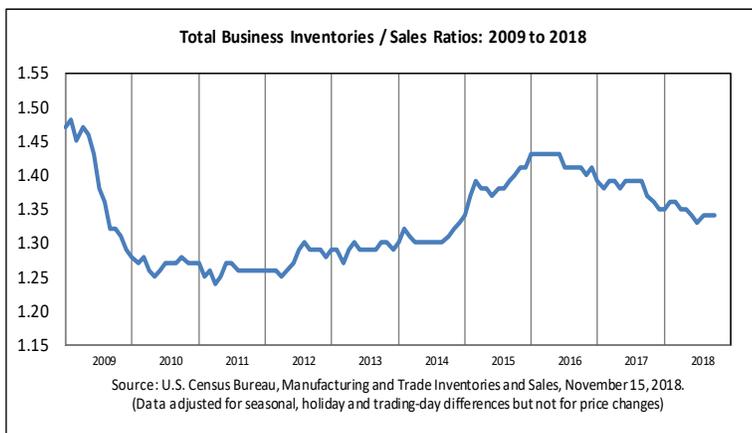


## MANUFACTURING AND TRADE INVENTORIES AND SALES, SEPTEMBER 2018

Release Number: CB18-172

**November 15, 2018** — The U.S. Census Bureau announced the following new manufacturing and trade statistics for September 2018:

BUSINESS INVENTORIES		
SEPTEMBER 2018	\$1,967.5 billion	+0.3%
AUGUST 2018 (revised)	\$1,961.0 billion	+0.5%
Next release: December 14, 2018		
* The 90 percent confidence interval includes zero. There is insufficient evidence to conclude that the actual change is different from zero. Data adjusted for seasonality but not price changes. Source: U.S. Census Bureau, Manufacturing and Trade Inventories and Sales, November 15, 2018.		



### Sales

The combined value of distributive trade sales and manufacturers' shipments for September, adjusted for seasonal and trading-day differences but not for price changes, was estimated at \$1,468.0 billion, up 0.4 percent ( $\pm 0.2$  percent) from August 2018 and was up 6.6 percent ( $\pm 1.3$  percent) from September 2017.

### Inventories

Manufacturers' and trade inventories, adjusted for seasonal variations but not for price changes, were estimated at an end-of-month level of \$1,967.5 billion, up 0.3 percent ( $\pm 0.1$  percent) from August 2018 and were up 4.4 percent ( $\pm 1.3$  percent) from September 2017.

### Inventories/Sales Ratio

The total business inventories/sales ratio based on seasonally adjusted data at the end of September was 1.34. The September 2017 ratio was 1.37.

### General Information

The October 2018 Manufacturing and Trade Inventories and Sales Report is scheduled for release on December 14, 2018. View the full schedule in the Economic Briefing Room: <[www.census.gov/economic-indicators/](http://www.census.gov/economic-indicators/)>.

### EXPLANATORY NOTES

#### Reliability of Estimates

#### Data Inquiries

Economic Indicators Division

Retail: 301-763-2713 [eid.retail.indicator.branch@census.gov](mailto:eid.retail.indicator.branch@census.gov)

Wholesale: 301-763-6856 [eid.wholesale.indicator.branch@census.gov](mailto:eid.wholesale.indicator.branch@census.gov)

Manufacturing: 301-763-4832 [eid.m3.qs@census.gov](mailto:eid.m3.qs@census.gov)

#### Media Inquiries

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The sampling variability for retailers and merchant wholesalers can be used to construct a 90 percent confidence interval for the estimates. Over all possible samples, 90 percent of such intervals will cover the true estimate. These intervals are given in parentheses for the estimates on the front page. If, for example, the estimate is up 0.8 percent and the margin of sampling error is  $\pm 1.2$  percent, the 90 percent confidence interval is -0.4 percent to +2.0 percent. If the range contains 0, it is uncertain whether there was an increase or decrease. Measures of reliability for Retail and Wholesale sales and inventory levels and changes are included in the detailed monthly press releases for those Industries. Manufacturers do not contribute to estimates of sampling variability because the manufacturer's mail panel is not a probability sample from a known frame and standard errors of the industry estimates cannot be calculated. Estimates from all three surveys are also subject to nonsampling errors, which can arise in any stage of the survey. Such errors include coverage error (failure to accurately represent all population units in the sample) response errors, coding errors, and nonresponse. Although no direct measurement of these errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data to minimize their influence.

### Description of the Survey

The Manufacturing and Trade Inventories and Sales estimates are based on data from three surveys: the Monthly Retail Trade Survey, the Monthly Wholesale Trade Survey, and the Manufacturers' Shipments, Inventories, and Orders Survey. Data for the wholesale and manufacturing sectors are unrevised from the most recent Monthly Wholesale Trade Report and the Full Report on Manufacturers' Shipments, Inventories and orders. Data from the Retail sector is revised and presented in more detail from the most recent Advance Economic Indicators Report. For more information on these surveys see the links below:

<[www.census.gov/retail/](http://www.census.gov/retail/)>, <[www.census.gov/wholesale/](http://www.census.gov/wholesale/)>, and <[www.census.gov/manufacturing/m3/](http://www.census.gov/manufacturing/m3/)>.

