



Monthly Wholesale Trade

Sales and Inventories

January 1998

U.S. Department of Commerce
Economics and Statistics Administration
BUREAU OF THE CENSUS

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MONTHLY WHOLESALE TRADE: SALES AND INVENTORIES

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Intention to Revise Wholesale Estimates: Monthly wholesale data will be revised based on the results of the 1996 Annual Trade Survey. Unadjusted sales, inventories, and inventories/sales ratios will be revised for January 1993 through February 1998, while corresponding adjusted data will be revised for January 1990 through February 1998. Revised data are scheduled for release May 6.

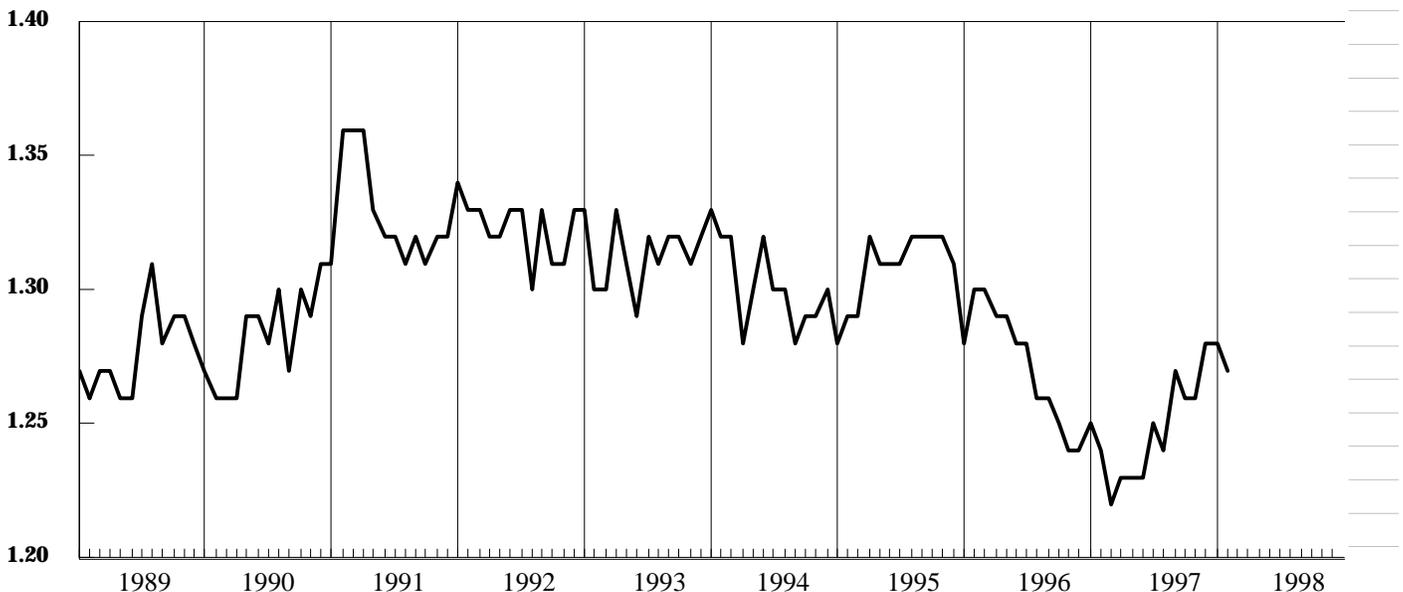
Sales. January 1998 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences but not for price changes, were \$213.3 billion, up 0.3 percent (+/- 0.7%) from the revised December level and 2.8 percent (+/-0.3%) above the January 1997 level. The December preliminary estimate was revised upward by \$0.1 billion or 0.1 percent. January sales of durable goods increased 1.2 percent (+/-1.0%) from December and were 5.5 percent (+/-1.2%) above last year. Compared to last month, sales of hardware, plumbing, and heating equipment were up 5.3 percent while machinery, equipment and supplies increased 4.2 percent. Among nondurable goods, sales of petroleum and petroleum products fell 7.9 percent from last month, while drugs, drug proprietaries and druggists' sundries rose 4.6 percent.

Inventories. Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$271.2 billion at the end of January, down 0.5 percent (+/-0.5%) from the revised December level but were 5.3 percent (+/-1.2%) above January 1997.

