

For Wire Transmission 10:00 a.m. ET December 10, 2002

CB02-156

MONTHLY WHOLESALE TRADE: SALES AND INVENTORIES OCTOBER 2002

Sales. October 2002 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences but not for price changes, were \$232.6 billion, down 0.1 percent (+/-0.6%) from the revised September level, but were up 5.1 percent (+/-0.9%) from the October 2001 level. The September preliminary estimate was revised downward \$0.6 billion or 0.3 percent. Sales of durable goods decreased 1.0 percent (+/-0.9%) from last month but increased 2.4 percent (+/-0.6%) compared to last year. Sales of motor vehicle and motor vehicle parts and supplies were down 1.9 percent. Among nondurable goods, sales of petroleum and petroleum products increased 6.5 percent, while chemicals and allied products decreased 2.2 percent.

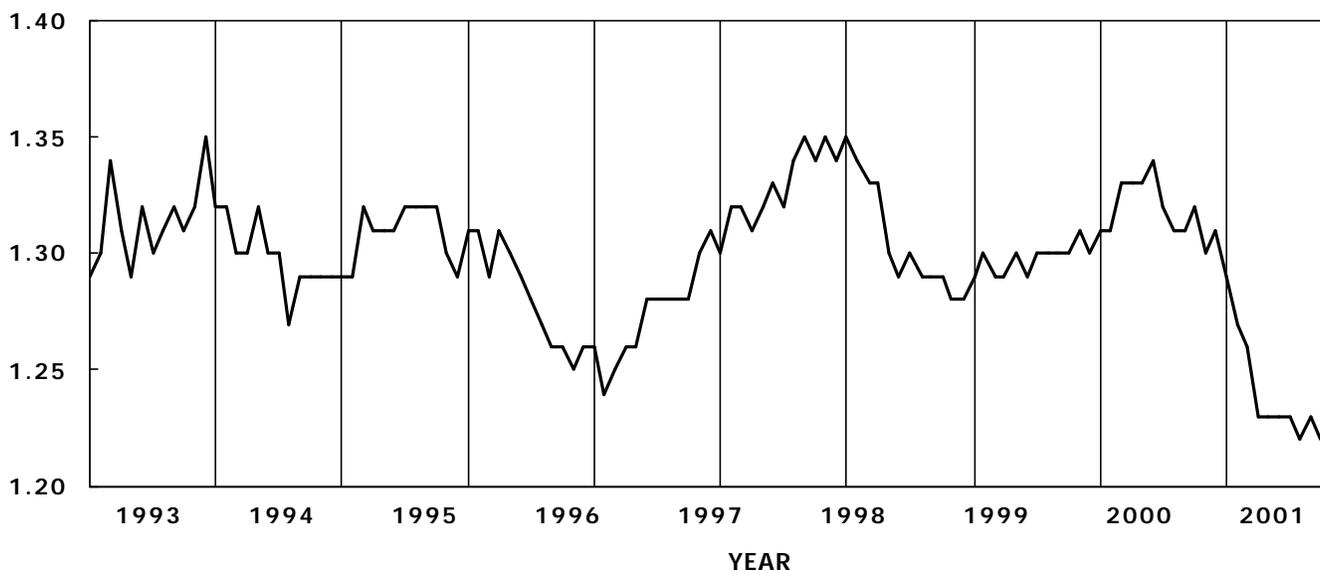
Inventories. Total inventories of merchant wholesalers, after adjustment for seasonal variations but not for price changes, were \$284.4 billion at the end of October, down 0.3 percent (+/-0.3%) from last month, and were down 3.0 percent (+/-0.9%) from a year ago. The September preliminary estimate was revised downward \$0.3 billion or 0.1 percent. Among durable goods, inventories of motor vehicle and motor vehicle parts and supplies were up 2.6 percent from last month, while computer and computer peripheral equipment and software decreased 4.1 percent. End-of-month inventories of nondurable goods decreased 0.6 percent (+/-0.5%) from last month but were up 1.4 percent (+/-1.7%) from last year. Compared to last month, inventories of petroleum and petroleum products decreased 7.7 percent and inventories of farm product raw materials decreased 5.5 percent.

Inventories/Sales Ratio. The October inventories/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.22. The October 2001 ratio was 1.32.

Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling error. A discussion of the reliability of the estimates and general survey methodology appears in BW/01-A Current Business Reports.

RATIO

Monthly Inventories/Sales Ratios of Merchant Wholesalers: 1993 to 2002 (Estimates adjusted for seasonal and trading-day differences, but not for price changes)



Monthly Wholesale Trade for November is scheduled to be released January 9, 2003 at 10:00 a.m.

