



U.S. Economic Outlook

December 2022

Shannon Seery

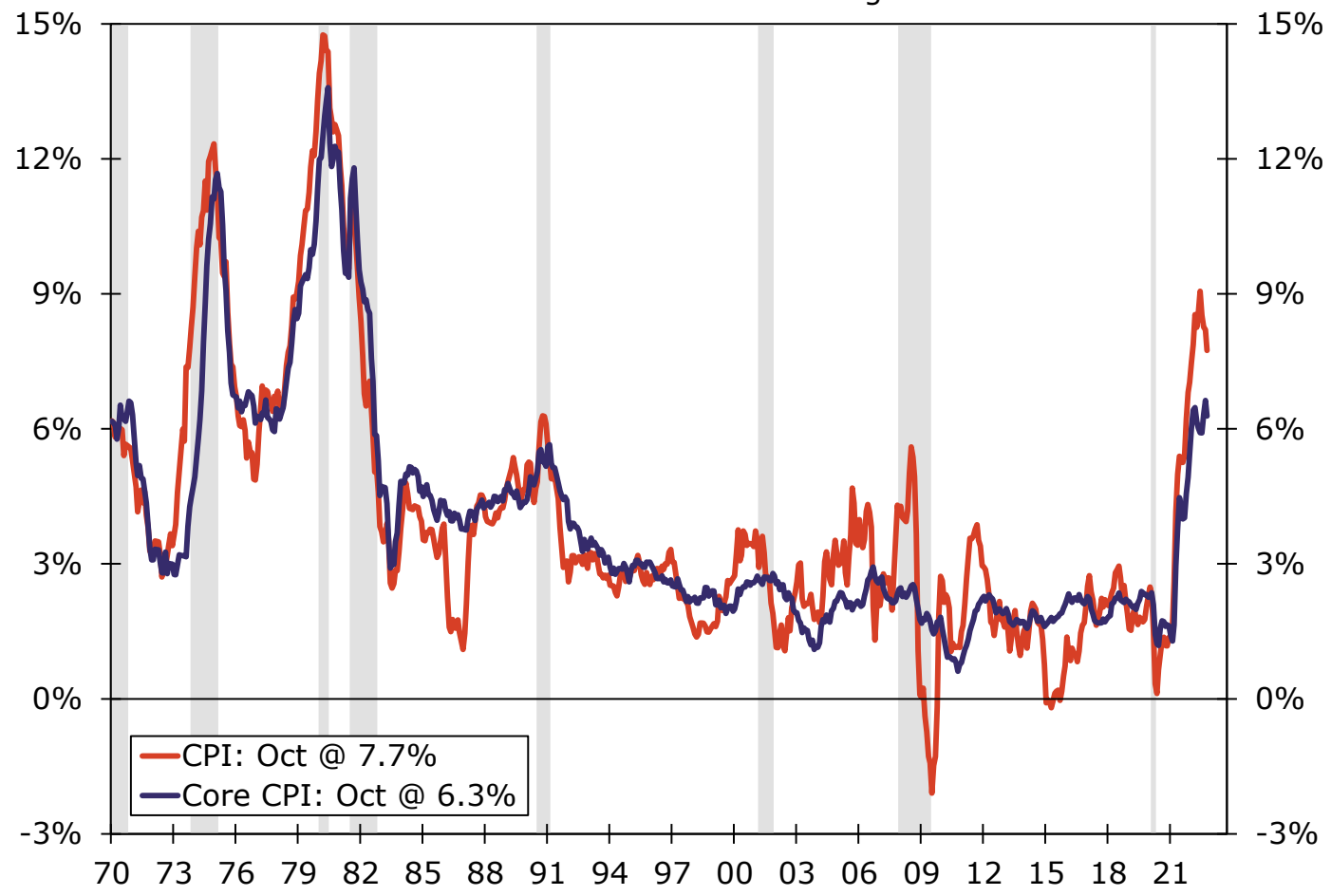
Economist | Wells Fargo Corporate and Investment Banking

shannon.seery@wellsfargo.com | 332-204-0693

Decades-high inflation is reverberating throughout the economy.