### RESOURCES

#### API

The Census Bureau's application programming interface lets developers create custom apps to reach new users and makes key demographic, socio-economic and housing statistics more accessible than ever before.

<[www.census.gov/developers/](http://www.census.gov/developers/)>

#### FRED Mobile App



Receive the latest updates on the nation's key economic indicators by downloading the FRED App <<https://fred.stlouisfed.org/fred-mobile/>> for both Apple and Android devices. FRED, the signature database of the Federal Reserve Bank of St. Louis, now incorporates the Census Bureau's 13 economic indicators.

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\* The 90 percent confidence interval includes zero. There is insufficient evidence to conclude that the actual change is different from zero.

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U.S. Department of Commerce  
Economics and Statistics Administration  
U.S. CENSUS BUREAU  
[census.gov](http://census.gov)

**Table 1. Estimated Monthly Sales and Inventories for Manufacturers, Retailers, and Merchant Wholesalers**

(In millions of dollars)

	Sales			Inventories			Inventories/Sales Ratios		
	Sep. 2018	Aug. 2018	Sep. 2017	Sep. 2018	Aug. 2018	Sep. 2017	Sep. 2018	Aug. 2018	Sep. 2017
	(p)	(r)	(r)	(p)	(r)	(r)	(p)	(r)	(r)
<b>Adjusted<sup>1</sup></b>									
Total business.....	1,468,036	1,461,984	1,376,904	1,967,452	1,961,025	1,884,562	1.34	1.34	1.37
Manufacturers <sup>2</sup> .....	509,779	505,207	472,250	680,400	676,738	648,947	1.33	1.34	1.37
Retailers <sup>3</sup> .....	447,088	446,408	430,563	642,496	642,073	622,965	1.44	1.44	1.45
Merchant wholesalers <sup>4</sup> .....	511,169	510,369	474,091	644,556	642,214	612,650	1.26	1.26	1.29
<b>Not Adjusted</b>									
Total business.....	1,436,165	1,523,289	1,371,821	1,966,573	1,942,182	1,883,533	1.37	1.27	1.37
Manufacturers <sup>2</sup> .....	517,948	529,157	485,527	680,458	680,217	647,570	1.31	1.29	1.33
Retailers <sup>3</sup> .....	424,222	461,392	415,471	644,444	629,981	625,564	1.52	1.37	1.51
Merchant wholesalers <sup>4</sup> .....	493,995	532,740	470,823	641,671	631,984	610,399	1.30	1.19	1.30

(p) Preliminary estimate.

(r) Revised estimate.

Data adjusted for seasonality but not price changes. Explanations of confidence intervals and sampling variability can be found on our website at <[www.census.gov/mtis/how\\_surveys\\_are\\_collected.html](http://www.census.gov/mtis/how_surveys_are_collected.html)>.

Source: U.S. Census Bureau, Manufacturing and Trade Inventories and Sales, November 15, 2018.

**Table 2. Percent Changes for Sales and Inventories -- Manufacturers, Retailers, and Merchant Wholesalers**

	Adjusted						Not Adjusted					
	Sales			Inventories			Sales			Inventories		
	Sep. 18/ Aug. 18	Aug. 18/ Jul. 18	Sep. 18/ Sep. 17	Sep. 18/ Aug. 18	Aug. 18/ Jul. 18	Sep. 18/ Sep. 17	Sep. 18/ Aug. 18	Aug. 18/ Jul. 18	Sep. 18/ Sep. 17	Sep. 18/ Aug. 18	Aug. 18/ Jul. 18	Sep. 18/ Sep. 17
Total business.....	0.4	0.5	6.6	0.3	0.5	4.4	-5.7	6.7	4.7	1.3	0.6	4.4
Manufacturers <sup>2</sup> .....	0.9	0.7	7.9	0.5	0.1	4.8	-2.1	9.6	6.7	0.0	0.0	5.1
Retailers <sup>3</sup> .....	0.2	-0.1	3.8	0.1	0.6	3.1	-8.1	3.3	2.1	2.3	1.3	3.0
Merchant wholesalers <sup>4</sup> .....	0.2	0.7	7.8	0.4	0.9	5.2	-7.3	6.9	4.9	1.5	0.4	5.1

See footnotes and notes at the end of Table 3.

Data adjusted for seasonality but not for price changes. Explanations of confidence intervals and sampling variability can be found on our website at <[www.census.gov/mtis/how\\_surveys\\_are\\_collected.html](http://www.census.gov/mtis/how_surveys_are_collected.html)>.

Source: U.S. Census Bureau, Manufacturing and Trade Inventories and Sales, November 15, 2018.

