



Monthly Wholesale Trade

Sales and Inventories

June 1998

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

BW/98-6
Issued August 1998

MONTHLY WHOLESALE TRADE: SALES AND INVENTORIES

June 1998

Sales. June 1998 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences but not for price changes, were \$214.0 billion, up 0.3 percent (+/- 0.8%) from the revised May level and were 2.6 percent (+/-1.3%) above the June 1997 level. The May preliminary estimate was revised upward by \$0.2 billion or 0.1 percent. June sales of durable goods increased 1.1 percent (+/- 1.0%) from May and were 4.1 percent (+/- 2.0%) above last June. Compared to last month, sales of professional and commercial equipment and supplies increased 4.1 percent, and furniture and home furnishings rose 3.3 percent. Among nondurable goods, sales of beer, wine, and distilled alcoholic beverages decreased 3.0 percent from May, while petroleum and petroleum products increased 1.5 percent.

Inventories. Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$277.9 billion at the end of June, up 0.1 percent (+/- 0.2%) from the revised May level and were 4.9 percent (+/-1.6%) above June 1997. The May preliminary estimate was revised upward by \$0.2 billion or 0.1 percent. End-of-month inventories of

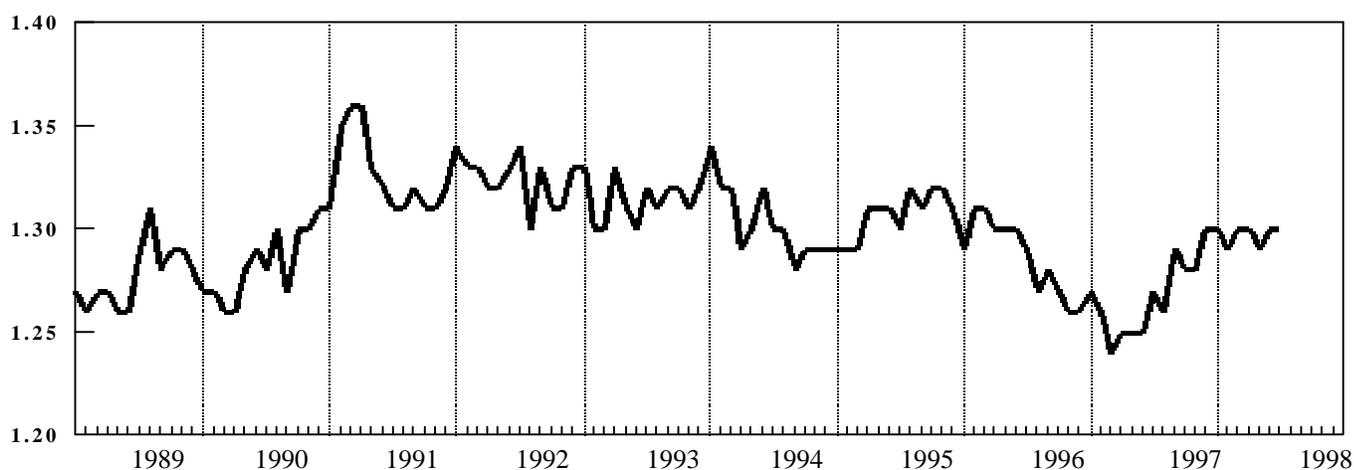
durable goods decreased 0.4 percent (+/- 0.3%) from last month but were 3.9 percent (+/-2.2%) above June 1997. Compared to last month, inventories of professional and commercial equipment and supplies fell 3.6 percent, while hardware, plumbing, and heating equipment grew 1.8 percent. End-of-month inventories of nondurable goods increased 1.1 percent (+/-0.5%) from last month, and were 6.8 percent (+/- 1.6%) above the June 1997 level. Compared to last month, inventories of farm-product raw materials increased 5.6 percent, and beer, wine, and distilled alcoholic beverages rose 2.5 percent.

Inventories/Sales Ratio. The June inventories/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.30. The June 1997 ratio was 1.27.

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/97-RV Current Business Reports.

Monthly Inventories/Sales Ratios of Merchant Wholesalers: 1989 to 1998

(Data adjusted for seasonal and trading-day differences, but not for price changes)



Monthly Wholesale Trade for July is scheduled to be released September 9, 1998 at 10:00 a.m.

