

For Wire Transmission 10:00 a.m. ET January 8, 2004

CB04-04

**MONTHLY WHOLESALE TRADE: SALES AND INVENTORIES  
NOVEMBER 2003**

**Intention to Revise Wholesale Estimates:** Monthly wholesale sales, inventories, and inventories/sales ratios will be revised based on the results of the 2002 Annual Trade Survey. Revised unadjusted and corresponding adjusted data are scheduled for release on March 3, 2004.

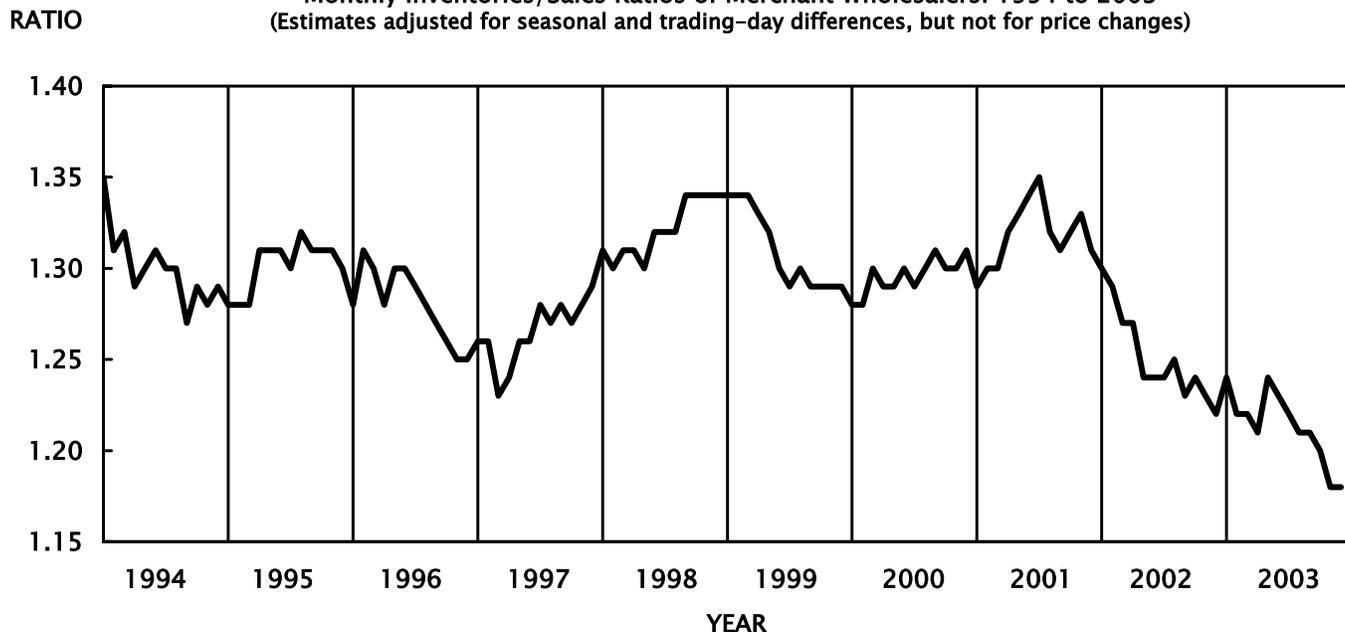
**Sales.** November 2003 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences but not for price changes, were \$247.4 billion, up 0.3 percent (+/-0.6%) from the revised October level and were up 5.5 percent (+/-1.0%) from the November 2002 level. The October preliminary estimate was revised downward \$0.1 billion. November sales of durable goods increased 0.6 percent (+/-0.8%) from last month and were up 6.0 percent (+/-1.3%) from a year ago. Compared to last month, sales of motor vehicle and motor vehicle parts and supplies increased 2.0 percent. November sales of nondurable goods were virtually unchanged (+/-0.8%) from last month and were up 5.0 percent (+/-1.6%) from last year. Compared to last month, sales of paper and paper products were down 3.3 percent, while sales of petroleum and petroleum products were up 1.7 percent.

**Inventories.** Total inventories of merchant wholesalers, after adjustment for seasonal variations but not for price changes, were \$292.7 billion at the end of November, up 0.5 percent (+/-0.4%) from last month and were up 2.2 percent (+/-1.4%) from a year ago. The October preliminary estimate was virtually unchanged. End-of-month inventories of durable goods increased 0.3 percent (+/-0.4%) from October and were up 0.5 percent (+/-0.8%) from last November. Inventories of lumber and other construction materials increased 3.4 percent from last month, while inventories of electrical goods decreased 1.8 percent. End-of-month inventories of nondurable goods increased 0.8 percent (+/-0.6%) from October and were up 4.9 percent (+/-3.2%) compared to last November. Inventories of beer, wine, and distilled alcoholic beverages increased 3.0 percent from last month, while chemicals and allied products decreased 1.3 percent.

