

For Wire Transmission 10:00 a.m. ET February 7, 2003

CB03-33

**MONTHLY WHOLESALE TRADE: SALES AND INVENTORIES
DECEMBER 2002**

Intention to Revise Wholesale Estimates: Monthly wholesale sales, inventories, and inventories/sales ratios will be revised based on the results of the 2001 Annual Trade Survey. Revised unadjusted and corresponding adjusted data are scheduled for release on April 3.

Sales. December 2002 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences but not for price changes, were \$233.7 billion, down 0.8 percent (+/-0.6%) from the revised November level, and were up 5.8 percent (+/-0.9%) from the December 2001 level. The November preliminary estimate was revised downward \$0.2 billion or 0.1 percent. December sales of durable goods decreased 1.4 percent (+/-0.9%) from last month, but were 1.4 percent (+/-1.1%) above a year ago. Compared to last month, sales of metals and minerals, except petroleum, decreased 5.3 percent and sales of furniture and home furnishings decreased 4.6 percent. Among nondurable goods, sales of beer, wine, and distilled beverages increased 4.6 percent from November and sales of petroleum and petroleum products increased 2.1 percent.

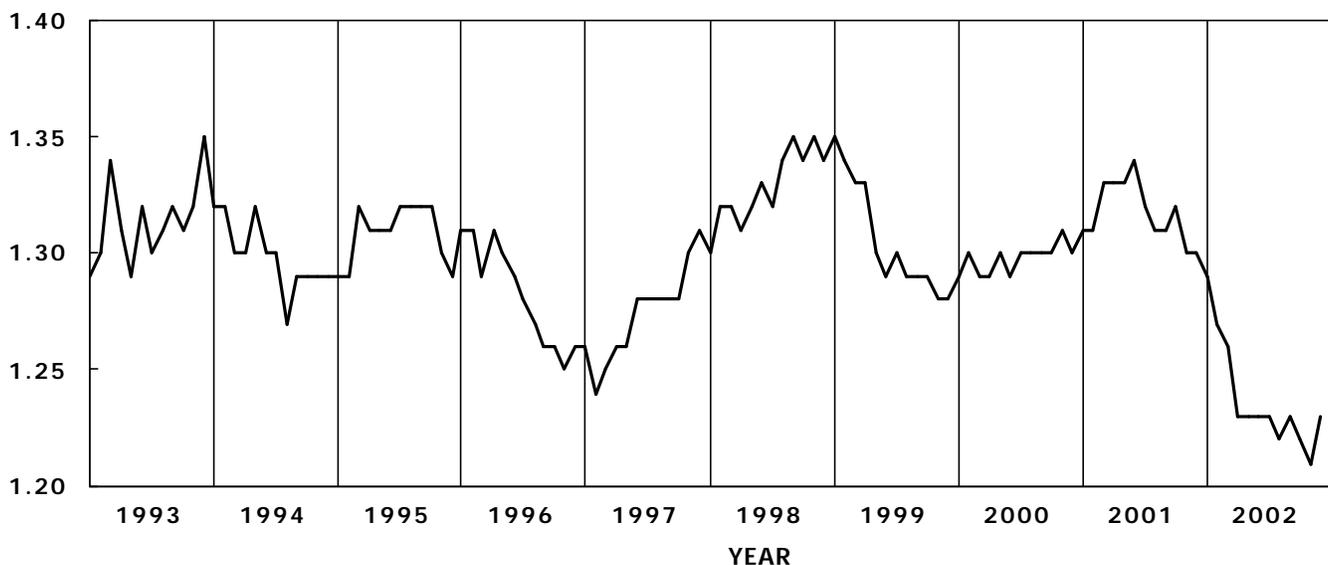
Inventories. Total inventories of merchant wholesalers, after adjustment for seasonal variations but not for price changes, were \$287.3 billion at the end of December, up 0.8 percent (+/-0.3%) from last month, but were about the same from a year ago. The November preliminary estimate was revised upward \$0.4 billion or 0.1 percent. Among durable goods, inventories of hardware, and plumbing and heating equipment and supplies were up 1.0 percent from last month. End-of-month inventories of nondurable goods increased 1.6 percent (+/-0.6%) from November, and were up 2.5 percent (+/-1.5%) from last December. Inventories of petroleum and petroleum products increased 16.5 percent compared to last month and drugs and druggists' sundries grew 2.4 percent.

Inventories/Sales Ratio. The December inventories/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.23. The December 2001 ratio was 1.30.

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.

