# MONTHLY ADVANCE ECONOMIC INDICATORS REPORT, SEPTEMBER 2022

Release Number: CB22-179

**October 26, 2022** — The U.S. Census Bureau announced the following international trade, wholesale inventories, and retail inventories advance statistics for September 2022:

	ADVANCE INTERNATIONAL TRADE: GOODS DEFICIT		ADVANO WHOLES, INVENTOR	ALE	ADVANCE RETAIL INVENTORIES		
SEPTEMBER 2022	\$92.2 Billion	+5.7%°	\$921.7 Billion	+0.8%	\$744.0 Billion	+0.4%	
AUGUST 2022	\$87.3 Billion		\$913.9 Billion (R)		\$740.7 Billion (R)		

Next release: November 30, 2022.

#### **Advance International Trade in Goods**

The international trade deficit was \$92.2 billion in September, up \$4.9 billion from \$87.3 billion in August. Exports of goods for September were \$177.6 billion, \$2.8 billion less than August exports. Imports of goods for September were \$269.8 billion, \$2.2 billion more than August imports.

## **Advance Wholesale Inventories**

Wholesale inventories for September, adjusted for seasonal variations and trading day differences, but not for price changes, were estimated at an end-of-month level of \$921.7 billion, up 0.8 percent (±0.4 percent) from August 2022, and were up 24.5 percent (±0.7 percent) from September 2021. The July 2022 to August 2022 percentage change was revised from up 1.3 percent (±0.2 percent) to up 1.4 percent (±0.2 percent).

## **Advance Retail Inventories**

Retail inventories for September, adjusted for seasonal variations and trading day differences, but not for price changes, were estimated at an end-of-month level of \$744.0 billion, up 0.4 percent (±0.2 percent) from August 2022, and were up 22.2 percent (±0.5 percent) from September 2021. The July 2022 to August 2022 percentage change was revised from up 1.3 percent (±0.2 percent) to up 1.4 percent (±0.2 percent).

The October 2022 Advance report is scheduled for release on November 30, 2022. View the full schedule in the Economic Briefing Room: <a href="www.census.gov/economic-indicators/">www.census.gov/economic-indicators/</a>>. The full text and tables of this release can be found at <a href="www.census.gov/econ/indicators/">www.census.gov/econ/indicators/</a>>.

#### **Data Inquiries**

International Trade Indicator Branch: 301-763-2311 eid.international.trade.data@census.gov Retail Indicator Branch: 301-763-2713 eid.retail.indicator.branch@census.gov Wholesale Indicator Branch: 301-763-6856 eid.wholesale.indicator.branch@census.gov Media Inquiries
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<sup>\*</sup> The 90 percent confidence interval includes zero. There is insufficient evidence to conclude that the actual change is different from zero.

<sup>°</sup> Statistical significance is not applicable or not measurable.

Data adjusted for seasonality but not price changes.

Source: U.S. Census Bureau; Advance Economic Indicators Report, October 26, 2022.

#### **EXPLANATORY NOTES**

#### **International Trade in Goods**

## **Goods (Census Basis)**

Data for goods on a Census basis are compiled from the documents collected by the U.S. Customs and Border Protection and reflect the movement of goods between foreign countries and the 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and U.S. Foreign Trade Zones. They include government and non-government shipments of goods and exclude shipments between the United States and its territories and possessions; transactions with U.S. military, diplomatic, and consular installations abroad; U.S. goods returned to the United States by its Armed Forces; personal and household effects of travelers; and in-transit shipments. Data for U.S. exports to Canada are derived from import data compiled by Canada. For more information on the data exchange and substitution please refer to the FT-900. The General Imports value reflects the total arrival of merchandise from foreign countries that immediately enters consumption channels, warehouses, or Foreign Trade Zones.

For imports, the value reported is the U.S. Customs and Border Protection appraised value of merchandise—generally, the price paid for merchandise for export to the United States. Import duties, freight, insurance, and other charges incurred in bringing merchandise to the United States are excluded.

Exports are valued at the free alongside ship value of merchandise at the U.S. port of export, based on the transaction price including inland freight, insurance, and other charges incurred in placing the merchandise alongside the carrier at the U.S. port of exportation.

Additional information on coverage and valuation are available in the Guide to Foreign Trade Statistics, <www.census.gov/foreign-trade/guide/sec2.html#coverage> and <www.census.gov/foreign-trade/guide/sec2.html#valuation>, respectively.