Address inquiries concerning this report to Service Sector Statistics Division, U.S. Census Bureau, Washington, DC 20233, or call Nancy Piesto, (301) 763-2747.

This report is available on day of issue through the Department of Commerce's STAT-USA website; for information, call (202) 482-1986. The data are also available on the internet - <http://www.census.gov/whl>.

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

[Total sales and inventory estimates are shown in millions of dollars. Estimates are based on data from the Monthly Wholesale Trade Survey, Annual Wholesale Trade Survey, and administrative records. Except for NAICS code 4225, estimates have been adjusted using results of the most recent economic census.]

NAICS ¹ code	Kind of Business	Sales						Inventories						Inventories/Sales Ratios		
		Monthly			Percent change			Monthly			Percent change			Ratios		
		Oct. 2002 (p)	Sep. 2002 (r)	Oct. 2001 (r)	Oct./ Sep.	Sep./ Aug.	Oct. 02 Oct. 01	Oct. 2002 (p)	Sep. 2002 (r)	Oct. 2001 (r)	Oct./ Sep.	Sep./ Aug.	Oct. 02 Oct. 01	Oct. 2002 (p)	Sep. 2002 (r)	Oct. 2001 (r)
Adjusted²																
42	U.S. Total	232,559	232,798	221,333	-0.1	-0.2	5.1	284,432	285,386	293,113	-0.3	0.4	-3.0	1.22	1.23	1.32
421	Durable	113,266	114,429	110,566	-1.0	-0.2	2.4	169,415	169,619	179,669	-0.1	0.1	-5.7	1.50	1.48	1.62
4211	Automotive	17,434	17,764	17,150	-1.9	-3.2	1.7	24,707	24,080	24,998	2.6	3.1	-1.2	1.42	1.36	1.46
4212	Furniture	3,410	3,442	3,572	-0.9	-1.1	-4.5	5,181	5,214	5,439	-0.6	-0.3	-4.7	1.52	1.51	1.52
4213	Lumber	6,749	6,778	6,235	-0.4	2.2	8.2	6,750	6,750	6,834	0.0	0.5	-1.2	1.00	1.00	1.10
4214	Prof. equip.	22,217	22,641	21,044	-1.9	2.9	5.6	22,713	23,178	23,881	-2.0	-1.7	-4.9	1.02	1.02	1.13
42143	Comp. equip.	11,669	12,012	11,496	-2.9	1.5	1.5	7,837	8,176	8,752	-4.1	-4.0	-10.5	0.67	0.68	0.76
4215	Metals	7,733	7,602	7,458	1.7	-1.3	3.7	12,716	12,864	12,624	-1.2	2.1	0.7	1.64	1.69	1.69
4216	Electrical	17,203	17,285	17,124	-0.5	-1.0	0.5	23,816	23,632	25,959	0.8	0.0	-8.3	1.38	1.37	1.52
4217	Hardware	5,259	5,325	5,336	-1.2	-1.9	-1.4	9,929	9,990	10,392	-0.6	-0.3	-4.5	1.89	1.88	1.95
4218	Machinery	19,845	20,359	20,105	-2.5	2.6	-1.3	44,003	44,459	48,938	-1.0	-1.1	-10.1	2.22	2.18	2.43
4219	Misc. Durable	13,416	13,233	12,542	1.4	-4.2	7.0	19,600	19,452	20,604	0.8	0.2	-4.9	1.46	1.47	1.64
422	Nondurable	119,293	118,369	110,767	0.8	-0.2	7.7	115,017	115,767	113,444	-0.6	0.8	1.4	0.96	0.98	1.02
4221	Paper	6,217	6,227	6,036	-0.2	0.0	3.0	5,972	6,033	6,453	-1.0	0.0	-7.5	0.96	0.97	1.07
4222	Drugs	18,862	18,875	17,537	-0.1	0.8	7.6	27,942	27,563	26,754	1.4	2.0	4.4	1.48	1.46	1.53
4223	Apparel	6,776	6,914	6,641	-2.0	-3.5	2.0	12,680	13,005	13,267	-2.5	1.8	-4.4	1.87	1.88	2.00
4224	Groceries	35,665	35,482	33,693	0.5	-0.3	5.9	22,355	22,421	20,981	-0.3	-0.6	6.5	0.63	0.63	0.62
4225	Farm products	9,627	9,537	8,410	0.9	2.7	14.5	9,354	9,894	9,924	-5.5	-3.3	-5.7	0.97	1.04	1.18