**Table 3. Estimated Monthly Retail Sales, Inventories, and Inventories/Sales Ratios, By Kind of Business**

(In millions of dollars)

NAICS Code	Kind of Business	Sales			Inventories <sup>3</sup>			Percent Change In Inventories			Inventories/Sales Ratios		
		Sep. 2018	Aug. 2018	Sep. 2017	Sep. 2018	Aug. 2018	Sep. 2017	Sep. 18/ Aug. 18	Aug. 18/ Jul. 18	Sep. 18/ Sep. 17	Sep. 18 (p)	Aug. 18 (r)	Sep. 17 (r)
		(p)	(r)	(r)	(p)	(r)	(r)						
	Adjusted <sup>1</sup>												
	Retail trade, total.....	447,088	446,408	430,563	642,496	642,073	622,965	0.1	0.6	3.1	1.44	1.44	1.45
	Total (excl. motor veh. & parts).....	345,207	344,471	328,411	407,587	408,150	401,715	-0.1	-0.1	1.5	1.18	1.18	1.22
441	Motor vehicle & parts dealers.....	101,881	101,937	102,152	234,909	233,923	221,250	0.4	1.8	6.2	2.31	2.29	2.17
442,3	Furniture,home furn., elect. & appl. stores.....	18,401	18,475	17,937	27,903	27,902	28,028	0.0	0.8	-0.4	1.52	1.51	1.56
444	Building materials, garden equip & supplies.....	32,885	32,845	32,579	57,787	57,768	53,857	0.0	0.4	7.3	1.76	1.76	1.65
445	Food & beverage stores.....	62,333	62,114	60,329	48,575	48,765	47,763	-0.4	0.6	1.7	0.78	0.79	0.79
448	Clothing & clothing access. stores.....	22,937	22,761	21,965	50,900	51,092	51,471	-0.4	-0.3	-1.1	2.22	2.24	2.34
452	General merchandise stores.....	60,073	60,068	58,288	81,473	81,516	81,060	-0.1	0.1	0.5	1.36	1.36	1.39
4521	Dept. str. (excl. leased depts.).....	12,337	12,467	12,584	25,417	25,346	25,863	0.3	-0.1	-1.7	2.06	2.03	2.06
	Not Adjusted												
	Retail trade, total.....	424,222	461,392	415,471	644,444	629,981	625,564	2.3	1.3	3.0	1.52	1.37	1.51
	Total (excl. motor veh. & parts).....	326,151	350,810	314,688	416,119	404,421	410,527	2.9	1.4	1.4	1.28	1.15	1.30
441	Motor vehicle & parts dealers.....	98,071	110,582	100,783	228,325	225,560	215,037	1.2	1.2	6.2	2.33	2.04	2.13
442,3	Furniture,home furn., elect. & appl. stores.....	17,529	18,827	17,513	28,210	27,511	28,308	2.5	2.0	-0.3	1.61	1.46	1.62
444	Building materials, garden equip & supplies.....	31,075	34,127	31,394	57,267	56,901	53,318	0.6	0.7	7.4	1.84	1.67	1.70
445	Food & beverage stores.....	60,682	63,045	59,275	48,493	48,036	47,729	1.0	1.1	1.6	0.80	0.76	0.81
448	Clothing & clothing access. stores.....	20,679	23,563	20,038	53,038	51,194	53,684	3.6	1.5	-1.2	2.56	2.17	2.68
452	General merchandise stores.....	56,148	60,638	54,553	85,774	80,289	85,380	6.8	3.4	0.5	1.53	1.32	1.57
4521	Dept. str. (excl. leased depts.).....	10,956	12,556	11,214	27,196	24,231	27,699	12.2	1.7	-1.8	2.48	1.93	2.47

(p) Preliminary estimate.

(r) Revised estimate.

<sup>1</sup> Adjusted for seasonal variations and, in the case of sales, for trading-day differences and holiday variations. Concurrent seasonal adjustment is being used to adjust all sales, shipment and inventory estimates. Concurrent seasonal adjustment uses all available unadjusted estimates as input to the X-13ARIMA-SEATS program. The factors derived from the program are applied to the current and previous month estimates and for retail and wholesale estimates a year ago as well. For retail sales, concurrent seasonal adjustment is also used to adjust the advance estimates (published one month before the preliminary estimates) and the estimates one year before the advance month. This explains the revision to retail estimates from a year ago.

<sup>2</sup> Manufacturers sales refer to the value of shipments by manufacturers. The shipments data from individual manufacturers are adjusted prior to tabulation for the number of trading days as well as for any variations in the length of the reporting period.

<sup>3</sup> Adjusted and not adjusted inventories for aggregate levels retail trade total, total excluding motor vehicles and parts, and motor vehicle and parts dealers are revised from the Advance Economic Indicators Report.

<sup>4</sup> The 2012 North American Industry Classification System (NAICS) defines merchant wholesalers as including manufacturers' sales branches and offices. However, the estimates included in this release exclude manufacturers' sales branches and offices. Note that this is not a change in coverage from prior releases and is consistent with the description used in the Monthly Wholesale Trade Survey data products.

Data adjusted for seasonality but not price changes. Explanations of confidence intervals and sampling variability can be found on our website at <[www.census.gov/mtis/how\\_surveys\\_are\\_collected.html](http://www.census.gov/mtis/how_surveys_are_collected.html)>. Source: U.S. Census Bureau, Manufacturing and Trade Inventories and Sales, November 15, 2018.