## **Nonsampling Errors**

Goods data are a complete enumeration of documents collected by the U.S. Customs and Border Protection and are not subject to sampling errors. This report presents current month statistics which reflect nearly complete coverage. Current month statistics reflecting complete coverage will be published in the upcoming U.S. International Trade in Goods and Services report (FT-900). Statistics for other months shown reflect complete coverage and appear in the most recently published FT-900. Quality assurance procedures are performed at every stage of collection, processing, and tabulation. However, the data are still subject to several types of nonsampling errors. Information on nonsampling errors and other quality issues are available in the Guide to Foreign Trade Statistics, <a href="https://www.census.gov/foreign-trade/guide/sec2.html">www.census.gov/foreign-trade/guide/sec2.html</a>.

The U.S. Census Bureau recommends that data users incorporate this information into their analyses, as nonsampling errors could impact the conclusion drawn from the results. For a detailed discussion of errors affecting the goods data, see U.S. Merchandise Trade Statistics: A Quality Profile (October 2014), available at

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< www.census.gov/foreign-trade/aip/quality\_profile10032014.pdf > or from the Economic Indicators Division, U.S. Census Bureau.

# **Adjustments for Seasonal and Trading-Day Variations**

Goods data are presented on a seasonally adjusted and not seasonally adjusted basis. Seasonally adjusted (and/or trading day adjusted data) are produced using X-13ARIMA-SEATS software to develop monthly adjustment factors. Goods data are initially classified under the Harmonized Commodity Description and Coding System (Harmonized System), which is an internationally accepted standard for the commodity classification of traded goods. Combining trade into approximately 140 export and 140 import end-use categories makes it possible to examine goods according to their principal uses. These categories are used as the basis for computing the seasonal and trading-day adjusted data. These adjusted data are then summed to the six end-use aggregates for publication. For more information, visit the seasonal adjustment section of the Guide to Foreign Trade here:

<a href="mailto:www.census.gov/foreign-trade/guide/sec2.html#seasonal">www.census.gov/foreign-trade/guide/sec2.html#seasonal</a>>.

# **Retail and Wholesale Inventories**

National estimates of end-of-month inventories are based on data from the Monthly Retail Trade Survey and the Monthly Wholesale Trade Survey. Additional information for each survey can be found at <<u>www.census.gov/retail</u>> and <<u>www.census.gov/wholesale</u>>. The advance estimates contained in this report are not incorporated into the full MRTS and MWTS time series.

The MRTS and MWTS samples selected to measure inventories consist of a stratified simple random sampling method of approximately 11,000 retail firms and 4,200 wholesale firms located in the United States. The retail and wholesale samples include firms of all sizes and are updated on a quarterly basis to account for new retail and wholesale firms, deaths, and other changes to the universe.

Data for nonresponding firms are imputed based on data for similar-sized firms classified in the same kind of business. For surveyed Retail companies, approximately 44.7 percent provided data for this reporting period resulting in a total quantity response rate of 52.9 percent. For surveyed Wholesale companies, approximately 52.7 percent provided data for this reporting period resulting in a total quantity response rate of 55.2 percent.

MRTS estimates cover companies with one or more establishments that sell merchandise and related services to final consumers. Nonemployers are represented in the retail estimates through benchmarking to prior annual survey estimates that include nonemployer sales based on administrative records.

MWTS estimates cover 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.

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## **Reliability of Estimates**

Because the retail and wholesale estimates 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 are estimated measures of sampling variation.

The margin of sampling error gives a range about the estimate which is a 90 percent confidence interval. If, for example, the percentage change estimate is  $\pm 1.2$  percent and its estimated standard error is 0.9 percent, then the margin of sampling error is  $\pm 1.753 \times 0.9$  percent or  $\pm 1.6$  percent, and the 90 percent confidence interval is  $\pm 0.4$  percent to  $\pm 1.8$  percent. If the interval contains 0, then one does not have sufficient evidence to conclude at the 90 percent confidence level that the change is different from zero and therefore the change is not statistically significant. Estimated changes are statistically significant unless otherwise noted. For a monthly total, the estimated coefficient of variation is given. The resulting confidence interval is the estimated value  $\pm 1.753 \times CV \times (the estimated monthly total)$ .

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 businesses, mistakes in the recording and coding of data, 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.

The U.S. Census Bureau recommends that individuals using retail and wholesale estimates incorporate this information into their analyses, as sampling error and nonsampling error could affect the conclusions drawn from the estimates.

## **Adjustments for Seasonal Variations**

Concurrent seasonal adjustment is used to adjust the retail and wholesale inventories estimates for seasonal variations. 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 retail and wholesale estimates of current and previous month inventories and for inventories estimates a year ago as well.