**Inventories/Sales Ratio.** The November inventories/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.18. The November 2002 ratio was 1.22.

*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/02-A Current Business Reports.*

**Monthly Inventories/Sales Ratios of Merchant Wholesalers: 1994 to 2003**  
(Estimates adjusted for seasonal and trading-day differences, but not for price changes)



**Monthly Wholesale Trade for December is scheduled to be released February 9, 2004 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 <sup>1</sup> code	Kind of Business	Sales						Inventories						Inventories/Sales		
		Monthly			Percent change			Monthly			Percent change			Ratios		
		Nov. 2003 (p)	Oct. 2003 (r)	Nov. 2002 (r)	Nov./ Oct.	Oct./ Sep.	Nov. 03/ Nov. 02	Nov. 2003 (p)	Oct. 2003 (r)	Nov. 2002 (r)	Nov./ Oct.	Oct./ Sep.	Nov. 03/ Nov. 02	Nov. 2003 (p)	Oct. 2003 (r)	Nov. 2002 (r)
<b>Adjusted<sup>2</sup></b>																
<b>42</b>	<b>U.S. Total</b>	<b>247,448</b>	<b>246,732</b>	<b>234,619</b>	<b>0.3</b>	<b>2.0</b>	<b>5.5</b>	<b>292,743</b>	<b>291,224</b>	<b>286,317</b>	<b>0.5</b>	<b>0.5</b>	<b>2.2</b>	<b>1.18</b>	<b>1.18</b>	<b>1.22</b>
<b>421</b>	<b>Durable</b>	<b>118,222</b>	<b>117,543</b>	<b>111,574</b>	<b>0.6</b>	<b>1.6</b>	<b>6.0</b>	<b>174,185</b>	<b>173,583</b>	<b>173,289</b>	<b>0.3</b>	<b>0.5</b>	<b>0.5</b>	<b>1.47</b>	<b>1.48</b>	<b>1.55</b>
4211	Automotive	18,735	18,365	18,079	2.0	1.1	3.6	25,090	25,227	25,350	-0.5	2.5	-1.0	1.34	1.37	1.40
4212	Furniture	3,764	3,757	3,569	0.2	-0.5	5.5	5,515	5,455	5,155	1.1	1.0	7.0	1.47	1.45	1.44
4213	Lumber	8,443	8,298	6,485	1.7	1.9	30.2	7,718	7,465	7,130	3.4	2.3	8.2	0.91	0.90	1.10
4214	Prof. equip.	21,198	20,995	21,147	1.0	1.1	0.2	24,346	24,217	23,422	0.5	-0.1	3.9	1.15	1.15	1.11
42143	Comp. equip.	9,548	9,461	9,516	0.9	2.7	0.3	7,549	7,549	7,471	0.0	1.4	1.0	0.79	0.80	0.79
4215	Metals	7,655	7,554	7,175	1.3	1.5	6.7	13,486	13,213	13,537	2.1	0.7	-0.4	1.76	1.75	1.89
4216	Electrical	18,875	18,790	17,450	0.5	3.7	8.2	22,035	22,430	23,544	-1.8	-1.8	-6.4	1.17	1.19	1.35
4217	Hardware	5,648	5,602	5,338	0.8	-0.3	5.8	10,402	10,381	10,108	0.2	0.6	2.9	1.84	1.85	1.89
4218	Machinery	19,393	19,670	18,172	-1.4	-0.5	6.7	44,624	44,450	45,505	0.4	-0.2	-1.9	2.30	2.26	2.50
4219	Misc. Durable	14,511	14,512	14,159	0.0	4.6	2.5	20,969	20,745	19,538	1.1	1.5	7.3	1.45	1.43	1.38
<b>422</b>	<b>Nondurable</b>	<b>129,226</b>	<b>129,189</b>	<b>123,045</b>	<b>0.0</b>	<b>2.3</b>	<b>5.0</b>	<b>118,558</b>	<b>117,641</b>	<b>113,028</b>	<b>0.8</b>	<b>0.6</b>	<b>4.9</b>	<b>0.92</b>	<b>0.91</b>	<b>0.92</b>
4221	Paper	6,038	6,241	6,232	-3.3	1.6	-3.1	6,248	6,254	6,144	-0.1	0.8	1.7	1.03	1.00	0.99
4222	Drugs	22,702	22,751	20,598	-0.2	2.0	10.2	31,012	30,666	28,278	1.1	-0.9	9.7	1.37	1.35	1.37
4223	Apparel	7,055	7,031	7,477	0.3	-0.8	-5.6	11,944	11,788	12,376	1.3	-1.9	-3.5	1.69	1.68	1.66
4224	Groceries	35,716	35,883	35,020	-0.5	-0.6	2.0	22,357	22,168	22,253	0.9	-1.7	0.5	0.63	0.62	0.64
4225	Farm products	12,200	12,065	10,409	1.1	14.6	17.2	11,251	11,338	9,443	-0.8	15.4	19.1	0.92	0.94	0.91
