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MONTHLY WHOLESALE TRADE: SALES AND INVENTORIES July 2016

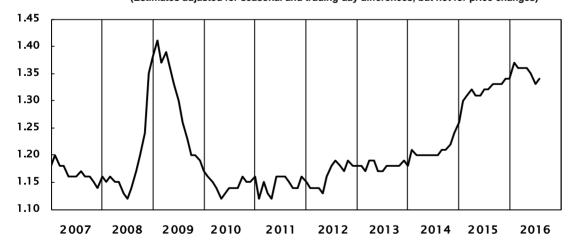
Sales. The U.S. Census Bureau announced today that July 2016 sales of merchant wholesalers, except manufacturers' sales branches and offices, after adjustment for seasonal variations and trading-day differences but not for price changes, were \$441.9 billion, down 0.4 percent (+/-0.4%)* from the revised June level and were down 1.0 percent (+/-0.9%) from the July 2015 level. The May 2016 to June 2016 percent change was revised from the preliminary estimate of up 1.9 percent (+/-0.5%) to up 1.7 percent (+/-0.6%). July sales of durable goods were up 0.2 percent (+/-0.5%)* from last month and were up 0.7 percent (+/-1.4%)* from a year ago. Sales of nondurable goods were down 1.0 percent (+/-0.5%) from June and were down 2.6 percent (+/-1.4%) from last July. Sales of petroleum and petroleum products were down 3.5 percent from last month and sales of beer, wine, and distilled alcoholic beverages were down 2.4 percent.

Inventories. Total inventories of merchant wholesalers, except manufacturers' sales branches and offices, after adjustment for seasonal variations but not for price changes, were \$591.3 billion at the end of July, virtually unchanged (+/-0.4%)* from the revised June level. Total inventories are up 0.5 percent (+/-1.8%)* from the revised July 2015 level. The June 2016 to July 2016 percent change was unrevised from the advance estimate of virtually unchanged (+/-0.4%)*. July inventories of durable goods were up 0.3 percent (+/-0.2%) from last month, but were down 1.8 percent (+/-1.6%) from a year ago. Inventories of professional and commercial equipment and supplies were up 1.4 percent from last month. Inventories of nondurable goods were down 0.3 percent (+/-0.5%)* from June, but were up 4.3 percent (+/-2.8%) from last July. Inventories of farm product raw materials were down 2.0 percent from last month, while inventories of chemicals and allied products were up 1.4 percent.

Inventories/Sales Ratio. The July inventories/sales ratio for merchant wholesalers, except manufacturers' sales branches and offices, based on seasonally adjusted data, was 1.34. The July 2015 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 survey methodology can be found at: http://www.census.gov/wholesale/www/how_surveys_are_collected/monthly_methodology.html.

Monthly Inventories/Sales Ratios of Merchant Wholesalers, Except Manufacturers'
Sales Branches and Offices: 2007 to 2016
(Estimates adjusted for seasonal and trading-day differences, but not for price changes)



Monthly Wholesale Trade for August is scheduled to be released October 7, 2016 at 10:00 a.m. EDT.

For additional survey information, including customizable time series estimates by industry, visit http://www.census.gov/wholesale

To learn more about this release and the other indicators the U.S. Census Bureau publishes, join us for the Investigating Economic Indicators Webinar Series. For more information, visit http://www.census.gov/econ/webinar.

To receive the latest updates on the nation's key economic indicators, download the America's Economy app for Apple and Android smartphones and tablets.

The U.S. Census Bureau updated its Application Programming Interface (API) with monthly and quarterly economic indicators. The API allows developers to combine Census Bureau statistics with other data sets to create tools for research on a variety of topics. For more information, visit http://www.census.gov/developers.

^{*} The 90 percent confidence interval includes zero. The Census Bureau does not have sufficient statistical evidence to conclude that the actual change is different from zero.

Table 1. Estimates of Monthly Sales, Inventories, and Inventories/Sales Ratios of Merchant Wholesalers, Except Manufacturers' Sales Branches and Offices

[Total sales and inventories estimates are shown in millions of dollars. Estimates are based on data from the Monthly Wholesale Trade Survey.]

