3)" indicates a 90-percent confidence interval from -0.5 to +2.1. If the confidence interval contains zero, it is uncertain whether there is an increase or decrease.

Nonsampling Errors

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 34 percent of the sales estimates and 38 percent for inventories.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventory estimates in this report reflect the results of a benchmarking² operation which made use of 1984 and 1985 estimates tabulated from the 1985 Annual Trade Survey. The sales estimates for the period January 1984 through December 1986 were derived in a manner so that the sum of the 12 months for 1984 and 1985 were equal to the sales estimates published in the 1984 and 1985 Annual Trade Surveys. The revision process was conducted so as to minimize changes to previously published month-to-month trends. The estimates for the original series were derived by using composite estimation procedures. Using inventory results from the annual surveys for the years 1980 to 1985, monthly inventories were revised to a non-LIFO basis. Through the use of carry-forward factors, the effect of the revision process was applied to composite sales and inventory estimates subsequent to December 1985. These factors were derived at various kind-of-business levels and are held constant until the next benchmarking operation. Aggregate level estimates were derived by summing appropriate three-digit kind-of-business estimates, thereby assuring additivity.

CLASSIFICATION DIFFERENCES BETWEEN MONTHLY SURVEY AND 1977 AND 1982 CENSUSES OF WHOLESALE TRADE

For SIC 505, the monthly survey included merchant wholesalers as well as sales branches of ferrous metals service centers with inventories. Therefore, the 1977 and 1982 census sales estimates included the receipts of merchant wholesalers and sales branches of ferrous metals service centers with inventories.

Establishments classified in the Farm-Product Raw Materials group (SIC 515) included as sales, products purchased and transferred to other company establishments. In the monthly survey, intercompany transfers are not included in sales. Because of the differences, the 1977 and 1982 sales for the SIC were obtained from the 1977 and 1982 Annual Trade Surveys (ATS).

Inventories were not benchmarked to the census levels since the census of wholesale trade does not include inventories of auxiliary and central administrative offices of merchant wholesale establishments which are included in the monthly survey. The inventory estimates for the years 1977 and 1982 were computed by multiplying the stock/sales ratios obtained from the annual surveys by the census sales for these years.

Unpublished Data

Sales and inventory estimates for unpublished four-digit wholesale trade categories are not included in this publication because their sampling variability is so high, relative to

²For a more detailed description, see the section dealing with revisions to published data in the Current Business Reports publication, *Revised Monthly Wholesale Trade: December 1980 Through December 1986*.

the changes from month-to-month or between other periods, as to make them potentially misleading. The Census Bureau, for a nominal fee 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 on a non-LIFO basis 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. Methods of valuation may vary according to the accounting practices of the firm.

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 current and past experiences. Therefore, the adjusted could become less precise if 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.

Concurrent Seasonal Adjustment

Concurrent seasonal adjustment uses all available unadjusted estimates (including the latest preliminary estimates) as input to the X-11 program. After the last benchmarking operation, factors were developed and used to derive adjusted sales estimates for the period January 1984 through January 1987. Factors were developed and used to derive non-LIFO inventory estimates for the period December 1980 through January 1987. When unadjusted preliminary and final estimates become available, all estimates will be used as input to the X-11 program and new factors will be applied to the preliminary and final (one month before the preliminary) estimates and to the previous year estimates that correspond to the preliminary month.

Table 4 presents, by kind of business, the combined seasonal and trading-day factors that are used to adjust inventory and sales estimates. For all kind of business, one month of projected factors are shown. These projected factors are estimates of the factors that will be used to derive adjusted estimates.

Table 3. 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	1.1-1.6	1.2	0.9-1.4	1.3	0.3-0.6	0.4	0.9-2.2	1.5	1.0-1.9	1.3	0.2-1.6	0.4
501	Durable goods, total	1.3-1.7	1.5	1.2-1.8	1.4	0.5-0.8	0.6	1.4-3.3	2.0	1.4-2.4	1.7	0.2-2.5	0.4
502	Motor vehicles and automotive parts and supplies	2.1-4.0	3.2	2.0-3.7	3.1	0.8-1.7	1.3	3.6-5.7	4.6	3.6-5.4	4.4	0.4-1.5	0.7
503	Furniture and home furnishings	6.6-9.6	7.9	5.3-8.6	7.3	2.1-6.2	3.3	5.3-12.3	10.0	5.0-12.8	10.2	0.7-3.2	1.2
504	Lumber and other construction materials	4.8-7.1	5.8	4.3-7.2	5.5	1.1-2.5	1.8	6.2-11.8	7.5	5.4-11.5	7.4	0.6-3.0	1.3
505	Sporting, recreational, photographic, & hobby goods, toys & supplies	9.3-22.9	11.4	8.8-20.8	10.9	2.3-5.3	3.3	7.2-16.2	10.8	8.5-16.7	10.6	0.9-2.4	1.6
506	Metals and minerals, ex. petroleum	2.4-6.6	4.9	2.5-6.5	4.2	0.8-2.0	1.4	4.0-6.9	4.8	3.2-6.8	4.8	0.5-2.1	0.7
507	Electrical goods	1.9-9.2	2.2	1.4-8.6	2.3	1.1-2.5	1.7	1.6-9.2	2.6	1.7-8.7	2.3	0.5-1.1	0.7
508	Hardware, plumbing, heating equipment, and supplies	4.4-7.8	6.7	4.3-8.7	6.8	1.3-2.9	2.0	4.8-9.3	6.0	4.5-9.2	6.1	0.5-2.1	0.6
509	Machinery, equipment, and supplies	2.5-4.2	2.8	1.9-3.4	2.9	1.0-2.1	1.7	2.3-9.0	4.4	2.4-5.8	3.8	0.4-6.4	0.6
51	Miscellaneous durable goods	3.5-4.9	3.9	3.0-4.3	3.7	1.4-2.5	1.9	4.5-8.6	6.6	4.3-9.1	6.8	0.5-2.4	0.9
511	Nondurable goods, total	1.5-3.2	1.8	1.5-3.1	1.6	0.5-1.0	0.7	1.5-2.6	2.2	1.6-2.8	2.2	0.3-0.8	0.4
512	Paper and paper products	2.9-5.1	4.0	3.4-4.5	4.0	1.2-2.9	1.9	5.1-7.3	6.4	4.5-7.1	6.5	0.6-2.2	0.8
513	Drugs, drug proprietaries and druggists' sundries	4.5-9.3	7.8	4.8-9.0	7.2	0.8-2.1	1.5	4.5-9.6	7.2	4.6-9.7	7.5	0.6-2.6	1.0
514	Apparel, piece goods, & notions	4.2-7.5	4.7	3.2-7.3	4.7	1.9-4.9	2.7	3.8-11.3	8.5	4.1-11.6	8.4	0.6-2.6	1.5
515	Groceries and related products	2.6-5.8	3.6	2.1-5.6	3.5	0.6-2.8	1.2	4.6-7.6	6.2	4.4-8.8	6.1	0.5-1.8	1.0
516	Farm-product raw materials	2.9-6.3	5.0	2.5-8.5	4.0	2.5-5.3	3.8	3.7-6.8	6.1	5.2-6.3	5.7	0.8-3.3	1.5
517	Chemicals & allied products	4.6-10.1	8.2	4.3-9.3	7.4	1.4-5.1	3.1	6.6-13.0	7.5	6.3-12.9	7.0	0.4-2.9	1.7
518	Petroleum & petroleum products	2.8-10.4	3.5	2.6-11.6	3.3	0.4-3.0	1.0	2.9-12.0	4.2	2.9-14.1	4.3	0.5-6.0	1.1
519	Beer, wine, and distilled alcoholic beverages	2.9-7.3	5.0	2.4-8.8	5.4	0.9-3.8	2.0	4.9-6.1	5.2	4.9-5.7	5.0	0.8-1.8	1.1
	Misc. nondurable goods	2.3-7.3	4.9	4.0-7.1	4.5	0.7-2.8	2.0	6.0-10.5	7.3	6.0-10.5	6.9	0.7-3.0	1.0

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 1986 through January 1987.

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Table 4. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers

SIC code	Kind of business	1986			1987										
		Oct. ¹	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept. ¹	Oct. ¹	Nov.
	Sales, ¹ Total	1.059	.962	1.035	.953	.905	1.035	1.019	1.007	1.039	.998	.976	1.009	1.032	.987
50	Durable goods	1.091	.956	1.010	.920	.890	1.031	1.027	.991	1.053	1.004	.985	1.031	1.065	.980
501	Motor vehicles & auto. equip.	1.094	.954	1.011	.958	.871	1.014	1.034	1.037	1.083	1.034	.969	.948	1.077	.965
502	Furniture & home furnishings	1.154	.976	.974	.868	.882	.991	1.013	.991	1.058	1.033	1.005	1.073	1.113	1.008
503	Lumber & other construction mat.	1.148	.953	.876	.811	.793	.955	1.044	1.040	1.120	1.113	1.090	1.087	1.095	.992
504	Sporting, recreational, photographic & hobby goods, toys & supplies	1.213	1.066	1.011	.849	.877	.981	1.000	.888	.978	.990	.996	1.074	1.166	1.128
505	Metals & minerals, ex. petroleum ..	1.044	.892	.983	.968	.944	1.098	1.040	.985	1.034	.987	.991	1.058	1.005	.925
506	Electrical goods	1.117	1.012	1.062	.912	.907	1.017	.949	.927	1.013	.989	.999	1.066	1.107	1.025
507	Hardware, plumbing & heating equipment	1.096	.957	.960	.932	.902	.968	1.041	1.008	1.081	1.049	1.000	1.018	1.072	.971
508	Machinery, equip. & supplies	1.044	.930	1.043	.908	.907	1.065	1.050	1.005	1.053	.986	.968	1.028	1.011	.955
509	Miscellaneous durable goods	1.124	.989	.954	.954	.893	1.033	1.138	.993	.997	.935	1.008	1.033	1.102	1.026
51	Nondurable goods	1.032	.968	1.056	.982	.917	1.041	1.007	1.020	1.021	.992	.968	.992	1.008	.995
511	Paper & paper products	1.073	.943	1.005	.979	.939	1.035	1.018	.958	1.035	.998	1.009	1.007	1.045	.966
512	Drugs, drug proprietaries and druggists' sundries	1.076	.949	1.025	1.001	.927	1.026	1.030	.955	1.010	.987	.955	1.036	1.044	.977
513	Apparel, piece goods & notions	1.144	.894	.779	.887	1.039	1.038	.977	.879	1.070	1.112	1.155	1.058	1.123	.913
514	Groceries & related products	1.030	.964	1.025	.978	.915	1.006	1.007	1.020	1.012	1.033	.995	1.007	1.007	.972
515	Farm-product raw materials	1.011	1.075	1.186	1.090	.969	1.083	.977	1.020	.955	.877	.848	.870	1.005	1.108
516	Chemicals & allied products	1.111	.914	.930	.991	.925	1.041	1.022	1.000	1.068	.997	.986	1.039	1.063	.955
517	Petroleum & petroleum products	1.023	.987	1.114	1.104	.958	1.061	.975	.957	.959	.935	.903	1.007	1.001	1.006
518	Beer, wine, & distilled beverages ..	1.082	.984	1.201	.760	.774	.927	.984	1.024	1.098	1.102	1.038	1.019	1.042	1.004
519	Misc. nondurable goods	1.005	.915	1.017	.856	.856	1.079	1.101	1.180	1.070	1.012	.958	.953	.975	.962
	Inventories, ¹ total	1.008	1.010	1.007	1.003	1.006	1.009	1.006	.992	.995	.990	.985	.997	1.008	1.008
50	Durable goods	1.003	.997	.995	.985	.993	1.002	1.004	1.000	1.008	1.005	1.002	1.010	1.002	.997
501	Motor vehicles & auto. equip.	1.016	1.006	1.016	.998	1.002	1.008	1.005	.988	1.004	.976	.959	1.022	1.015	1.006
502	Furniture & home furnishings	.993	.985	1.027	1.014	1.012	.994	.976	.996	.995	.992	1.014	1.007	.994	.983
503	Lumber & other construction mat.	.981	.985	.996	.961	.997	1.026	1.030	1.002	1.026	1.018	1.012	.997	.981	.984
504	Sporting, recreational, photographic & hobby goods, toys & supplies	1.003	.976	.977	.984	.990	1.008	1.001	.993	1.012	1.028	1.016	1.016	1.006	.979
505	Metals & minerals, ex. petroleum ..	.982	.987	1.013	1.007	1.000	.993	.987	.997	1.016	1.009	.997	.993	.981	.983
506	Electrical goods	1.022	1.005	.984	.969	.970	.978	.995	.992	1.000	1.025	1.023	1.034	1.021	1.002
507	Hardware, plumbing & heating equipment	.983	.980	.962	.972	.999	1.028	1.042	1.032	1.011	1.017	1.000	.986	.983	.980
508	Machinery, equip. & supplies	1.007	.991	.997	.985	.994	1.006	1.005	1.006	1.011	1.004	1.006	.996	1.007	.988
509	Miscellaneous durable goods	1.025	1.029	.957	.974	.996	.978	.994	1.010	.995	1.019	1.025	1.027	1.026	1.015
51	Nondurable goods	1.021	1.029	1.031	1.036	1.029	1.022	1.008	.972	.972	.962	.950	.973	1.020	1.031
511	Paper & paper products	.982	1.007	.995	.994	1.007	1.003	1.004	1.003	1.005	1.000	1.006	.976	.982	1.006
512	Drugs, drug proprietaries and druggists' sundries	1.028	.974	.994	1.023	1.031	1.052	1.019	.981	.969	.965	.961	.999	1.029	.974
513	Apparel, piece goods & notions	1.009	.944	.994	1.000	.986	.948	.966	1.014	1.033	1.078	1.065	1.035	1.010	.938
514	Groceries & related products	1.037	1.041	1.000	.979	1.009	.997	.994	.999	1.002	.981	.965	.989	1.037	1.048
515	Farm-product raw materials	1.077	1.186	1.213	1.251	1.157	1.088	.996	.819	.810	.785	.792	.872	1.077	1.176
516	Chemicals & allied products	1.002	1.004	.983	.990	1.006	.998	1.035	1.009	1.012	1.011	.998	.959	.997	1.003
517	Petroleum & petroleum products	1.016	1.034	1.090	1.062	.921	.931	.943	.996	1.006	.984	.942	1.010	1.016	1.037
518	Beer, wine, & distilled beverages ..	1.065	1.062	.912	.942	.959	.997	1.022	1.005	1.032	1.011	.987	1.004	1.063	1.051
519	Misc. nondurable goods	.987	.958	1.018	1.033	1.071	1.111	1.072	.980	.971	.936	.930	.957	.989	.959

¹Revised

¹Adjusted sales and inventory data shown in table 1A 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: The seasonal factors shown have been computed based on monthly estimates through the current month preliminary estimates.



Monthly Wholesale Trade

Sales and Inventories

U.S. Department of Commerce
BUREAU OF THE CENSUS

October 1987

BW87-10
Issued December 1987

Sales. October 1987 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$130.5 billion, up 0.4 percent (± 1.1 percent) from the revised September level and up 11.3 percent from a year ago. The September preliminary estimate was revised upward by \$0.09 billion or about 0.07 percent. October sales of durable goods increased 0.7 percent (± 1.5 percent) from September and were 10.0 percent above a year ago. Sales in the miscellaneous durable goods category rose 11.6 percent from September to \$6,314 million. October sales of nondurable goods were up 0.2 percent (± 1.5 percent) from September and were 12.5 percent above October 1986.

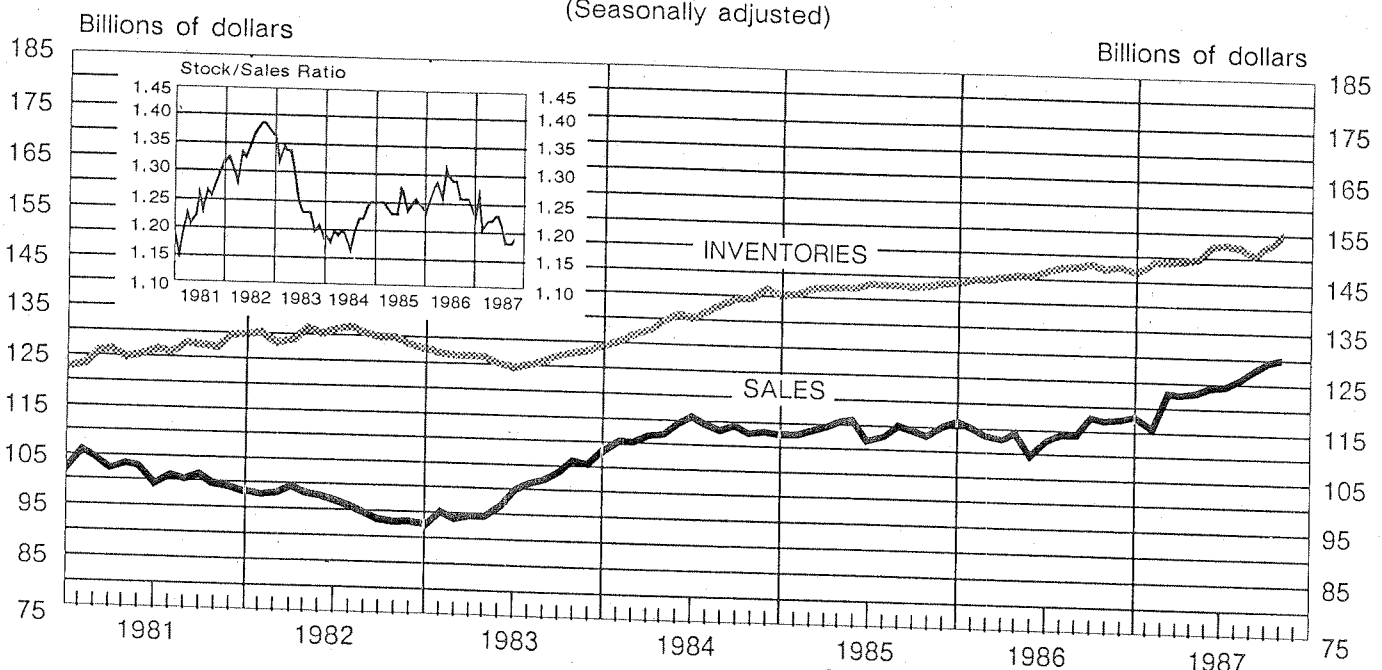
Inventories. Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$155.3 billion at the end of October, up 1.3

percent (± 0.5 percent) from the revised September level and up 5.4 percent from a year ago. The September preliminary estimate was revised downward by \$0.05 billion or about 0.03 percent. Inventories of durable goods wholesalers increased 1.4 percent (± 0.6 percent) from the September level and were 3.4 percent above a year ago. Inventories of nondurable goods wholesalers were up 1.2 percent (± 1.0 percent) from the September level and were up 9.4 percent from October 1986.

Stock/Sales Ratio. The October stock/sales ratio for merchant wholesalers, based on seasonally adjusted data was 1.19. The year ago ratio was 1.26.

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 4.

Monthly Sales, Inventories, and Stock/Sales Ratios
of Merchant Wholesalers: 1981-1987
(Seasonally adjusted)



Monthly Wholesale Trade for November is scheduled to be released January 7, 1988 at 10:00.

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.

