Numerator

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Retail Spending by Household Income

The US Census Advance Monthly Sales for Retail and Food Services report, released today, provides an advance estimate of aggregate retail and food services sales based on surveys of establishments. To understand retail sales from the bottom-up – looking at household spending rather than retailers' sales – Numerator uses data from a panel of 150,000 representative US households, allowing us to examine changes in monthly retail and food services spending by low, middle, and high-income households.

Expanding on the FEDS Note, "A Better Way of Understanding the US Consumer,"[2] Figure 1 provides an updated view on the growth of average retail spending, excluding motor vehicles and parts, overall and decomposed by household income, since January 2018.

Figure 1. Growth of average retail spending, excluding motor vehicles and parts, overall and decomposed by household income
Jan 2018–Nov 2024, Seasonally Adjusted and Inflation Adjusted
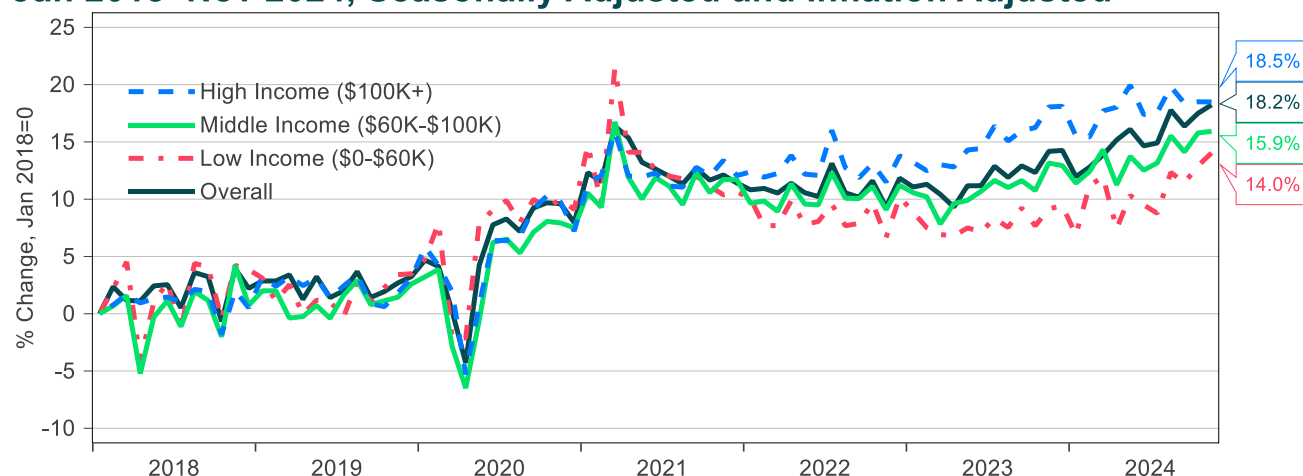
Notes: The data are monthly from January 2018 through November 2024. All series are adjusted for inflation using the chain indexed PCE deflator for goods and food services excluding motor vehicles and parts (with forecast for latest month if official PCE data has not yet been released) and are shown as growth relative to January 2018. All series are seasonally adjusted using X13-ARIMA-SEATS.
Source: Based on author's calculations using Numerator data. Numerator data last pulled on December 17, 2024.

[1] The release schedule of the Numerator Retail Spending by Household Income report follows the release schedule of the US Census Advance Monthly Sales for Retail and Food Services report, available here: https://www.census.gov/retail/release_schedule.html.

[2] Hoke, Sinem Hacioglu, Leo Feler, and Jack Chylak (2024). "A Better Way of Understanding the US Consumer: Decomposing Retail Sales by Household Income," FEDS Notes. Washington: Board of Governors of the Federal Reserve System, October 11, 2024, https://doi.org/10.17016/2380-7172.3611.

Table 1 provides the monthly index values and the changes in these values for average retail spending, excluding motor vehicles and parts, by household income.