The December preliminary estimate was revised downward by \$0.04 billion. Among durable goods wholesalers, inventories of lumber and other construction materials increased 2.5 percent from December, while electrical goods decreased 1.3 percent. End-of-month inventories of nondurable goods were down 1.8 percent (+/-0.7%) from last month but were 4.4 percent (+/-2.0%) above a year ago. Compared to last month, inventories of farm-product raw materials fell 7.3 percent and paper and paper products decreased 3.2 percent.

Inventory/Sales Ratio. The January inventories/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.27. The January 1997 ratio was 1.24.

Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling variability. A discussion of the reliability of the data and general survey methodology appears in BW/96-RV Current Business Report.



Monthly Wholesale Trade for February is scheduled to be released April 7, 1998 at 10:00 a.m.

Address inquiries concerning this report to Services Division, Bureau of the Census, Washington, DC 20233, or call Ronald Piencykoski, (301) 457-2779 or 457-2764. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

This report is available on day of issue through the Department of Commerce's online Economic Bulletin Board (202-482-1986). The data are also available on the internet - <http://www.census.gov/svsd/www/mwts.html>.

Table 1. Estimated Monthly Sales, Inventories, and Inventories/Sales Ratios of Merchant Wholesalers: 1998 and 1997

[In millions of dollars]