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

RATIO



Monthly Wholesale Trade for January is scheduled to be released March 11, 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		
		Dec. 2002 (p)	Nov. 2002 (r)	Dec. 2001 (r)	Dec./ Nov.	Nov./ Oct.	Dec. 02 Dec. 01	Dec. 2002 (p)	Nov. 2002 (r)	Dec. 2001 (r)	Dec./ Nov.	Nov./ Oct.	Dec. 02 Dec. 01	Dec. 2002 (p)	Nov. 2002 (r)	Dec. 2001 (r)
Adjusted²																
42	U.S. Total	233,655	235,471	220,917	-0.8	1.1	5.8	287,257	284,889	287,339	0.8	0.3	0.0	1.23	1.21	1.30
421	Durable	112,230	113,870	110,723	-1.4	0.5	1.4	170,649	170,136	173,525	0.3	0.5	-1.7	1.52	1.49	1.57
4211	Automotive	18,064	18,116	16,802	-0.3	3.9	7.5	25,049	25,259	23,838	-0.8	2.2	5.1	1.39	1.39	1.42
4212	Furniture	3,327	3,487	3,496	-4.6	1.7	-4.8	5,248	5,199	5,355	0.9	0.3	-2.0	1.58	1.49	1.53
4213	Lumber	6,406	6,502	6,426	-1.5	-2.7	-0.3	6,810	6,783	6,694	0.4	0.5	1.7	1.06	1.04	1.04
4214	Prof. equip.	22,281	22,547	21,547	-1.2	1.0	3.4	22,862	22,759	23,032	0.5	0.6	-0.7	1.03	1.01	1.07
42143	Comp. equip.	11,766	11,580	11,589	1.6	-0.9	1.5	7,823	7,682	8,070	1.8	-1.3	-3.1	0.66	0.66	0.70
4215	Metals	6,818	7,203	7,117	-5.3	-6.0	-4.2	12,968	12,909	12,283	0.5	1.2	5.6	1.90	1.79	1.73
4216	Electrical	17,111	17,645	17,066	-3.0	2.3	0.3	23,786	23,624	24,120	0.7	-0.5	-1.4	1.39	1.34	1.41
4217	Hardware	5,128	5,171	5,420	-0.8	-1.2	-5.4	10,016	9,917	10,242	1.0	0.0	-2.2	1.95	1.92	1.89
4218	Machinery	19,902	19,222	20,116	3.5	-2.3	-1.1	44,449	44,237	47,674	0.5	0.3	-6.8	2.23	2.30	2.37
4219	Misc. Durable	13,193	13,977	12,733	-5.6	2.5	3.6	19,461	19,449	20,287	0.1	-0.7	-4.1	1.48	1.39	1.59
422	Nondurable	121,425	121,601	110,194	-0.1	1.7	10.2	116,608	114,753	113,814	1.6	0.1	2.5	0.96	0.94	1.03
4221	Paper	6,366	6,332	6,210	0.5	1.4	2.5	6,089	6,071	6,292	0.3	1.2	-3.2	0.96	0.96	1.01
4222	Drugs	19,360	19,449	17,521	-0.5	2.7	10.5	28,517	27,838	28,033	2.4	0.1	1.7	1.47	1.43	1.60
4223	Apparel	6,976	7,154	6,763	-2.5	4.4	3.1	12,353	12,387	12,741	-0.3	-1.3	-3.0	1.77	1.73	1.88
4224	Groceries	35,305	35,587	34,030	-0.8	-0.1	3.7	22,396	22,169	21,335	1.0	-0.6	5.0	0.63	0.62	0.63
4225	Farm products	10,938	10,682	8,089	2.4	8.1	35.2	9,410	9,358	9,995	0.6	1.5	-5.9	0.86	0.88	1.24
4226	Chemicals	5,004	5,054	4,816	-1.0	-0.4	3.9	6,133	6,212	6,116	-1.3	0.7	0.3	1.23	1.23	1.27
4227	Petroleum	17,218	16,871	12,425	2.1	0.3	38.6	5,200	4,463	4,423	16.5	0.8	17.6	0.30	0.26	0.36
4228	Alcohol	6,870	6,565	6,354	4.6	3.1	8.1	7,002	6,960	6,417	0.6	1.7	9.1	1.02	1.06	1.01
4229	Misc. Nondur.	13,388	13,907	13,986	-3.7	1.2	-4.3	19,508	19,295	18,462	1.1	0.0	5.7	1.46	1.39	1.32
Not Adjusted																
Sales to date																
														2002	2001	
42	U.S. Total	232,237	229,431	213,276	1.2	-7.9	8.9	289,065	287,186	289,050	0.7	0.1	0.0	2,759,448	2,715,755	
421	Durable	109,864	110,262	105,244	-0.4	-9.7	4.4	168,106	168,987	170,916	-0.5	-0.1	-1.6	1,361,035	1,371,270	
4211	Automotive	18,281	18,007	16,382	1.5	-2.8	11.6	24,824	25,663	23,623	-3.3	3.3	5.1	212,078	204,401	
4212	Furniture	3,124	3,543	3,202	-11.8	-6.5	-2.4	5,143	5,163	5,243	-0.4	-2.5	-1.9	41,932	43,538	
4213	Lumber	5,343	5,949	5,192	-10.2	-19.1	2.9	6,558	6,573	6,433	-0.2	-0.5	1.9	79,803	73,493	
4214	Prof. equip.	23,440	21,352	22,215	9.8	-9.1	5.5	22,679	22,964	22,871	-1.2	-0.2	-0.8	262,462	266,230	
42143	Comp. equip.	12,743	10,688	12,342	19.2	-14.4	3.2	7,706	7,828	8,014	-1.6	-1.2	-3.8	139,022	146,164	
4215	Metals	6,075	6,749	6,149	-10.0	-18.6	-1.2	13,150	12,780	12,443	2.9	0.7	5.7	89,320	92,985	
4216	Electrical	16,632	17,416	16,127	-4.5	-8.3	3.1	23,405	23,648	23,758	-1.0	-0.9	-1.5	209,916	213,314	
4217	Hardware	4,574	4,923	4,661	-7.1	-13.6	-1.9	9,926	9,689	10,140	2.4	-0.7	-2.1	64,158	63,122	
4218	Machinery	19,822	17,857	19,271	11.0	-14.2	2.9	43,427	43,175	46,625	0.6	-0.4	-6.9	239,652	256,414	
4219	Misc. Durable	12,573	14,466	12,045	-13.1	-4.6	4.4	18,994	19,332	19,780	-1.7	-2.5	-4.0	161,714	157,773	
422	Nondurable	122,373	119,169	108,032	2.7	-6.1	13.3	120,959	118,199	118,134	2.3	0.4	2.4	1,398,413	1,344,485	
4221	Paper	6,162	6,123	5,850	0.6	-9.6	5.3	6,162	6,138	6,355	0.4	2.2	-3.0	74,765	76,636	
4222	Drugs	20,134	19,138	17,486	5.2	-4.8	15.1	30,000	28,005	29,294	7.1	-1.5	2.4	223,124	193,368	
4223	Apparel	5,420	6,861	5,099	-21.0	-12.3	6.3	12,267	11,916	12,665	2.9	-5.2	-3.1	83,685	80,630	
4224	Groceries	35,482	35,231	33,962	0.7	-4.9	4.5	22,754	22,967	21,676	-0.9	-1.0	5.0	421,148	402,881	
4225	Farm products	12,240	11,248	8,647	8.8	-0.8	41.6	11,386	11,435	12,144	-0.4	10.0	-6.2	111,607	106,092	
4226	Chemicals	4,579	4,705	4,262	-2.7	-12.4	7.4	6,133	6,169	6,128	-0.6	2.0	0.1	60,362	58,984	
4227	Petroleum	17,356	16,331	12,090	6.3	-7.7	43.6	5,382	4,557	4,582	18.1	2.5	17.5	180,548	177,978	
4228	Alcohol	7,866	6,696	6,888	17.5	-2.8	14.2	6,470	7,273	5,923	-11.0	-0.6	9.2	78,172	72,600	
4229	Misc. Nondur.	13,134	12,836	13,748	2.3	-7.6	-4.5	20,405	19,739	19,367	3.4	1.9	5.4	165,002	175,316	