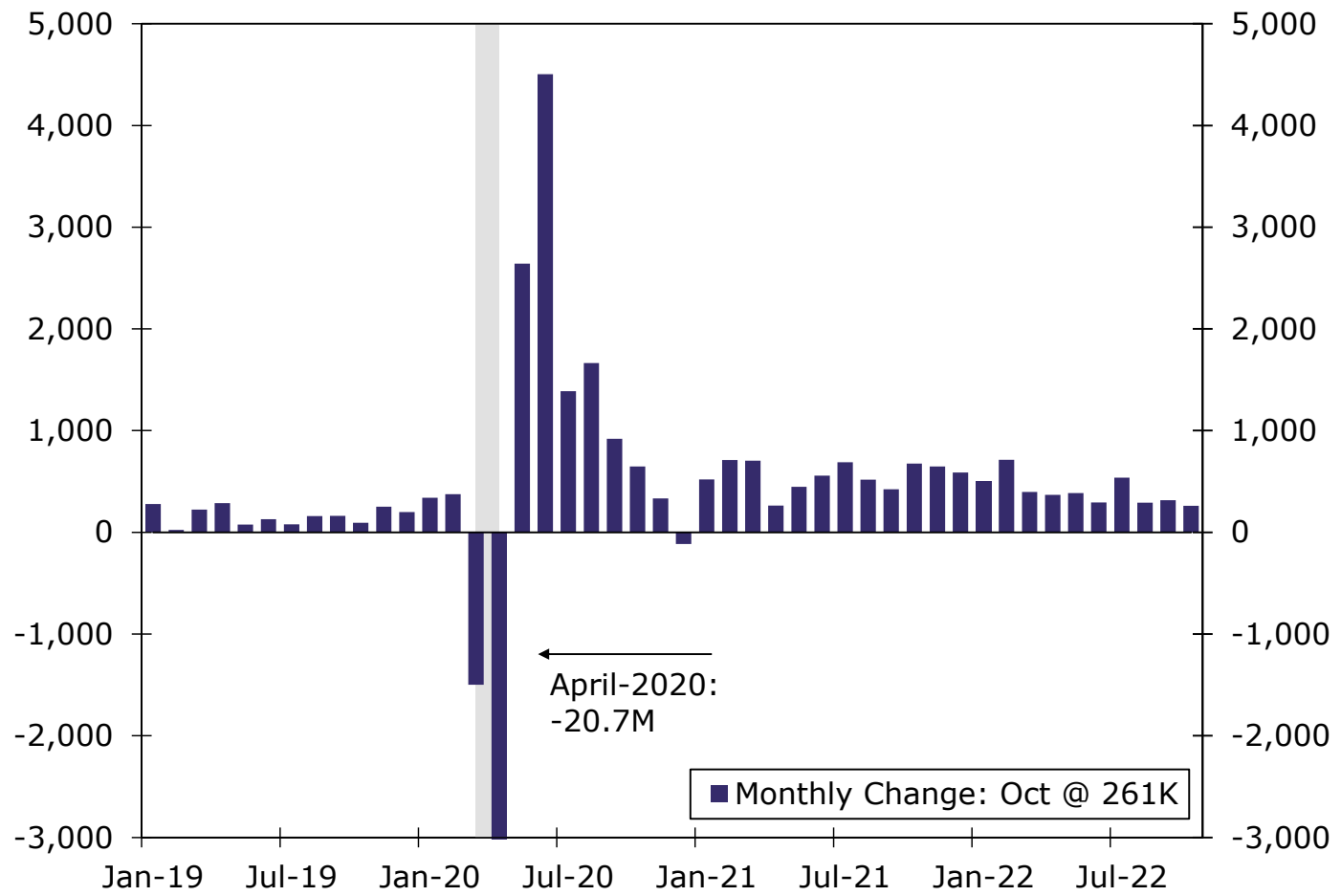
Headline CPI vs. "Core" CPI

Year-over-Year Percent Change