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Table 1A. Adjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1987 and 1986

(Data adjusted for seasonal variation and, in the case of sales, also for trading-day differences. Sales and Inventories in millions of dollars)

SIC code	Kind of business	1987										1986			
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct. ^p	Oct. ^r	Nov.	Dec.	
	Sales, Total.	116,545	123,281	123,009	123,439	124,486	124,836	126,196	128,164	129,912	130,487	117,284	117,734	118,446	
50	Durable goods	55,893	59,344	59,498	59,016	59,413	60,274	60,784	61,065	62,238	62,654	56,982	56,758	57,833	
501	Motor vehicles & auto. equip.	11,334	12,931	12,890	12,338	12,339	12,073	12,001	12,518	12,612	12,911	12,820	12,459	12,966	
502	Furniture & home furnishings	2,377	2,304	2,370	2,190	2,179	2,117	2,260	2,376	2,670	2,411	2,269	2,170	2,227	
503	Lumber & other construction mat.	4,543	4,571	4,831	4,696	4,791	5,171	5,252	5,083	5,296	5,270	4,408	4,391	4,635	
504	Sporting, recreational, photographic & hobby goods, toys & supplies.	1,645	1,718	1,554	1,480	1,417	1,449	1,505	1,605	1,480	1,472	1,577	1,622	1,627	
505	Metals & minerals, ex. petroleum	4,983	5,267	5,493	5,192	5,364	5,524	5,612	5,795	5,757	5,747	4,939	4,937	4,852	
506	Electrical goods	7,899	8,270	8,023	8,207	8,249	8,085	8,339	8,381	8,055	8,068	7,844	7,630	7,812	
507	Hardware, plumbing & heating equipment	3,667	3,891	4,191	3,981	3,944	4,247	4,186	4,269	4,537	4,484	3,738	3,695	3,922	
508	Machinery, equip. & supplies	14,787	15,230	15,146	15,345	15,348	15,439	15,670	15,866	16,171	15,977	14,197	14,671	15,027	
509	Miscellaneous durable goods	4,658	5,162	5,000	5,587	5,782	6,169	5,759	5,172	5,660	6,314	5,190	5,183	4,765	
51	Nondurable goods	60,652	63,937	63,511	64,423	65,073	64,562	65,412	67,099	67,674	67,833	60,302	60,976	60,613	
511	Paper & paper products	3,564	3,706	3,671	3,705	3,685	3,844	3,938	3,993	4,197	4,296	3,433	3,453	3,584	
512	Drugs, drug proprietaries and druggists' sundries	2,514	2,608	2,507	2,513	2,630	2,610	2,608	2,578	2,613	2,558	2,442	2,524	2,484	
513	Apparel, piece goods & notions	3,417	3,852	3,894	3,318	3,476	3,615	3,563	3,784	3,935	4,119	3,753	3,709	3,300	
514	Groceries & related products	20,429	20,596	20,021	20,625	20,914	20,762	20,971	20,750	20,375	20,534	20,007	20,094	20,023	
515	Farm-product raw materials	6,174	6,496	6,632	6,952	6,903	7,254	7,620	8,152	8,378	8,475	6,741	6,384	6,358	
516	Chemicals & allied products	2,055	1,990	2,100	2,192	2,143	2,191	2,214	2,176	2,204	2,269	2,054	2,225	2,097	
517	Petroleum & petroleum products	10,253	11,297	11,442	11,452	11,537	11,278	12,160	12,307	12,197	11,727	8,995	9,224	9,724	
518	Beer, wine, & distilled beverages	3,550	3,621	3,589	3,603	3,590	3,442	3,377	3,387	3,454	3,517	3,313	3,420	3,446	
519	Misc. nondurable goods	8,696	9,771	9,655	10,063	10,195	9,566	8,961	9,972	10,321	10,338	9,564	9,943	9,597	
	Inventories, total	149,347	149,408	149,565	150,050	152,673	153,093	152,648	151,222	153,245	155,292	147,268	148,204	147,375	
50	Durable goods	97,280	96,594	97,491	97,891	100,056	99,504	99,099	97,980	98,482	99,857	96,606	97,652	95,710	
501	Motor vehicles & auto. equip.	18,782	19,176	19,209	19,360	20,678	20,090	20,183	20,368	20,316	20,380	17,934	18,834	18,643	
502	Furniture & home furnishings	3,510	3,558	3,697	3,885	4,038	4,045	4,178	4,029	4,189	4,111	3,129	3,132	3,333	
503	Lumber & other construction mat.	4,907	4,846	5,022	5,207	5,520	5,491	5,599	5,350	5,616	5,588	5,024	5,017	4,940	
504	Sporting, recreational, photographic & hobby goods, toys & supplies.	3,436	3,473	3,492	3,444	3,481	3,486	3,731	3,700	3,695	3,676	3,547	3,541	3,387	
505	Metals & minerals, ex. petroleum	9,508	9,182	9,377	9,449	9,477	9,539	9,150	8,823	8,972	9,149	9,329	9,088	9,359	
506	Electrical goods	13,864	14,092	14,082	13,545	13,867	13,698	13,321	13,338	12,846	13,290	13,516	13,815	13,576	
507	Hardware, plumbing & heating equipment	6,576	6,509	6,504	6,187	6,259	6,427	6,339	6,305	6,617	6,960	6,623	6,611	6,642	
508	Machinery, equip. & supplies	31,984	31,106	31,182	31,554	31,011	31,153	31,239	30,900	31,136	31,481	32,622	33,087	31,007	
509	Miscellaneous durable goods	4,713	4,652	4,926	5,260	5,725	5,575	5,359	5,167	5,095	5,222	4,882	4,527	4,823	
51	Nondurable goods	52,067	52,814	52,074	52,159	52,617	53,589	53,549	53,242	54,763	55,435	50,662	50,552	51,665	
511	Paper & paper products	3,595	3,535	3,563	3,554	3,517	3,522	3,548	3,449	3,601	3,609	3,429	3,383	3,570	
512	Drugs, drug proprietaries and druggists' sundries	4,385	4,394	4,152	4,455	4,357	4,422	4,628	4,617	4,656	4,913	4,056	4,143	4,246	
513	Apparel, piece goods & notions	7,061	7,142	7,310	7,071	7,201	7,500	7,072	7,143	7,471	7,643	6,560	6,841	6,928	
514	Groceries & related products	12,074	11,915	11,614	11,743	11,865	12,001	12,671	12,368	12,751	12,464	11,830	11,983	12,185	
515	Farm-product raw materials	5,954	5,978	5,748	6,184	6,529	6,644	6,400	6,125	6,362	6,583	6,224	5,712	5,636	
516	Chemicals & allied products	2,121	2,253	2,223	2,227	2,374	2,341	2,290	2,412	2,406	2,321	2,112	2,161	2,144	
517	Petroleum & petroleum products	3,405	3,468	3,469	3,198	3,047	3,103	3,428	3,294	3,276	3,319	3,178	3,140	3,449	
518	Beer, wine, & distilled beverages	4,033	4,347	4,273	4,061	4,066	4,012	3,924	4,001	4,108	4,142	3,635	3,794	3,818	
519	Misc. nondurable goods	9,439	9,782	9,722	9,666	9,661	10,044	9,588	9,833	10,132	10,441	9,638	9,395	9,689	
	Stock/sales ratios, total	1.28	1.21	1.22	1.22	1.23	1.23	1.21	1.18	1.18	1.19	1.26	1.26	1.24	
50	Durable goods	1.74	1.63	1.64	1.66	1.68	1.65	1.63	1.60	1.58	1.59	1.70	1.72	1.65	
501	Motor vehicles & auto. equip.	1.66	1.48	1.49	1.57	1.68	1.66	1.68	1.63	1.61	1.58	1.40	1.51	1.44	
502	Furniture & home furnishings	1.48	1.54	1.56	1.77	1.85	1.91	1.85	1.70	1.57	1.71	1.38	1.44	1.50	
503	Lumber & other construction mat.	1.08	1.06	1.04	1.11	1.15	1.06	1.07	1.05	1.06	1.06	1.14	1.14	1.07	
504	Sporting, recreational, photographic & hobby goods, toys & supplies.	2.09	2.02	2.25	2.33	2.46	2.41	2.48	2.31	2.50	2.50	2.25	2.18	2.08	
505	Metals & minerals, ex. petroleum	1.91	1.74	1.71	1.82	1.77	1.73	1.63	1.52	1.56	1.59	1.89	1.84	1.93	
506	Electrical goods	1.76	1.70	1.76	1.65	1.68	1.69	1.60	1.59	1.59	1.65	1.72	1.81	1.74	
507	Hardware, plumbing & heating equipment	1.79	1.67	1.55	1.55	1.59	1.51	1.51	1.48	1.46	1.55	1.77	1.79	1.69	
508	Machinery, equip. & supplies	2.16	2.04	2.06	2.06	2.02	2.02	1.97	1.95	1.93	1.97	2.30	2.26	2.06	
509	Miscellaneous durable goods	1.01	.90	.99	.94	.99	.90	.93	1.00	.90	.83	.94	.87	1.01	
51	Nondurable goods	.86	.83	.82	.81	.81	.83	.82	.79	.81	.82	.84	.83	.85	
511	Paper & paper products	1.01	.95	.97	.96	.95	.92	.90	.86	.86	.84	1.00	.98	1.00	
512	Drugs, drug proprietaries and druggists' sundries	1.74	1.68	1.66	1.77	1.66	1.69	1.77	1.79	1.78	1.92	1.66	1.64	1.71	
513	Apparel, piece goods & notions	2.07	1.85	1.88	2.13	2.07	2.07	1.98	1.89	1.90	1.86	1.75	1.84	2.10	
514	Groceries & related products	.59	.58	.58	.57	.57	.58	.60	.60	.63	.61	.59	.60	.61	
515	Farm-product raw materials	.96	.92	.87	.89	.95	.92	.84	.75	.76	.78	.92	.89	.89	
516	Chemicals & allied products	1.03	1.13	1.06	1.02	1.11	1.07	1.03	1.11	1.09	1.02	1.03	.97	1.02	
517	Petroleum & petroleum products	.33	.31	.30	.28	.26	.28	.28	.27	.27	.28	.35	.34	.35	
518	Beer, wine, & distilled beverages	1.14	1.20	1.19	1.13	1.13	1.17	1.16	1.18	1.19	1.18	1.10	1.11	1.11	
519	Misc. nondurable goods	1.09	1.00	1.01	.96	.95	1.05	1.07	.99	.98	1.01	1.01	.94	1.01	

^rRevised.

^pPreliminary estimate. See sample design and estimation procedures in Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 through December 1986.

Table 1B. Unadjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1987 and 1986

(Data not adjusted for seasonal variation or trading-day differences. Sales and Inventories in millions of dollars)

SIC code	Kind of business	1987											1986		Total 11 mos.	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. ^P	Nov.	Dec.	1987	1986
	Sales, Total	110,564	111,705	126,908	126,354	125,630	129,016	126,469	125,361	130,767	135,834	126,173	113,152	121,499	1,374,781	1,259,812
50	Durable goods	51,319	52,834	61,100	61,161	59,270	63,423	61,290	60,613	63,936	67,409	60,022	54,350	58,033	662,377	606,075
501	Motor vehicles & auto. equip.	10,858	11,263	13,070	12,758	12,796	13,075	12,409	12,130	11,956	13,985	12,336	11,886	13,109	136,636	132,107
502	Furniture & home furnishings	2,063	2,032	2,349	2,218	2,159	2,240	2,335	2,388	2,865	2,829	2,406	2,118	2,169	25,884	24,168
503	Lumber & other construction mat.	3,684	3,625	4,614	4,903	4,983	5,791	5,846	5,540	5,757	5,716	4,856	4,185	4,060	55,315	47,375
504	Sporting, recreational, photographic & hobby goods, toys & supplies	1,397	1,507	1,524	1,480	1,258	1,417	1,490	1,599	1,590	1,750	1,561	1,729	1,645	16,573	16,436
505	Metals & minerals, ex. petroleum	4,824	4,972	6,031	5,400	5,284	5,712	5,539	5,743	6,091	5,936	5,418	4,404	4,770	60,950	52,577
506	Electrical goods	7,204	7,501	8,159	7,788	7,647	8,190	8,247	8,373	8,587	8,923	8,291	7,722	8,296	88,910	84,054
507	Hardware, plumbing & heating equipment	3,418	3,510	4,057	4,144	3,976	4,591	4,391	4,269	4,619	4,786	4,344	3,536	3,765	46,105	39,853
508	Machinery, equip. & supplies	13,427	13,814	16,131	16,112	15,425	16,257	15,648	15,358	16,624	16,555	14,665	13,644	15,673	170,016	153,543
509	Miscellaneous durable goods	4,444	4,610	5,165	6,358	5,742	6,150	5,385	5,213	5,847	6,929	6,145	5,126	4,546	61,988	55,962
51	Nondurable goods	59,245	58,871	65,808	65,193	66,360	65,593	65,179	64,748	66,831	68,425	66,151	58,802	63,466	712,404	653,737
511	Paper & paper products	3,489	3,480	3,800	3,772	3,530	3,979	3,930	4,029	4,226	4,524	4,397	3,256	3,602	43,156	36,919
512	Drugs, drug proprietaries and druggists' sundries	2,517	2,418	2,572	2,588	2,512	2,636	2,574	2,462	2,707	2,627	2,533	2,395	2,546	28,146	25,030
513	Apparel, piece goods & notions	3,031	4,002	4,042	3,242	3,055	3,868	3,962	4,370	4,163	4,379	3,684	3,316	2,571	41,798	38,840
514	Groceries & related products	19,980	18,845	20,141	20,769	21,332	21,011	21,663	20,646	20,518	20,913	21,555	19,371	20,524	227,273	214,224
515	Farm-product raw materials	6,730	6,295	7,182	6,792	7,041	6,928	6,683	6,913	7,289	8,349	7,207	6,863	7,541	77,409	71,654
516	Chemicals & allied products	2,037	1,841	2,186	2,240	2,143	2,340	2,207	2,146	2,290	2,453	2,328	2,034	1,950	24,211	23,557
517	Petroleum & petroleum products	11,319	10,823	12,140	11,166	11,041	10,816	11,370	11,113	12,282	11,893	11,722	9,104	10,833	125,685	107,980
518	Beer, wine, & distilled beverages	2,698	2,803	3,327	3,545	3,676	3,779	3,721	3,516	3,520	3,585	3,422	3,365	4,139	37,592	36,123
519	Misc. nondurable goods	7,444	8,364	10,418	11,079	12,030	10,236	9,069	9,553	9,836	9,702	9,403	9,098	9,760	107,134	99,410
	Inventories, total	149,548	150,166	150,882	150,853	151,371	152,651	151,258	148,823	152,788	157,872	159,166	148,804	148,245	(X)	(X)
50	Durable goods	95,895	95,989	97,667	98,249	100,083	100,288	99,537	97,919	99,294	101,601	101,833	97,210	95,353	(X)	(X)
501	Motor vehicles & auto. equip.	18,744	19,214	19,363	19,457	20,430	20,170	19,699	19,533	20,763	20,794	21,528	18,947	18,941	(X)	(X)
502	Furniture & home furnishings	3,559	3,601	3,675	3,792	4,022	4,025	4,145	4,085	4,218	4,113	4,078	3,085	3,423	(X)	(X)
503	Lumber & other construction mat.	4,716	4,831	5,153	5,363	5,531	5,634	5,700	5,414	5,599	5,563	5,606	4,942	4,920	(X)	(X)
504	Sporting, recreational, photographic & hobby goods, toys & supplies	3,381	3,438	3,520	3,447	3,457	3,528	3,835	3,759	3,754	3,709	3,551	3,456	3,309	(X)	(X)
505	Metals & minerals, ex. petroleum	9,575	9,182	9,311	9,326	9,449	9,692	9,232	8,797	8,909	9,287	9,419	8,970	9,481	(X)	(X)
506	Electrical goods	13,434	13,669	13,772	13,477	13,756	13,698	13,654	13,645	13,283	13,610	13,543	13,884	13,359	(X)	(X)
507	Hardware, plumbing & heating equipment	6,392	6,502	6,686	6,447	6,459	6,498	6,447	6,305	6,524	6,714	6,439	6,479	6,390	(X)	(X)
508	Machinery, equip. & supplies	31,504	30,919	31,369	31,712	31,197	31,496	31,364	31,085	31,011	32,539	32,437	32,789	30,914	(X)	(X)
509	Miscellaneous durable goods	4,590	4,633	4,818	5,228	5,782	5,547	5,461	5,296	5,233	5,272	5,232	4,658	4,616	(X)	(X)
51	Nondurable goods	53,653	54,177	53,215	52,604	51,288	52,363	51,721	50,904	53,494	56,271	57,333	51,594	52,892	(X)	(X)
511	Paper & paper products	3,573	3,560	3,574	3,568	3,528	3,540	3,548	3,470	3,515	3,744	3,780	3,407	3,552	(X)	(X)
512	Drugs, drug proprietaries and druggists' sundries	4,486	4,530	4,368	4,540	4,274	4,285	4,466	4,437	4,651	5,000	5,004	4,035	4,221	(X)	(X)
513	Apparel, piece goods & notions	7,061	7,042	6,930	6,831	7,302	7,747	7,624	7,607	7,733	7,291	7,107	6,458	6,886	(X)	(X)
514	Groceries & related products	11,820	12,022	11,579	11,673	11,853	12,025	12,430	11,935	12,611	13,017	13,378	12,474	12,185	(X)	(X)
515	Farm-product raw materials	7,448	6,916	6,254	6,159	5,347	5,382	5,024	4,851	5,548	7,112	7,388	6,774	6,836	(X)	(X)
516	Chemicals & allied products	2,100	2,267	2,219	2,305	2,395	2,369	2,315	2,407	2,307	2,350	2,382	2,170	2,108	(X)	(X)
517	Petroleum & petroleum products	3,616	3,194	3,230	3,016	3,035	3,122	3,373	3,103	3,309	3,336	3,322	3,247	3,759	(X)	(X)
518	Beer, wine, & distilled beverages	3,799	4,169	4,260	4,150	4,086	4,140	3,967	3,949	4,124	4,285	4,307	4,029	3,482	(X)	(X)
519	Misc. nondurable goods	9,750	10,477	10,801	10,362	9,468	9,753	8,974	9,145	9,696	10,136	10,665	9,000	9,863	(X)	(X)
	Stock/sales ratios, total	1.35	1.34	1.19	1.19	1.20	1.18	1.20	1.19	1.17	1.16	1.26	1.32	1.22	(X)	(X)
50	Durable goods	1.87	1.82	1.60	1.61	1.69	1.58	1.62	1.62	1.55	1.51	1.70	1.79	1.64	(X)	(X)
501	Motor vehicles & auto. equip.	1.73	1.71	1.48	1.53	1.60	1.54	1.59	1.61	1.74	1.49	1.75	1.59	1.44	(X)	(X)
502	Furniture & home furnishings	1.73	1.77	1.86	1.71	1.86	1.80	1.78	1.71	1.47	1.45	1.69	1.46	1.58	(X)	(X)
503	Lumber & other construction mat.	1.28	1.33	1.12	1.09	1.11	.97	.98	.98	.97	.97	1.15	1.18	1.21	(X)	(X)
504	Sporting, recreational, photographic & hobby goods, toys & supplies	2.42	2.28	2.31	2.33	2.75	2.49	2.57	2.35	2.36	2.12	2.27	2.00	2.01	(X)	(X)
505	Metals & minerals, ex. petroleum	1.98	1.85	1.54	1.73	1.79	1.70	1.67	1.53	1.46	1.56	1.74	2.04	1.99	(X)	(X)
506	Electrical goods	1.86	1.82	1.69	1.73	1.80	1.67	1.66	1.63	1.55	1.53	1.63	1.80	1.61	(X)	(X)
507	Hardware, plumbing & heating equipment	1.87	1.85	1.65	1.56	1.62	1.42	1.47	1.48	1.41	1.40	1.48	1.83	1.70	(X)	(X)
508	Machinery, equip. & supplies	2.35	2.24	1.94	1.97	2.02	1.94	2.00	2.02	1.87	1.97	2.21	2.40	1.97	(X)	(X)
509	Miscellaneous durable goods	1.03	1.00	.93	.82	1.01	.90	1.01	1.02	.89	.76	.85	.91	1.02	(X)	(X)
51	Nondurable goods	.91	.92	.81	.81	.77	.80	.79	.80	.80	.82	.87	.88	.83	(X)	(X)
511	Paper & paper products	1.02	1.02	.94	.95	1.00	.89	.90	.86	.83	.83	.86	1.05	.99	(X)	(X)
512	Drugs, drug proprietaries and druggists' sundries	1.78	1.87	1.70	1.75	1.70	1.63	1.74	1.80	1.72	1.90	1.98	1.68	1.66	(X)	(X)
513	Apparel, piece goods & notions	2.33	1.76	1.71	2.11	2.39	2.00	1.92	1.74	1.86	1.66	1.93	1.95	2.68	(X)	(X)
514	Groceries & related products	.59	.64	.67	.56	.56	.57	.57	.58	.61	.62	.62	.64	.59	(X)	(X)
515	Farm-product raw materials	1.11	1.10	.87	.91	.76	.78	.75	.70	.76	.85	1.03	.99	.91	(X)	(X)
516	Chemicals & allied products	1.03	1.23	1.02	1.03	1.12	1.01	1.05	1.12	1.01	.96	1.02	1.07	1.08	(X)	(X)
517	Petroleum & petroleum products	.32	.30	.27	.27	.27	.29	.30	.28	.27	.28	.28	.36	.35	(X)	(X)
518	Beer, wine, & distilled beverages	1.41	1.49	1.28	1.17	1.11	1.10	1.07	1.12	1.17	1.20	1.26	1.20	.84	(X)	(X)
519	Misc. nondurable goods	1.31	1.25	1.04	.94	.79	.95	.99	.96	.99	1.04	1.13	.99	1.01	(X)	(X)

^PPreliminary estimate. See sample design and estimation procedures in Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 through December 1986.
 x Cumulative data are not applicable for inventories or stock/sales ratios, cumulative seasonally adjusted sales estimates are not tabulated.