4226	Chemicals	5,392	5,364	5,174	0.5	0.1	4.2	5,838	5,913	6,091	-1.3	-0.5	-4.2	1.08	1.10	1.18
4227	Petroleum	19,131	18,810	17,395	1.7	2.1	10.0	4,791	4,723	4,177	1.4	-0.4	14.7	0.25	0.25	0.24
4228	Alcohol	7,408	7,486	6,867	-1.0	4.6	7.9	7,810	7,581	7,375	3.0	0.5	5.9	1.05	1.01	1.07
4229	Misc. Nondur.	13,584	13,558	13,873	0.2	2.4	-2.1	17,307	17,210	16,891	0.6	0.6	2.5	1.27	1.27	1.22
													<b>Sales to date</b>			
													<b>2003</b>	<b>2002</b>		
<b>42</b>	<b>U.S. Total</b>	<b>235,058</b>	<b>264,263</b>	<b>228,956</b>	<b>-11.1</b>	<b>6.6</b>	<b>2.7</b>	<b>295,626</b>	<b>294,253</b>	<b>288,743</b>	<b>0.5</b>	<b>2.5</b>	<b>2.4</b>	<b>2,635,291</b>	<b>2,519,091</b>	
<b>421</b>	<b>Durable</b>	<b>111,670</b>	<b>127,084</b>	<b>108,375</b>	<b>-12.1</b>	<b>4.7</b>	<b>3.0</b>	<b>172,878</b>	<b>173,117</b>	<b>172,059</b>	<b>-0.1</b>	<b>0.6</b>	<b>0.5</b>	<b>1,251,708</b>	<b>1,230,834</b>	
4211	Automotive	18,248	19,357	18,043	-5.7	8.6	1.1	25,542	25,530	25,781	0.0	6.4	-0.9	198,234	194,450	
4212	Furniture	3,708	4,148	3,626	-10.6	3.2	2.3	5,471	5,537	5,114	-1.2	-0.7	7.0	40,763	39,710	
4213	Lumber	7,506	9,277	5,966	-19.1	6.6	25.8	7,471	7,211	6,888	3.6	-0.3	8.5	83,623	74,664	
4214	Prof. equip.	19,629	22,150	19,857	-11.4	-3.3	-1.1	24,419	24,483	23,539	-0.3	0.8	3.7	226,993	225,137	
42143	Comp. equip.	8,555	9,981	8,631	-14.3	-4.5	-0.9	7,564	7,617	7,538	-0.7	2.9	0.3	101,324	104,940	
4215	Metals	6,935	8,143	6,723	-14.8	5.4	3.2	13,405	13,041	13,442	2.8	-1.1	-0.3	81,646	83,160	
4216	Electrical	18,290	20,801	17,433	-12.1	7.7	4.9	22,035	22,699	23,568	-2.9	-1.9	-6.5	196,366	192,964	
4217	Hardware	5,207	6,101	5,082	-14.7	4.7	2.5	10,100	10,132	9,835	-0.3	-1.1	2.7	61,184	61,286	
4218	Machinery	17,143	20,752	16,736	-17.4	0.7	2.4	43,508	43,428	44,413	0.2	-1.2	-2.0	210,356	205,887	
4219	Misc. Durable	15,004	16,355	14,909	-8.3	13.4	0.6	20,927	21,056	19,479	-0.6	2.5	7.4	152,543	153,576	
<b>422</b>	<b>Nondurable</b>	<b>123,388</b>	<b>137,179</b>	<b>120,581</b>	<b>-10.1</b>	<b>8.4</b>	<b>2.3</b>	<b>122,748</b>	<b>121,136</b>	<b>116,684</b>	<b>1.3</b>	<b>5.4</b>	<b>5.2</b>	<b>1,383,583</b>	<b>1,288,257</b>	
4221	Paper	5,658	6,759	6,020	-16.3	5.7	-6.0	6,317	6,248	6,212	1.1	2.3	1.7	67,296	67,552	
4222	Drugs	21,317	24,275	20,042	-12.2	6.2	6.4	30,919	30,911	28,278	0.0	1.2	9.3	237,075	212,420	
4223	Apparel	6,808	8,064	7,327	-15.6	3.7	-7.1	11,418	11,776	11,844	-3.0	-5.7	-3.6	78,314	84,179	
4224	Groceries	34,609	37,282	34,635	-7.2	3.9	-0.1	23,095	22,811	23,032	1.2	0.6	0.3	391,553	376,947	
4225	Farm products	13,054	13,634	11,408	-4.3	37.3	14.4	14,188	13,334	11,851	6.4	64.3	19.7	114,396	100,917	
4226	Chemicals	4,837	5,670	4,807	-14.7	5.1	0.6	5,785	5,830	6,030	-0.8	-0.9	-4.1	59,014	56,876	
4227	Petroleum	17,428	19,901	16,595	-12.4	9.8	5.0	5,011	4,784	4,352	4.7	-2.7	15.1	209,210	166,007	
4228	Alcohol	7,193	7,995	6,984	-10.0	14.9	3.0	8,154	8,043	7,670	1.4	4.2	6.3	77,894	73,252	
4229	Misc. Nondur.	12,484	13,599	12,763	-8.2	2.9	-2.2	17,861	17,399	17,415	2.7	5.2	2.6	148,831	150,107	