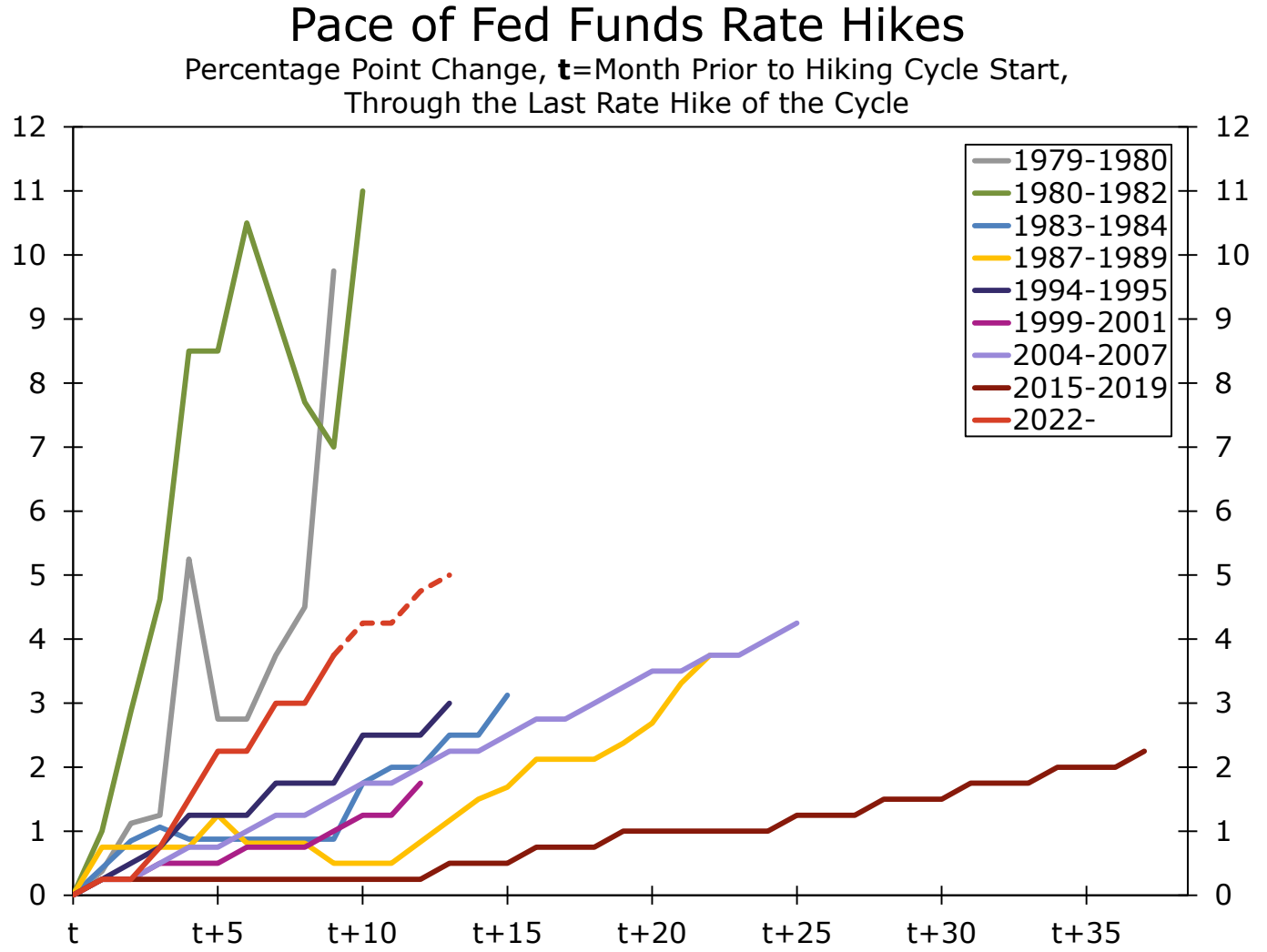
Employment growth has continued in recent months at a strong pace.