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. 1987 from Oct. 1987	Nov. 1987 from Nov. 1986	11 months 1987 from 11 months 1986	Nov. 1987 from Oct. 1987	Nov. 1987 from Nov. 1986	Nov. 1987 from Oct. 1987	Nov. 1987 from Nov. 1986	Nov. 1987 from Oct. 1987	Nov. 1987 from Nov. 1986
	Total	-7.1	+11.5	+9.1	+.8	+7.0	-1.6	+8.8	+.8	+7.0
50	Durable goods	-11.0	+10.4	+9.3	+.2	+4.8	-2.4	+7.9	+.2	+4.7
501	Motor vehicles & auto. equip.	-11.8	+3.8	+3.4	+3.5	+13.6	-1.8	+2.4	+2.7	+13.6
502	Furniture & home furnishings.	-15.0	+13.6	+7.1	-.9	+32.2	-2.2	+11.4	+.3	+32.3
503	Lumber & other construction mat.	-15.0	+16.0	+16.8	+.8	+13.4	-4.2	+11.7	+.6	+13.6
504	Sporting, recreational, photographic & hobby goods, toys & supplies.	-10.8	-9.7	+.8	-4.3	+2.7	-3.8	-12.2	-.7	+2.8
505	Metals & minerals, ex. petroleum	-8.7	+23.0	+15.9	+1.4	+5.0	.0	+18.4	+1.2	+5.2
506	Electrical goods	-7.1	+7.4	+5.8	-.5	-2.5	+1	+6.3	+.8	-2.6
507	Hardware, plumbing & heating equipment	-9.2	+22.9	+15.7	-4.1	-.6	+7	+19.4	-3.6	-.4
508	Machinery, equip. & supplies	-11.4	+7.5	+10.7	-.3	-1.1	-4.0	+5.1	-.8	-1.4
509	Miscellaneous durable goods	-11.3	+19.9	+10.8	-.8	+12.3	-5.3	+13.9	-.8	+12.5
51	Nondurable goods	-3.3	+12.5	+9.0	+1.9	+11.1	-.9	+9.8	+1.8	+11.5
511	Paper & paper products	-2.8	+35.0	+16.9	+1.0	+10.9	+4.0	+31.4	-1.2	+11.2
512	Drugs, drug proprietaries and druggists' sundries	-3.6	+5.8	+12.4	+.1	+24.0	+1.7	+2.7	+5.0	+23.9
513	Apparel, piece goods & notions	-15.9	+11.1	+7.6	-2.5	+10.0	+.6	+7.4	+2.0	+10.4
514	Groceries & related products	+2.6	+10.8	+6.1	+2.8	+7.2	+5.4	+9.3	+2.1	+7.5
515	Farm-product raw materials	-13.7	+5.0	+8.0	+3.9	+9.1	-20.6	+2.1	-3.3	+9.8
516	Chemicals & allied products	-5.1	+14.5	+2.8	+1.4	+9.8	+2.7	+8.1	+1.9	+9.6
517	Petroleum & petroleum products	-1.4	+28.8	+16.4	-.4	+2.3	-.8	+26.8	-2.1	+2.2
518	Beer, wine, & distilled beverages	-4.5	+1.7	+4.1	+.5	+6.9	-1.0	-.6	+.3	+7.2
519	Misc. nondurable goods	-3.1	+3.4	+7.8	+5.2	+18.5	-1.7	-1.1	+6.4	+18.4

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 1982 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

Estimates based on a sample survey will differ from the value derived from the population because of sampling variability and nonsampling error. Sampling variability occurs 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 variability 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 3. 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 correspond-

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

ing percent for that estimate shown in the sampling variability table. In about 9 out of 10 (90 percent) of these samples, the estimates would differ from the results of a complete enumeration by less than 1.65 times the percentages shown. In about 19 out of 20 (95 percent) of these samples, the estimate would differ from the results of a complete enumeration by less than twice the percentages shown.

To illustrate the computations involved in the above confidence statements, as related to dollar volume sales estimates, assume that an estimate of sales published in table 1B is \$10,750 million for a particular month and that the median coefficient of variation for this estimate as given in table 3, is 1.8 percent, or 0.018. Multiplying \$10,750 million by 0.018 yields \$194 million. Therefore a 67-percent confidence interval is \$10,556 million to \$10,944 million (\$10,750 million plus or minus \$194 million). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately 2 out of 3 (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Typical practice is to construct 90 or 95 percent confidence intervals. Continuing with the illustration, a 90-percent confidence interval is \$10,430 million to \$11,070 million (\$10,750 million plus or minus \$320 million). A 95-percent confidence interval is \$10,362 million to \$11,138 million (\$10,750 million plus or minus \$388 million).

All comparisons appearing on the front page of this publication and for which measures of sampling variability are available are accompanied by an indication of the 90-percent confidence interval. Thus a statement such as "+0.8 (± 1.3)" indicates a 90-percent confidence interval from -0.5 to +2.1. If the confidence interval contains zero, it is uncertain whether there is an increase or decrease.

Nonsampling Errors

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 34 percent of the sales estimates and 38 percent for inventories.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventory estimates in this report reflect the results of a benchmarking² operation which made use of 1984 and 1985 estimates tabulated from the 1985 Annual Trade Survey. The sales estimates for the period January 1984 through December 1986 were derived in a manner so that the sum of the 12 months for 1984 and 1985 were equal to the sales estimates published in the 1984 and 1985 Annual Trade Surveys. The revision process was conducted so as to minimize changes to previously published month-to-month trends. The estimates for the original series were derived by using composite estimation procedures. Using inventory results from the annual surveys for the years 1980 to 1985, monthly inventories were revised to a non-LIFO basis. Through the use of carry-forward factors, the effect of the revision process was applied to composite sales and inventory estimates subsequent to December 1985. These factors were derived at various kind-of-business levels and are held constant until the next benchmarking operation. Aggregate level estimates were derived by summing appropriate three-digit kind-of-business estimates, thereby assuring additivity.

CLASSIFICATION DIFFERENCES BETWEEN MONTHLY SURVEY AND 1977 AND 1982 CENSUSES OF WHOLESALE TRADE

For SIC 505, the monthly survey included merchant wholesalers as well as sales branches of ferrous metals service centers with inventories. Therefore, the 1977 and 1982 census sales estimates included the receipts of merchant wholesalers and sales branches of ferrous metals service centers with inventories.

Establishments classified in the Farm-Product Raw Materials group (SIC 515) included as sales, products purchased and transferred to other company establishments. In the monthly survey, intercompany transfers are not included in sales. Because of the differences, the 1977 and 1982 sales for the SIC were obtained from the 1977 and 1982 Annual Trade Surveys (ATS).

Inventories were not benchmarked to the census levels since the census of wholesale trade does not include inventories of auxiliary and central administrative offices of merchant wholesale establishments which are included in the monthly survey. The inventory estimates for the years 1977 and 1982 were computed by multiplying the stock/sales ratios obtained from the annual surveys by the census sales for these years.

Unpublished Data

Sales and inventory estimates for unpublished four-digit wholesale trade categories are not included in this publication because their sampling variability is so high, relative to

²For a more detailed description, see the section dealing with revisions to published data in the Current Business Reports publication, *Revised Monthly Wholesale Trade: December 1980 Through December 1986*.

the changes from month-to-month or between other periods, as to make them potentially misleading. The Census Bureau, for a nominal fee 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 on a non-LIFO basis 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. Methods of valuation may vary according to the accounting practices of the firm.

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 current and past experiences. Therefore, the adjusted could become less precise if 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.

Concurrent Seasonal Adjustment

Concurrent seasonal adjustment uses all available unadjusted estimates (including the latest preliminary estimates) as input to the X-11 program. After the last benchmarking operation, factors were developed and used to derive adjusted sales estimates for the period January 1984 through January 1987. Factors were developed and used to derive non-LIFO inventory estimates for the period December 1980 through January 1987. When unadjusted preliminary and final estimates become available, all estimates will be used as input to the X-11 program and new factors will be applied to the preliminary and final (one month before the preliminary) estimates and to the previous year estimates that correspond to the preliminary month.

Table 4 presents, by kind of business, the combined seasonal and trading-day factors that are used to adjust inventory and sales estimates. For all kind of business, one month of projected factors are shown. These projected factors are estimates of the factors that will be used to derive adjusted estimates.

Table 3. Coefficients of Variation of Sales and Inventories
(in percent)

SIC code	Kind of business	Preliminary estimates		Final estimates		Ratio of two consecutive months		Year to year estimates		Cumulative sales estimates		Current year cumulative to previous year cumulative
		Range	Median	Range	Median	Range	Median	Range	Median	CY	PY	
	Sales, Total	1.2-1.6	1.2	1.0-1.4	1.2	0.4-0.9	0.6	1.4-1.8	1.6	1.0	(Y)	(Y)
50	Durable goods	1.3-1.9	1.6	1.1-1.7	1.4	0.5-0.9	0.7	1.4-2.2	1.9	1.3	(Y)	(Y)
501	Motor vehicles & auto. equip.	3.2-3.7	3.4	3.0-3.7	3.3	0.9-1.9	1.5	2.4-5.3	3.8	3.1	(Y)	(Y)
502	Furniture & home furnishings	5.0-8.7	6.6	4.6-8.1	5.3	1.8-7.1	3.1	6.1-12.0	8.0	5.1	(Y)	(Y)
503	Lumber & other construction mat.	5.3-8.8	6.9	5.0-8.5	6.7	1.6-3.5	2.1	4.6-11.3	9.4	5.3	(Y)	(Y)
504	Sporting, recreational, photographic & hobby goods, toys & supplies	4.9-9.4	7.1	5.0-8.8	5.9	1.9-5.5	3.3	9.4-20.4	11.6	5.8	(Y)	(Y)
505	Metals & minerals, ex. petroleum	3.5-4.6	4.4	3.5-4.7	4.1	1.2-2.4	1.8	3.9-7.0	4.9	3.3	(Y)	(Y)
506	Electrical goods	2.0-3.2	2.3	1.8-2.8	2.2	1.1-1.7	1.5	2.9-9.0	5.2	2.1	(Y)	(Y)
507	Hardware, plumbing & heating equipment	6.2-8.6	6.9	6.0-8.0	6.5	1.3-3.6	2.0	5.0-10.3	8.1	5.7	(Y)	(Y)
508	Machinery, equip. & supplies	2.3-3.0	2.6	1.6-2.5	2.5	0.8-2.1	1.6	2.2-5.2	4.6	1.7	(Y)	(Y)
09	Miscellaneous durable goods	2.9-4.1	3.4	2.6-4.0	3.0	1.2-2.7	1.8	3.2-5.5	4.9	2.3	(Y)	(Y)
51	Nondurable goods	2.0-3.2	2.2	1.9-2.3	2.1	0.4-1.5	0.8	2.4-3.3	2.8	1.9	(Y)	(Y)
511	Paper & paper products	3.8-5.8	5.3	3.8-5.7	4.8	1.1-2.6	1.9	2.9-6.5	4.9	4.1	(Y)	(Y)
512	Drugs, drug proprietaries and druggists' sundries	5.0-8.3	5.8	5.0-7.9	5.8	0.9-2.0	1.7	3.4-10.1	7.8	5.4	(Y)	(Y)
513	Apparel, piece goods & notions	7.3-9.2	7.5	6.1-8.3	7.5	2.6-5.3	3.1	6.0-10.4	8.4	5.6	(Y)	(Y)
514	Groceries & related products	3.6-6.8	4.2	3.8-4.9	4.2	0.5-4.1	0.8	4.2-7.0	6.6	4.0	(Y)	(Y)
515	Farm-product raw materials	4.8-6.2	5.4	4.4-6.2	5.2	2.0-4.4	2.6	5.9-9.3	6.3	4.3	(Y)	(Y)
516	Chemicals & allied products	5.1-9.9	7.4	4.8-8.5	5.8	1.1-3.9	2.3	6.4-12.4	9.0	5.7	(Y)	(Y)
517	Petroleum & petroleum products	4.0-4.9	4.5	4.0-4.8	4.3	0.8-1.3	1.1	3.0-12.0	7.9	3.8	(Y)	(Y)
518	Beer, wine, & distilled beverages	2.6-3.7	2.9	2.6-3.3	2.8	0.8-1.7	1.4	2.8-9.9	6.8	2.5	(Y)	(Y)
519	Misc. nondurable goods	4.5-5.5	4.9	4.2-5.5	4.6	1.4-2.3	1.7	4.7-8.7	6.5	4.0	(Y)	(Y)
	Inventories, Total	1.1-1.3	1.3	1.2-1.3	1.3	0.2-0.4	0.3	0.8-2.1	1.5	(X)	(X)	(X)
50	Durable goods	1.3-1.6	1.5	1.4-1.6	1.5	0.2-0.5	0.3	1.0-2.4	2.0	(X)	(X)	(X)
501	Motor vehicles & auto. equip.	4.4-6.2	5.2	4.5-5.7	5.1	0.5-1.4	0.9	3.7-6.8	5.9	(X)	(X)	(X)
502	Furniture & home furnishings	7.5-8.9	8.2	7.6-9.4	7.9	0.5-2.3	1.4	5.1-16.8	13.0	(X)	(X)	(X)
503	Lumber & other construction mat.	4.9-6.1	5.5	4.9-5.7	5.4	0.7-2.9	1.0	4.6-12.6	7.4	(X)	(X)	(X)
504	Sporting, recreational, photographic & hobby goods, toys & supplies	7.5-12.4	10.1	8.7-11.5	10.5	0.8-2.0	1.4	4.4-18.6	13.1	(X)	(X)	(X)
505	Metals & minerals, ex. petroleum	4.8-5.9	5.8	4.7-5.9	5.6	0.5-0.9	0.8	4.0-8.3	6.8	(X)	(X)	(X)
506	Electrical goods	1.7-2.4	1.9	1.5-2.6	1.9	0.3-0.7	0.5	2.2-9.1	5.7	(X)	(X)	(X)
507	Hardware, plumbing & heating equipment	4.3-5.3	5.0	4.1-5.4	4.7	0.5-2.6	1.2	4.8-8.6	6.4	(X)	(X)	(X)
508	Machinery, equip. & supplies	2.1-3.4	2.9	2.1-3.0	2.8	0.3-0.9	0.6	2.8-6.2	4.4	(X)	(X)	(X)
509	Miscellaneous durable goods	5.2-8.3	6.9	5.4-8.3	6.5	0.5-1.0	0.9	7.7-12.8	10.8	(X)	(X)	(X)
51	Nondurable goods	1.4-2.0	1.9	1.5-1.9	1.7	0.4-0.6	0.5	1.8-2.7	2.0	(X)	(X)	(X)
511	Paper & paper products	5.8-6.8	6.1	5.6-6.6	6.1	0.5-1.1	0.8	3.4-9.7	8.1	(X)	(X)	(X)
512	Drugs, drug proprietaries and druggists' sundries	5.4-6.3	5.7	5.3-5.9	5.7	0.5-1.2	0.7	4.8-9.1	7.9	(X)	(X)	(X)
513	Apparel, piece goods & notions	4.4-6.0	5.3	4.2-6.0	5.1	0.9-1.7	1.3	6.0-14.5	8.9	(X)	(X)	(X)
514	Groceries & related products	4.7-5.1	4.7	4.7-5.4	4.9	0.6-1.0	0.8	3.6-7.9	5.8	(X)	(X)	(X)
515	Farm-product raw materials	6.5-8.1	7.2	6.3-8.0	7.3	1.2-3.9	2.1	7.3-10.4	9.9	(X)	(X)	(X)
516	Chemicals & allied products	7.0-9.2	7.6	7.2-9.1	7.5	0.8-2.1	1.3	8.4-14.9	10.9	(X)	(X)	(X)
517	Petroleum & petroleum products	2.9-4.4	3.3	3.1-4.0	3.4	0.7-2.0	0.8	3.0-20.7	7.9	(X)	(X)	(X)
518	Beer, wine, & distilled beverages	4.4-5.8	4.9	4.3-5.2	4.9	0.6-1.2	0.8	2.5-6.7	5.9	(X)	(X)	(X)
519	Misc. nondurable goods	7.2-9.0	8.2	7.6-8.4	8.0	0.9-3.1	1.2	5.5-12.2	11.1	(X)	(X)	(X)

y Previous year cumulative coefficients of variation will appear early in 1988.

x Cumulative coefficients of variation are not applicable for inventories.

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 June 1987 through November 1987.

Table 4. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers

SIC code	Kind of business	1986		1987											
		Nov. ¹	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct. ¹	Nov. ¹	Dec.
	Sales,¹ Total	.962	1.035	.953	.905	1.035	1.019	1.007	1.039	.998	.976	1.009	1.037	.983	1.036
50	Durable goods	.954	1.010	.920	.890	1.031	1.027	.991	1.053	1.004	.985	1.031	1.071	.976	1.012
501	Motor vehicles & auto. equip.	.956	1.011	.958	.871	1.014	1.034	1.037	1.083	1.034	.969	.948	1.079	.969	1.031
502	Furniture & home furnishings	.965	.974	.868	.882	.991	1.013	.991	1.058	1.033	1.005	1.073	1.132	.984	.977
503	Lumber & other construction mat.	.942	.876	.811	.793	.955	1.044	1.040	1.120	1.113	1.090	1.087	1.103	.978	.878
504	Sporting, recreational, photographic & hobby goods, toys & supplies	1.073	1.011	.849	.877	.981	1.000	.888	.978	.990	.996	1.074	1.190	1.103	1.037
505	Metals & minerals, ex. petroleum ..	.889	.983	.968	.944	1.098	1.040	.985	1.034	.987	.991	1.058	1.012	.924	.981
506	Electrical goods	1.017	1.062	.912	.907	1.017	.949	.927	1.013	.989	.999	1.066	1.107	1.027	1.068
507	Hardware, plumbing & heating equipment	.940	.960	.932	.902	.968	1.041	1.008	1.081	1.049	1.000	1.018	1.073	.967	.977
508	Machinery, equip. & supplies	.924	1.043	.908	.907	1.065	1.050	1.005	1.053	.986	.968	1.028	1.024	.945	1.053
509	Miscellaneous durable goods	.977	.954	.954	.893	1.033	1.138	.993	.997	.935	1.008	1.033	1.098	1.028	.955
51	Nondurable goods	.969	1.056	.982	.917	1.041	1.007	1.020	1.021	.992	.968	.992	1.010	.993	1.056
511	Paper & paper products	.948	1.005	.979	.939	1.035	1.018	.958	1.035	.998	1.009	1.007	1.042	.974	1.015
512	Drugs, drug proprietaries and druggists' sundries	.956	1.025	1.001	.927	1.026	1.030	.955	1.010	.987	.955	1.036	1.039	.985	1.032
513	Apparel, piece goods & notions	.901	.779	.887	1.039	1.038	.877	.879	1.070	1.112	1.155	1.058	1.114	.932	.774
514	Groceries & related products	.967	1.025	.978	.915	1.006	1.007	1.020	1.012	1.033	.995	1.007	1.007	.990	1.030
515	Farm-product raw materials	1.069	1.186	1.090	.969	1.083	.977	1.020	.955	.877	.848	.870	1.011	1.099	1.206
516	Chemicals & allied products	.925	.930	.991	.925	1.041	1.022	1.000	1.068	.997	.986	1.039	1.059	.979	.920
517	Petroleum & petroleum products	.988	1.114	1.104	.958	1.061	.975	.957	.959	.935	.903	1.007	1.009	1.003	1.112
518	Beer, wine, & distilled beverages ..	.976	1.201	.760	.774	.927	.984	1.024	1.098	1.102	1.038	1.019	1.035	.998	1.227
519	Misc. nondurable goods	.914	1.017	.856	.856	1.079	1.101	1.180	1.070	1.012	.958	.953	.969	.955	1.000
	Inventories,¹ total	1.008	1.007	1.003	1.006	1.009	1.006	.992	.995	.990	.985	.997	1.009	1.007	1.004
50	Durable goods	1.000	.995	.985	.993	1.002	1.004	1.000	1.008	1.005	1.002	1.010	1.001	1.000	.995
501	Motor vehicles & auto. equip.	1.014	1.016	.998	1.002	1.008	1.005	.988	1.004	.976	.959	1.022	1.006	1.014	1.017
502	Furniture & home furnishings	.984	1.027	1.014	1.012	.994	.976	.996	.995	.992	1.014	1.007	.994	.983	1.020
503	Lumber & other construction mat.	.985	.996	.961	.997	1.026	1.030	1.002	1.026	1.018	1.012	.997	.982	.984	.994
504	Sporting, recreational, photographic & hobby goods, toys & supplies	.975	.977	.984	.990	1.008	1.001	.993	1.012	1.028	1.016	1.016	1.010	.974	.978
505	Metals & minerals, ex. petroleum ..	.985	1.013	1.007	1.000	.993	.987	.997	1.016	1.009	.997	.993	.981	.983	1.011
506	Electrical goods	1.005	.984	.969	.970	.978	.995	.992	1.000	1.025	1.023	1.034	1.019	1.006	.988
507	Hardware, plumbing & heating equipment	.980	.962	.972	.999	1.028	1.042	1.032	1.011	1.017	1.000	.986	.983	.978	.964
508	Machinery, equip. & supplies	1.006	.997	.985	.994	1.006	1.005	1.006	1.011	1.004	1.006	.996	1.004	1.009	.995
509	Miscellaneous durable goods	1.022	.957	.974	.996	.978	.994	1.010	.995	1.019	1.025	1.027	1.020	1.020	.955
51	Nondurable goods	1.032	1.031	1.036	1.029	1.022	1.008	.972	.972	.962	.950	.973	1.018	1.030	1.029
511	Paper & paper products	1.007	.995	.994	1.007	1.003	1.004	1.003	1.005	1.000	1.006	.976	.984	1.005	.995
512	Drugs, drug proprietaries and druggists' sundries	.978	.994	1.023	1.031	1.052	1.019	.981	.969	.965	.961	.999	1.027	.979	.991
513	Apparel, piece goods & notions	.941	.994	1.000	.986	.948	.966	1.014	1.033	1.078	1.065	1.035	.981	.938	.980
514	Groceries & related products	1.047	1.000	.979	1.009	.997	.994	.999	1.002	.981	.965	.989	1.038	1.045	1.004
515	Farm-product raw materials	1.166	1.213	1.251	1.157	1.088	.996	.819	.810	.785	.792	.872	1.078	1.158	1.194
516	Chemicals & allied products	1.002	.983	.990	1.006	.998	1.035	1.009	1.012	1.011	.996	.959	.999	1.004	.975
517	Petroleum & petroleum products	1.037	1.090	1.062	.921	.931	.943	.996	1.006	.984	.942	1.010	1.021	1.038	1.113
518	Beer, wine, & distilled beverages ..	1.052	.912	.942	.959	.997	1.022	1.005	1.032	1.011	.987	1.004	1.047	1.049	.905
519	Misc. nondurable goods	.972	1.018	1.033	1.071	1.111	1.072	.980	.971	.936	.930	.957	.984	.973	1.021

¹Revised

¹Adjusted sales and inventory data shown in table 1A 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: The seasonal factors shown have been computed based on monthly estimates through the current month preliminary estimates.