**Statement Regarding COVID-19 Impact:** The Census Bureau continues to monitor response and data quality and has determined that estimates in this release meet publication standards. For more information, see < < COVID-19 FAQs>.

**Statement Regarding Natural Disasters:** For information on the impact of natural disasters, including hurricanes, on the compilation of this report, please see <a href="Wholesale Natural Disaster FAQs">Wholesale Natural Disaster FAQs</a> and <a href="Retail Natural Disaster FAQs">Retail Natural Disaster FAQs</a>.

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**Special Notice:** On October 7, 2022, the U.S. Census Bureau released the experimental Monthly Real Dollar Wholesale Sales Estimates tables for data through August 2022. These experimental tables will be released at the same time as the Monthly Wholesale Trade report each month and can be found by visiting <a href="www.census.gov/wholesale">www.census.gov/wholesale</a>.

# **Data Availability**

The Advance Economic Indicators Report is available at <<u>www.census.gov/econ/indicators/index.html</u>>. For archived versions of the Advance Economic Indicators Report please visit the Historical Data tab at the following: <<u>www.census.gov/econ/indicators/historical\_data.html></u>.

## **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.

<a href="https://www.census.gov/developers">www.census.gov/developers</a>>

## **FRED Mobile App**



Receive the latest updates on the nation's key economic indicators by downloading the FRED App < <a href="fred.stlouisfed.org/fred-mobile">fred.stlouisfed.org/fred-mobile</a>> 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 statistical evidence to conclude that the actual change is different from zero.
- ° Statistical significance is not applicable or not measurable for this survey.

(R) Revised from the last published Monthly Retail Trade Report and Monthly Wholesale Trade: Sales and Inventories Report

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Table 1. U.S. International Trade in Goods by Principal End-Use Category (1) In millions of dollars. Details may not equal totals due to seasonal adjustment and rounding. (X) - Not applicable

	Goods - Census Basis (2)								
		Mor	nthly		Percent change				
	September	August	July	September	September 2022/	August 2022/	September 2022/		
	2022	2022	2022	2021	August 2022	July 2022	September 2021		
	(a)								
Seasonally Adjusted									
Balance	-92,221	-87,279	-90,155	-95,077	(X)	(X)	(>		
Exports	177,624	180,404	181,658	143,884	-1.5	-0.7	23.		
Foods, Feeds, & Beverages	13,546	15,760	15,555	12,569	-14.0	1.3	7.		
Industrial Supplies (3)	72,251	74,585	76,815	52,317	-3.1	-2.9	38.		
Capital Goods	49,584	48,460	48,184	42,672	2.3	0.6	16.		
Automotive Vehicles, etc.	13,322	12,689	13,742	10,997	5.0	-7.7	21.		
Consumer Goods	21,598	21,657	20,360	20,060	-0.3	6.4	7.		
Other Goods	7,323	7,253	7,002	5,269	1.0	3.6	39.		
Imports	269,845	267,683	271,813	238,961	0.8	-1.5	12.		
Foods, Feeds, & Beverages	17,182	17,416	16,993	15,574	-1.3	2.5	10.		
Industrial Supplies (3)	64,516	66,723	71,390	57,906	-3.3	-6.5	11.		
Capital Goods	74,812	71,658	72,776	65,307	4.4	-1.5	14.		
Automotive Vehicles, etc.	35,012	34,369	33,287	26,114	1.9	3.2	34.		
Consumer Goods	68,963	68,028	67,935	62,797	1.4	0.1	9.		
Other Goods	9,361	9,489	9,431	11,262	-1.3	0.6	-16.		
Not Seasonally Adjusted									
Balance	-99,640	-103,511	-95,458	-102,479	(X)	(X)	()		
Exports	175,316	180,259	175,784	142,079	-2.7	2.5	23.		
Foods, Feeds, & Beverages	12,927	14,571	13,600	11,620	-11.3	7.1	11.		
Industrial Supplies (3)	70,046	75,174	76,276	50,899	-6.8	-1.4	37.		
Capital Goods	49,669	48,564	47,526	42,736	2.3	2.2	16.		
Automotive Vehicles, etc.	13,516	13,611	12,672	11,142	-0.7	7.4	21.		
Consumer Goods	21,895	20,982	18,793	20,486	4.4	11.7	6.		
Other Goods	7,264	7,357	6,917	5,197	-1.3	6.4	39.		
Imports	274,956	283,770	271,242	244,558	-3.1	4.6	12.		
Foods, Feeds, & Beverages	16,457	17,501	16,688	14,917	-6.0	4.9	10.		
Industrial Supplies (3)	63,744	70,494	73,134	57,403	-9.6	-3.6	11.		
Capital Goods	76,004	75,048	72,787	66,600	1.3	3.1	14.		
Automotive Vehicles, etc.	33,975	35,894	32,036	25,358	-5.3	12.0	34.		
Consumer Goods	75,197	75,220	67,449	68,747	0.0	11.5	9.		
Other Goods	9,580	9,613	9,148	11,534	-0.3	5.1	-16.		