<sup>p</sup> Preliminary estimate. <sup>r</sup> Revised.

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

<sup>2</sup> 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
<b>42</b>	<b>U.S. Total</b>	<b>1.1</b>	<b>1.6</b>	<b>1.1</b>	<b>1.6</b>	<b>0.3</b>	<b>0.3</b>	<b>0.6</b>	<b>0.9</b>	<b>1.1</b>	<b>1.1</b>	<b>0.4</b>
<b>421</b>	<b>Durable</b>	<b>1.2</b>	<b>1.5</b>	<b>1.2</b>	<b>1.6</b>	<b>0.5</b>	<b>0.3</b>	<b>0.8</b>	<b>0.5</b>	<b>1.1</b>	<b>1.2</b>	<b>0.6</b>
4211	Automotive	3.6	4.4	3.6	4.4	1.0	0.7	1.1	1.4	3.5	3.6	0.7
4212	Furniture	6.2	7.9	6.1	7.8	2.0	0.7	2.3	2.6	6.1	5.1	1.4
4213	Lumber	5.0	5.8	5.0	5.8	1.2	0.8	2.1	1.8	4.9	4.9	1.4
4214	Prof. equip.	5.0	6.8	4.9	6.8	1.2	0.6	2.0	1.9	4.9	4.9	1.6
42143	Comp. equip.	8.0	8.6	8.0	8.2	1.9	1.4	3.0	3.6	7.8	8.3	2.2
4215	Metals	7.2	10.2	7.1	10.2	1.5	0.6	2.7	2.2	7.0	6.6	1.8
4216	Electrical	3.4	5.0	3.3	5.0	1.2	0.5	1.6	1.4	3.3	3.1	1.0
4217	Hardware	7.9	10.6	7.9	10.6	1.2	0.7	2.1	1.6	7.8	7.7	1.7
4218	Machinery	3.9	3.2	3.9	3.2	1.7	0.5	2.0	1.2	3.7	3.4	1.0
4219	Misc. Durable	4.4	7.5	4.5	7.5	1.8	0.8	2.6	2.5	4.0	4.6	1.9
<b>422</b>	<b>Nondurable</b>	<b>1.9</b>	<b>2.5</b>	<b>1.9</b>	<b>2.5</b>	<b>0.5</b>	<b>0.4</b>	<b>1.0</b>	<b>1.9</b>	<b>1.8</b>	<b>1.5</b>	<b>0.7</b>
4221	Paper	4.5	3.6	4.5	3.6	0.9	0.6	1.1	1.3	4.4	4.3	0.5
4222	Drugs	5.8	5.6	5.8	5.6	0.9	0.4	1.7	1.7	5.7	5.9	1.1
4223	Apparel	5.1	5.0	5.0	5.0	2.4	0.9	2.6	1.7	4.7	4.6	1.5
4224	Groceries	3.9	8.0	3.9	8.1	0.8	0.7	1.7	2.4	3.8	3.6	1.4
4225	Farm products	7.5	8.3	7.5	8.3	2.1	2.1	2.6	3.9	7.1	5.8	1.6
4226	Chemicals	4.9	7.1	4.9	7.1	1.0	0.7	1.8	2.2	4.7	4.9	1.4
4227	Petroleum	6.9	8.1	6.8	8.1	0.8	1.2	2.1	2.1	6.8	6.2	1.7
4228	Alcohol	3.8	5.1	3.8	5.1	0.9	0.6	1.2	1.1	3.8	3.8	1.0
4229	Misc. Nondur.	7.3	8.6	7.2	8.5	2.1	0.8	3.9	4.7	7.2	7.5	3.0