Monthly Wholesale Trade

Sales and Inventories

November 1987

U.S. Department of Commerce
BUREAU OF THE CENSUS

BW87-11
Issued January 1988

Sales. November 1987 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$128.3 billion, down 1.6 percent (± 1.4 percent) from the revised October level but up 8.8 percent (± 2.6 percent) from a year ago. The October preliminary estimate was revised downward by \$0.1 billion or about 0.08 percent. November sales of durable goods decreased 2.4 percent (± 1.1 percent) from October but were up 7.9 percent (± 2.4 percent) from a year ago. November sales of nondurable goods were down 0.9 percent (± 2.5 percent) from October but were 9.8 percent (± 5.1 percent) above November 1986. Sales in the farm-product raw materials category decreased 20.6 percent from October to \$6,558 million.

Inventories. Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$157.9 billion at the end of November, up

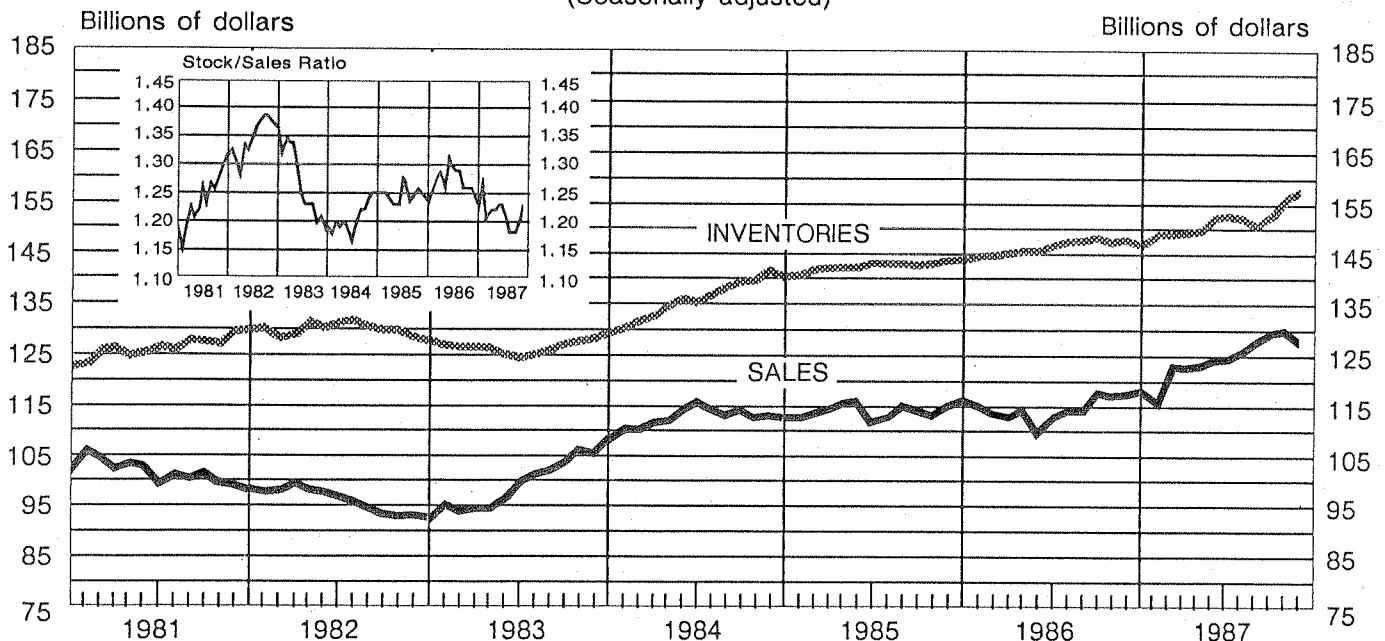
0.8 percent (± 0.4 percent) from the revised October level and up 7.0 percent (± 1.4 percent) from a year ago. The October preliminary estimate was revised upward by \$0.7 billion or about 0.5 percent. Inventories of durable goods wholesalers increased 0.2 percent (± 0.5 percent) from the October level and were 4.7 percent (± 1.8 percent) above a year ago. Inventories of nondurable goods wholesalers were up 1.8 percent (± 0.8 percent) from the October level and were 11.5 percent (± 3.2 percent) above November 1986.

Stock/Sales Ratio. The November stock/sales ratio for merchant wholesalers, based on seasonally adjusted data was 1.23, up from the October ratio of 1.20.

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 4.

Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1981-1987

(Seasonally adjusted)



Monthly Wholesale Trade for December is scheduled to be released February 10, 1988 at 10:00.

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.

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Table 1A. Adjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1987 and 1986

(Data adjusted for seasonal variation and, in the case of sales, also for trading-day differences. Sales and Inventories in millions of dollars)

SIC code	Kind of business	1987											1986	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. ^P	Nov. ^T	Dec.
	Sales, Total	116,545	123,281	123,009	123,439	124,486	124,836	126,196	128,164	129,912	130,384	128,312	117,892	118,446
50	Durable goods	55,893	59,344	59,498	59,016	59,413	60,274	60,784	61,065	62,238	62,978	61,482	57,004	57,833
501	Motor vehicles & auto. equip.	11,334	12,931	12,890	12,338	12,339	12,073	12,001	12,518	12,612	12,961	12,731	12,433	12,966
502	Furniture & home furnishings	2,377	2,304	2,370	2,190	2,179	2,117	2,260	2,376	2,670	2,499	2,445	2,195	2,227
503	Lumber & other construction mat.	4,543	4,571	4,831	4,696	4,791	5,171	5,252	5,083	5,296	5,182	4,965	4,443	4,635
504	Sporting, recreational, photographic & hobby goods, toys & supplies	1,645	1,718	1,554	1,480	1,417	1,449	1,505	1,605	1,480	1,471	1,415	1,611	1,627
505	Metals & minerals, ex. petroleum	4,983	5,267	5,493	5,192	5,364	5,524	5,612	5,795	5,757	5,866	5,864	4,954	4,852
506	Electrical goods	7,899	8,270	8,023	8,207	8,249	8,085	8,339	8,381	8,055	8,061	8,073	7,593	7,812
507	Hardware, plumbing & heating equipment	3,667	3,891	4,191	3,981	3,944	4,247	4,186	4,269	4,537	4,460	4,492	3,762	3,922
508	Machinery, equip. & supplies	14,787	15,230	15,146	15,345	15,348	15,439	15,870	15,866	16,171	16,167	15,519	14,766	15,027
509	Miscellaneous durable goods	4,658	5,162	5,000	5,587	5,782	6,169	5,759	5,172	5,660	6,311	5,978	5,247	4,765
51	Nondurable goods	60,652	63,937	63,511	64,423	65,073	64,562	65,412	67,099	67,674	67,406	66,830	60,888	60,613
511	Paper & paper products	3,564	3,706	3,671	3,705	3,685	3,844	3,938	3,993	4,197	4,342	4,514	3,435	3,584
512	Drugs, drug proprietaries and druggists' sundries	2,514	2,608	2,507	2,513	2,630	2,610	2,608	2,578	2,613	2,528	2,572	2,505	2,484
513	Apparel, piece goods & notions	3,417	3,852	3,894	3,318	3,476	3,615	3,563	3,784	3,935	3,931	3,953	3,680	3,300
514	Groceries & related products	20,429	20,596	20,021	20,625	20,914	20,762	20,971	20,750	20,375	20,768	21,893	20,032	20,023
515	Farm-product raw materials	6,174	6,496	6,632	6,952	6,903	7,254	7,620	8,152	8,378	8,258	6,558	6,420	6,358
516	Chemicals & allied products	2,055	1,990	2,100	2,192	2,143	2,191	2,214	2,176	2,204	2,316	2,378	2,199	2,097
517	Petroleum & petroleum products	10,253	11,297	11,442	11,452	11,537	11,278	12,160	12,307	12,197	11,787	11,687	9,215	9,724
518	Beer, wine, & distilled beverages	3,550	3,621	3,589	3,603	3,590	3,442	3,377	3,387	3,454	3,464	3,429	3,448	3,446
519	Misc. nondurable goods	8,696	9,771	9,655	10,063	10,195	9,566	8,961	9,972	10,321	10,012	9,846	9,954	9,597
	Inventories, total	149,347	149,408	149,655	150,050	152,673	153,093	152,648	151,222	153,245	156,632	157,899	147,548	147,375
50	Durable goods	97,280	96,594	97,491	97,891	100,056	99,504	99,099	97,980	98,482	101,376	101,628	97,066	95,710
501	Motor vehicles & auto. equip.	18,782	19,176	19,209	19,360	20,678	20,090	20,183	20,368	20,316	20,670	21,231	18,685	18,643
502	Furniture & home furnishings	3,510	3,558	3,697	3,885	4,038	4,045	4,178	4,029	4,189	4,138	4,149	3,135	3,333
503	Lumber & other construction mat.	4,907	4,846	5,022	5,207	5,520	5,491	5,599	5,350	5,616	5,665	5,697	5,017	4,940
504	Sporting, recreational, photographic & hobby goods, toys & supplies	3,436	3,473	3,492	3,444	3,481	3,486	3,731	3,700	3,695	3,672	3,646	3,545	3,387
505	Metals & minerals, ex. petroleum	9,508	9,182	9,377	9,449	9,477	9,539	9,150	8,823	8,972	9,467	9,582	9,107	9,359
506	Electrical goods	13,864	14,092	14,082	13,545	13,867	13,698	13,321	13,338	12,846	13,356	13,462	13,815	13,756
507	Hardware, plumbing & heating equipment	6,576	6,509	6,504	6,187	6,259	6,427	6,339	6,305	6,617	6,830	6,584	6,611	6,642
508	Machinery, equip. & supplies	31,984	31,106	31,182	31,554	31,011	31,153	31,239	30,900	31,136	32,409	32,148	32,593	31,007
509	Miscellaneous durable goods	4,713	4,652	4,926	5,260	5,725	5,575	5,359	5,167	5,095	5,169	5,129	4,558	4,823
51	Nondurable goods	52,067	52,814	52,074	52,159	52,617	53,589	53,549	53,242	54,763	55,256	56,271	50,482	51,665
511	Paper & paper products	3,595	3,535	3,563	3,554	3,517	3,522	3,548	3,449	3,601	3,805	3,761	3,383	3,570
512	Drugs, drug proprietaries and druggists' sundries	4,385	4,394	4,152	4,455	4,357	4,422	4,628	4,617	4,656	4,869	5,111	4,126	4,246
513	Apparel, piece goods & notions	7,061	7,142	7,310	7,071	7,201	7,500	7,072	7,143	7,471	7,432	7,577	6,863	6,928
514	Groceries & related products	12,074	11,915	11,614	11,743	11,865	12,001	12,671	12,368	12,751	12,540	12,802	11,914	12,185
515	Farm-product raw materials	5,954	5,978	5,748	6,184	6,529	6,644	6,400	6,125	6,362	6,597	6,380	5,810	5,636
516	Chemicals & allied products	2,121	2,253	2,223	2,227	2,374	2,341	2,290	2,412	2,406	2,352	2,374	2,166	2,144
517	Petroleum & petroleum products	3,405	3,468	3,469	3,198	3,047	3,103	3,428	3,294	3,276	3,267	3,200	3,131	3,449
518	Beer, wine, & distilled beverages	4,033	4,347	4,273	4,061	4,066	4,012	3,924	4,001	4,108	4,093	4,106	3,830	3,818
519	Misc. nondurable goods	9,439	9,782	9,722	9,666	9,661	10,044	9,588	9,833	10,132	10,301	10,961	9,259	9,689
	Stock/sales ratios, total	1.28	1.21	1.22	1.22	1.23	1.23	1.21	1.18	1.18	1.20	1.23	1.25	1.24
50	Durable goods	1.74	1.63	1.64	1.66	1.68	1.65	1.63	1.60	1.58	1.61	1.65	1.70	1.65
501	Motor vehicles & auto. equip.	1.66	1.48	1.49	1.57	1.68	1.66	1.68	1.63	1.61	1.59	1.67	1.50	1.44
502	Furniture & home furnishings	1.48	1.54	1.56	1.77	1.85	1.91	1.85	1.70	1.57	1.66	1.70	1.43	1.50
503	Lumber & other construction mat.	1.08	1.06	1.04	1.11	1.15	1.06	1.07	1.05	1.06	1.09	1.15	1.13	1.07
504	Sporting, recreational, photographic & hobby goods, toys & supplies	2.09	2.02	2.25	2.33	2.46	2.41	2.48	2.31	2.50	2.50	2.58	2.20	2.08
505	Metals & minerals, ex. petroleum	1.91	1.74	1.71	1.82	1.77	1.73	1.63	1.52	1.56	1.61	1.63	1.84	1.93
506	Electrical goods	1.76	1.70	1.76	1.65	1.68	1.69	1.60	1.59	1.59	1.66	1.67	1.82	1.74
507	Hardware, plumbing & heating equipment	1.79	1.67	1.55	1.55	1.59	1.51	1.51	1.48	1.46	1.53	1.47	1.76	1.69
508	Machinery, equip. & supplies	2.16	2.04	2.06	2.06	2.02	2.02	1.97	1.95	1.93	2.00	2.07	2.21	2.06
509	Miscellaneous durable goods	1.01	.90	.99	.94	.99	.90	.93	1.00	.90	.82	.86	.87	1.01
51	Nondurable goods	.86	.83	.82	.81	.81	.83	.82	.79	.81	.82	.84	.83	.85
511	Paper & paper products	1.01	.95	.97	.96	.95	.92	.90	.86	.86	.88	.83	.98	1.00
512	Drugs, drug proprietaries and druggists' sundries	1.74	1.68	1.66	1.77	1.66	1.69	1.77	1.79	1.78	1.93	1.99	1.65	1.71
513	Apparel, piece goods & notions	2.07	1.85	1.88	2.13	2.07	2.07	1.98	1.89	1.90	1.89	1.92	1.86	2.10
514	Groceries & related products	.59	.58	.58	.57	.57	.58	.60	.60	.63	.60	.58	.59	.61
515	Farm-product raw materials	.96	.92	.87	.89	.95	.92	.84	.75	.76	.80	.97	.90	.89
516	Chemicals & allied products	1.03	1.13	1.06	1.02	1.11	1.07	1.03	1.11	1.09	1.02	1.00	.98	1.02
517	Petroleum & petroleum products	.33	.31	.30	.28	.26	.28	.28	.27	.27	.28	.27	.34	.35
518	Beer, wine, & distilled beverages	1.14	1.20	1.19	1.13	1.13	1.17	1.16	1.18	1.19	1.18	1.20	1.11	1.11
519	Misc. nondurable goods	1.09	1.00	1.01	.96	.95	1.05	1.07	.99	.98	1.03	1.11	.93	1.01

¹Revised.

²Preliminary estimate. See sample design and estimation procedures in Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 through December 1986.