		Sales						Inventories ⁴						Inventories/Sales		
NAICS ¹	Kind of		Monthly	Percent change				Monthly	Percent change			Ratios				
code	Business	Jul.	Jun.	Jul.	Jul./	Jun./	Jul. 16/	Jul.	Jun.	Jul.	Jul./	Jun./	Jul. 16/	Jul.	Jun.	Jul.
		2016	2016	2015	Jun.	May	Jul. 15	2016	2016	2015 (r)	Jun.	May	Jul. 15	2016	2016	2015
A 11		(p)	(r)	(r)				(p)	(r)	(1)				(p)	(r)	(r)
Adjusted		441.005	442.056	446 473	0.4		-1.0	F01 261	F01 003	F00 222				1.24	1.33	1.22
42	U.S. Total	441,865	443,856	446,473	-0.4	1.7		591,261	591,002	588,333	0.0	0.3	0.5	1.34		1.32
423	.Durable	215,294	214,883	213,840	0.2	1.2	0.7	355,949	354,882	362,625	0.3	-0.2	-1.8	1.65	1.65	1.70
4231	Automotive	35,263	35,363	37,430	-0.3	-1.9	-5.8	65,050	64,804	65,366	0.4	-0.1	-0.5	1.84	1.83	
4232	Furniture	7,315	7,203	6,843	1.6	-0.1	6.9	11,028	10,973	10,921	0.5	-0.1	1.0	1.51	1.52	1.60
4233	Lumber	10,100	9,985	9,535	1.2	0.1	5.9	14,651	14,532	14,202	0.8	1.8		1.45	1.46	
4234	Prof. equip.	37,760	37,546	37,191	0.6	0.0	1.5	39,169	38,623	38,826	1.4	0.0		1.04	1.03 0.79	1.04
42343 4235	Comp. equip.	18,630	18,688	19,275	-0.3 0.1	1.0	-3.3 -8.4	14,808	14,700	15,484	0.7 1.2	-0.5 0.2	-4.4	0.79 2.24	2.21	0.80 2.46
4235 4236	Metals Electrical	11,505	11,494 47,093	12,561 45,343	0.1	1.3 2.5	-8.4 4.4	25,715 46,317	25,410 46,355	30,946 47,962	-0.1	-0.9		0.98	0.98	
4230	Hardware	47,330 11,542	11,751	11,023	-1.8	2.5 7.9	4.4	23,077	23,105	22,345	-0.1 -0.1	-0.9 0.9		2.00	1.97	2.03
4237	Machinery	35,413	35,504	35,375	-0.3	2.1	0.1	104,385	104,484	105,118	-0.1	0.9		2.00	2.94	
4239	Misc. Durable	19,066	18,944	18,539	0.6	2.1	2.8	26,557	26,596	26,939	-0.1	-2.6		1.39	1.40	
4239 424	.Nondurable	226,571	228,973	232,633	-1.0	2.1	-2.6	235,312	236,120	225,708	-0.1 -0.3	1.0		1.04	1.03	0.97
4241	Paper	8,175	8,075	8,150	1.2	-1.4	0.3	8,258	8,331	8,169	-0.9	-0.4		1.01	1.03	1.00
4242	Drugs	54,565	54,858	51,574	-0.5	1.7	5.8	61,525	62,243	55,536	-1.2	4.5		1.13	1.13	1.08
4243	Apparel	13,642	13,677	13,896	-0.3	0.4	-1.8	30,680	30,740	29,759	-0.2	-0.9		2.25	2.25	2.14
4244	Groceries	49,035	50,027	51,004 18,146	-2.0 5.1	0.5 6.5	-3.9 1.0	34,105	33,789	34,798	0.9	-0.5		0.70 1.37	0.68 1.47	0.68 1.25
4245	Farm products	18,319	17,423					25,130	25,646	22,672	-2.0	2.8				
4246	Chemicals ³	9,858	9,996	10,469	-1.4	1.4	-5.8	12,660	12,490	12,882	1.4	-0.9		1.28	1.25	1.23
4247	Petroleum	40,014	41,453	46,474	-3.5	3.9	-13.9	18,338	18,558	18,508	-1.2	-1.8		0.46	0.45	0.40
4248	Alcohol	11,241	11,512	11,410	-2.4	2.9	-1.5	15,305	15,363	15,506	-0.4	-1.3		1.36	1.33 1.32	