U.S. Nonfarm Employment Change Thousands



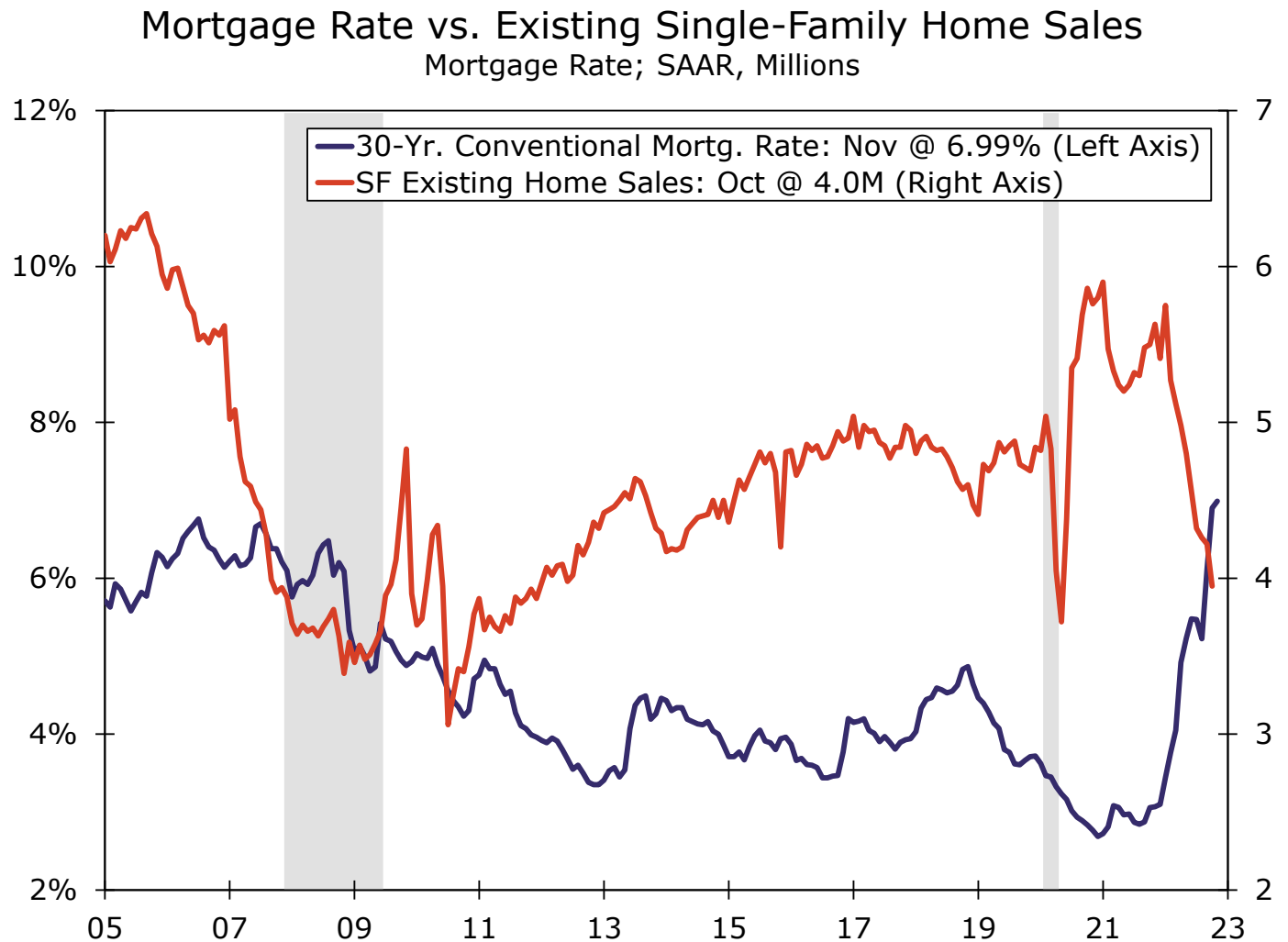
Source: U.S. Department of Labor and Wells Fargo Economics

We expect the Fed to continue to tighten monetary policy at the fastest pace since the early 1980s into next year.