4226	Chemicals	5,098	5,214	4,810	-2.2	1.3	6.0	6,148	6,146	6,216	0.0	1.4	-1.1	1.21	1.18	1.29
4227	Petroleum	16,935	15,905	13,078	6.5	2.6	29.5	4,383	4,750	4,227	-7.7	4.5	3.7	0.26	0.30	0.32
4228	Alcohol	6,356	6,432	5,912	-1.2	-2.4	7.5	6,834	6,736	6,373	1.5	2.6	7.2	1.08	1.05	1.08
4229	Misc. Nondur.	13,757	13,783	14,650	-0.2	-4.1	-6.1	19,349	19,219	19,249	0.7	0.9	0.5	1.41	1.39	1.31
Not Adjusted																
Sales to date																
														2002		2001
42	U.S. Total	249,073	231,298	237,144	7.7	-3.1	5.0	287,239	282,926	295,827	1.5	0.9	-2.9	2,297,815	2,281,293	
421	Durable	122,035	115,660	119,318	5.5	-2.3	2.3	169,257	169,435	179,358	-0.1	-0.5	-5.6	1,140,833	1,155,149	
4211	Automotive	18,532	16,858	18,128	9.9	-10.0	2.2	24,855	23,671	25,098	5.0	5.1	-1.0	175,794	170,703	
4212	Furniture	3,775	3,549	3,947	6.4	-3.9	-4.4	5,300	5,402	5,564	-1.9	0.1	-4.7	35,250	36,600	
4213	Lumber	7,390	6,785	6,821	8.9	-6.7	8.3	6,608	6,750	6,663	-2.1	0.1	-0.8	68,544	62,337	
4214	Prof. equip.	23,417	24,113	22,370	-2.9	7.8	4.7	23,054	23,178	24,263	-0.5	-2.2	-5.0	217,597	223,297	
42143	Comp. equip.	12,393	13,369	12,358	-7.3	9.8	0.3	7,970	8,168	8,910	-2.4	-4.2	-10.5	115,501	122,966	
4215	Metals	8,290	7,526	7,913	10.2	-6.9	4.8	12,691	12,967	12,561	-2.1	2.3	1.0	76,496	79,756	
4216	Electrical	19,026	17,942	18,956	6.0	-0.3	0.4	23,840	23,868	25,959	-0.1	-0.9	-8.2	175,901	179,017	
4217	Hardware	5,695	5,229	5,795	8.9	-8.0	-1.7	9,770	10,010	10,215	-2.4	-1.2	-4.4	54,658	53,142	
4218	Machinery	20,857	20,054	21,291	4.0	0.3	-2.0	43,343	44,059	48,204	-1.6	-2.7	-10.1	202,029	217,457	
4219	Misc. Durable	15,053	13,604	14,097	10.7	-6.3	6.8	19,796	19,530	20,831	1.4	-0.9	-5.0	134,564	132,840	
422	Nondurable	127,038	115,638	117,826	9.9	-3.9	7.8	117,982	113,491	116,469	4.0	2.9	1.3	1,156,982	1,126,144	
4221	Paper	6,776	6,295	6,603	7.6	-3.5	2.6	6,008	5,991	6,492	0.3	0.7	-7.5	62,481	64,612	
4222	Drugs	20,182	18,630	18,765	8.3	3.0	7.6	28,473	27,094	27,289	5.1	6.0	4.3	183,937	158,427	
4223	Apparel	7,758	7,184	7,537	8.0	-9.1	2.9	12,642	13,343	13,214	-5.3	1.0	-4.3	71,338	68,927	
4224	Groceries	37,127	34,524	35,176	7.5	-5.6	5.5	23,160	22,668	21,778	2.2	0.7	6.3	350,498	334,937	
4225	Farm products	11,206	8,803	9,823	27.3	3.3	14.1	10,514	8,192	11,313	28.3	6.8	-7.1	87,989	88,369	
4226	Chemicals	5,383	5,058	5,075	6.4	-5.1	6.1	6,050	6,072	6,104	-0.4	0.2	-0.9	51,089	50,091	
4227	Petroleum	17,697	15,491	13,771	14.2	-3.3	28.5	4,409	4,750	4,269	-7.2	5.3	3.3	146,874	153,387	
4228	Alcohol	6,877	6,104	6,338	12.7	-12.8	8.5	7,319	6,931	6,819	5.6	6.2	7.3	63,599	59,131	
4229	Misc. Nondur.	14,032	13,549	14,738	3.6	-5.6	-4.8	19,407	18,450	19,191	5.2	0.8	1.1	139,177	148,263	

^p Preliminary estimate. ^r Revised.

¹ For a full description of the NAICS codes used in this table, see <http://www.census.gov/svsd/www/naicsdef.html>.