Table 1. Index value for average retail spending, excluding motor vehicles and parts, by household income
Seasonally Adjusted and Inflation Adjusted (Jan 2018=0)

	Nov `24	Oct `24	Sep `24	Aug `24
Index Value				
High Income ($100K+)	18.5	18.5	18.4	19.8
Middle Income ($60K-$100K)	15.9	15.8	14.1	15.5
Low Income ($0-$60K)	14.0	12.9	11.4	12.3
Change in Index Value from Prior Month				
High Income ($100K+)	0.0	0.1	-1.4	2.2
Middle Income ($60K-$100K)	0.1	1.7	-1.4	2.4
Low Income ($0-$60K)	1.1	1.5	-0.9	3.6

Notes: Index value shows % change relative to Jan 2018. All series are adjusted for inflation using the chain indexed PCE deflator for goods and food services excluding motor vehicles and parts (with forecast for latest month if official PCE data has not yet been released). All series are seasonally adjusted using X13-ARIMA-SEATS.
Source: Based on author's calculations using Numerator data. Numerator data last pulled on December 17, 2024.

Table 2 shows the percent change in average retail spending, excluding motor vehicles and parts, by household income, both month-over-month and versus a year ago.

Table 2. Percent change in average retail spending, excluding motor vehicles and parts, by household income
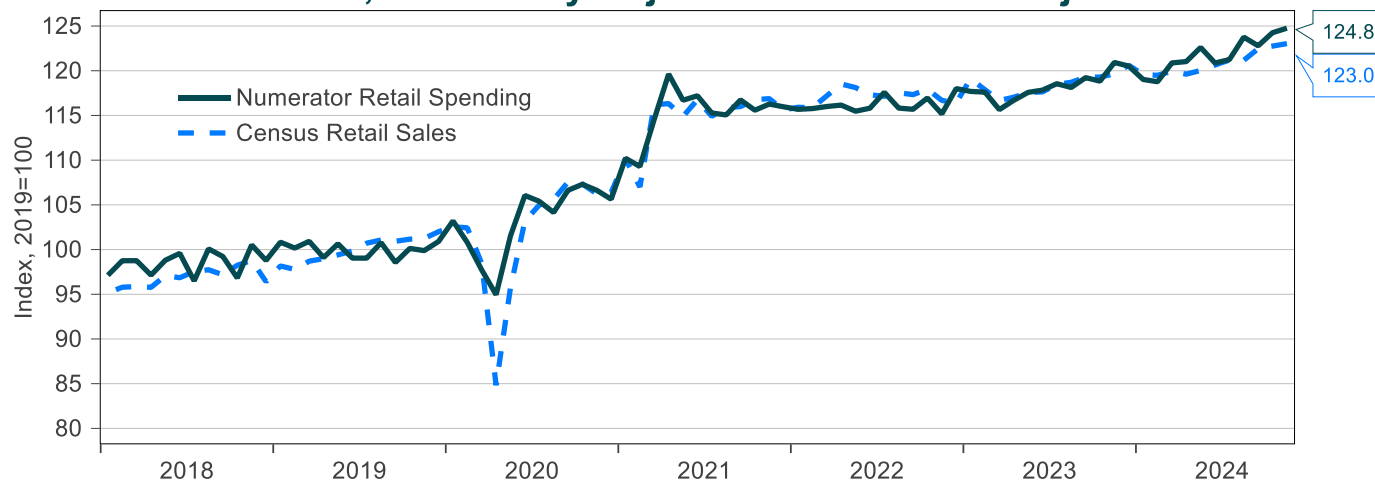### Seasonally Adjusted and Inflation Adjusted

	Oct `24 from...		Sep `24 from...		Aug `24 from...	
	Sep `24	Oct `23	Aug `24	Sep `23	Jul `24	Aug `23
Avg Spending per HH						
High Income ($100K+)	0.1	1.9	-1.2	2.1	1.9	4.1
Middle Income ($60K-$100K)	1.5	4.5	-1.2	2.2	2.1	4.1
Low Income ($0-$60K)	1.3	4.9	-0.8	2.0	3.3	4.5

Notes: All series are adjusted for inflation using the chain indexed PCE deflator for goods and food services excluding motor vehicles and parts (with forecast for latest month if official PCE data has not yet been released). All series are seasonally adjusted using X13-ARIMA-SEATS.
Source: Based on author's calculations using Numerator data. Numerator data last pulled on December 17, 2024.

To verify that aggregate Numerator and Census data align closely with one another, Figure 2 shows total retail sales, excluding motor vehicles and parts, constructed using the Census Bureau series and Numerator panel data since January 2018.