Table 1B. Unadjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1987 and 1986

(Data not adjusted for seasonal variation or trading-day differences. Sales and Inventories in millions of dollars)

SIC code	Kind of business	1987											1986		Total 11 mos.	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. ^P	Nov.	Dec.	1987	1986
	Sales, Total	110,564	111,705	126,908	126,354	125,630	129,016	126,469	125,361	130,767	135,834	126,173	113,152	121,499	1,374,781	1,259,812
50	Durable goods	51,319	52,834	61,100	61,161	59,270	63,423	61,290	60,613	63,936	67,409	60,022	54,350	58,033	662,377	606,075
501	Motor vehicles & auto. equip.	10,858	11,263	13,070	12,758	12,796	13,075	12,409	12,130	11,956	13,985	12,336	11,886	13,109	136,636	132,107
502	Furniture & home furnishings.	2,063	2,032	2,349	2,218	2,159	2,240	2,335	2,388	2,865	2,829	2,406	2,118	2,169	25,884	24,168
503	Lumber & other construction mat.	3,684	3,625	4,614	4,903	4,983	5,791	5,846	5,540	5,757	5,716	4,856	4,185	4,060	55,315	47,375
504	Sporting, recreational, photographic & hobby goods, toys & supplies	1,397	1,507	1,524	1,480	1,258	1,417	1,490	1,599	1,590	1,750	1,561	1,729	1,645	16,573	16,436
505	Metals & minerals, ex. petroleum	4,824	4,972	6,031	5,400	5,284	5,712	5,539	5,743	6,091	5,936	5,418	4,404	4,770	60,950	52,577
506	Electrical goods.	7,204	7,501	8,159	7,788	7,647	8,190	8,247	8,373	8,587	8,923	8,291	7,722	8,296	88,910	84,054
507	Hardware, plumbing & heating equipment	3,418	3,510	4,057	4,144	3,976	4,591	4,391	4,269	4,619	4,786	4,344	3,536	3,765	46,105	39,853
508	Machinery, equip. & supplies.	13,427	13,814	16,131	16,112	15,425	16,257	15,648	15,358	16,624	16,555	14,665	13,644	15,673	170,016	153,543
509	Miscellaneous durable goods.	4,444	4,610	5,165	6,358	5,742	6,150	5,385	5,213	5,847	6,929	6,145	5,126	4,546	61,988	55,962
51	Nondurable goods	59,245	58,871	65,808	65,193	66,360	65,593	65,179	64,748	66,831	68,425	66,151	58,802	63,466	712,404	653,737
511	Paper & paper products	3,489	3,480	3,800	3,772	3,530	3,979	3,930	4,029	4,226	4,524	4,397	3,256	3,602	43,156	36,919
512	Drugs, drug proprietaries and druggists' sundries	2,517	2,418	2,572	2,588	2,512	2,636	2,574	2,462	2,707	2,627	2,533	2,395	2,546	28,146	25,030
513	Apparel, piece goods & notions	3,031	4,002	4,042	3,242	3,055	3,868	3,962	4,370	4,163	4,379	3,684	3,316	2,571	41,798	38,840
514	Groceries & related products	19,980	18,845	20,141	20,769	21,332	21,011	21,663	20,646	20,518	20,913	21,455	19,371	20,524	227,273	214,224
515	Farm-product raw materials.	6,730	6,295	7,182	6,792	7,041	6,928	6,683	6,913	7,289	8,349	7,207	6,863	7,541	77,409	71,654
516	Chemicals & allied products	2,037	1,841	2,186	2,240	2,143	2,340	2,207	2,146	2,290	2,453	2,328	2,034	1,950	24,211	23,557
517	Petroleum & petroleum products	11,319	10,823	12,140	11,166	11,041	10,816	11,370	11,113	12,282	11,893	11,722	9,104	10,833	125,685	107,980
518	Beer, wine, & distilled beverages	2,698	2,803	3,327	3,545	3,676	3,779	3,721	3,516	3,520	3,585	3,422	3,365	4,139	37,592	36,123
519	Misc. nondurable goods	7,444	8,364	10,418	11,079	12,030	10,236	9,069	9,553	9,836	9,702	9,403	9,098	9,760	107,134	99,410
	Inventories, total	149,548	150,166	150,882	150,853	151,371	152,651	151,258	148,823	152,788	157,872	159,166	148,804	148,245	(X)	(X)
50	Durable goods	95,895	95,989	97,667	98,249	100,083	100,288	99,537	97,919	99,294	101,601	101,833	97,210	95,353	(X)	(X)
501	Motor vehicles & auto. equip.	18,744	19,214	19,363	19,457	20,430	20,170	19,699	19,533	20,763	20,794	21,528	18,947	18,941	(X)	(X)
502	Furniture & home furnishings.	3,559	3,601	3,675	3,792	4,022	4,025	4,145	4,085	4,218	4,113	4,078	3,085	3,423	(X)	(X)
503	Lumber & other construction mat.	4,716	4,831	5,153	5,363	5,531	5,634	5,700	5,414	5,599	5,563	5,606	4,942	4,920	(X)	(X)
504	Sporting, recreational, photographic & hobby goods, toys & supplies	3,381	3,438	3,520	3,447	3,457	3,528	3,835	3,759	3,754	3,709	3,551	3,456	3,309	(X)	(X)
505	Metals & minerals, ex. petroleum	9,575	9,182	9,311	9,326	9,449	9,692	9,232	8,797	8,909	9,287	9,419	8,970	9,481	(X)	(X)
506	Electrical goods.	13,434	13,669	13,772	13,477	13,756	13,698	13,654	13,645	13,283	13,610	13,543	13,884	13,359	(X)	(X)
507	Hardware, plumbing & heating equipment	6,392	6,502	6,686	6,447	6,459	6,498	6,447	6,305	6,524	6,714	6,439	6,479	6,390	(X)	(X)
508	Machinery, equip. & supplies.	31,504	30,919	31,369	31,712	31,197	31,496	31,364	31,085	31,011	32,539	32,437	32,789	30,914	(X)	(X)
509	Miscellaneous durable goods	4,590	4,633	4,818	5,228	5,782	5,547	5,461	5,296	5,233	5,272	5,232	4,658	4,616	(X)	(X)
51	Nondurable goods	53,653	54,177	53,215	52,604	51,288	52,363	51,721	50,904	53,494	56,271	57,333	51,594	52,892	(X)	(X)
511	Paper & paper products	3,573	3,560	3,574	3,568	3,528	3,540	3,548	3,470	3,515	3,744	3,780	3,407	3,552	(X)	(X)
512	Drugs, drug proprietaries and druggists' sundries	4,486	4,530	4,368	4,540	4,274	4,285	4,466	4,437	4,651	5,000	5,004	4,035	4,221	(X)	(X)
513	Apparel, piece goods & notions	7,061	7,042	6,930	6,831	7,302	7,747	7,624	7,607	7,733	7,291	7,107	6,458	6,886	(X)	(X)
514	Groceries & related products	11,820	12,022	11,579	11,673	11,853	12,025	12,430	11,935	12,611	13,017	13,378	12,474	12,185	(X)	(X)
515	Farm-product raw materials.	7,448	6,916	6,254	6,159	5,347	5,382	5,024	4,851	5,548	7,112	7,388	6,774	6,836	(X)	(X)
516	Chemicals & allied products	2,100	2,267	2,219	2,305	2,395	2,369	2,315	2,407	2,307	2,350	2,382	2,170	2,108	(X)	(X)
517	Petroleum & petroleum products	3,616	3,194	3,230	3,016	3,035	3,122	3,373	3,103	3,309	3,336	3,322	3,247	3,759	(X)	(X)
518	Beer, wine, & distilled beverages	3,799	4,169	4,260	4,150	4,086	4,140	3,967	3,949	4,124	4,285	4,307	4,029	3,482	(X)	(X)
519	Misc. nondurable goods	9,750	10,477	10,801	10,362	9,468	9,753	8,974	9,145	9,696	10,136	10,665	9,000	9,863	(X)	(X)
	Stock/sales ratios, total	1.35	1.34	1.19	1.19	1.20	1.18	1.20	1.19	1.17	1.16	1.26	1.32	1.22	(X)	(X)
50	Durable goods	1.87	1.82	1.60	1.61	1.69	1.58	1.62	1.62	1.55	1.51	1.70	1.79	1.64	(X)	(X)
501	Motor vehicles & auto. equip.	1.73	1.71	1.48	1.53	1.60	1.54	1.59	1.61	1.74	1.49	1.75	1.59	1.44	(X)	(X)
502	Furniture & home furnishings.	1.73	1.77	1.56	1.71	1.86	1.80	1.78	1.71	1.47	1.45	1.69	1.46	1.58	(X)	(X)
503	Lumber & other construction mat.	1.28	1.33	1.12	1.09	1.11	.97	.98	.98	.97	.97	1.15	1.18	1.21	(X)	(X)
504	Sporting, recreational, photographic & hobby goods, toys & supplies	2.42	2.28	2.31	2.33	2.75	2.49	2.57	2.35	2.36	2.12	2.27	2.00	2.01	(X)	(X)
505	Metals & minerals, ex. petroleum	1.98	1.85	1.54	1.73	1.79	1.70	1.67	1.53	1.46	1.56	1.74	2.04	1.99	(X)	(X)
506	Electrical goods.	1.86	1.82	1.69	1.73	1.80	1.67	1.66	1.63	1.55	1.53	1.63	1.80	1.61	(X)	(X)
507	Hardware, plumbing & heating equipment	1.87	1.85	1.65	1.56	1.62	1.42	1.47	1.48	1.41	1.40	1.48	1.83	1.70	(X)	(X)
508	Machinery, equip. & supplies.	2.35	2.24	1.94	1.97	2.02	1.94	2.00	2.02	1.87	1.97	2.21	2.40	1.97	(X)	(X)
509	Miscellaneous durable goods	1.03	1.00	.93	.82	1.01	.90	1.01	1.02	.89	.76	.85	.91	1.02	(X)	(X)
51	Nondurable goods	.91	.92	.81	.81	.77	.80	.79	.79	.80	.82	.87	.88	.83	(X)	(X)
511	Paper & paper products	1.02	1.02	.94	.95	1.00	.89	.90	.86	.83	.83	.86	1.05	.99	(X)	(X)
512	Drugs, drug proprietaries and druggists' sundries	1.78	1.87	1.70	1.75	1.70	1.63	1.74	1.80	1.72	1.90	1.98	1.68	1.66	(X)	(X)
513	Apparel, piece goods & notions	2.33	1.76	1.71	2.11	2.39	2.00	1.92	1.74	1.86	1.66	1.93	1.95	2.68	(X)	(X)
514	Groceries & related products	.69	.64	.57	.56	.56	.57	.57	.58	.61	.62	.62	.64	.59	(X)	(X)
515	Farm-product raw materials.	1.11	1.10	.87	.91	.76	.78	.75	.70	.76	.85	1.03	.99	.91	(X)	(X)
516	Chemicals & allied products	1.03	1.23	1.02	1.03	1.12	1.01	1.05	1.12	1.01	.96	1.02	1.07	1.08	(X)	(X)
517	Petroleum & petroleum products	.32	.30	.27	.27	.27	.29	.30	.28	.27	.28	.28	.36	.35	(X)	(X)
518	Beer, wine, & distilled beverages	1.41	1.49	1.28	1.17	1.11	1.10	1.07	1.12	1.17	1.20	1.26	1.20	.84	(X)	(X)
519	Misc. nondurable goods	1.31	1.25	1.04	.94	.79	.95	.99	.96	.99	1.04	1.13	.99	1.01	(X)	(X)

^PPreliminary estimate. See sample design and estimation procedures in Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 through December 1986.

x Cumulative data are not applicable for inventories or stock/sales ratios, cumulative seasonally adjusted sales estimates are not tabulated.

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. 1987 from Oct. 1987	Nov. 1987 from Nov. 1986	11 months 1987 from 11 months 1986	Nov. 1987 from Oct. 1987	Nov. 1987 from Nov. 1986	Nov. 1987 from Oct. 1987	Nov. 1987 from Nov. 1986	Nov. 1987 from Oct. 1987	Nov. 1987 from Nov. 1986
	Total	-7.1	+11.5	+9.1	+8	+7.0	-1.6	+8.8	+8	+7.0
50	Durable goods	-11.0	+10.4	+9.3	+2	+4.8	-2.4	+7.9	+2	+4.7
501	Motor vehicles & auto. equip.	-11.8	+3.8	+3.4	+3.5	+13.6	-1.8	+2.4	+2.7	+13.6
502	Furniture & home furnishings	-15.0	+13.6	+7.1	-9	+32.2	-2.2	+11.4	+3	+32.3
503	Lumber & other construction mat.	-15.0	+16.0	+16.8	+8	+13.4	-4.2	+11.7	+6	+13.6
504	Sporting, recreational, photographic & hobby goods, toys & supplies	-10.8	-9.7	+8	-4.3	+2.7	-3.8	-12.2	-7	+2.8
505	Metals & minerals, ex. petroleum	-8.7	+23.0	+15.9	+1.4	+5.0	.0	+18.4	+1.2	+5.2
506	Electrical goods	-7.1	+7.4	+5.8	-5	-2.5	+1	+6.3	+8	-2.6
507	Hardware, plumbing & heating equipment	-9.2	+22.9	+15.7	-4.1	-.6	+7	+19.4	-3.6	-.4
508	Machinery, equip. & supplies	-11.4	+7.5	+10.7	-.3	-1.1	-4.0	+5.1	-.8	-1.4
509	Miscellaneous durable goods	-11.3	+19.9	+10.8	-.8	+12.3	-5.3	+13.9	-.8	+12.5
51	Nondurable goods	-3.3	+12.5	+9.0	+1.9	+11.1	-.9	+9.8	+1.8	+11.5
511	Paper & paper products	-2.8	+35.0	+16.9	+1.0	+10.9	+4.0	+31.4	-1.2	+11.2
512	Drugs, drug proprietaries and druggists' sundries	-3.6	+5.8	+12.4	+1	+24.0	+1.7	+2.7	+5.0	+23.9
513	Apparel, piece goods & notions	-15.9	+11.1	+7.6	-2.5	+10.0	+6	+7.4	+2.0	+10.4
514	Groceries & related products	+2.6	+10.8	+6.1	+2.8	+7.2	+5.4	+9.3	+2.1	+7.5
515	Farm-product raw materials	-13.7	+5.0	+8.0	+3.9	+9.1	-20.6	+2.1	-3.3	+9.8
516	Chemicals & allied products	-5.1	+14.5	+2.8	+1.4	+9.8	+2.7	+8.1	+9	+9.6
517	Petroleum & petroleum products	-1.4	+28.8	+16.4	-.4	+2.3	-.8	+26.8	-2.1	+2.2
518	Beer, wine, & distilled beverages	-4.5	+1.7	+4.1	+5	+6.9	-1.0	-.6	+3	+7.2
519	Misc. nondurable goods	-3.1	+3.4	+7.8	+5.2	+18.5	-1.7	-1.1	+6.4	+18.4

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 1982 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

Estimates based on a sample survey will differ from the value derived from the population because of sampling variability and nonsampling error. Sampling variability occurs 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 variability 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 3. 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 correspond-

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

ing percent for that estimate shown in the sampling variability table. In about 9 out of 10 (90 percent) of these samples, the estimates would differ from the results of a complete enumeration by less than 1.65 times the percentages shown. In about 19 out of 20 (95 percent) of these samples, the estimate would differ from the results of a complete enumeration by less than twice the percentages shown.

To illustrate the computations involved in the above confidence statements, as related to dollar volume sales estimates, assume that an estimate of sales published in table 1B is \$10,750 million for a particular month and that the median coefficient of variation for this estimate as given in table 3, is 1.8 percent, or 0.018. Multiplying \$10,750 million by 0.018 yields \$194 million. Therefore a 67-percent confidence interval is \$10,556 million to \$10,944 million (\$10,750 million plus or minus \$194 million). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately 2 out of 3 (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Typical practice is to construct 90 or 95 percent confidence intervals. Continuing with the illustration, a 90-percent confidence interval is \$10,430 million to \$11,070 million (\$10,750 million plus or minus \$320 million). A 95-percent confidence interval is \$10,362 million to \$11,138 million (\$10,750 million plus or minus \$388 million).

All comparisons appearing on the front page of this publication and for which measures of sampling variability are available are accompanied by an indication of the 90-percent confidence interval. Thus a statement such as "+0.8 (± 1.3)" indicates a 90-percent confidence interval from -0.5 to +2.1. If the confidence interval contains zero, it is uncertain whether there is an increase or decrease.

Nonsampling Errors

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 34 percent of the sales estimates and 38 percent for inventories.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventory estimates in this report reflect the results of a benchmarking² operation which made use of 1984 and 1985 estimates tabulated from the 1985 Annual Trade Survey. The sales estimates for the period January 1984 through December 1986 were derived in a manner so that the sum of the 12 months for 1984 and 1985 were equal to the sales estimates published in the 1984 and 1985 Annual Trade Surveys. The revision process was conducted so as to minimize changes to previously published month-to-month trends. The estimates for the original series were derived by using composite estimation procedures. Using inventory results from the annual surveys for the years 1980 to 1985, monthly inventories were revised to a non-LIFO basis. Through the use of carry-forward factors, the effect of the revision process was applied to composite sales and inventory estimates subsequent to December 1985. These factors were derived at various kind-of-business levels and are held constant until the next benchmarking operation. Aggregate level estimates were derived by summing appropriate three-digit kind-of-business estimates, thereby assuring additivity.

CLASSIFICATION DIFFERENCES BETWEEN MONTHLY SURVEY AND 1977 AND 1982 CENSUSES OF WHOLESALE TRADE

For SIC 505, the monthly survey included merchant wholesalers as well as sales branches of ferrous metals service centers with inventories. Therefore, the 1977 and 1982 census sales estimates included the receipts of merchant wholesalers and sales branches of ferrous metals service centers with inventories.

Establishments classified in the Farm-Product Raw Materials group (SIC 515) included as sales, products purchased and transferred to other company establishments. In the monthly survey, intercompany transfers are not included in sales. Because of the differences, the 1977 and 1982 sales for the SIC were obtained from the 1977 and 1982 Annual Trade Surveys (ATS).

Inventories were not benchmarked to the census levels since the census of wholesale trade does not include inventories of auxiliary and central administrative offices of merchant wholesale establishments which are included in the monthly survey. The inventory estimates for the years 1977 and 1982 were computed by multiplying the stock/sales ratios obtained from the annual surveys by the census sales for these years.

Unpublished Data

Sales and inventory estimates for unpublished four-digit wholesale trade categories are not included in this publication because their sampling variability is so high, relative to

²For a more detailed description, see the section dealing with revisions to published data in the Current Business Reports publication, *Revised Monthly Wholesale Trade: December 1980 Through December 1986*.

the changes from month-to-month or between other periods, as to make them potentially misleading. The Census Bureau, for a nominal fee 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 on a non-LIFO basis 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. Methods of valuation may vary according to the accounting practices of the firm.

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 current and past experiences. Therefore, the adjusted could become less precise if 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.

Concurrent Seasonal Adjustment

Concurrent seasonal adjustment uses all available unadjusted estimates (including the latest preliminary estimates) as input to the X-11 program. After the last benchmarking operation, factors were developed and used to derive adjusted sales estimates for the period January 1984 through January 1987. Factors were developed and used to derive non-LIFO inventory estimates for the period December 1980 through January 1987. When unadjusted preliminary and final estimates become available, all estimates will be used as input to the X-11 program and new factors will be applied to the preliminary and final (one month before the preliminary) estimates and to the previous year estimates that correspond to the preliminary month.

Table 4 presents, by kind of business, the combined seasonal and trading-day factors that are used to adjust inventory and sales estimates. For all kind of business, one month of projected factors are shown. These projected factors are estimates of the factors that will be used to derive adjusted estimates.

Table 3. Coefficients of Variation of Sales and Inventories
(in percent)