4249	Misc. Nondur.	21,722	21,952	21,510	-1.0	3.1	1.0	29,311	28,960	27,878	1.2	0.5	5.1	1.35		1.30
Not Adj	<u>usted</u> '													Sales to date 2016 201		
42	U.S. Total	423,847	467,425	453,760	-9.3	5.0	-6.6	585,153	584,564	582,894	0.1	0.0	0.4	3,005	-	3,085,516
423	.Durable	204,596	228,862	-	-10.6		-5.1	358,605	354,889	365,251		-0.3		1,453		,466,600
		•	-	215,669		8.4		•	-		1.0				-	
4231	Automotive	33,923	36,707	37,655	-7.6	0.5	-9.9	65,180	64,480	65,497	1.1	0.0			9,449 3,099	255,776 45,925
4232 4233	Furniture Lumber	6,986 10,393	7,397 11,513	6,939 10,670	-5.6 -9.7	1.6 7.6	0.7 -2.6	11,282 15,120	10,907 15,099	11,172 14,585	3.4 0.1	1.3 1.8			0,500	45,925 66,420
4233	Prof. equip.	36,325	41,714	37,935	-12.9	18.8	-2.6 -4.2	39,326	38,314	38,942	2.6	0.0			716	249,511
42343	Comp. equip.	18,667	21,304	20,277	-12.9	28.0	-4.2 -7.9	14,971	14,788	15,654	1.2	0.0			3,137	129,048
4235	Metals	11,148	12,161	12,925	-8.3	5.1	-13.7	25,921	25,410	31,163	2.0	-0.1	-16.8		0,505	96,334
4236	Electrical	43,212	48,883	43,711	-11.6	9.6	-1.1	46,688	45,984	48,394	1.5	-1.4			3,506	308,536
4237	Hardware	11,796	13,232	11,960	-10.9	16.5	-1.4	23,308	23,359	22,568	-0.2	0.8			3,901	76,119
4238	Machinery	33,253	37,705	35,446	-11.8	5.6	-6.2	105,011	105,006	105,749	0.0	-0.5	-0.7	241	,258	241,308
4239	Misc. Durable	17,560	19,550	18,428	-10.2	7.0	-4.7	26,769	26,330	27,181	1.7	-1.7		124	1,122	126,671
424	.Nondurable	219,251	238,563	238,091	-8.1	1.9	-7.9	226,548	229,675	217,643	-1.4	0.3	4.1	1,552	.,886	,618,916
4241	Paper	7,783	8,317	8,272	-6.4	0.8	-5.9	8,308	8,406	8,226	-1.2	0.1	1.0		5,611	55,454
4242	Drugs	51,400	56,010	52,502	-8.2	3.0	-2.1	61,402	62,430	55,536	-1.6	6.2			2,128	348,257
4243	Apparel	13,506	13,308	14,605	1.5	6.2	-7.5	32,337	31,140	31,396	3.8	4.0			9,849	90,324
4244	Groceries	48,103	50,877	52,228	-5.5	-1.5	-7.9	33,730	33,079	34,415	2.0	-0.8			7,828	352,911
4245	Farm products	15,956	16,691	16,785	-4.4	4.4	-4.9	17,943	20,645	15,916	-13.1	-4.8			1,982	129,616
4246	Chemicals	9,750	10,666	11,003	-8.6	6.5	-11.4	12,660	12,490	12,882	1.4	-0.9			0,303	74,020
4247	Petroleum	42,015	43,940	49,960	-4.4	1.8	-15.9	19,017	19,727	19,156	-3.6	-0.1	-0.7	262	2,676	334,028
4248	Alcohol	10,645	13,158	11,764	-19.1	11.6	-9.5	15,504	15,578	15,723	-0.5	-2.7	-1.4	76	5,889	75,002
4249	Misc. Nondur.	20,093	25,596	20,972	-21.5	-3.1	-4.2	25,647	26,180	24,393	-2.0	-7.8	5.1	161	,620	159,304
Footnotes							_							_		