Figure 2. Retail sales: total excluding motor vehicles and parts constructed using Census Bureau series and Numerator panel data Jan 2018–Nov 2024, Seasonally Adjusted and Inflation Adjusted
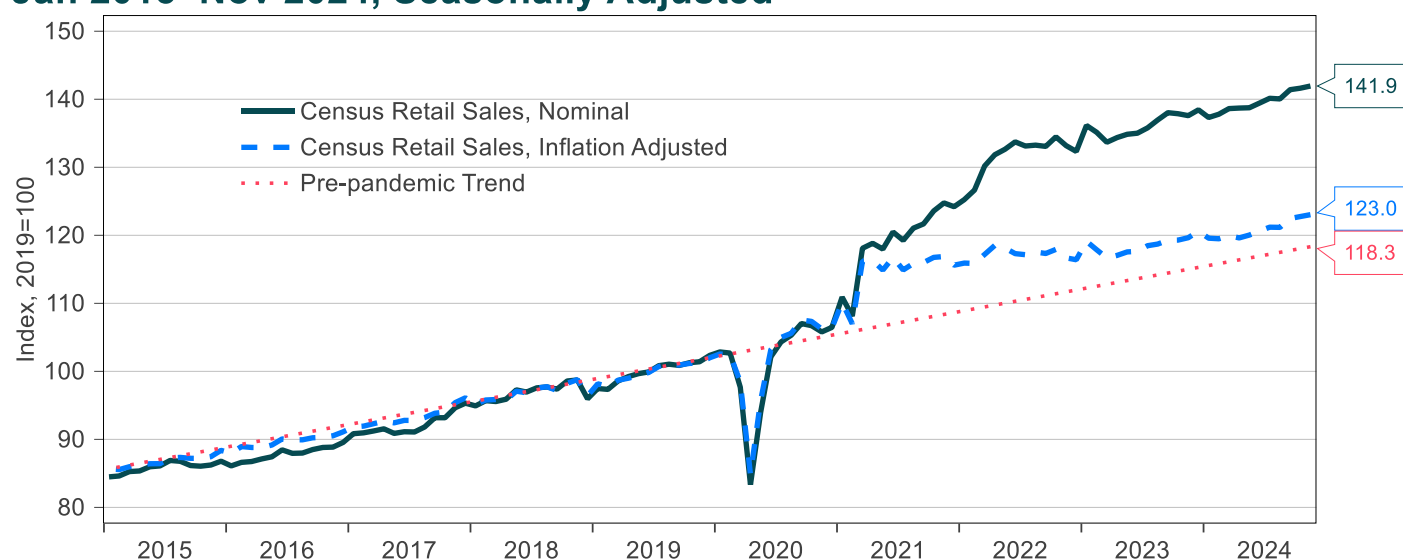

Notes: The solid dark blue line is the retail spending measure constructed from the Numerator data, seasonally adjusted using X13-ARIMA-SEATS. The dashed light blue line is the Census Bureau's seasonally-adjusted retail sales series excluding motor vehicles and parts. Inflation adjustment uses the chain indexed PCE deflator for goods and food services excluding motor vehicles and parts (with forecast for latest month if official PCE data has not yet been released). The data are monthly from January 2018 through November 2024. Values are indexed to 100 in 2019.
Sources: US Census Bureau, US Bureau of Economic Analysis, Numerator. Data as of December 17, 2024.

Finally, Figure 3 shows the Census Bureau series, both nominal and inflation-adjusted, and the pre-pandemic trend for retail sales.

Figure 3. Retail sales: total excluding motor vehicles and parts
Jan 2015–Nov 2024, Seasonally Adjusted

Notes: Retail sales in solid dark blue line, retail sales adjusted for inflation in dashed light blue line, and pre-pandemic trend for retail sales adjusted for inflation in dotted red line. Inflation adjustment uses the chain indexed PCE deflator for goods and food services excluding motor vehicles and parts (with forecast for latest month if official PCE data has not yet been released). The data are monthly from January 2015 through November 2024. Values are indexed to 100 in 2019.
Sources: US Census Bureau, US Bureau of Economic Analysis, Numerator. Data as of December 17, 2024.

For additional information on Numerator panel data, an early read of retail spending, or additional decompositions of consumer spending, please contact the Numerator team.