SIC code	Kind of business	Preliminary estimates		Final estimates		Ratio of two consecutive months		Year to year estimates		Cumulative sales estimates		Current year cumulative to previous year cumulative
		Range	Median	Range	Median	Range	Median	Range	Median	CY	PY	
	Sales, Total	1.2-1.6	1.2	1.0-1.4	1.2	0.4-0.9	0.6	1.4-1.8	1.6	1.0	(Y)	(Y)
50	Durable goods	1.3-1.9	1.6	1.1-1.7	1.4	0.5-0.9	0.7	1.4-2.2	1.9	1.3	(Y)	(Y)
501	Motor vehicles & auto. equip.	3.2-3.7	3.4	3.0-3.7	3.3	0.9-1.9	1.5	2.4-5.3	3.8	3.1	(Y)	(Y)
502	Furniture & home furnishings	5.0-8.7	6.6	4.6-8.1	5.3	1.8-7.1	3.1	6.1-12.0	8.0	5.1	(Y)	(Y)
503	Lumber & other construction mat.	5.3-8.8	6.9	5.0-8.5	6.7	1.6-3.5	2.1	4.6-11.3	9.4	5.3	(Y)	(Y)
504	Sporting, recreational, photographic & hobby goods, toys & supplies	4.9-9.4	7.1	5.0-8.8	5.9	1.9-5.5	3.3	9.4-20.4	11.6	5.8	(Y)	(Y)
505	Metals & minerals, ex. petroleum	3.5-4.6	4.4	3.5-4.7	4.1	1.2-2.4	1.8	3.9-7.0	4.9	3.3	(Y)	(Y)
506	Electrical goods	2.0-3.2	2.3	1.8-2.8	2.2	1.1-1.7	1.5	2.9-9.0	5.2	2.1	(Y)	(Y)
507	Hardware, plumbing & heating equipment	6.2-8.6	6.9	6.0-8.0	6.5	1.3-3.6	2.0	5.0-10.3	8.1	5.7	(Y)	(Y)
508	Machinery, equip. & supplies	2.3-3.0	2.6	1.6-2.5	2.5	0.8-2.1	1.6	2.2-5.2	4.6	1.7	(Y)	(Y)
09	Miscellaneous durable goods	2.9-4.1	3.4	2.6-4.0	3.0	1.2-2.7	1.8	3.2-5.5	4.9	2.3	(Y)	(Y)
51	Nondurable goods	2.0-3.2	2.2	1.9-2.3	2.1	0.4-1.5	0.8	2.4-3.3	2.8	1.9	(Y)	(Y)
511	Paper & paper products	3.8-5.8	5.3	3.8-5.7	4.8	1.1-2.6	1.9	2.9-6.5	4.9	4.1	(Y)	(Y)
512	Drugs, drug proprietaries and druggists' sundries	5.0-8.3	5.8	5.0-7.9	5.8	0.9-2.0	1.7	3.4-10.1	7.8	5.4	(Y)	(Y)
513	Apparel, piece goods & notions	7.3-9.2	7.5	6.1-8.3	7.5	2.6-5.3	3.1	6.0-10.4	8.4	5.6	(Y)	(Y)
514	Groceries & related products	3.6-6.8	4.2	3.8-4.9	4.2	0.5-4.1	0.8	4.2-7.0	6.6	4.0	(Y)	(Y)
515	Farm-product raw materials	4.8-6.2	5.4	4.4-6.2	5.2	2.0-4.4	2.6	5.9-9.3	6.3	4.3	(Y)	(Y)
516	Chemicals & allied products	5.1-9.9	7.4	4.8-8.5	5.8	1.1-3.9	2.3	6.4-12.4	9.0	5.7	(Y)	(Y)
517	Petroleum & petroleum products	4.0-4.9	4.5	4.0-4.8	4.3	0.8-1.3	1.1	3.0-12.0	7.9	3.8	(Y)	(Y)
518	Beer, wine, & distilled beverages	2.6-3.7	2.9	2.6-3.3	2.8	0.8-1.7	1.4	2.8-9.9	6.8	2.5	(Y)	(Y)
519	Misc. nondurable goods	4.5-5.5	4.9	4.2-5.5	4.6	1.4-2.3	1.7	4.7-8.7	6.5	4.0	(Y)	(Y)
	Inventories, Total	1.1-1.3	1.3	1.2-1.3	1.3	0.2-0.4	0.3	0.8-2.1	1.5	(X)	(X)	(X)
50	Durable goods	1.3-1.6	1.5	1.4-1.6	1.5	0.2-0.5	0.3	1.0-2.4	2.0	(X)	(X)	(X)
501	Motor vehicles & auto. equip.	4.4-6.2	5.2	4.5-5.7	5.1	0.5-1.4	0.9	3.7-6.8	5.9	(X)	(X)	(X)
502	Furniture & home furnishings	7.5-8.9	8.2	7.6-9.4	7.9	0.5-2.3	1.4	5.1-16.8	13.0	(X)	(X)	(X)
503	Lumber & other construction mat.	4.9-6.1	5.5	4.9-5.7	5.4	0.7-2.9	1.0	4.6-12.6	7.4	(X)	(X)	(X)
504	Sporting, recreational, photographic & hobby goods, toys & supplies	7.5-12.4	10.1	8.7-11.5	10.5	0.8-2.0	1.4	4.4-18.6	13.1	(X)	(X)	(X)
505	Metals & minerals, ex. petroleum	4.8-5.9	5.8	4.7-5.9	5.6	0.3-0.9	0.8	4.0-8.3	6.8	(X)	(X)	(X)
506	Electrical goods	1.7-2.4	1.9	1.5-2.6	1.9	0.3-0.7	0.5	2.2-9.1	5.7	(X)	(X)	(X)
507	Hardware, plumbing & heating equipment	4.3-5.3	5.0	4.1-5.4	4.7	0.5-2.6	1.2	4.8-8.6	6.4	(X)	(X)	(X)
508	Machinery, equip. & supplies	2.1-3.4	2.9	2.1-3.0	2.8	0.3-0.9	0.6	2.8-6.2	4.4	(X)	(X)	(X)
509	Miscellaneous durable goods	5.2-8.3	6.9	5.4-8.3	6.5	0.5-1.0	0.9	7.7-12.8	10.8	(X)	(X)	(X)
51	Nondurable goods	1.4-2.0	1.9	1.5-1.9	1.7	0.4-0.6	0.5	1.8-2.7	2.0	(X)	(X)	(X)
511	Paper & paper products	5.8-6.8	6.1	5.6-6.6	6.1	0.5-1.1	0.8	3.4-9.7	8.1	(X)	(X)	(X)
512	Drugs, drug proprietaries and druggists' sundries	5.4-6.3	5.7	5.3-5.9	5.7	0.5-1.2	0.7	4.8-9.1	7.9	(X)	(X)	(X)
513	Apparel, piece goods & notions	4.4-6.0	5.3	4.2-6.0	5.1	0.9-1.7	1.3	6.0-14.5	8.9	(X)	(X)	(X)
514	Groceries & related products	4.7-5.1	4.7	4.7-5.4	4.9	0.6-1.0	0.8	3.6-7.9	5.8	(X)	(X)	(X)
515	Farm-product raw materials	6.5-8.1	7.2	6.3-8.0	7.3	1.2-3.9	2.1	7.3-10.4	9.9	(X)	(X)	(X)
516	Chemicals & allied products	7.0-9.2	7.6	7.2-9.1	7.5	0.8-2.1	1.3	8.4-14.9	10.9	(X)	(X)	(X)
517	Petroleum & petroleum products	2.9-4.4	3.3	3.1-4.0	3.4	0.7-2.0	0.8	3.0-20.7	7.9	(X)	(X)	(X)
518	Beer, wine, & distilled beverages	4.4-5.8	4.9	4.3-6.2	4.9	0.6-1.2	0.8	2.5-6.7	5.9	(X)	(X)	(X)
519	Misc. nondurable goods	7.2-9.0	8.2	7.6-8.4	8.0	0.9-3.1	1.2	5.5-12.2	11.1	(X)	(X)	(X)

y Previous year cumulative coefficients of variation will appear early in 1988.

x Cumulative coefficients of variation are not applicable for inventories.

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 June 1987 through November 1987.

Table 4. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers

SIC code	Kind of business	1986		1987											
		Nov. ¹	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct. ¹	Nov. ¹	Dec.
	Sales,¹ Total	.962	1.035	.953	.905	1.035	1.019	1.007	1.039	.998	.976	1.009	1.037	.983	1.036
50	Durable goods	.954	1.010	.920	.890	1.031	1.027	.991	1.053	1.004	.985	1.031	1.071	.976	1.012
501	Motor vehicles & auto. equip.	.956	1.011	.958	.871	1.014	1.034	1.037	1.083	1.034	.969	.948	1.079	.969	1.031
502	Furniture & home furnishings	.965	.974	.868	.882	.991	1.013	.991	1.058	1.033	1.005	1.073	1.132	.984	.977
503	Lumber & other construction mat.	.942	.876	.811	.793	.955	1.044	1.040	1.120	1.113	1.090	1.087	1.103	.978	.878
504	Sporting, recreational, photographic & hobby goods, toys & supplies	1.073	1.011	.849	.877	.981	1.000	.888	.978	.990	.996	1.074	1.190	1.103	1.037
505	Metals & minerals, ex. petroleum ..	.889	.983	.968	.944	1.098	1.040	.985	1.034	.987	.991	1.058	1.012	.924	.981
506	Electrical goods	1.017	1.062	.912	.907	1.017	.949	.927	1.013	.989	.999	1.066	1.107	1.027	1.068
507	Hardware, plumbing & heating equipment	.940	.860	.932	.902	.968	1.041	1.008	1.081	1.049	1.000	1.018	1.073	.967	.977
508	Machinery, equip. & supplies	.924	1.043	.908	.907	1.065	1.050	1.005	1.053	.986	.968	1.028	1.024	.945	1.053
509	Miscellaneous durable goods	.977	.954	.954	.893	1.033	1.138	.993	.997	.935	1.008	1.033	1.098	1.028	.955
51	Nondurable goods	.969	1.056	.982	.917	1.041	1.007	1.020	1.021	.992	.968	.992	1.010	.993	1.056
511	Paper & paper products	.948	1.005	.979	.939	1.035	1.018	.958	1.035	.998	1.009	1.007	1.042	.974	1.015
512	Drugs, drug proprietaries and druggists' sundries	.956	1.025	1.001	.927	1.026	1.030	.955	1.010	.987	.955	1.036	1.039	.985	1.032
513	Apparel, piece goods & notions ..	.901	.779	.887	1.039	1.038	.977	.879	1.070	1.112	1.155	1.058	1.114	.932	.774
514	Groceries & related products	.967	1.025	.978	.915	1.006	1.007	1.020	1.012	1.033	.995	1.007	1.007	.980	1.030
515	Farm-product raw materials	1.069	1.186	1.090	.969	1.083	.977	1.020	.955	.877	.848	.870	1.011	1.099	1.206
516	Chemicals & allied products	.925	.930	.991	.925	1.041	1.022	1.000	1.068	.997	.986	1.039	1.059	.979	.920
517	Petroleum & petroleum products ..	.988	1.114	1.104	.958	1.061	.975	.957	.959	.935	.903	1.007	1.009	1.003	1.112
518	Beer, wine, & distilled beverages ..	.976	1.201	.760	.774	.927	.984	1.024	1.098	1.102	1.038	1.019	1.035	.998	1.227
519	Misc. nondurable goods	.914	1.017	.856	.856	1.079	1.101	1.180	1.070	1.012	.958	.953	.969	.955	1.000
	Inventories,¹ total	1.008	1.007	1.003	1.006	1.009	1.006	.992	.995	.990	.985	.997	1.009	1.007	1.004
50	Durable goods	1.000	.995	.985	.993	1.002	1.004	1.000	1.008	1.005	1.002	1.010	1.001	1.000	.995
501	Motor vehicles & auto. equip.	1.014	1.016	.998	1.002	1.008	1.005	.988	1.004	.976	.959	1.022	1.006	1.014	1.017
502	Furniture & home furnishings	.984	1.027	1.014	1.012	.994	.976	.996	.995	.992	1.014	1.007	.994	.983	1.020
503	Lumber & other construction mat.	.985	.996	.961	.997	1.026	1.030	1.002	1.026	1.018	1.012	.997	.982	.984	.994
504	Sporting, recreational, photographic & hobby goods, toys & supplies	.975	.977	.984	.990	1.008	1.001	.993	1.012	1.028	1.016	1.016	1.010	.974	.978
505	Metals & minerals, ex. petroleum ..	.985	1.013	1.007	1.000	.993	.987	.997	1.016	1.009	.997	.993	.981	.983	1.011
506	Electrical goods	1.005	.984	.969	.970	.978	.995	.992	1.000	1.025	1.023	1.034	1.019	1.006	.988
507	Hardware, plumbing & heating equipment	.980	.962	.972	.999	1.028	1.042	1.032	1.011	1.017	1.000	.986	.983	.978	.964
508	Machinery, equip. & supplies	1.006	.997	.985	.994	1.006	1.005	1.006	1.011	1.004	1.006	.996	1.004	1.009	.995
509	Miscellaneous durable goods	1.022	.957	.974	.996	.978	.994	1.010	.995	1.019	1.025	1.027	1.020	1.020	.955
51	Nondurable goods	1.032	1.031	1.036	1.029	1.022	1.008	.972	.972	.962	.950	.973	1.018	1.030	1.029
511	Paper & paper products	1.007	.995	.994	1.007	1.003	1.004	1.003	1.005	1.000	1.006	.976	.984	1.005	.995
512	Drugs, drug proprietaries and druggists' sundries	.978	.994	1.023	1.031	1.052	1.019	.981	.969	.965	.961	.999	1.027	.979	.991
513	Apparel, piece goods & notions ..	.941	.994	1.000	.986	.948	.966	1.014	1.033	1.078	1.065	1.035	.981	.938	.980
514	Groceries & related products	1.047	1.000	.979	1.009	.997	.994	.999	1.002	.981	.965	.989	1.038	1.045	1.004
515	Farm-product raw materials	1.166	1.213	1.251	1.157	1.088	.996	.819	.810	.785	.792	.872	1.078	1.158	1.194
516	Chemicals & allied products	1.002	.983	.990	1.006	.998	1.035	1.009	1.012	1.011	.998	.959	.999	1.004	.975
517	Petroleum & petroleum products ..	1.037	1.090	1.062	.921	.931	.943	.996	1.006	.984	.942	1.010	1.021	1.038	1.113
518	Beer, wine, & distilled beverages ..	1.052	.912	.942	.959	.997	1.022	1.005	1.032	1.011	.987	1.004	1.047	1.049	.905
519	Misc. nondurable goods	.972	1.018	1.033	1.071	1.111	1.072	.980	.971	.936	.930	.957	.984	.973	1.021

¹Revised

¹Adjusted sales and inventory data shown in table 1A 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: The seasonal factors shown have been computed based on monthly estimates through the current month preliminary estimates.



Monthly Wholesale Trade

Sales and Inventories

December 1987



U.S. Department of Commerce
BUREAU OF THE CENSUS

BW87-12
Issued February 1988

Intention to Revise Wholesale Estimates: The unadjusted and adjusted merchant wholesale sales, inventories, and stock/sales ratio estimates will be revised utilizing the results of the 1986 Annual Trade Survey. Revised sales estimates for January 1982 through December 1987 and inventories for January 1983 through December 1987 are scheduled for release during the week of April 4.

Sales. December 1987 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$127.4 billion, unchanged at 0.0 percent (± 0.5 percent) from the revised November level and up 7.6 percent (± 2.5 percent) from a year ago. The November preliminary estimate was revised downward by \$0.9 billion or about 0.7 percent. December sales of durable goods decreased 0.6 percent (± 1.1 percent) from November, but were 5.1 percent (± 2.5 percent) above a year ago. Sales in the machinery, equipment, and supplies category decreased 4.4 percent from November to \$14,766 million. December sales of nondurable goods were up 0.6 percent (± 0.8 percent) from November and were 9.9 percent (± 5.6 percent) above December 1986. However, sales in the petroleum and petroleum products category decreased 5.0 percent from November to \$10,933 million.

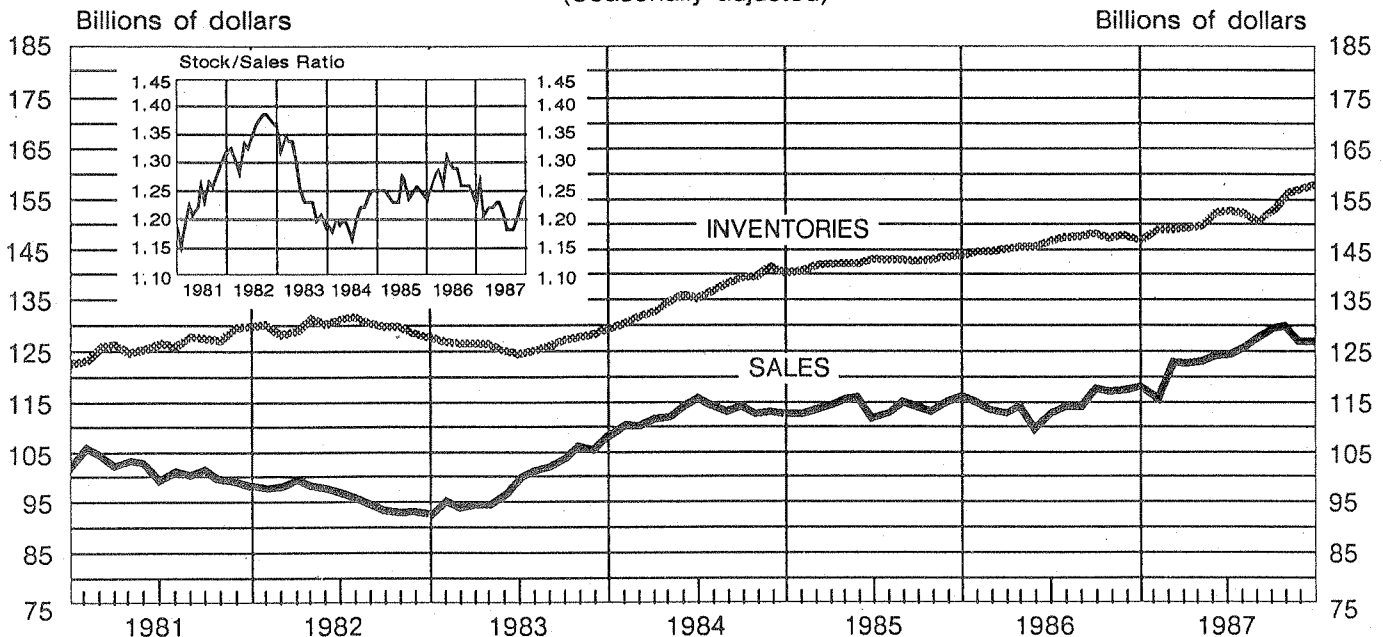
Inventories. Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$158.2 billion at the end of December, up 0.6 percent (± 0.6

percent) from the revised November level and up 7.4 percent (± 1.1 percent) from a year ago. The November preliminary estimate was revised downward by \$0.6 billion or about 0.4 percent. Inventories of durable goods wholesalers increased 0.6 percent (± 0.5 percent) from the November level and were 6.0 percent (± 2.5 percent) above a year ago. Inventories of nondurable goods wholesalers were up 0.5 percent (± 1.1 percent) from the November level and were 9.9 percent (± 3.0 percent) above December 1986.

Stock/Sales Ratio. The December stock/sales ratio for merchant wholesalers, based on seasonally adjusted data was 1.24, up from the November ratio of 1.23 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 4.

Monthly Sales, Inventories, and Stock/Sales Ratios
of Merchant Wholesalers: 1981-1987
(Seasonally adjusted)



Monthly Wholesale Trade for January is scheduled to be released March 9, 1988 at 10:00.

Address inquiries concerning this report to Shirley Roberts, Business Division, Bureau of the Census, Washington, D.C. 20233. Telephone (301) 763-3916 or 763-5806.

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Table 1A. Adjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1987 and 1986

(Data adjusted for seasonal variation and, in the case of sales, also for trading-day differences. Sales and Inventories in millions of dollars)