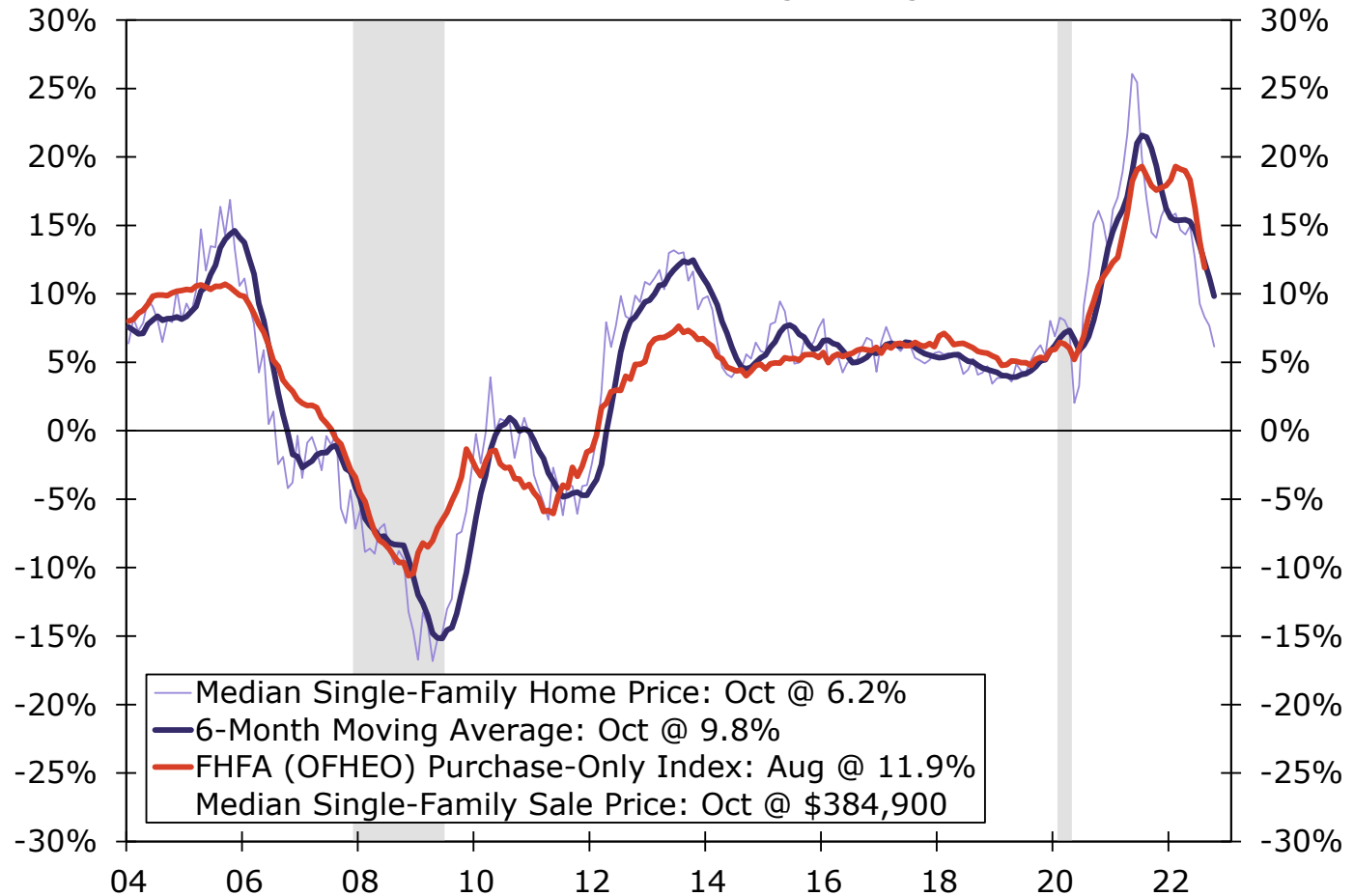
Source: Federal Reserve Board and Wells Fargo Economics
Forecast as of 11/10/2022

Housing activity is buckling under the weight of higher mortgage rates.