² Estimates are adjusted for seasonal variations and, in the case of sales, also for trading-day differences. See Table 3 for the seasonal adjustment factors used. Cumulative seasonally adjusted sales estimates are not tabulated.

Note: Estimates have not been adjusted for price changes. Table 2 provides estimated measures of sampling variability. Additional information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions may be found at <http://www.census.gov/svsd/www/mwtsreliability.html>.

Table 2. Coefficients of Variation and Standard Errors for Sales and Inventories Estimates

[Estimates are shown as percents. Estimates are based on data from the Monthly Wholesale Trade Survey and administrative records.]

NAICS code	Kind of Business	Median coefficients of variation for level (%)				Median standard errors for trend				Coefficients of variation for level (%)		Standard errors 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.	Current year	Previous year	to previous year cumulative
42	U.S. Total	1.2	1.6	1.2	1.6	0.4	0.2	0.6	0.5	1.2	1.3	0.3
421	Durable	1.5	1.5	1.5	1.5	0.5	0.3	1.0	0.7	1.4	1.7	0.6
4211	Automotive	3.3	4.5	3.4	4.5	0.9	0.8	1.3	1.8	3.3	3.8	0.9
4212	Furniture	4.6	7.3	4.6	7.3	1.4	0.7	2.9	1.7	4.5	4.0	2.3
4213	Lumber	4.6	6.3	4.6	6.4	1.0	0.6	2.5	2.8	4.6	3.8	1.6
4214	Prof. equip.	5.0	6.2	4.9	6.2	1.2	0.6	2.3	1.8	4.8	4.1	1.5
42143	Comp. equip.	8.8	6.9	8.4	6.8	2.0	1.1	3.2	3.7	8.6	7.3	2.5
4215	Metals	7.6	9.0	7.6	8.9	1.3	0.7	2.8	3.5	7.1	6.9	2.3
4216	Electrical	3.7	4.9	3.7	4.9	1.2	0.6	1.7	1.7	3.4	3.9	0.8
4217	Hardware	8.0	10.9	8.1	10.8	1.1	0.5	2.4	2.2	7.9	8.0	1.5
4218	Machinery	3.9	3.1	4.0	3.1	1.7	0.5	2.2	1.4	3.4	3.3	1.1
4219	Misc. Durable	5.0	7.7	5.0	7.6	1.8	0.8	2.9	2.4	4.8	5.3	2.1
422	Nondurable	1.8	2.5	1.7	2.6	0.5	0.3	0.9	1.0	1.8	1.5	0.5
4221	Paper	4.3	3.4	4.4	3.4	0.9	0.6	1.2	1.5	4.2	4.8	0.7
4222	Drugs	5.3	5.5	5.3	5.5	0.9	0.4	2.2	2.7	5.3	5.7	1.1
4223	Apparel	5.0	4.8	5.0	4.8	1.8	0.9	3.0	2.6	4.5	4.3	2.0
4224	Groceries	3.2	5.9	3.2	5.8	0.7	0.7	1.6	1.9	3.3	2.9	1.0
4225	Farm products	5.8	10.6	5.9	10.9	1.8	1.7	2.8	3.1	5.8	5.5	1.5
4226	Chemicals	5.3	7.1	5.3	7.1	1.0	0.7	1.8	1.9	5.2	4.9	1.1
4227	Petroleum	5.7	6.8	5.8	6.9	0.7	0.8	1.4	1.9	5.9	5.6	0.9
4228	Alcohol	4.1	5.3	4.1	5.1	0.9	0.7	1.2	1.6	4.0	4.0	0.8
4229	Misc. Nondur.	7.8	8.1	7.8	7.9	2.0	1.2	3.5	1.8	7.5	6.9	2.5

Note: Estimated measures of sampling variability are based on estimates unadjusted for seasonal variation or trading-day differences. Medians are computed using final monthly estimates for the latest 12 months. Additional information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions may be found at www.census.gov/svsd/www/mwtsreliability.html.

Reliability of Estimates

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 percent change 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 zero, then we do not have sufficient evidence to conclude the estimated change was statistically different from zero. For monthly totals, 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 can occur because of nonresponse, insufficient coverage of the universe of wholesale businesses, mistakes in the recording and coding of data, and response errors. Imputed data accounts for approximately 28% of the sales estimates and 31% of the inventories estimates. Additionally, estimates of sales and inventories prior to March 2001 have been restated from SIC-based estimates. The restatement methodology may have introduced additional nonsampling error. The calculated median standard errors of year-to-year change estimates may also be influenced by the methodology used to impute historical data for units in the NAICS sample. The effect of this historic imputation methodology on published estimates will decrease as more data from the NAICS sample is accumulated. Precautionary steps are taken to minimize nonsampling errors, but their magnitude is not directly measured.