^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	1.3	1.6	0.4	0.2	0.6	0.5	1.2	1.3	0.2
421	Durable	1.4	1.5	1.5	1.5	0.5	0.3	0.8	0.6	1.3	1.7	0.6
4211	Automotive	3.2	4.4	3.2	4.5	0.9	0.8	1.2	1.5	3.2	3.7	0.8
4212	Furniture	4.6	7.0	4.6	7.0	1.5	0.7	2.9	1.3	4.5	4.0	2.4
4213	Lumber	4.8	6.3	4.8	6.3	1.0	0.6	2.2	2.5	4.6	4.0	1.4
4214	Prof. equip.	5.0	6.3	4.9	6.3	1.2	0.6	2.0	1.7	4.8	4.1	1.4
42143	Comp. equip.	8.9	7.2	8.9	7.1	2.1	1.2	3.0	4.0	8.5	7.2	2.4
4215	Metals	6.8	9.1	7.2	9.1	1.6	0.7	2.7	3.4	6.9	6.8	1.9
4216	Electrical	3.5	4.9	3.6	4.9	1.2	0.6	1.6	1.5	3.4	3.9	0.8
4217	Hardware	7.9	10.9	8.0	10.9	1.2	0.6	2.4	2.0	7.9	8.2	1.5
4218	Machinery	3.9	3.1	3.8	3.1	1.6	0.5	2.2	1.3	3.3	3.2	1.0
4219	Misc. Durable	4.9	7.6	4.8	7.6	1.7	0.8	2.7	2.5	4.6	5.0	2.0
422	Nondurable	1.8	2.5	1.8	2.5	0.5	0.3	0.9	0.9	1.8	1.5	0.5
4221	Paper	4.3	3.3	4.3	3.4	0.9	0.7	1.2	1.5	4.3	4.8	0.6
4222	Drugs	5.3	5.5	5.4	5.5	0.9	0.4	2.0	2.3	5.3	5.7	1.0
4223	Apparel	5.0	4.9	5.0	4.8	2.0	0.9	2.8	2.4	4.5	4.4	1.9
4224	Groceries	3.4	6.1	3.2	6.0	0.7	0.7	1.6	1.7	3.4	2.9	1.1
4225	Farm products	5.9	10.1	6.0	10.4	1.9	1.8	2.8	3.1	5.9	5.5	1.7
4226	Chemicals	5.2	7.1	5.3	7.1	1.0	0.7	1.7	1.8	5.2	5.0	1.0
4227	Petroleum	6.0	6.8	5.8	6.9	0.7	0.9	1.4	1.7	6.1	5.6	1.0
4228	Alcohol	4.1	5.3	4.1	5.3	1.0	0.7	1.1	1.1	3.9	3.8	0.7
4229	Misc. Nondur.	7.8	8.2	7.8	8.1	2.0	1.2	3.4	1.7	7.3	6.9	2.2