Address inquiries concerning this report to Service Sector Statistics 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		
		Jun. 1998 (p)	May 1998 (r)	Jun. 1997 (r)	Jun./ May	May/ Apr.	Jun. 98 Jun. 97	Jun. 1998 (p)	May 1998 (r)	Jun. 1997 (r)	Jun./ May	May/ Apr.	Jun. 98 Jun. 97	Jun. 1998 (p)	May 1998 (r)	Jun. 1997 (r)
Adjusted²																
	U.S. Total	214,029	213,413	208,544	0.3	-0.2	2.6	277,934	277,699	265,008	0.1	0.6	4.9	1.30	1.30	1.27
50	Durable	114,423	113,164	109,963	1.1	-1.0	4.1	182,360	183,150	175,538	-0.4	0.3	3.9	1.59	1.62	1.60
501	Automotive	18,612	18,837	18,588	-1.2	-0.4	0.1	28,086	28,486	29,279	-1.4	-2.2	-4.1	1.51	1.51	1.58
502	Furniture	3,491	3,379	3,293	3.3	-0.9	6.0	5,574	5,532	5,382	0.8	0.0	3.6	1.60	1.64	1.63
503	Lumber	7,426	7,392	7,633	0.5	-1.9	-2.7	7,753	7,802	8,264	-0.6	-1.0	-6.2	1.04	1.06	1.08
504	Prof. equip.	21,740	20,880	19,901	4.1	-3.1	9.2	26,107	27,081	25,182	-3.6	-0.5	3.7	1.20	1.30	1.27
505	Metals	8,809	8,810	9,093	0.0	0.9	-3.1	14,189	14,259	13,783	-0.5	1.1	2.9	1.61	1.62	1.52
506	Electrical	17,358	17,434	16,887	-0.4	1.1	2.8	27,008	26,872	25,623	0.5	1.3	5.4	1.56	1.54	1.52
507	Hardware	6,780	6,741	6,339	0.6	1.9	7.0	13,525	13,285	12,376	1.8	0.1	9.3	1.99	1.97	1.95
508	Machinery	19,048	18,867	17,361	1.0	0.1	9.7	44,195	43,891	40,619	0.7	2.0	8.8	2.32	2.33	2.34
509	Other Durable	11,159	10,824	10,868	3.1	-5.6	2.7	15,923	15,942	15,030	-0.1	0.9	5.9	1.43	1.47	1.38
51	Nondurable	99,606	100,249	98,581	-0.6	0.7	1.0	95,574	94,549	89,470	1.1	1.2	6.8	0.96	0.94	0.91
511	Paper	7,639	7,555	6,833	1.1	1.4	11.8	9,251	9,118	8,215	1.5	-0.1	12.6	1.21	1.21	1.20
512	Drugs	10,757	10,795	9,443	-0.4	0.4	13.9	14,915	15,121	12,398	-1.4	2.5	20.3	1.39	1.40	1.31
513	Apparel	6,801	7,020	6,752	-3.1	-0.7	0.7	12,118	12,058	11,657	0.5	0.5	4.0	1.78	1.72	1.73
514	Groceries	28,557	28,478	27,659	0.3	0.0	3.2	16,435	16,557	15,614	-0.7	1.1	5.3	0.58	0.58	0.56
515	Farm-products	8,789	8,818	10,094	-0.3	0.5	-12.9	10,271	9,722	10,716	5.6	-1.1	-4.2	1.17	1.10	1.06
516	Chemicals	4,601	4,546	4,635	1.2	0.8	-0.7	5,088	5,039	4,857	1.0	2.1	4.8	1.11	1.11	1.05
517	Petroleum	12,760	12,574	13,829	1.5	3.6	-7.7	4,721	4,673	4,898	1.0	2.8	-3.6	0.37	0.37	0.35
518	Alcohol	4,636	4,780	4,493	-3.0	0.2	3.2	5,409	5,279	4,761	2.5	3.0	13.6	1.17	1.10	1.06
519	Other Nondur.	15,066	15,683	14,843	-3.9	0.3	1.5	17,366	16,982	16,354	2.3	1.8	6.2	1.15	1.08	1.10
Not Adjusted																
	U.S. Total	222,645	210,362	210,350	5.8	-2.6	5.8	274,741	276,348	261,692	-0.6	-0.7	5.0	Sales to date		
														1998	1997	
50	Durable	120,540	110,142	112,049	9.4	-3.7	7.6	182,558	184,470	175,603	-1.0	0.3	4.0	1,261,997	1,229,854	
501	Automotive	19,729	18,950	18,885	4.1	-3.4	4.5	27,637	28,714	28,811	-3.8	-2.4	-4.1	111,880	108,206	
502	Furniture	3,592	3,274	3,286	9.7	-4.7	9.3	5,674	5,565	5,468	2.0	3.0	3.8	20,050	19,892	
503	Lumber	8,302	7,629	8,167	8.8	-0.2	1.7	7,962	7,974	8,479	-0.2	-1.4	-6.1	43,420	44,130	
504	Prof. equip.	22,914	19,523	20,379	17.4	-6.9	12.4	25,768	26,756	24,829	-3.7	-2.1	3.8	124,506	113,101	
505	Metals	9,258	8,704	9,275	6.4	-4.4	-0.2	14,303	14,330	13,893	-0.2	0.7	3.0	53,771	53,412	
506	Electrical	17,792	16,475	16,887	8.0	-0.6	5.4	27,386	26,899	25,982	1.8	1.6	5.4	99,504	96,449	
507	Hardware	7,519	6,613	6,770	13.7	2.5	11.1	13,593	13,577	12,426	0.1	0.6	9.4	38,724	36,350	
508	Machinery	20,286	18,810	17,760	7.8	-4.3	14.2	44,328	44,681	40,700	-0.8	1.9	8.9	112,764	102,063	
509	Other Durable	11,148	10,164	10,640	9.7	-6.6	4.8	15,907	15,974	15,015	-0.4	2.2	5.9	63,588	64,251	
51	Nondurable	102,105	100,220	98,301	1.9	-1.4	3.9	92,183	91,878	86,089	0.3	-2.5	7.1	593,790	592,000	
511	Paper	7,631	7,102	6,635	7.4	-4.0	15.0	9,047	8,963	8,034	0.9	-3.1	12.6	44,191	41,101	
512	Drugs	10,779	10,158	9,103	6.1	-5.7	18.4	14,333	14,335	11,914	0.0	-2.6	20.3	63,990	53,939	
513	Apparel	6,726	5,749	6,502	17.0	-14.9	3.4	12,421	11,769	11,925	5.5	1.2	4.2	41,442	39,973	
514	Groceries	29,328	28,877	27,687	1.6	1.8	5.9	16,221	16,375	15,427	-0.9	1.5	5.1	167,363	162,874	
515	Farm-products	8,297	8,474	9,266	-2.1	-0.8	-10.5	8,330	8,351	8,637	-0.3	-16.1	-3.6	54,534	61,914	
516	Chemicals	5,006	4,691	4,871	6.7	0.1	2.8	5,139	5,125	4,906	0.3	3.1	4.7	28,108	27,739	
517	Petroleum	12,581	12,587	13,276	0.0	1.9	-5.2	4,471	4,673	4,658	-4.3	3.3	-4.0	73,104	85,062	
518	Alcohol	5,109	4,923	4,767	3.8	2.9	7.2	5,463	5,084	4,790	7.5	-1.4	14.1	26,773	25,438	
519	Other Nondur.	16,648	17,659	16,194	-5.7	-2.0	2.8	16,758	17,203	15,798	-2.6	-3.9	6.1	94,285	93,960	