Preliminary estimate.

r Revised estimate

¹ For a full description of the NAICS codes used in this table, see the 2007 NAICS manual or http://www.census.gov/eos/www/naics.

² Except where indicated, sales and inventories estimates are adjusted for seasonal variation. Estimates of sales are also adjusted for trading-day differences and moving holidays. See Table 3 for the combined adjustment factors. Adjusted sales-to-date estimates are not tabulated.

³ No significant seasonal pattern for this NAICS code was detected in the latest annual review of the seasonal adjustment for inventories. Consequently, the "Adjusted" inventories estimates are equal to the "Not Adjusted" estimates.

⁴ Adjusted and not adjusted inventories for aggregate NAICS levels 42, 423, and 424 are revised from the Advance Economic Indicators Report.

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/wholesale/www/how_surveys_are_collected/monthly_methodology.html.

Table 2. Estimated Measures of Sampling Variability of Monthly Wholesale Sales and Inventory Estimates

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

<u>[23emace</u>	Kind of Business	Coefficie	nt of variati				dard error f		Coeffic variation	Standard error for percent change		
NAICS code		Preliminar	y estimates	Final estimates			of two ve months	current m	month to nonth last ar	Sales to date		Current year sales to date to
		Sales	Inv.	Sales	lnv.	Sales	Inv.	Sales	Inv.	Current year	Previous year	previous year sales to date
42	U.S. Total	1.1	1.6	1.0	1.6	0.2	0.2	0.5	1.0	1.1	0.9	0.6
423	.Durable	1.4	1.8	1.5	1.7	0.3	0.1	0.8	0.9	1.4	1.1	0.9
4231	Automotive	3.9	4.6	4.2	4.6	0.5	0.3	1.1	2.2	3.7	3.1	1.4
4232	Furniture	7.4	6.9	7.9	6.8	1.5	0.6	2.8	3.1	7.5	6.9	2.2
4233	Lumber	5.3	5.8	5.4	5.7	0.8	0.4	2.7	2.2	5.1	5.0	2.1
4234	Prof. equip.	3.5	3.7	3.6	3.8	0.8	0.4	1.7	2.0	3.5	3.4	2.0
42343	Comp. equip.	5.1	5.4	4.8	5.3	2.0	0.6	2.6	1.8	4.4	3.9	1.8
4235	Metals	5.2	8.0	4.9	8.3	0.9	0.9	1.9	1.9	5.1	4.8	1.7
4236	Electrical	2.6	3.3	2.9	3.3	0.6	0.5	0.9	1.8	2.8	2.5	0.8
4237	Hardware	3.6	3.9	3.2	3.9	1.0	0.3	1.6	0.8	2.9	2.5	1.3
4238	Machinery	3.1	3.7	3.2	3.7	1.4	0.5	3.2	1.9	2.6	2.8	2.4
4239	Misc. Durable	5.5	5.1	4.7	5.0	1.6	0.6	2.6	1.7	4.7	3.8	2.0
424	.Nondurable	1.8	2.3	1.7	2.4	0.3	0.3	0.8	1.6	1.8	1.7	0.9
4241	Paper	5.2	6.0	5.3	5.9	0.9	0.5	1.4	2.2	5.0	4.6	1.1
4242	Drugs	3.4	7.4	3.3	7.5	0.4	0.3	1.5	3.3	3.4	2.9	1.5
4243	Apparel	6.6	6.2	6.9	6.1	2.1	0.4	2.1	2.4	6.7	6.8	2.4
4244	Groceries	3.5	6.2	3.5	6.0	0.6	1.2	1.5	2.7	3.6	3.2	1.5
4245	Farm products	2.7	5.7	2.7	5.5	2.0	0.9	4.0	3.9	2.4	2.7	2.2
4246	Chemicals	3.5	5.2	3.4	5.3	0.7	0.6	1.4	1.7	3.7	4.0	1.5
4247	Petroleum	5.4	4.2	5.5	4.0	0.3	0.5	1.2	1.2	5.5	6.2	1.4
4248	Alcohol	4.8	5.7	4.7	5.7	0.8	0.7	2.1	3.0	4.8	4.9	1.8
4249	Misc. Nondur.	3.4	5.6	4.1	5.5	1.1	0.4	1.6	1.2	3.4	3.7	1.6
Notes	-											

Note:

Estimated measures of sampling variability are based on estimates not adjusted for seasonal variation, trading-day differences, or moving holidays. Additional information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions may be found at http://www.census.gov/wholesale/www/how_surveys_are_collected/monthly_methodology.html.