SIC code	Kind of business	1987												1986
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^P	Dec. ^T
	Sales, Total.	116,545	123,281	123,009	123,439	124,486	124,836	126,196	128,164	129,912	130,384	127,400	127,419	118,462
50	Durable goods	55,893	59,344	59,498	59,016	59,413	60,274	60,784	61,065	62,238	62,978	61,103	60,718	57,759
501	Motor vehicles & auto. equip.	11,334	12,931	12,890	12,338	12,339	12,073	12,001	12,518	12,612	12,961	12,754	12,810	12,839
502	Furniture & home furnishings	2,377	2,304	2,370	2,190	2,179	2,117	2,260	2,376	2,670	2,499	2,447	2,425	2,231
503	Lumber & other construction mat.	4,543	4,571	4,831	4,696	4,791	5,171	5,252	5,083	5,296	5,182	4,890	4,937	4,624
504	Sporting, recreational, photographic & hobby goods, toys & supplies	1,645	1,718	1,554	1,480	1,417	1,449	1,505	1,605	1,480	1,471	1,443	1,425	1,596
505	Metals & minerals, ex. petroleum	4,963	5,267	5,493	5,192	5,364	5,524	5,612	5,795	5,757	5,866	5,793	6,038	4,882
506	Electrical goods	7,899	8,270	8,023	8,207	8,249	8,085	8,339	8,381	8,055	8,061	7,915	7,640	7,871
507	Hardware, plumbing & heating equipment	3,667	3,891	4,191	3,981	3,944	4,247	4,186	4,269	4,537	4,460	4,390	4,399	3,858
508	Machinery, equip. & supplies	14,787	15,230	15,146	15,345	15,348	15,439	15,870	15,866	16,171	16,167	15,450	14,766	15,012
509	Miscellaneous durable goods	4,658	5,162	5,000	5,587	5,782	6,169	5,759	5,172	5,660	6,311	6,021	6,278	4,846
51	Nondurable goods	60,652	63,937	63,511	64,423	65,073	64,562	65,412	67,099	67,674	67,406	66,297	66,701	60,703
511	Paper & paper products	3,564	3,706	3,671	3,705	3,685	3,844	3,938	3,993	4,197	4,342	4,423	4,498	3,581
512	Drugs, drug proprietaries and druggists' sundries	2,514	2,608	2,507	2,513	2,630	2,610	2,608	2,578	2,613	2,528	2,564	2,599	2,484
513	Apparel, piece goods & notions	3,417	3,852	3,894	3,318	3,476	3,615	3,563	3,784	3,935	3,931	4,026	4,098	3,326
514	Groceries & related products	20,429	20,596	20,021	20,625	20,914	20,762	20,971	20,750	20,735	20,768	21,568	21,980	19,946
515	Farm-product raw materials	6,174	6,496	6,632	6,952	6,903	7,254	7,620	8,152	8,378	8,258	6,740	6,803	6,467
516	Chemicals & allied products	2,055	1,990	2,100	2,192	2,143	2,191	2,214	2,176	2,204	2,316	2,313	2,386	2,086
517	Petroleum & petroleum products	10,253	11,297	11,442	11,452	11,537	11,278	12,160	12,307	12,197	11,787	11,517	10,933	9,839
518	Beer, wine, & distilled beverages	3,550	3,621	3,589	3,603	3,590	3,442	3,377	3,387	3,454	3,464	3,427	3,419	3,452
519	Misc. nondurable goods	8,696	9,771	9,655	10,063	10,195	9,566	8,961	9,972	10,321	10,012	9,725	9,975	9,522
	Inventories, total	149,347	149,408	149,565	150,050	152,673	153,093	152,648	151,222	153,245	156,632	157,287	158,183	147,352
50	Durable goods	97,280	96,594	97,491	97,891	100,056	99,504	99,099	97,980	98,482	101,376	100,814	101,413	95,709
501	Motor vehicles & auto. equip.	18,782	19,176	19,209	19,360	20,678	20,090	20,183	20,368	20,316	20,670	21,182	21,330	18,643
502	Furniture & home furnishings	3,510	3,558	3,697	3,885	4,038	4,045	4,178	4,029	4,189	4,138	4,098	3,923	3,389
503	Lumber & other construction mat.	4,907	4,846	5,022	5,207	5,520	5,491	5,599	5,350	5,616	5,665	5,561	5,647	4,950
504	Sporting, recreational, photographic & hobby goods, toys & supplies	3,436	3,473	3,492	3,444	3,481	3,486	3,731	3,700	3,695	3,672	3,587	3,544	3,397
505	Metals & minerals, ex. petroleum	9,508	9,182	9,377	9,449	9,477	9,539	9,150	8,823	8,972	9,467	9,383	9,446	9,359
506	Electrical goods	13,864	14,092	14,082	13,545	13,867	13,698	13,321	13,338	12,846	13,356	13,477	13,680	13,521
507	Hardware, plumbing & heating equipment	6,576	6,509	6,504	6,187	6,259	6,427	6,339	6,305	6,617	6,830	6,559	6,672	6,615
508	Machinery, equip. & supplies	31,984	31,106	31,182	31,554	31,011	31,153	31,239	30,900	31,136	32,409	31,704	31,832	31,007
509	Miscellaneous durable goods	4,713	4,652	4,926	5,260	5,725	5,575	5,359	5,167	5,095	5,169	5,263	5,339	4,828
51	Nondurable goods	52,067	52,814	52,074	52,159	52,617	53,589	53,549	53,242	54,763	55,256	56,473	56,770	51,643
511	Paper & paper products	3,595	3,535	3,563	3,554	3,517	3,522	3,548	3,449	3,601	3,805	3,724	3,757	3,552
512	Drugs, drug proprietaries and druggists' sundries	4,385	4,394	4,152	4,455	4,357	4,422	4,628	4,617	4,656	4,869	5,087	5,147	4,264
513	Apparel, piece goods & notions	7,061	7,142	7,310	7,071	7,201	7,500	7,072	7,143	7,471	7,432	7,848	7,762	7,027
514	Groceries & related products	12,074	11,915	11,614	11,743	11,865	12,001	12,671	12,368	12,751	12,540	12,758	12,942	12,052
515	Farm-product raw materials	5,954	5,978	5,748	6,184	6,529	6,644	6,400	6,125	6,362	6,597	6,523	6,441	5,754
516	Chemicals & allied products	2,121	2,253	2,223	2,227	2,374	2,341	2,290	2,412	2,406	2,352	2,414	2,549	2,140
517	Petroleum & petroleum products	3,405	3,468	3,469	3,198	3,047	3,103	3,428	3,294	3,276	3,267	3,174	3,009	3,393
518	Beer, wine, & distilled beverages	4,033	4,347	4,273	4,061	4,066	4,012	3,924	4,001	4,108	4,093	4,002	4,062	3,848
519	Misc. nondurable goods	9,439	9,782	9,722	9,666	9,661	10,044	9,588	9,833	10,132	10,301	10,943	11,101	9,613
	Stock/sales ratios, total	1.28	1.21	1.22	1.22	1.23	1.23	1.21	1.18	1.18	1.20	1.23	1.24	1.24
50	Durable goods	1.74	1.63	1.64	1.66	1.68	1.65	1.63	1.60	1.58	1.61	1.65	1.67	1.66
501	Motor vehicles & auto. equip.	1.66	1.48	1.49	1.57	1.68	1.66	1.68	1.63	1.61	1.59	1.66	1.67	1.45
502	Furniture & home furnishings	1.48	1.54	1.56	1.77	1.85	1.91	1.85	1.70	1.57	1.66	1.67	1.62	1.52
503	Lumber & other construction mat.	1.08	1.06	1.04	1.11	1.15	1.06	1.07	1.05	1.06	1.09	1.14	1.14	1.07
504	Sporting, recreational, photographic & hobby goods, toys & supplies	2.09	2.02	2.25	2.33	2.46	2.41	2.48	2.31	2.50	2.50	2.49	2.49	2.13
505	Metals & minerals, ex. petroleum	1.91	1.74	1.71	1.82	1.77	1.73	1.63	1.52	1.56	1.61	1.62	1.56	1.92
506	Electrical goods	1.76	1.70	1.76	1.65	1.68	1.69	1.60	1.59	1.59	1.66	1.70	1.79	1.72
507	Hardware, plumbing & heating equipment	1.79	1.67	1.55	1.55	1.59	1.51	1.51	1.48	1.46	1.53	1.49	1.52	1.71
508	Machinery, equip. & supplies	2.16	2.04	2.06	2.06	2.02	2.02	1.97	1.95	1.93	2.00	2.05	2.16	2.07
509	Miscellaneous durable goods	1.01	.90	.99	.94	.99	.90	.93	1.00	.90	.82	.87	.85	1.00
51	Nondurable goods	.86	.83	.82	.81	.81	.83	.82	.79	.81	.82	.85	.85	.85
511	Paper & paper products	1.01	.95	.97	.96	.95	.92	.90	.86	.86	.88	.84	.84	.99
512	Drugs, drug proprietaries and druggists' sundries	1.74	1.68	1.66	1.77	1.66	1.69	1.77	1.79	1.78	1.93	1.98	1.98	1.72
513	Apparel, piece goods & notions	2.07	1.85	1.88	2.13	2.07	2.07	1.98	1.89	1.90	1.89	1.95	1.89	2.11
514	Groceries & related products	.59	.58	.58	.57	.57	.58	.60	.60	.63	.60	.59	.59	.60
515	Farm-product raw materials	.96	.92	.87	.89	.95	.92	.84	.75	.76	.80	.97	.95	.89
516	Chemicals & allied products	1.03	1.13	1.06	1.02	1.11	1.07	1.03	1.11	1.09	1.02	1.04	1.07	1.03
517	Petroleum & petroleum products	.33	.31	.30	.28	.26	.28	.28	.27	.27	.28	.28	.28	.34
518	Beer, wine, & distilled beverages	1.14	1.20	1.19	1.13	1.13	1.17	1.16	1.18	1.19	1.18	1.17	1.19	1.11
519	Misc. nondurable goods	1.09	1.00	1.01	.96	.95	1.05	1.07	.99	.98	1.03	1.13	1.11	1.01

^TRevised.

^PPreliminary estimate. See sample design and estimation procedures in Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986.

Table 1B. Unadjusted Estimated Monthly Sales, Inventories, and Stock/Sales Ratios of Merchant Wholesalers: 1987 and 1986

(Data not adjusted for seasonal variation or trading-day differences. Sales and Inventories in millions of dollars)

SIC code	Kind of business	1987												1986	Total 12 mos.	
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^P	Dec.	1987	1986
	Sales, Total	110,564	111,705	126,908	126,354	125,630	129,016	126,469	125,361	130,767	135,834	125,448	131,176	121,499	1,505,232	1,381,311
50	Durable goods	51,319	52,834	61,100	61,161	59,270	63,423	61,290	60,613	63,936	67,409	59,691	61,265	58,033	723,311	664,108
501	Motor vehicles & auto. equip.	10,858	11,263	13,070	12,758	12,796	13,075	12,409	12,130	11,956	13,985	12,397	13,246	13,109	149,943	145,216
502	Furniture & home furnishings	2,063	2,032	2,349	2,218	2,159	2,240	2,335	2,388	2,865	2,829	2,432	2,360	2,169	28,270	26,337
503	Lumber & other construction mat.	3,684	3,625	4,614	4,903	4,983	5,791	5,846	5,540	5,757	5,716	4,778	4,320	4,060	59,557	51,435
504	Sporting, recreational, photographic & hobby goods, toys & supplies	1,397	1,507	1,524	1,480	1,258	1,417	1,490	1,599	1,590	1,750	1,610	1,489	1,645	18,111	18,081
505	Metals & minerals, ex. petroleum	4,824	4,972	6,031	5,400	5,284	5,712	5,539	5,743	6,091	5,936	5,318	5,947	4,770	66,797	57,347
506	Electrical goods	7,204	7,501	8,159	7,788	7,647	8,190	8,247	8,373	8,587	8,923	8,145	8,076	8,296	96,840	92,350
507	Hardware, plumbing & heating equipment	3,418	3,510	4,057	4,144	3,976	4,591	4,391	4,269	4,619	4,786	4,276	4,289	3,765	50,326	43,618
508	Machinery, equip. & supplies	13,427	13,814	16,131	16,112	15,425	16,257	15,648	15,358	16,624	16,555	14,600	15,549	15,673	185,500	169,216
509	Miscellaneous durable goods	4,444	4,610	5,165	6,358	5,742	6,150	5,385	5,213	5,847	6,929	6,135	5,989	4,546	67,967	60,508
51	Nondurable goods	59,245	58,871	65,808	65,193	66,360	65,593	65,179	64,748	66,831	68,425	65,757	69,911	63,466	781,921	717,203
511	Paper & paper products	3,489	3,480	3,800	3,772	3,530	3,979	3,930	4,029	4,226	4,524	4,277	4,579	3,602	47,615	40,521
512	Drugs, drug proprietaries and druggists' sundries	2,517	2,418	2,572	2,588	2,512	2,636	2,574	2,462	2,707	2,627	2,505	2,698	2,546	30,816	27,576
513	Apparel, piece goods & notions	3,031	4,002	4,042	3,242	3,055	3,868	3,962	4,370	4,163	4,379	3,732	3,131	2,571	44,977	41,411
514	Groceries & related products	19,980	18,845	20,141	20,769	21,332	21,011	21,663	20,646	20,518	20,913	21,201	22,826	20,524	249,845	234,748
515	Farm-product raw materials	6,730	6,295	7,182	6,792	7,041	6,928	6,683	6,913	7,289	8,349	7,481	8,000	7,541	85,683	79,195
516	Chemicals & allied products	2,037	1,841	2,186	2,240	2,143	2,340	2,207	2,146	2,290	2,453	2,204	2,207	1,950	26,294	25,507
517	Petroleum & petroleum products	11,319	10,823	12,140	11,166	11,041	10,816	11,370	11,113	12,282	11,893	11,626	12,081	10,833	137,670	118,813
518	Beer, wine, & distilled beverages	2,698	2,803	3,327	3,545	3,676	3,779	3,721	3,516	3,520	3,585	3,424	4,185	4,139	41,779	40,262
519	Misc. nondurable goods	7,444	8,364	10,418	11,079	12,030	10,236	9,069	9,553	9,836	9,702	9,307	10,204	9,760	117,242	109,170
	Inventories, total	149,548	150,166	150,882	150,853	151,371	152,651	151,258	148,823	152,788	157,872	158,482	159,096	148,245	(X)	(X)
50	Durable goods	95,895	95,989	97,667	98,249	100,083	100,288	99,537	97,919	99,294	101,601	100,821	100,986	95,353	(X)	(X)
501	Motor vehicles & auto. equip.	18,744	19,214	19,363	19,457	20,430	20,170	19,699	19,533	20,763	20,794	21,542	21,671	18,941	(X)	(X)
502	Furniture & home furnishings	3,559	3,601	3,675	3,792	4,022	4,025	4,145	4,085	4,218	4,113	4,078	3,962	3,423	(X)	(X)
503	Lumber & other construction mat.	4,716	4,831	5,153	5,363	5,531	5,634	5,700	5,414	5,599	5,563	5,450	5,596	4,920	(X)	(X)
504	Sporting, recreational, photographic & hobby goods, toys & supplies	3,381	3,438	3,520	3,447	3,457	3,528	3,835	3,759	3,754	3,709	3,501	3,441	3,309	(X)	(X)
505	Metals & minerals, ex. petroleum	9,575	9,182	9,311	9,326	9,449	9,692	9,232	8,797	8,909	9,287	9,167	9,578	9,481	(X)	(X)
506	Electrical goods	13,434	13,669	13,772	13,477	13,756	13,698	13,654	13,645	13,283	13,610	13,544	13,502	13,359	(X)	(X)
507	Hardware, plumbing & heating equipment	6,392	6,502	6,686	6,447	6,459	6,498	6,447	6,305	6,524	6,714	6,408	6,438	6,390	(X)	(X)
508	Machinery, equip. & supplies	31,504	30,919	31,369	31,712	31,197	31,496	31,364	31,085	31,011	32,539	31,736	31,705	30,914	(X)	(X)
509	Miscellaneous durable goods	4,590	4,633	4,818	5,228	5,782	5,547	5,461	5,296	5,233	5,272	5,395	5,088	4,616	(X)	(X)
51	Nondurable goods	53,653	54,177	53,215	52,604	51,288	52,363	51,721	50,904	53,494	56,271	57,661	58,118	52,892	(X)	(X)
511	Paper & paper products	3,573	3,560	3,574	3,568	3,528	3,540	3,548	3,470	3,515	3,744	3,724	3,761	3,552	(X)	(X)
512	Drugs, drug proprietaries and druggists' sundries	4,486	4,530	4,368	4,540	4,274	4,285	4,466	4,437	4,651	5,000	4,995	5,090	4,221	(X)	(X)
513	Apparel, piece goods & notions	7,061	7,042	6,930	6,831	7,302	7,747	7,624	7,607	7,733	7,291	7,385	7,607	6,886	(X)	(X)
514	Groceries & related products	11,820	12,022	11,579	11,673	11,853	12,025	12,430	11,935	12,611	13,017	13,294	13,097	12,185	(X)	(X)
515	Farm-product raw materials	7,448	6,916	6,254	6,159	5,347	5,382	5,024	4,851	5,548	7,112	7,580	7,639	6,836	(X)	(X)
516	Chemicals & allied products	2,100	2,267	2,219	2,305	2,395	2,369	2,315	2,407	2,307	2,350	2,414	2,513	2,108	(X)	(X)
517	Petroleum & petroleum products	3,616	3,194	3,230	3,016	3,035	3,122	3,373	3,103	3,309	3,336	3,323	3,349	3,759	(X)	(X)
518	Beer, wine, & distilled beverages	3,799	4,169	4,260	4,150	4,086	4,140	3,967	3,949	4,124	4,285	4,178	3,672	3,482	(X)	(X)
519	Misc. nondurable goods	9,750	10,477	10,801	10,362	9,468	9,753	8,974	9,145	9,696	10,136	10,768	11,390	9,863	(X)	(X)
	Stock/sales ratios, total	1.35	1.34	1.19	1.19	1.20	1.18	1.20	1.19	1.17	1.16	1.26	1.21	1.22	(X)	(X)
50	Durable goods	1.87	1.82	1.60	1.61	1.69	1.58	1.62	1.62	1.55	1.51	1.69	1.65	1.64	(X)	(X)
501	Motor vehicles & auto. equip.	1.73	1.71	1.48	1.53	1.60	1.54	1.59	1.61	1.74	1.49	1.74	1.64	1.44	(X)	(X)
502	Furniture & home furnishings	1.73	1.77	1.56	1.71	1.86	1.80	1.78	1.71	1.47	1.45	1.68	1.68	1.58	(X)	(X)
503	Lumber & other construction mat.	1.28	1.33	1.12	1.09	1.11	.97	.98	.98	.97	.97	1.14	1.30	1.21	(X)	(X)
504	Sporting, recreational, photographic & hobby goods, toys & supplies	2.42	2.28	2.31	2.33	2.75	2.49	2.57	2.35	2.36	2.12	2.17	2.31	2.01	(X)	(X)
505	Metals & minerals, ex. petroleum	1.98	1.85	1.54	1.73	1.79	1.70	1.67	1.53	1.46	1.56	1.72	1.61	1.99	(X)	(X)
506	Electrical goods	1.86	1.82	1.69	1.73	1.80	1.67	1.66	1.63	1.55	1.53	1.66	1.67	1.61	(X)	(X)
507	Hardware, plumbing & heating equipment	1.87	1.85	1.65	1.56	1.62	1.42	1.47	1.48	1.41	1.40	1.50	1.50	1.70	(X)	(X)
508	Machinery, equip. & supplies	2.35	2.24	1.94	1.97	2.02	1.94	2.00	2.02	1.87	1.97	2.17	2.04	1.97	(X)	(X)
509	Miscellaneous durable goods	1.03	1.00	.93	.82	1.01	.90	1.01	1.02	.89	.76	.88	.85	1.02	(X)	(X)
51	Nondurable goods	.91	.92	.81	.81	.77	.80	.79	.79	.80	.82	.88	.83	.83	(X)	(X)
511	Paper & paper products	1.02	1.02	.94	.95	1.00	.89	.90	.86	.83	.83	.87	.82	.99	(X)	(X)
512	Drugs, drug proprietaries and druggists' sundries	1.78	1.87	1.70	1.75	1.70	1.63	1.74	1.80	1.72	1.90	1.99	1.89	1.66	(X)	(X)
513	Apparel, piece goods & notions	2.33	1.76	1.71	2.11	2.39	2.00	1.92	1.74	1.86	1.66	1.98	2.43	2.68	(X)	(X)
514	Groceries & related products	.59	.64	.57	.56	.56	.57	.58	.61	.62	.63	.57	.59	.59	(X)	(X)
515	Farm-product raw materials	1.11	1.10	.87	.91	.76	.78	.75	.70	.76	.85	1.01	.95	.91	(X)	(X)
516	Chemicals & allied products	1.03	1.23	1.02	1.03	1.12	1.01	1.05	1.12	1.01	.98	1.10	1.14	1.08	(X)	(X)
517	Petroleum & petroleum products	.32	.30	.27	.27	.29	.29	.30	.28	.27	.28	.29	.28	.35	(X)	(X)
518	Beer, wine, & distilled beverages	1.41	1.49	1.28	1.17	1.11	1.10	1.07	1.12	1.17	1.20	1.22	.88	.84	(X)	(X)
519	Misc. nondurable goods	1.31	1.25	1.04	.94	.79	.95	.99	.96	.99	1.04	1.16	1.12	1.01	(X)	(X)

^PPreliminary estimate. See sample design and estimation procedures in Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986.

x Cumulative data are not applicable for inventories or stock/sales ratios.

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. 1987 from Nov. 1987	Dec. 1987 from Dec. 1986	12 months 1987 from 12 months 1986	Dec. 1987 from Nov. 1987	Dec. 1987 from Dec. 1986	Dec. 1987 from Nov. 1987	Dec. 1987 from Dec. 1986	Dec. 1987 from Nov. 1987	Dec. 1987 from Dec. 1986
	Total	+4.6	+8.0	+9.0	+4	+7.3	.0	+7.6	+6	+7.4
50	Durable goods	+2.6	+5.6	+8.9	+2	+5.9	-6	+5.1	+6	+6.0
501	Motor vehicles & auto.equip.	+6.8	+1.0	+3.3	+6	+14.4	+4	-2	+7	+14.4
502	Furniture & home furnishings.	-3.0	+8.8	+7.3	-2.8	+15.7	-9	+8.7	-4.3	+15.8
503	Lumber & other construction mat.	-9.6	+6.4	+15.8	+2.7	+13.7	+1.0	+6.8	+1.5	+14.1
504	Sporting, recreational, photographic & hobby goods, toys & supplies.	-7.5	-9.5	+2	-1.7	+4.0	-1.2	-10.7	-1.2	+4.3
505	Metals & minerals, ex. petroleum	+11.8	+24.7	+16.5	+4.5	+1.0	+4.2	+23.7	+7	+9
506	Electrical goods	-8	-2.7	+4.9	-3	+1.1	-3.5	-2.9	+1.5	+1.2
507	Hardware, plumbing & heating equipment	+3	+13.9	+15.4	+5	+8	+2	+14.0	+1.7	+9
508	Machinery, equip. & supplies	+6.5	-8	+9.6	-1	+2.6	-4.4	-1.6	+4	+2.7
509	Miscellaneous durable goods	-2.4	+31.7	+12.3	-5.7	+10.2	+4.3	+29.6	+1.4	+10.6
51	Nondurable goods.	+6.3	+10.2	+9.0	+8	+9.9	+6	+9.9	+5	+9.9
511	Paper & paper products	+7.1	+27.1	+17.5	+1.0	+5.9	+1.7	+25.6	+9	+5.8
512	Drugs, drug proprietaries and druggists' sundries	+7.7	+6.0	+11.7	+1.9	+20.6	+1.4	+4.6	+1.2	+20.7
513	Apparel, piece goods & notions	-16.1	+21.8	+8.6	+3.0	+10.5	+1.8	+23.2	-1.1	+10.5
514	Groceries & related products	+7.7	+11.2	+6.4	-1.5	+7.5	+2.0	+10.2	+1.4	+7.4
515	Farm-product raw materials	+6.9	+6.1	+8.2	+8	+11.7	+9	+5.2	-1.3	+11.9
516	Chemicals & allied products.	+1	+13.2	+3.1	+4.1	+19.2	+3.2	+14.4	+5.6	+19.1
517	Petroleum & petroleum products	+3.9	+11.5	+15.9	+8	-10.9	-5.0	+11.1	-5.2	-11.3
518	Beer, wine, & distilled beverages	+22.2	+1.1	+3.8	-12.1	+5.5	-2	-1.0	+1.5	+5.6
519	Misc. nondurable goods.	+9.6	+4.5	+7.4	+5.8	+15.5	+2.6	+4.8	+1.4	+15.5

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 1982 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

Estimates based on a sample survey will differ from the value derived from the population because of sampling variability and nonsampling error. Sampling variability occurs 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 variability 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 3. 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 correspond-

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

ing percent for that estimate shown in the sampling variability table. In about 9 out of 10 (90 percent) of these samples, the estimates would differ from the results of a complete enumeration by less than 1.65 times the percentages shown. In about 19 out of 20 (95 percent) of these samples, the estimate would differ from the results of a complete enumeration by less than twice the percentages shown.