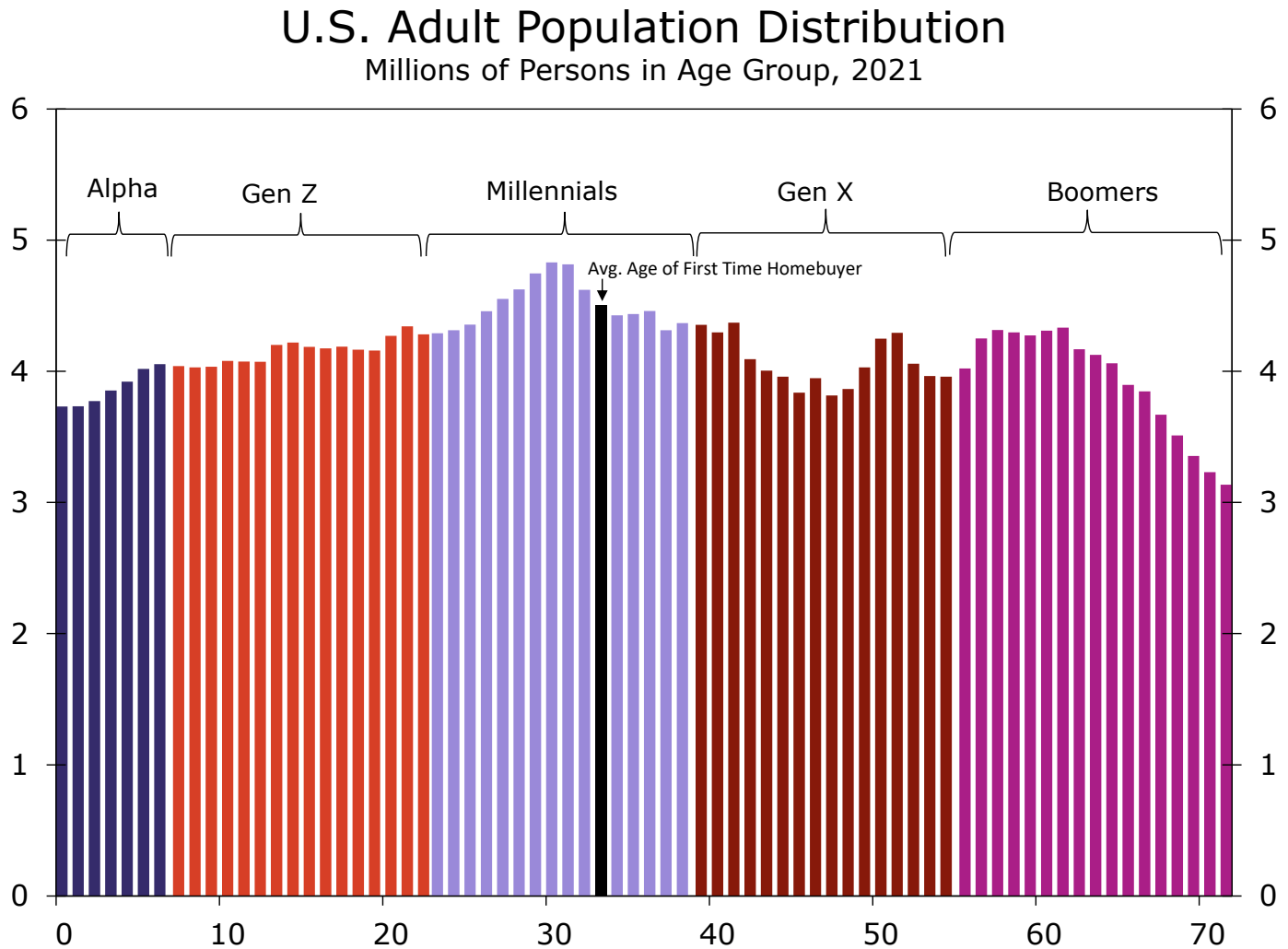


Home prices are moderating as buyers retreat to the sidelines.