(a) Advance statistics

Source: U.S. Census Bureau; Advance Economic Indicators Report, October 26, 2022.

<sup>(1)</sup> For a listing of the detail included in each end-use category, see < www.census.gov/foreign-trade/reference/codes/enduse/exeumstr.txt>.

<sup>(2)</sup> Data are presented on a Census basis. The information needed to convert to a balance of payment basis is not available.

<sup>(3)</sup> Includes petroleum and petroleum products.

<sup>\*</sup> Current month statistics reflect nearly complete coverage; current month statistics reflecting complete coverage will be published in the upcoming U.S. International Trade in Goods and Services report (FT-900). Statistics for other months shown reflect complete coverage and appear in the most recently

<sup>\*</sup> For information on data sources, nonsampling errors, and definitions, see the explanatory notes in this release or at <www.census.gov/econ/indicators/advance\_report.pdf>.

# Table 2. Levels and Percent Changes for Inventories

Inventories estimates are shown in millions of dollars. Estimates are based on data from the Monthly Wholesale Trade Survey and the Monthly Retail Trade Survey.

	Inventories						
		Monthly		Percent change			
	September	August	September	September 2022/	August 2022/	September 2022/	
	2022	2022	2021	August 2022	July 2022	September 2021	
	(a)	(r)	(r)				
<u>Adjusted</u> <sup>1</sup>							
Merchant wholesale <sup>2</sup> trade, total	921,666	913,936	740,115	0.8	1.4	24.5	
Durable goods	561,837	555,656	443,162	1.1	1.5	26.8	
Nondurable goods	359,829	358,280	296,953	0.4	1.3	21.2	
Retail trade, total	743,968	740,727	608,986	0.4	1.4	22.2	
Total (excl. motor veh. & parts)	551,121	551,476	460,441	-0.1	0.7	19.7	
Motor vehicle & parts dealers	192,847	189,251	148,545	1.9	3.5	29.8	
Not Adjusted							
Merchant wholesale <sup>2</sup> trade, total	913,672	898,531	732,401	1.7	0.9	24.8	
Durable goods	564,916	558,733	445,889	1.1	1.0	26.7	
Nondurable goods	348,756	339,798	286,512	2.6	0.7	21.7	
Retail trade, total	747,986	726,145	612,261	3.0	1.8	22.2	
Total (excl. motor veh. & parts)	559,705	543,312	467,318	3.0	1.4	19.8	
Motor vehicle & parts dealers	188,281	182,833	144,943	3.0	3.2	29.9	

<sup>(</sup>a) Advance estimate

See footnotes and notes at the end of Table 3.

# Table 3. Estimated Measures of Sampling Variability

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

		Inventories						
		Monthly		Standard Error of				
	Coet	fficient of Varia	ntion	Percent Change				
	September	August	September	September 2022/	August 2022/	September 2022/		
	2022	2022	2021	August 2022	July 2022	September 2021		
	(a)	(r)	(r)					
Merchant wholesale <sup>2</sup> trade, total Durable goods Nondurable goods	1.7 2.7 1.5	1.7 2.6 1.5	1.7 2.5 1.4	0.2 0.2 0.2	0.1 0.2 0.3	0.4 0.9 0.9		
Retail trade, total Total (excl. motor veh. & parts) Motor vehicle & parts dealers	0.9 1.1 1.5	0.9 1.0 1.6	1.0 1.1 1.5	0.1 0.1 0.3	0.1 0.1 0.3	0.3 0.3 1.1		

<sup>(</sup>a) Advance estimate (r) Revised estimate

#### NOTES:

Estimated measures of sampling variability are based on estimates not adjusted for seasonal variation. Additional information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions may be found at

<sup>(</sup>r) Revised estimate

<sup>(1)</sup> Estimates are concurrently adjusted for seasonal variation and trading day differences, but not for price changes. Concurrent seasonal adjustment uses all available not adjusted estimates as input to the X-13ARIMA-SEATS program. The factors derived from the program are used in calculating all seasonally adjusted estimates shown in this table.

<sup>(2)</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.