To illustrate the computations involved in the above confidence statements, as related to dollar volume sales estimates, assume that an estimate of sales published in table 1B is \$10,750 million for a particular month and that the median coefficient of variation for this estimate as given in table 3, is 1.8 percent, or 0.018. Multiplying \$10,750 million by 0.018 yields \$194 million. Therefore a 67-percent confidence interval is \$10,556 million to \$10,944 million (\$10,750 million plus or minus \$194 million). If corresponding confidence intervals were constructed for all possible samples of the same size and design, approximately 2 out of 3 (67 percent) of these intervals would contain the figure obtained from a complete enumeration. Typical practice is to construct 90 or 95 percent confidence intervals. Continuing with the illustration, a 90-percent confidence interval is \$10,430 million to \$11,070 million (\$10,750 million plus or minus \$320 million). A 95-percent confidence interval is \$10,362 million to \$11,138 million (\$10,750 million plus or minus \$388 million).

All comparisons appearing on the front page of this publication and for which measures of sampling variability are available are accompanied by an indication of the 90-percent confidence interval. Thus a statement such as "+0.8 (± 1.3)" indicates a 90-percent confidence interval from -0.5 to +2.1. If the confidence interval contains zero, it is uncertain whether there is an increase or decrease.

Nonsampling Errors

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 34 percent of the sales estimates and 38 percent for inventories.

Sample Design and Estimation Procedures

See *Revised Monthly Wholesale Trade, Sales and Inventories: December 1980 Through December 1986* for a full description of the sample design and estimation procedures.

Benchmarking

Wholesale sales and inventory estimates in this report reflect the results of a benchmarking² operation which made use of 1984 and 1985 estimates tabulated from the 1985 Annual Trade Survey. The sales estimates for the period January 1984 through December 1986 were derived in a manner so that the sum of the 12 months for 1984 and 1985 were equal to the sales estimates published in the 1984 and 1985 Annual Trade Surveys. The revision process was conducted so as to minimize changes to previously published month-to-month trends. The estimates for the original series were derived by using composite estimation procedures. Using inventory results from the annual surveys for the years 1980 to 1985, monthly inventories were revised to a non-LIFO basis. Through the use of carry-forward factors, the effect of the revision process was applied to composite sales and inventory estimates subsequent to December 1985. These factors were derived at various kind-of-business levels and are held constant until the next benchmarking operation. Aggregate level estimates were derived by summing appropriate three-digit kind-of-business estimates, thereby assuring additivity.

CLASSIFICATION DIFFERENCES BETWEEN MONTHLY SURVEY AND 1977 AND 1982 CENSUSES OF WHOLESALE TRADE

For SIC 505, the monthly survey included merchant wholesalers as well as sales branches of ferrous metals service centers with inventories. Therefore, the 1977 and 1982 census sales estimates included the receipts of merchant wholesalers and sales branches of ferrous metals service centers with inventories.

Establishments classified in the Farm-Product Raw Materials group (SIC 515) included as sales, products purchased and transferred to other company establishments. In the monthly survey, intercompany transfers are not included in sales. Because of the differences, the 1977 and 1982 sales for the SIC were obtained from the 1977 and 1982 Annual Trade Surveys (ATS).

Inventories were not benchmarked to the census levels since the census of wholesale trade does not include inventories of auxiliary and central administrative offices of merchant wholesale establishments which are included in the monthly survey. The inventory estimates for the years 1977 and 1982 were computed by multiplying the stock/sales ratios obtained from the annual surveys by the census sales for these years.

Unpublished Data

Sales and inventory estimates for unpublished four-digit wholesale trade categories are not included in this publication because their sampling variability is so high, relative to

²For a more detailed description, see the section dealing with revisions to published data in the Current Business Reports publication, *Revised Monthly Wholesale Trade: December 1980 Through December 1986*.

the changes from month-to-month or between other periods, as to make them potentially misleading. The Census Bureau, for a nominal fee 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 on a non-LIFO basis 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. Methods of valuation may vary according to the accounting practices of the firm.

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 current and past experiences. Therefore, the adjusted could become less precise if 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.

Concurrent Seasonal Adjustment

Concurrent seasonal adjustment uses all available unadjusted estimates (including the latest preliminary estimates) as input to the X-11 program. After the last benchmarking operation, factors were developed and used to derive adjusted sales estimates for the period January 1984 through January 1987. Factors were developed and used to derive non-LIFO inventory estimates for the period December 1980 through January 1987. When unadjusted preliminary and final estimates become available, all estimates will be used as input to the X-11 program and new factors will be applied to the preliminary and final (one month before the preliminary) estimates and to the previous year estimates that correspond to the preliminary month.

Table 4 presents, by kind of business, the combined seasonal and trading-day factors that are used to adjust inventory and sales estimates. For all kind of business, one month of projected factors are shown. These projected factors are estimates of the factors that will be used to derive adjusted estimates.

Table 3. Coefficients of Variation of Sales and Inventories
(in percent)

SIC code	Kind of business	Preliminary estimates		Final estimates		Ratio of two consecutive months		Year to year estimates		Cumulative sales estimates		Current year cumulative to previous year cumulative
		Range	Median	Range	Median	Range	Median	Range	Median	CY	PY	
	Sales, Total	1.2-1.6	1.2	1.0-1.4	1.2	0.4-0.9	0.6	1.4-1.8	1.6	1.0	(Y)	(Y)
50	Durable goods	1.3-1.9	1.6	1.1-1.7	1.4	0.5-0.9	0.7	1.4-2.2	1.9	1.3	(Y)	(Y)
501	Motor vehicles & auto. equip.	3.2-3.7	3.4	3.0-3.7	3.3	0.9-1.9	1.5	2.4-5.3	3.8	3.1	(Y)	(Y)
502	Furniture & home furnishings	5.0-8.7	6.6	4.6-8.1	5.3	1.8-7.1	3.1	6.1-12.0	8.0	5.1	(Y)	(Y)
503	Lumber & other construction mat.	5.3-8.8	6.9	5.0-8.5	6.7	1.6-3.5	2.1	4.6-11.3	9.4	5.3	(Y)	(Y)
504	Sporting, recreational, photographic & hobby goods, toys & supplies	4.9-9.4	7.1	5.0-8.8	5.9	1.9-5.5	3.3	9.4-20.4	11.6	5.8	(Y)	(Y)
505	Metals & minerals, ex. petroleum	3.5-4.6	4.4	3.5-4.7	4.1	1.2-2.4	1.8	3.9-7.0	4.9	3.3	(Y)	(Y)
506	Electrical goods	2.0-3.2	2.3	1.8-2.8	2.2	1.1-1.7	1.5	2.9-9.0	5.2	2.1	(Y)	(Y)
507	Hardware, plumbing & heating equipment	6.2-8.6	6.9	6.0-8.0	6.5	1.3-3.6	2.0	5.0-10.3	8.1	5.7	(Y)	(Y)
508	Machinery, equip. & supplies	2.3-3.0	2.6	1.6-2.5	2.5	0.8-2.1	1.6	2.2-5.2	4.6	1.7	(Y)	(Y)
509	Miscellaneous durable goods	2.9-4.1	3.4	2.6-4.0	3.0	1.2-2.7	1.8	3.2-5.5	4.9	2.3	(Y)	(Y)
51	Nondurable goods	2.0-3.2	2.2	1.9-2.3	2.1	0.4-1.5	0.8	2.4-3.3	2.8	1.9	(Y)	(Y)
511	Paper & paper products	3.8-5.8	5.3	3.8-5.7	4.8	1.1-2.6	1.9	2.9-6.5	4.9	4.1	(Y)	(Y)
512	Drugs, drug proprietaries and druggists' sundries	5.0-8.3	5.8	5.0-7.9	5.8	0.9-2.0	1.7	3.4-10.1	7.8	5.4	(Y)	(Y)
513	Apparel, piece goods & notions	7.3-9.2	7.5	6.1-8.3	7.5	2.8-5.3	3.1	6.0-10.4	8.4	5.6	(Y)	(Y)
514	Groceries & related products	3.6-6.8	4.2	3.8-4.9	4.2	0.5-4.1	0.8	4.2-7.0	6.6	4.0	(Y)	(Y)
515	Farm-product raw materials	4.8-6.2	5.4	4.4-6.2	5.2	2.0-4.4	2.6	5.9-9.3	6.3	4.3	(Y)	(Y)
516	Chemicals & allied products	5.1-9.9	7.4	4.8-8.5	5.8	1.1-3.9	2.3	6.4-12.4	9.0	5.7	(Y)	(Y)
517	Petroleum & petroleum products	4.0-4.9	4.5	4.0-4.8	4.3	0.8-1.3	1.1	3.0-12.0	7.9	3.8	(Y)	(Y)
518	Beer, wine, & distilled beverages	2.6-3.7	2.9	2.6-3.3	2.8	0.8-1.7	1.4	2.8-9.9	6.8	2.5	(Y)	(Y)
519	Misc. nondurable goods	4.5-5.5	4.9	4.2-5.5	4.6	1.4-2.3	1.7	4.7-8.7	6.5	4.0	(Y)	(Y)
	Inventories, Total	1.1-1.3	1.3	1.2-1.3	1.3	0.2-0.4	0.3	0.8-2.1	1.5	(X)	(X)	(X)
50	Durable goods	1.3-1.6	1.5	1.4-1.6	1.5	0.2-0.5	0.3	1.0-2.4	2.0	(X)	(X)	(X)
501	Motor vehicles & auto. equip.	4.4-6.2	5.2	4.5-5.7	5.1	0.5-1.4	0.9	3.7-6.8	5.9	(X)	(X)	(X)
502	Furniture & home furnishings	7.5-8.9	8.2	7.6-9.4	7.9	0.5-2.3	1.4	5.1-16.8	13.0	(X)	(X)	(X)
503	Lumber & other construction mat.	4.9-6.1	5.5	4.9-5.7	5.4	0.7-2.9	1.0	4.6-12.6	7.4	(X)	(X)	(X)
504	Sporting, recreational, photographic & hobby goods, toys & supplies	7.5-12.4	10.1	8.7-11.5	10.5	0.8-2.0	1.4	4.4-18.6	13.1	(X)	(X)	(X)
505	Metals & minerals, ex. petroleum	4.8-5.9	5.8	4.7-5.9	5.6	0.5-0.9	0.8	4.0-8.3	6.8	(X)	(X)	(X)
506	Electrical goods	1.7-2.4	1.9	1.5-2.6	1.9	0.3-0.7	0.5	2.2-9.1	5.7	(X)	(X)	(X)
507	Hardware, plumbing & heating equipment	4.3-5.3	5.0	4.1-5.4	4.7	0.5-2.6	1.2	4.8-8.6	6.4	(X)	(X)	(X)
508	Machinery, equip. & supplies	2.1-3.4	2.9	2.1-3.0	2.8	0.3-0.9	0.6	2.8-6.2	4.4	(X)	(X)	(X)
509	Miscellaneous durable goods	5.2-8.3	6.9	5.4-8.3	6.5	0.5-1.0	0.9	7.7-12.8	10.8	(X)	(X)	(X)
51	Nondurable goods	1.4-2.0	1.9	1.5-1.9	1.7	0.4-0.6	0.5	1.8-2.7	2.0	(X)	(X)	(X)
511	Paper & paper products	5.8-6.8	6.1	5.6-6.6	6.1	0.5-1.1	0.8	3.4-9.7	8.1	(X)	(X)	(X)
512	Drugs, drug proprietaries and druggists' sundries	5.4-6.3	5.7	5.3-5.9	5.7	0.5-1.2	0.7	4.8-9.1	7.9	(X)	(X)	(X)
513	Apparel, piece goods & notions	4.4-6.0	5.3	4.2-6.0	5.1	0.9-1.7	1.3	6.0-14.5	8.9	(X)	(X)	(X)
514	Groceries & related products	4.7-5.1	4.7	4.7-5.4	4.9	0.6-1.0	0.8	3.6-7.9	5.8	(X)	(X)	(X)
515	Farm-product raw materials	6.5-8.1	7.2	6.3-8.0	7.3	1.2-3.9	2.1	7.3-10.4	9.9	(X)	(X)	(X)
516	Chemicals & allied products	7.0-9.2	7.6	7.2-9.1	7.5	0.8-2.1	1.3	8.4-14.9	10.9	(X)	(X)	(X)
517	Petroleum & petroleum products	2.9-4.4	3.3	3.1-4.0	3.4	0.7-2.0	0.8	3.0-20.7	7.9	(X)	(X)	(X)
518	Beer, wine, & distilled beverages	4.4-5.8	4.9	4.3-6.2	4.9	0.6-1.2	0.8	2.5-6.7	5.9	(X)	(X)	(X)
519	Misc. nondurable goods	7.2-9.0	8.2	7.6-8.4	8.0	0.9-3.1	1.2	5.5-12.2	11.1	(X)	(X)	(X)

x Cumulative coefficients of variation are not applicable for inventories.

y Previous year cumulative coefficients of variation will appear early in 1988.

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 June 1987 through November 1987.

Table 4. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers

SIC code	Kind of business	1986	1987												1988
		Dec. ¹	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. ¹	Dec. ¹	Jan.
	Sales,¹ Total	1.031	.953	.905	1.035	1.019	1.007	1.039	.998	.976	1.009	1.037	.985	1.035	.928
50	Durable goods	1.006	.920	.890	1.031	1.027	.991	1.053	1.004	.985	1.031	1.071	.978	1.011	.894
501	Motor vehicles & auto.equip.	1.021	.958	.871	1.014	1.034	1.037	1.083	1.034	.969	.948	1.079	.972	1.034	.925
502	Furniture & home furnishings	.972	.868	.882	.991	1.013	.991	1.058	1.033	1.005	1.073	1.132	.994	.973	.856
503	Lumber & other construction mat.	.878	.811	.793	.955	1.044	1.040	1.120	1.113	1.090	1.087	1.103	.977	.875	.786
504	Sporting, recreational, photographic & hobby goods, toys & supplies	1.031	.849	.877	.981	1.000	.888	.978	.990	.996	1.074	1.190	1.116	1.045	.833
505	Metals & minerals, ex. petroleum	.977	.968	.944	1.098	1.040	.985	1.034	.987	.991	1.058	1.012	.918	.985	.941
506	Electrical goods	1.054	.912	.907	1.017	.949	.927	1.013	.989	.999	1.066	1.107	1.029	1.057	.893
507	Hardware, plumbing & heating equipment	.976	.932	.902	.968	1.041	1.008	1.081	1.049	1.000	1.018	1.073	.974	.975	.890
508	Machinery, equip. & supplies	1.044	.908	.907	1.065	1.050	1.005	1.053	.986	.968	1.028	1.024	.945	1.053	.886
509	Miscellaneous durable goods	.938	.954	.893	1.033	1.138	.993	.997	.935	1.008	1.033	1.098	1.019	.954	.869
51	Nondurable goods	1.053	.982	.917	1.041	1.007	1.020	1.021	.992	.968	.992	1.010	.994	1.056	.952
511	Paper & paper products	1.006	.979	.939	1.035	1.018	.958	1.035	.998	1.009	1.007	1.042	.967	1.018	.947
512	Drugs, drug proprietaries and druggists' sundries	1.025	1.001	.927	1.026	1.030	.955	1.010	.987	.955	1.036	1.039	.977	1.038	.979
513	Apparel, piece goods & notions	.773	.887	1.039	1.038	.977	.879	1.070	1.112	1.155	1.058	1.114	.927	.764	.870
514	Groceries & related products	1.029	.978	.915	1.006	1.007	1.020	1.012	1.033	.995	1.007	1.007	.983	1.038	.958
515	Farm-product raw materials	1.166	1.090	.969	1.083	.977	1.020	.955	.877	.848	.870	1.011	1.110	1.176	1.027
516	Chemicals & allied products	.935	.991	.925	1.041	1.022	1.000	1.068	.997	.986	1.039	1.059	.953	.925	.962
517	Petroleum & petroleum products	1.101	1.104	.958	1.061	.975	.957	.959	.935	.903	1.007	1.009	1.010	1.105	1.080
518	Beer, wine, & distilled beverages	1.199	.760	.774	.927	.984	1.024	1.098	1.102	1.038	1.019	1.035	.999	1.224	.737
519	Misc. nondurable goods	1.025	.856	.856	1.079	1.101	1.180	1.070	1.012	.958	.953	.969	.957	1.023	.835
	Inventories,¹ total	1.004	1.003	1.006	1.009	1.006	.992	.995	.990	.985	.997	1.009	1.007	1.003	1.003
50	Durable goods	.995	.985	.993	1.002	1.004	1.000	1.008	1.005	1.002	1.010	1.001	.999	.994	.984
501	Motor vehicles & auto. equip.	1.016	.998	1.002	1.008	1.005	.988	1.004	.976	.959	1.022	1.006	1.017	1.016	.994
502	Furniture & home furnishings	1.010	1.014	1.012	.994	.976	.996	.995	.992	1.014	1.007	.994	.995	1.010	1.011
503	Lumber & other construction mat.	.994	.961	.997	1.026	1.030	1.002	1.026	1.018	1.012	.997	.982	.980	.991	.951
504	Sporting, recreational, photographic & hobby goods, toys & supplies	.974	.984	.990	1.008	1.001	.993	1.012	1.028	1.016	1.016	1.010	.976	.971	.986
505	Metals & minerals, ex. petroleum	1.013	1.007	1.000	.993	.987	.997	1.016	1.009	.997	.993	.981	.977	1.014	1.014
506	Electrical goods	.988	.969	.970	.978	.995	.992	1.000	1.025	1.023	1.034	1.019	1.005	.987	.968
507	Hardware, plumbing & heating equipment	.966	.972	.999	1.028	1.042	1.032	1.011	1.017	1.000	.986	.983	.977	.965	.973
508	Machinery, equip. & supplies	.997	.985	.994	1.006	1.005	1.006	1.011	1.004	1.006	.996	1.004	1.001	.996	.984
509	Miscellaneous durable goods	.956	.974	.996	.978	.994	1.010	.995	1.019	1.025	1.027	1.020	1.025	.953	.950
51	Nondurable goods	1.031	1.036	1.029	1.022	1.008	.972	.972	.962	.950	.973	1.018	1.030	1.031	1.037
511	Paper & paper products	1.000	.994	1.007	1.003	1.004	1.003	1.005	1.000	1.006	.976	.984	1.000	1.001	.998
512	Drugs, drug proprietaries and druggists' sundries	.990	1.023	1.031	1.052	1.019	.981	.969	.965	.961	.999	1.027	.982	.989	1.031
513	Apparel, piece goods & notions	.980	1.000	.986	.948	.966	1.014	1.033	1.078	1.065	1.035	.981	.941	.980	.992
514	Groceries & related products	1.011	.979	1.009	.997	.994	.999	1.002	.981	.965	.989	1.038	1.042	1.012	.984
515	Farm-product raw materials	1.188	1.251	1.157	1.088	.996	.819	.810	.785	.792	.872	1.078	1.162	1.186	1.238
516	Chemicals & allied products	.985	.990	1.006	.998	1.035	1.009	1.012	1.011	.998	.959	.999	1.000	.986	.984
517	Petroleum & petroleum products	1.108	1.062	.921	.931	.943	.996	1.006	.984	.942	1.010	1.021	1.047	1.113	1.086
518	Beer, wine, & distilled beverages	.905	.942	.959	.997	1.022	1.005	1.032	1.011	.987	1.004	1.047	1.044	.904	.945
519	Misc. nondurable goods	1.026	1.033	1.071	1.111	1.072	.980	.971	.936	.930	.957	.984	.984	1.026	1.027

¹Revised

¹Adjusted sales and inventory data shown in table 1A 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: The seasonal factors shown have been computed based on monthly estimates through the current month preliminary estimates.