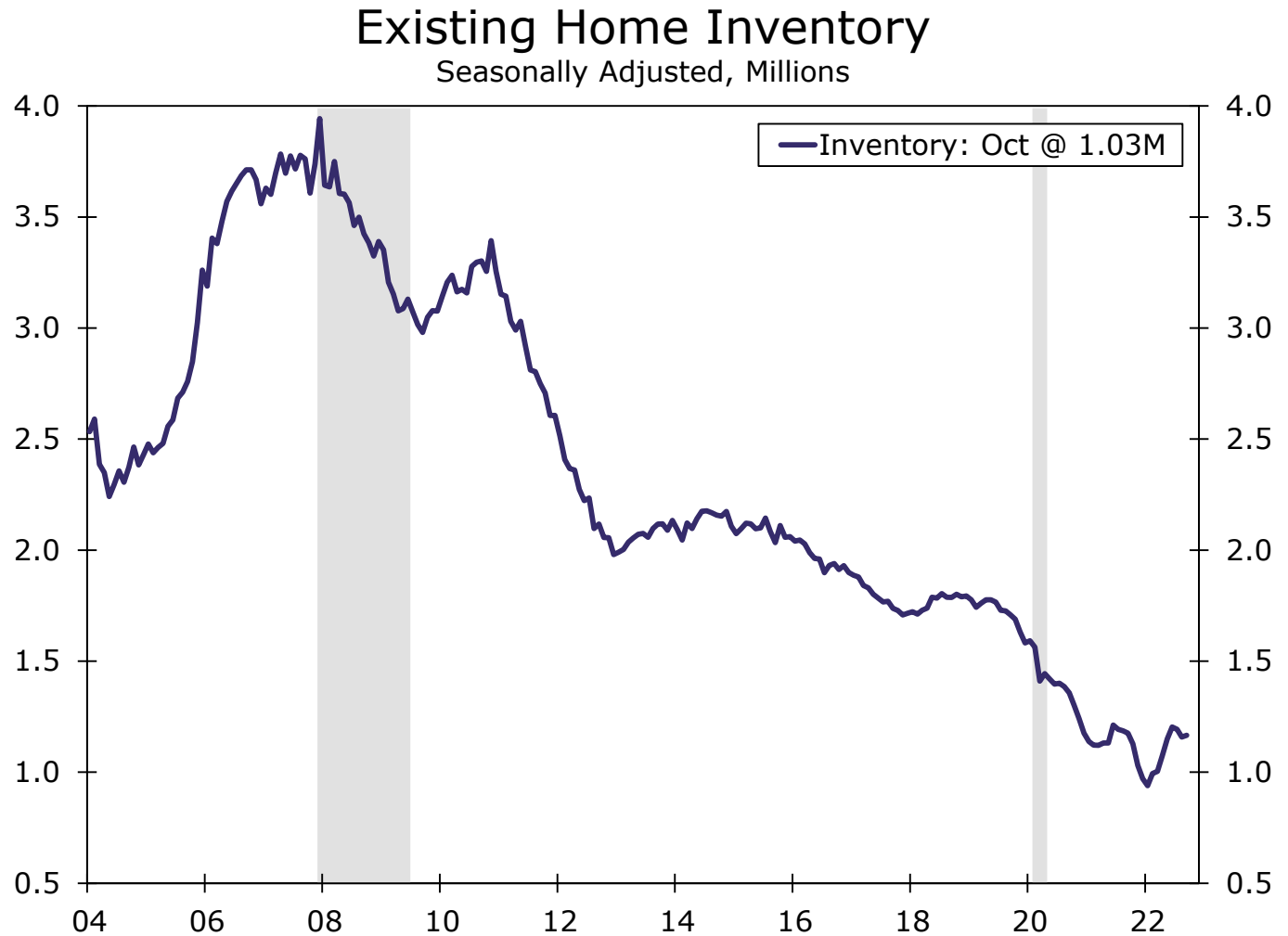
Median Single-Family Existing Home Price Year-over-Year Percentage Change



Demographics will continue to provide a powerful tailwind for home sales.



The inventory of existing homes remains near an all-time low.