Further information regarding the reliability of estimates can be found on the Internet on our web page at <http://www.census.gov/svsd/www/mwtsreliability.html>.

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

[Seasonal adjustment factors are computed using the Census Bureau's X-12 ARIMA program and are based on data from the Monthly Wholesale Trade Survey, Annual Wholesale Trade Survey, and administrative records.]

NAICS code	Kind of Business	Sales						Inventories					
		2002					2001	2002					2001
		Nov.	Oct.r	Sep.r	Aug.	Jul.	Oct.r	Nov.	Oct.r	Sep.r	Aug.	Jul.	Oct.r
42	U.S. Total ¹	0.968	1.072	0.997	1.023	1.016	1.071	1.011	1.011	0.989	0.984	0.994	1.011
421	Durable	0.964	1.078	1.013	1.031	1.020	1.079	0.994	0.999	0.998	1.002	1.012	0.999
4211	Automotive	0.988	1.063	0.949	1.021	1.016	1.057	1.017	1.006	0.983	0.964	0.988	1.004
4212	Furniture	1.005	1.107	1.031	1.061	0.998	1.105	0.995	1.023	1.036	1.032	1.036	1.023
4213	Lumber	0.919	1.095	1.001	1.096	1.095	1.094	0.969	0.979	1.000	1.004	1.016	0.975
4214	Prof. equip.	0.939	1.054	1.065	1.016	1.017	1.063	1.013	1.015	1.000	1.005	1.011	1.016
42143	Comp. equip.	0.935	1.062	1.113	1.029	1.002	1.075	1.024	1.017	0.999	1.001	1.015	1.018
4215	Metals	0.936	1.072	0.990	1.049	1.024	1.061	0.990	0.998	1.008	1.006	1.017	0.995
4216	Electrical	0.979	1.106	1.038	1.031	1.016	1.107	1.003	1.001	1.010	1.019	1.016	1.000
4217	Hardware	0.958	1.083	0.982	1.048	1.038	1.086	0.981	0.984	1.002	1.011	1.012	0.983
4218	Machinery	0.937	1.051	0.985	1.008	1.013	1.059	0.977	0.985	0.991	1.007	1.021	0.985
4219	Misc. Durable	1.006	1.122	1.028	1.052	1.002	1.124	0.996	1.010	1.004	1.015	1.007	1.011
422	Nondurable	0.972	1.067	0.979	1.014	1.013	1.065	1.036	1.028	0.983	0.958	0.965	1.028
4221	Paper	0.964	1.090	1.011	1.047	1.022	1.094	1.008	1.006	0.993	0.986	0.994	1.006
4222	Drugs	0.972	1.070	0.987	0.966	0.986	1.070	1.013	1.019	0.983	0.946	0.986	1.020
4223	Apparel	0.930	1.145	1.039	1.102	1.046	1.135	0.964	0.997	1.026	1.034	1.033	0.996
4224	Groceries	0.988	1.041	0.973	1.027	1.040	1.044	1.041	1.036	1.011	0.998	0.986	1.038
4225	Farm products	1.040	1.164	0.923	0.918	0.940	1.168	1.219	1.124	0.828	0.750	0.753	1.140
4226	Chemicals	0.934	1.056	0.970	1.035	1.032	1.055	0.990	0.984	0.988	1.000	1.011	0.982
4227	Petroleum	0.974	1.045	0.974	1.033	1.011	1.053	1.018	1.006	1.000	0.992	0.994	1.010
4228	Alcohol	1.033	1.082	0.949	1.062	1.043	1.072	1.039	1.071	1.029	0.994	1.017	1.070
4229	Misc. Nondur.	0.909	1.020	0.983	0.999	0.990	1.006	1.026	1.003	0.960	0.961	0.946	0.997

r Revised.

¹Adjusted sales and inventory estimates for detailed kind-of business levels in Table 1 are computed by dividing each unadjusted estimate by the seasonal adjustment factor for the corresponding kind of business and month. Adjusted estimates for broad kind-of-business levels are obtained by summing adjusted estimates at the appropriate detailed levels. Seasonal factors shown for broad kind-of-business levels may be used to approximate adjusted estimates at these levels, but the resulting estimates may differ slightly from the published estimates.

Note: The seasonal adjustment factors shown are estimates derived from a model that uses sample survey data as input. Therefore, these estimates may contain model error, sampling error, and nonsampling error. Additional information on the general form of the model and the X-12 ARIMA program may be found at <http://www.census.gov/srd/www/x12a/>.