Reliability of the Estimates

Because the estimates presented in this report are based on a sample survey, they contain sampling error and nonsampling error.

Sampling error is the difference between the estimate and the result that would be obtained from a complete enumeration of the sampling frame conducted under the same survey conditions. This error occurs because only a subset of the entire sampling frame is measured in a sample survey. Standard errors and coefficients of variation (CV), as given in Table 2 of this report, are estimated measures of sampling variation.

The margin of sampling error , as used on page 1, gives a range about the estimate, which can be used to construct a 90-percent confidence interval. If, for example, the percent change estimate is ± 1.2 percent and its estimated standard error is 0.8 percent, then the margin of sampling error is $\pm 1.753 \times 0.8$ percent or ± 1.4 percent, and the 90 percent confidence interval is 1.2 ± 1.4 or ± 1.4 percent to 2.6 percent. If the interval contains 0, then one does not have sufficient statistical evidence to conclude at the 90 percent confidence level that the actual change is different from zero. Estimated changes shown in the text are statistically significant unless otherwise noted. For a monthly total, the estimated coefficient of variation is given. The resulting confidence interval is the estimated monthly total $\pm 1.753 \times \text{CV} \times \text{(the estimated monthly total)}$. The Census Bureau recommends that individuals using estimates in this report incorporate this information into their analyses, as sampling error could affect the conclusions drawn from the estimates.

Nonsampling error encompasses all other factors that contribute to the total error of a sample survey estimate. This type of error can occur because of nonresponse, insufficient coverage of the universe of wholesale businesses, mistakes in the recording and coding of data, model error, and other errors of collection, response, coverage, or processing. Although nonsampling error is not measured directly, the Census Bureau employs quality control procedures throughout the process to minimize this type of error.

Table 3. Combined Adjustment Factors for Monthly Wholesale Sales and Inventory Estimates

[Combined adjustment factors are computed using the Census Bureau's X-13 ARIMA-SEATS program and are based on data from the Monthly Wholesale Trade Survey.]