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](http://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	2003					2002
		Dec.	Nov.r	Oct.r	Sep.	Aug.	Nov.r	Dec.	Nov.r	Oct.r	Sep.	Aug.	Nov.r
<b>42</b>	<b>U.S. Total</b> <sup>1</sup>	<b>1.019</b>	<b>0.948</b>	<b>1.070</b>	<b>1.025</b>	<b>0.993</b>	<b>0.974</b>	<b>1.006</b>	<b>1.008</b>	<b>1.008</b>	<b>0.989</b>	<b>0.986</b>	<b>1.008</b>
<b>421</b>	<b>Durable</b>	<b>1.004</b>	<b>0.941</b>	<b>1.077</b>	<b>1.050</b>	<b>0.997</b>	<b>0.968</b>	<b>0.985</b>	<b>0.993</b>	<b>0.997</b>	<b>0.995</b>	<b>1.000</b>	<b>0.993</b>
4211	Automotive	1.029	0.974	1.054	0.981	0.998	0.998	0.991	1.018	1.012	0.975	0.954	1.017
4212	Furniture	0.953	0.985	1.104	1.065	1.026	1.016	0.977	0.992	1.015	1.032	1.036	0.992
4213	Lumber	0.868	0.889	1.118	1.068	1.065	0.920	0.965	0.968	0.966	0.991	1.000	0.966
4214	Prof. equip.	1.092	0.926	1.055	1.103	0.972	0.939	0.989	1.003	1.011	1.002	1.006	1.005
42143	Comp. equip.	1.119	0.896	1.055	1.135	0.993	0.907	0.977	1.002	1.009	0.994	1.015	1.009
4215	Metals	0.908	0.906	1.078	1.038	1.035	0.937	1.020	0.994	0.987	1.004	1.003	0.993
4216	Electrical	1.000	0.969	1.107	1.066	1.002	0.999	0.984	1.000	1.012	1.013	1.013	1.001
4217	Hardware	0.908	0.922	1.089	1.037	1.017	0.952	0.981	0.971	0.976	0.993	1.006	0.973
4218	Machinery	1.028	0.884	1.055	1.042	0.983	0.921	0.978	0.975	0.977	0.987	1.006	0.976
4219	Misc. Durable	0.997	1.034	1.127	1.040	0.992	1.053	0.980	0.998	1.015	1.005	1.011	0.997
<b>422</b>	<b>Nondurable</b>	<b>1.030</b>	<b>0.954</b>	<b>1.066</b>	<b>1.002</b>	<b>0.985</b>	<b>0.980</b>	<b>1.043</b>	<b>1.035</b>	<b>1.026</b>	<b>0.981</b>	<b>0.962</b>	<b>1.036</b>
4221	Paper	0.996	0.937	1.083	1.041	1.017	0.966	1.010	1.011	0.999	0.984	0.989	1.011
4222	Drugs	1.077	0.939	1.067	1.025	0.944	0.973	1.047	0.997	1.008	0.987	0.947	1.000
4223	Apparel	0.826	0.965	1.147	1.097	1.071	0.980	0.990	0.956	0.999	1.039	1.049	0.957
4224	Groceries	1.026	0.969	1.039	0.994	0.998	0.989	1.017	1.033	1.029	1.005	0.993	1.035
4225	Farm products	1.220	1.070	1.130	0.943	0.881	1.096	1.232	1.261	1.176	0.826	0.780	1.255
4226	Chemicals	0.942	0.897	1.057	1.007	0.998	0.929	0.998	0.991	0.986	0.989	0.993	0.990
4227	Petroleum	1.002	0.911	1.058	0.984	1.036	0.954	1.060	1.046	1.013	1.037	1.000	1.042
4228	Alcohol	1.216	0.971	1.068	0.972	1.035	1.017	0.928	1.044	1.061	1.023	0.985	1.040
4229	Misc. Nondur.	1.004	0.919	1.003	0.998	0.988	0.920	1.058	1.032	1.011	0.967	0.959	1.031

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<sup>1</sup>Adjusted 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/>.