SIC ¹ code	Kind of business	Sales						Inventories						Inventories/Sales		
		Monthly			Percent change			Monthly			Percent change			ratios		
		Jan. 1998 (p)	Dec. 1997 (r)	Jan. 1997 (r)	Jan./ Dec.	Dec./ Nov.	Jan. 98 Jan. 97	Jan. 1998 (p)	Dec. 1997 (r)	Jan. 1997 (r)	Jan./ Dec.	Dec./ Nov.	Jan. 98 Jan. 97	Jan. 1998 (p)	Dec. 1997 (r)	Jan. 1997 (r)
Adjusted²																
	U.S. Total	213,341	212,679	207,448	0.3	0.8	2.8	271,231	272,529	257,522	-0.5	0.9	5.3	1.27	1.28	1.24
50	Durable	111,486	110,128	105,624	1.2	1.0	5.5	171,904	171,337	162,352	0.3	1.2	5.9	1.54	1.56	1.54
501	Automotive	18,149	17,523	17,815	3.6	-4.3	1.9	28,430	28,218	27,097	0.8	1.8	4.9	1.57	1.61	1.52
502	Furniture	3,733	3,608	3,649	3.5	2.0	2.3	5,366	5,264	5,269	1.9	0.5	1.8	1.44	1.46	1.44
503	Lumber	7,504	7,413	7,305	1.2	5.4	2.7	7,782	7,590	7,695	2.5	-3.5	1.1	1.04	1.02	1.05
504	Prof. equip.	22,552	22,834	19,842	-1.2	3.2	13.7	24,190	23,851	22,153	1.4	-0.7	9.2	1.07	1.04	1.12
505	Metals	8,911	9,056	8,555	-1.6	-0.6	4.2	13,958	13,812	12,906	1.1	0.3	8.2	1.57	1.53	1.51
506	Electrical	14,700	14,922	14,458	-1.5	3.7	1.7	23,839	24,145	23,259	-1.3	0.9	2.5	1.62	1.62	1.61
507	Hardware	6,677	6,338	6,112	5.3	0.7	9.2	12,640	12,449	12,159	1.5	0.1	4.0	1.89	1.96	1.99
508	Machinery	17,153	16,464	15,549	4.2	1.9	10.3	39,241	39,566	35,923	-0.8	3.0	9.2	2.29	2.40	2.31
509	Other Durable	12,107	11,970	12,339	1.1	-0.8	-1.9	16,458	16,442	15,891	0.1	3.1	3.6	1.36	1.37	1.29
51	Nondurable	101,855	102,551	101,824	-0.7	0.7	0.0	99,327	101,192	95,170	-1.8	0.5	4.4	0.98	0.99	0.93
511	Paper	7,706	7,602	7,309	1.4	-1.2	5.4	9,361	9,668	8,750	-3.2	-0.6	7.0	1.21	1.27	1.20
512	Drugs	11,112	10,622	9,135	4.6	2.4	21.6	16,017	15,768	13,931	1.6	1.1	15.0	1.44	1.48	1.53
513	Apparel	7,640	7,430	7,326	2.8	6.4	4.3	13,200	13,120	12,013	0.6	-0.6	9.9	1.73	1.77	1.64
514	Groceries	27,446	27,425	26,912	0.1	0.5	2.0	17,757	17,658	17,784	0.6	-0.8	-0.2	0.65	0.64	0.66
515	Farm-products	9,580	9,972	9,893	-3.9	-0.9	-3.2	9,720	10,491	9,398	-7.3	-6.7	3.4	1.01	1.05	0.95
516	Chemicals	4,835	4,736	4,528	2.1	2.6	6.8	4,988	4,949	4,735	0.8	-1.6	5.3	1.03	1.04	1.05
517	Petroleum	12,928	14,043	16,795	-7.9	-4.9	-23.0	5,016	5,123	5,593	-2.1	0.3	-10.3	0.39	0.36	0.33
518	Alcohol	4,825	5,145	4,613	-6.2	7.0	4.6	5,207	5,111	4,951	1.9	2.9	5.2	1.08	0.99	1.07
519	Other Nondur.	15,783	15,576	15,313	1.3	2.1	3.1	18,061	19,304	18,015	-6.4	7.2	0.3	1.14	1.24	1.18
Not Adjusted																
	U.S. Total	200,654	216,360	199,249	-7.3	8.0	0.7	276,894	272,751	262,787	1.5	0.1	5.4	Sales to date		
													1998	1997		
		200,654	216,360	199,249	-7.3	8.0	0.7	276,894	272,751	262,787	1.5	0.1	5.4	200,654	199,249	
50	Durable	102,379	111,269	98,537	-8.0	7.2	3.9	172,105	168,844	162,499	1.9	0.3	5.9	102,379	98,537	
501	Automotive	16,661	17,751	16,390	-6.1	1.7	1.7	28,913	27,174	27,558	6.4	-3.2	4.9	16,661	16,390	
502	Furniture	3,307	3,626	3,299	-8.8	3.4	0.2	5,253	5,117	5,164	2.7	-1.4	1.7	3,307	3,299	
503	Lumber	6,356	6,523	6,341	-2.6	1.5	0.2	7,657	7,461	7,587	2.6	-2.3	0.9	6,356	6,341	
504	Prof. equip.	21,492	24,638	19,346	-12.8	20.1	11.1	24,601	24,066	22,530	2.2	-0.7	9.2	21,492	19,346	
505	Metals	8,581	8,603	8,469	-0.3	3.9	1.3	14,139	13,978	13,074	1.2	4.5	8.1	8,581	8,469	
506	Electrical	13,495	14,847	13,547	-9.1	5.1	-0.4	23,911	23,686	23,306	0.9	0.2	2.6	13,495	13,547	
507	Hardware	5,949	6,002	5,531	-0.9	-1.0	7.6	12,450	12,325	11,964	1.0	0.4	4.1	5,949	5,531	
508	Machinery	15,969	16,974	14,632	-5.9	15.7	9.1	38,888	38,973	35,600	-0.2	2.2	9.2	15,969	14,632	
509	Other Durable	10,569	12,305	10,982	-14.1	-3.2	-3.8	16,293	16,064	15,716	1.4	1.5	3.7	10,569	10,982	
51	Nondurable	98,275	105,091	100,712	-6.5	8.8	-2.4	104,789	103,907	100,288	0.8	-0.2	4.5	98,275	100,712	
511	Paper	7,667	7,693	7,514	-0.3	7.8	2.0	9,539	9,900	8,916	-3.6	-0.2	7.0	7,667	7,514	
512	Drugs	11,401	11,323	9,747	0.7	15.0	17.0	17,298	16,194	15,046	6.8	2.8	15.0	11,401	9,747	
513	Apparel	7,044	6,018	6,894	17.0	-8.8	2.2	13,715	13,146	12,481	4.3	3.4	9.9	7,044	6,894	
514	Groceries	26,842	28,495	26,535	-5.8	6.7	1.2	17,828	17,888	17,855	-0.3	-3.0	-0.2	26,842	26,535	
515	Farm-products	10,174	11,019	10,961	-7.7	12.1	-7.2	12,519	12,694	12,123	-1.4	-8.5	3.3	10,174	10,961	
516	Chemicals	4,622	4,442	4,460	4.1	4.0	3.6	4,948	4,929	4,692	0.4	-0.6	5.5	4,622	4,460	
517	Petroleum	13,148	15,040	17,517	-12.6	7.4	-24.9	4,991	5,338	5,543	-6.5	2.3	-10.0	13,148	17,517	
518	Alcohol	3,788	5,906	3,746	-35.9	23.5	1.1	4,879	4,707	4,644	3.7	-11.8	5.1	3,788	3,746	
519	Other Nondur.	13,589	15,155	13,338	-10.3	13.0	1.9	19,072	19,111	18,988	-0.2	6.8	0.4	13,589	13,338	

p Preliminary estimate. r Revised.