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					
		2003	2002				2001	2003	2002				2001
		Jan.	Dec.r	Nov.r	Oct.	Sep.	Dec.r	Jan.	Dec.r	Nov.r	Oct.	Sep.	Dec.r
42	U.S. Total ¹	0.959	0.990	0.971	1.069	0.997	0.965	1.014	1.005	1.009	1.011	0.989	1.005
421	Durable	0.930	0.973	0.968	1.076	1.013	0.945	0.997	0.985	0.994	0.998	0.998	0.985
4211	Automotive	0.915	1.012	0.994	1.063	0.949	0.975	1.015	0.991	1.016	1.005	0.983	0.991
4212	Furniture	0.917	0.939	1.016	1.105	1.031	0.916	0.984	0.980	0.993	1.022	1.036	0.979
4213	Lumber	0.893	0.834	0.915	1.101	1.001	0.808	0.986	0.963	0.969	0.979	1.000	0.961
4214	Prof. equip.	0.948	1.052	0.947	1.052	1.065	1.031	1.001	0.992	1.009	1.017	1.000	0.993
42143	Comp. equip.	0.949	1.083	0.923	1.068	1.113	1.065	0.998	0.985	1.019	1.018	0.999	0.993
4215	Metals	0.979	0.891	0.937	1.082	0.990	0.864	1.000	1.014	0.990	0.995	1.008	1.013
4216	Electrical	0.944	0.972	0.987	1.101	1.038	0.945	0.999	0.984	1.001	1.005	1.010	0.985
4217	Hardware	0.937	0.892	0.952	1.089	0.982	0.860	0.991	0.991	0.977	0.984	1.002	0.990
4218	Machinery	0.934	0.996	0.929	1.057	0.985	0.958	0.982	0.977	0.976	0.983	0.991	0.978
4219	Misc. Durable	0.911	0.953	1.035	1.112	1.028	0.946	1.004	0.976	0.994	1.012	1.004	0.975
422	Nondurable	0.987	1.001	0.976	1.064	0.979	0.981	1.044	1.041	1.034	1.028	0.983	1.041
4221	Paper	1.004	0.968	0.967	1.085	1.011	0.942	1.001	1.012	1.011	1.001	0.993	1.010
4222	Drugs	1.055	1.040	0.984	1.061	0.987	0.998	1.069	1.052	1.006	1.022	0.983	1.045
4223	Apparel	0.933	0.777	0.959	1.142	1.039	0.754	1.029	0.993	0.962	1.002	1.026	0.994
4224	Groceries	0.965	1.005	0.990	1.040	0.973	0.998	0.998	1.016	1.036	1.040	1.011	1.016
4225	Farm products	1.104	1.119	1.053	1.147	0.923	1.069	1.236	1.210	1.222	1.127	0.828	1.215
4226	Chemicals	0.997	0.915	0.931	1.059	0.970	0.885	0.991	1.000	0.993	0.981	0.988	1.002
4227	Petroleum	1.030	1.008	0.968	1.051	0.974	0.973	1.003	1.035	1.021	1.005	1.000	1.036
4228	Alcohol	0.810	1.145	1.020	1.082	0.949	1.084	0.949	0.924	1.045	1.069	1.029	0.923
4229	Misc. Nondur.	0.951	0.981	0.923	1.011	0.983	0.983	1.045	1.046	1.023	1.004	0.960	1.049

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/>.