NAICS	Kind of			Sa	les								
code	Business	2016					2015	2016				2015	
		Aug.	Jul.r	Jun.r	May	Apr.	Jul.r	Aug.	Jul.r	Jun.r	May	Apr.	Jul.r
42	U.S. Total ²	1.049	0.967	1.054	1.024	0.995	1.019	0.984	0.991	0.990	0.993	1.004	0.990
423	.Durable	1.058	0.954	1.064	0.994	0.979	1.009	1.003	1.008	1.001	1.002	1.001	1.008
4231	Automotive	1.055	0.962	1.038	1.013	0.999	1.006	0.961	1.002	0.995	0.994	1.008	1.002
4232	Furniture	1.100	0.955	1.027	1.010	0.964	1.014	1.033	1.023	0.994	0.980	0.968	1.023
4233	Lumber	1.150	1.029	1.153	1.073	1.015	1.119	1.019	1.032	1.039	1.039	1.041	1.027
4234	Prof. equip.	1.009	0.962	1.111	0.935	0.953	1.020	1.011	1.004	0.992	0.992	0.993	1.003
42343	Comp. equip.	0.979	1.002	1.140	0.899	0.936	1.052	1.008	1.011	1.006	0.992	0.990	1.011
4235	Metals	1.084	0.969	1.058	1.020	0.992	1.029	1.004	1.008	1.000	1.003	1.003	1.007
4236	Electrical	1.033	0.913	1.038	0.971	0.939	0.964	1.028	1.008	0.992	0.997	0.982	1.009
4237	Hardware	1.122	1.022	1.126	1.043	0.992	1.085	1.007	1.010	1.011	1.012	1.021	1.010
4238	Machinery	1.091	0.939	1.062	1.027	1.033	1.002	0.999	1.006	1.005	1.010	1.007	1.006
4239	Misc. Durable	1.092	0.921	1.032	0.985	0.965	0.994	1.023	1.008	0.990	0.981	0.982	1.009
424	.Nondurable	1.039	0.978	1.050	1.051	1.007	1.026	0.954	0.963	0.974	0.978	1.009	0.961
4241	Paper	1.092	0.952	1.030	1.007	0.982	1.015	0.982	1.006	1.009	1.004	1.014	1.007
4242	Drugs	1.050	0.942	1.021	1.009	0.983	1.018	0.976	0.998	1.003	0.987	0.988	1.000
4243	Apparel	1.158	0.990	0.973	0.920	0.878	1.051	1.071	1.054	1.013	0.965	0.947	1.055
4244	Groceries	1.046	0.981	1.017	1.038	0.991	1.024	0.990	0.989	0.979	0.982	0.981	0.989
4245	Farm products	0.905	0.871	0.958	0.977	0.995	0.925	0.664	0.714	0.805	0.869	1.010	0.702
4246	Chemicals ³	1.085	0.989	1.067	1.016	1.019	1.051	1.000	1.000	1.000	1.000	1.000	1.000
4247	Petroleum	1.069	1.050	1.060	1.082	1.009	1.075	1.000	1.037	1.063	1.044	1.034	1.035
4248	Alcohol	1.077	0.947	1.143	1.054	0.950	1.031	0.994	1.013	1.014	1.029	1.022	1.014
4249	Misc. Nondur.	0.919	0.925	1.166	1.240	1.199	0.975	0.892	0.875	0.904	0.985	1.096	0.875

Footnotes:

Note:

The seasonal adjustment factors shown are estimates derived from a model that uses sample survey data as input. Therefore, these estimates may contain sampling error and nonsampling error. Additional information on the general form of the model and the X-13 ARIMA-SEATS program may be found at http://www.census.gov/srd/www/x13as/.

Description of the Survey

The Census Bureau conducts the Monthly Wholesale Trade Survey (MWTS) to provide national estimates of monthly sales, end-of-month inventories, and inventories-to-sales ratios by kind of business for wholesale firms located in the United States. Specifically, the MWTS covers wholesale merchants who sell goods on their own account and include such businesses as wholesale merchants or jobbers, industrial distributors, exporters, and importers. Sales offices and branches maintained by manufacturing, refining, or mining firms for the purpose of marketing their products are not covered in this report. Also excluded is NAICS Industry Group 4251: Wholesale Electronic Markets and Agents and Brokers.

The MWTS sample was selected using a stratified, one-stage design with strata defined by kind of business (e.g., Automotive, Furniture, Lumber, etc.) and annual sales size. The sample includes firms of all sizes and is updated on a quarterly basis to account for new wholesale firms, deaths, and other changes to the wholesale universe. Each month, questionnaires are mailed to employer firms selected in a probability sample of approximately 4,200. For surveyed companies, approximately 66.8% provided data for this reporting period, resulting in a total quantity response rate of 67.6% for sales and 67.9% for inventories.

Monthly sales and inventories estimates are obtained by summing weighted data (either reported or imputed). The monthly estimates are benchmarked to annual survey estimates and are adjusted for seasonal variation and trading-day differences. Individuals who use estimates in this report to create new estimates should cite the Census Bureau as the source of only the original estimates. Additional information on the MWTS can be found on the Census Bureau website at: http://www.census.gov/wholesale.

Revised factors.

¹ Combined factors for sales include the effects of seasonal variation, trading day differences, and moving holidays. Combined factors for inventories include only the effects of seasonal variation.

² Adjusted sales and inventories estimates for detailed kind-of-business levels in Table 1 are computed by dividing each "Not Adjusted" estimate by the combined 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. Combined 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.

³ No significant seasonal pattern for this NAICS code was detected in the latest annual review of the seasonal adjustment for inventories. Therefore, the combined adjustment factors for inventories are set to one for this NAICS code.