1 For a full description of the SIC Codes shown above see the "1987 Standard Industrial Classification Manual" or the Current Business Reports

*Combined Annual and Revised Monthly Wholesale Trade" publication.

2 Data adjusted for seasonal variations and, in the case of sales, also for trading-day differences. See Table 3 for seasonal adjustment factors used.

Table 2. Coefficients of Variation and Standard Error for Sales and Inventories

SIC code	Kind of business	Coefficients of variation for level (x 100)				Standard error for trend				Coefficients of variation for level (x 100)		Standard error for trend
		Preliminary estimates		Final estimates		Ratio of two consecutive months		Year to Year Estimates		Cumulative sales estimates		Current year cumulative to previous year
		Sales	Inv	Sales	Inv	Sales	Inv	Sales	Inv	CY	PY	year cumulative
		Median	Median	Median	Median	Median	Median	Median	Median			
	U.S. Total	1.0	1.4	1.0	1.4	0.4	0.2	0.8	1.4	1.1	0.2	0.2
50	Durable	2.1	2.2	2.1	2.2	0.7	0.3	1.4	2.1	2.5	2.3	0.7
501	Automotive	4.0	5.4	4.0	5.4	1.2	1.0	3.3	4.1	3.9	3.8	2.2
502	Furniture	5.9	7.3	6.1	7.3	2.3	1.0	4.8	10.3	6.6	5.6	3.6
503	Lumber	5.0	5.8	5.1	5.7	1.2	0.9	4.8	5.5	6.3	5.5	3.4
504	Prof. equip.	5.6	6.5	5.8	6.7	1.4	0.7	4.4	4.6	6.5	6.3	2.4
505	Metals	4.6	9.2	4.6	9.2	1.4	0.7	2.9	10.2	4.7	3.5	2.2
506	Electrical	5.0	4.3	4.9	4.2	1.3	0.5	3.4	2.9	6.8	4.9	2.2
507	Hardware	4.8	4.8	4.8	4.7	1.3	0.5	6.0	5.0	6.0	5.0	2.3
508	Machinery	5.5	4.7	5.6	4.7	1.8	0.5	4.9	5.2	6.0	6.8	3.0
509	Other Durable	4.7	6.8	4.8	6.9	1.5	0.8	2.7	5.9	5.5	4.6	2.8
51	Nondurable	1.9	2.1	1.9	2.0	0.6	0.4	1.3	1.4	1.6	0.2	0.2
511	Paper	3.9	3.7	3.9	3.9	1.0	0.4	3.1	4.4	4.3	0.1	0.0
512	Drugs	5.7	5.2	5.6	5.1	0.5	0.4	3.3	2.2	6.1	5.4	1.2
513	Apparel	5.1	7.8	5.1	7.9	2.1	0.8	3.9	5.5	6.8	6.0	2.3
514	Groceries	3.1	5.2	3.2	5.1	0.9	0.6	1.9	5.0	2.6	2.8	0.9
515	Farm-products	5.4	7.7	5.3	7.4	2.4	1.6	3.1	4.4	4.4	3.9	1.8
516	Chemicals	5.8	5.7	5.7	5.5	1.3	0.6	4.5	3.5	6.1	5.6	2.5
517	Petroleum	6.1	13.9	5.9	14.0	1.0	0.8	3.7	12.6	5.9	5.0	1.9
518	Alcohol	6.4	6.0	6.4	6.1	1.7	1.3	7.7	5.7	6.1	6.7	1.4
519	Other Nondur.	6.0	5.7	5.9	5.7	2.0	0.9	6.0	5.2	6.2	5.6	4.4

Note: The median measures of variability are based on the most recent 12 months of data.

Sample Design and Reliability of Data

There are two types of errors possible in an estimate based on a sample survey: sampling and nonsampling.

Sampling errors occur because observations are made on a sample, not on the entire population, and different samples could have led to different estimates. Standard errors and coefficients of variation, as calculated for this report, are measures of sampling variation. The margin of sampling error, as used on page 1, gives a range about the estimate which is a 90% confidence interval. If, for example, the trend estimate is up 1.2% and the standard error is 0.9%, then the margin of sampling error is $\pm 1.65 \times 0.9\%$ or $\pm 1.5\%$, and the 90% confidence interval is -0.3% to $+2.7\%$. If the interval contains 0, it cannot be stated with certainty whether there was an increase or decrease. For monthly level, the coefficient of variation (CV) is given. The resulting confidence interval is the estimated value $\pm 1.65 \times CV \times$ (the estimated value).