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

"Annual Benchmark Report for 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
		Sales	Inv	Sales	Inv	Sales	Inv	Sales	Inv	CY	PY	to previous year cumulative
		Median	Median	Median	Median	Median	Median	Median	Median			
	U.S. Total	1.0	1.3	1.0	1.4	0.4	0.2	0.7	1.0	0.9	0.7	0.3
50	Durable	2.1	2.1	2.1	2.1	0.6	0.2	1.1	1.1	2.0	2.4	0.8
501	Automotive	4.1	5.4	4.1	5.4	1.2	0.8	2.6	2.8	4.2	4.0	1.6
502	Furniture	6.5	7.7	6.5	7.5	2.2	0.8	4.6	2.6	6.4	5.6	2.6
503	Lumber	4.7	5.9	5.0	5.9	1.2	0.8	2.5	2.6	4.8	5.3	1.7
504	Prof. equip.	5.3	6.4	5.3	6.4	1.4	0.6	3.1	3.4	4.5	5.6	2.8
505	Metals	4.5	9.2	4.5	9.2	1.3	0.7	2.4	3.1	4.3	4.3	1.1
506	Electrical	5.6	5.3	5.4	5.1	1.3	0.5	2.2	1.9	5.9	5.0	1.4
507	Hardware	5.1	4.8	5.1	4.8	1.2	0.5	2.3	2.0	5.4	4.7	1.1
508	Machinery	6.1	5.6	5.8	5.6	1.7	0.5	3.3	2.1	6.3	6.1	2.4
509	Other Durable	5.5	7.7	5.5	7.7	1.6	0.8	2.7	3.4	5.9	4.9	2.3
51	Nondurable	1.9	2.2	1.9	2.2	0.5	0.4	1.2	1.3	1.8	0.7	0.5
511	Paper	4.5	4.4	4.4	4.3	1.1	0.5	4.7	5.0	4.8	0.4	0.3
512	Drugs	5.9	4.9	5.7	4.9	0.7	0.5	2.5	1.5	6.3	5.5	2.2
513	Apparel	5.4	7.7	5.3	7.8	2.1	0.8	2.8	3.2	4.9	4.5	1.9
514	Groceries	3.0	5.6	3.0	5.5	0.8	0.5	1.5	2.3	3.0	3.2	0.9
515	Farm-products	5.1	8.3	5.1	8.1	2.3	1.7	2.9	4.4	4.3	4.5	2.1
516	Chemicals	5.9	5.6	6.0	5.6	1.3	0.6	2.4	2.1	5.7	5.7	1.2
517	Petroleum	6.0	14.1	5.9	14.2	1.0	0.7	1.9	1.7	5.8	5.7	1.2
518	Alcohol	6.3	6.2	6.4	6.2	1.6	1.3	2.0	5.6	6.2	6.8	1.1
519	Other Nondur.	6.1	6.1	6.1	6.0	1.8	1.0	4.8	4.4	6.0	5.3	2.3