Nonsampling errors are usually attributed to many possible sources: (1) coverage error - failure to accurately represent all population units in the sample, (2) inability to obtain information

about all sample cases, (3) response errors, possibly due to definitional difficulties or misreporting, (4) mistakes in recording or coding the data obtained, and (5) other errors of collection or processing, or in imputing for missing or inconsistent data. Coverage error has an effect on the accuracy of estimates for this survey to the extent that the administrative records system, which forms the basis of our survey universe frame, does not contain all legal businesses. A major source of nonsampling error in the published estimates is due to the need to impute data for nonrespondents and for late and inconsistent reports. For all kinds of businesses combined, imputed data amount to about 26 percent of the total monthly wholesale sales estimates and 28 percent of the total monthly wholesale inventories estimates.

Nonsampling errors also occur in complete censuses. Although no direct measures of these errors have been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data to minimize their influence.

Official Business

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Table 3. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers

SIC code	Kind of business	Sales						Inventories					
		1998		1997			1997	1998		1997			1997
		Feb.	Jan.r	Dec.r	Nov.	Oct.	Jan.r	Feb.	Jan.r	Dec.r	Nov.	Oct.	Jan.r
	U.S. Total¹	0.913	0.942	1.017	0.949	1.079	0.961	1.013	1.021	1.003	1.008	1.006	1.021
50	Durable	0.903	0.915	1.008	0.949	1.091	0.932	1.002	1.000	0.986	0.994	0.998	1.000
501	Automotive	0.910	0.918	1.013	0.953	1.046	0.920	1.041	1.017	0.963	1.013	0.996	1.017
502	Furniture	0.891	0.886	1.005	0.992	1.123	0.904	0.981	0.979	0.972	0.990	0.997	0.980
503	Lumber	0.844	0.847	0.880	0.914	1.121	0.868	1.015	0.984	0.983	0.971	0.957	0.986
504	Prof. equip.	0.911	0.953	1.079	0.927	1.068	0.975	0.989	1.017	1.009	1.009	1.008	1.017
505	Metals	0.944	0.963	0.950	0.909	1.062	0.990	0.990	1.013	1.012	0.972	0.983	1.013
506	Electrical	0.911	0.918	0.995	0.982	1.119	0.937	1.000	1.003	0.981	0.988	0.985	1.002
507	Hardware	0.856	0.891	0.947	0.963	1.126	0.905	0.996	0.985	0.990	0.987	0.995	0.984
508	Machinery	0.920	0.931	1.031	0.908	1.058	0.941	1.000	0.991	0.985	0.992	1.002	0.991
509	Other Durable	0.885	0.873	1.028	1.054	1.171	0.890	0.972	0.990	0.977	0.993	1.030	0.989
51	Nondurable	0.926	0.968	1.026	0.946	1.066	0.987	1.032	1.059	1.031	1.033	1.022	1.059
511	Paper	0.945	0.995	1.012	0.927	1.067	1.028	1.003	1.019	1.024	1.020	1.008	1.019
512	Drugs	0.917	1.026	1.066	0.949	1.096	1.067	1.021	1.080	1.027	1.010	1.016	1.080
513	Apparel	0.999	0.922	0.810	0.945	1.175	0.941	1.012	1.039	1.002	0.963	0.983	1.039
514	Groceries	0.902	0.978	1.039	0.978	1.052	0.986	0.967	1.004	1.013	1.036	1.062	1.004
515	Farm-products	0.976	1.062	1.105	0.977	1.074	1.108	1.227	1.288	1.210	1.233	1.083	1.290
516	Chemicals	0.937	0.956	0.938	0.926	1.039	0.985	1.022	0.992	0.996	0.986	0.974	0.991
517	Petroleum	0.960	1.017	1.071	0.948	1.043	1.043	0.981	0.995	1.042	1.022	1.033	0.991
518	Alcohol	0.810	0.785	1.148	0.995	1.077	0.812	0.951	0.937	0.921	1.074	1.100	0.938
519	Other Nondur.	0.895	0.861	0.973	0.879	1.018	0.871	1.058	1.056	0.990	0.994	0.980	1.054

r Revised

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

Note: The seasonal factors shown have been computed based on monthly estimates through the current month preliminary estimates.