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

Penalty for Private Use, \$300

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

SIC code	Kind of business	Sales						Inventories					
		199					1997	1998					1997
		Jul.	Jun.r	May.r	Apr.	Mar.	Jun.r	Jul.	Jun.r	May.r	Apr.	Mar.	Jun.r
	U.S. Total¹	1.006	1.038	0.985	1.009	1.034	1.007	0.996	0.986	0.995	1.007	1.008	0.985
50	Durable	1.007	1.056	0.969	1.001	1.048	1.021	1.014	0.999	1.008	1.008	1.000	0.999
501	Automotive	1.015	1.060	1.006	1.037	1.096	1.016	1.002	0.984	1.008	1.010	1.007	0.984
502	Furniture	0.986	1.029	0.969	1.008	1.034	0.998	1.018	1.018	1.006	0.977	0.990	1.016
503	Lumber	1.077	1.118	1.032	1.014	0.987	1.070	1.003	1.027	1.022	1.026	1.030	1.026
504	Prof. equip.	0.998	1.054	0.935	0.973	1.054	1.024	1.021	0.987	0.988	1.004	0.996	0.986
505	Metals	0.972	1.051	0.988	1.042	1.074	1.020	1.013	1.008	1.005	1.009	1.012	1.008
506	Electrical	1.001	1.025	0.945	0.961	1.050	1.000	1.028	1.014	1.001	0.998	0.984	1.014
507	Hardware	1.080	1.109	0.981	0.975	0.961	1.068	0.999	1.005	1.022	1.017	1.011	1.004
508	Machinery	0.988	1.065	0.997	1.043	1.080	1.023	1.010	1.003	1.018	1.019	1.008	1.002
509	Other Durable	0.934	0.999	0.939	0.949	1.025	0.979	1.037	0.999	1.002	0.989	0.957	0.999
51	Nondurable	1.010	1.023	0.998	1.018	1.028	0.995	0.961	0.961	0.970	1.009	1.019	0.961
511	Paper	1.011	0.999	0.940	0.993	1.042	0.971	1.004	0.978	0.983	1.013	1.005	0.978
512	Drugs	0.999	1.002	0.941	1.002	1.032	0.964	0.989	0.961	0.948	0.998	0.999	0.961
513	Apparel	1.082	0.989	0.819	0.956	1.093	0.963	1.034	1.025	0.976	0.969	0.964	1.023
514	Groceries	1.020	1.027	1.014	0.996	1.009	1.001	0.998	0.987	0.989	0.985	0.982	0.988
515	Farm-products	0.921	0.944	0.961	0.973	1.042	0.918	0.761	0.811	0.859	1.012	1.111	0.806
516	Chemicals	0.998	1.088	1.032	1.039	1.033	1.051	0.993	1.010	1.017	1.007	1.018	1.010
517	Petroleum	0.990	0.986	1.001	1.017	1.005	0.960	0.981	0.947	1.000	0.995	0.972	0.951
518	Alcohol	1.074	1.102	1.030	1.003	0.953	1.061	1.025	1.010	0.963	1.006	0.982	1.006
519	Other Nondur.	1.017	1.105	1.126	1.153	1.039	1.091	0.951	0.965	1.013	1.073	1.070	0.966



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.