Supply Chains

Pressure Gauge

Indicator	Feb-20	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb-21	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb-22	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Volume																																	
Unfilled Orders (a)	9.0%	6.2%	2.6%	0.6%	1.1%	4.6%	5.6%	7.4%	9.4%	10.7%	10.3%	11.2%	12.6%	15.3%	16.2%	15.6%	14.1%	12.4%	11.6%	9.1%	7.8%	6.0%	4.5%	4.4%	3.9%	4.3%	3.5%	2.2%	1.2%	1.5%	3.0%	3.3%	2.0%
Cass Freight Index (a)	-13.2%	14.0%	-33.5%	-44.1%	-36.3%	48.0%	88.4%	115.9%	80.5%	21.6%	-17.4%	-21.7%	-8.1%	29.1%	26.8%	59.0%	12.2%	-0.3%	-10.6%	-14.4%	4.1%	-8.8%	8.4%	-32.4%	-11.1%	-1.6%	39.7%	23.7%	0.0%	9.5%	14.7%	13.2%	8.6%
Taiwan Elect. Product Exports (a)	-38.1%	14.7%	56.6%	41.7%	14.7%	39.7%	120.9%	87.0%	96.2%	3.3%	-9.4%	10.2%	-47.1%	23.5%	6.6%	133.2%	35.7%	39.3%	73.1%	70.5%	-2.4%	20.0%	-7.5%	41.6%	-4.8%	58.0%	37.1%	27.1%	-19.5%	-5.8%	8.4%	-6.5%	-1.3%
Real Goods Consumption (b)	0.0%	-1.1%	-13.9%	-1.0%	5.1%	7.7%	6.9%	9.2%	8.9%	8.0%	7.2%	12.3%	9.9%	20.7%	18.9%	16.7%	16.8%	14.9%	14.8%	15.5%	16.8%	16.4%	14.0%	16.7%	15.3%	15.1%	15.3%	14.7%	14.9%	14.5%	14.5%	14.9%	
Time																																	
ISM Manuf. Supplier Deliveries	57.3	65.0	76.0	68.0	56.9	55.8	58.2	59.0	60.5	61.7	67.7	68.2	72.0	76.6	75.0	78.8	75.1	72.5	69.5	73.4	75.6	72.2	64.9	64.6	66.1	65.4	67.2	65.7	57.3	55.2	55.1	52.4	46.8
ISM Serv. Supplier Deliveries	52.4	62.1	78.3	67.0	57.5	55.2	60.5	54.9	56.2	57.0	62.8	57.8	60.8	61.0	66.1	70.4	68.5	72.0	69.6	68.8	75.7	75.7	63.9	65.7	66.2	63.4	65.1	61.3	61.9	57.8	54.5	53.9	56.2
Ships Awaiting Space LA & LB (c)	0.0	0.0	0.0	0.0	0.0	0.5	2.0	1.5	4.3	10.0	22.2	32.1	32.6	26.5	21.5	18.9	13.8	21.4	34.8	56.3	66.6	70.0	85.6	103.2	79.9	48.4	41.5	29.8	23.0	24.0	20.9	9.0	6.3
Price																																	
World Container Index (WCI)	\$1,633	\$1,520	\$1,500	\$1,549	\$1,788	\$2,009	\$2,144	\$2,541	\$2,592	\$2,806	\$3,955	\$5,263	\$5,227	\$4,991	\$4,919	\$5,898	\$7,052	\$8,879	\$9,556	\$10,237	\$9,891	\$9,180	\$9,227	\$9,518	\$9,398	\$8,783	\$7,907	\$7,667	\$7,412	\$6,908	\$6,317	\$4,894	\$3,425
PPI Transp. & Ware. of Goods (a)	0.3%	-1.9%	-7.6%	-12.2%	-8.8%	1.0%	9.0%	8.0%	6.5%	7.8%	10.2%	10.7%	13.0%	16.3%	16.5%	16.9%	14.4%	12.5%	9.6%	11.9%	16.4%	22.5%	19.6%	21.0%	19.5%	35.1%	34.3%	36.5%	15.9%	8.5%	-6.7%	-7.3%	-12.4%
Dry Van Rate Per Mile (a)	7.6%	-16.0%	-28.6%	-49.7%	-16.5%	52.6%	352.8%	315.4%	191.1%	112.6%	48.8%	12.2%	-25.4%	10.5%	12.6%	52.0%	-8.4%	-8.6%	-0.2%	41.8%	64.5%	57.1%	54.4%	91.6%	70.1%	-7.2%	-56.2%	-69.7%	-67.0%	-57.5%	-35.7%	-25.9%	-15.0%
Inventory																																	
Retail Inventory-to-Sales Ratio	1.42	1.53	1.69	1.35	1.23	1.22	1.23	1.23	1.25	1.27	1.22	1.24	1.10	1.09	1.09	1.09	1.12	1.11	1.10	1.09	1.10	1.17	1.15	1.15	1.18	1.18	1.20	1.21	1.23	1.24	1.25		
ISM Manuf. Cons. Inventories	41.8	43.4	48.8	46.2	44.6	41.6	38.1	37.9	36.7	36.3	37.9	33.1	32.5	29.9	28.4	28.0	30.8	25.0	30.2	31.7	31.7	25.1	31.7	33.0	31.8	34.1	37.1	32.7	35.2	39.5	38.9	41.6	41.6
Inventory Too Low (d)	-3.5%	-1.5%	-6.6%	-4.5%	1.2%	1.3%	2.7%	4.8%	4.4%	4.9%	6.5%	5.3%	4.5%	2.5%	7.0%	8.0%	11.0%	12.0%	11.0%	10.0%	9.0%	15.0%	9.0%	7.0%	7.0%	9.0%	6.0%	8.0%	5.0%	2.0%	3.0%	1.0%	0.0%
Labor																																	
Production & Manuf. Posts (b)	0.2%	1.3%	-30.0%	-31.6%	-23.7%	-13.8%	-6.1%	4.2%	12.9%	20.6%	27.4%	26.3%	38.2%	46.8%	63.5%	74.8%	76.7%	84.0%	78.0%	87.3%	92.4%	103.0%	115.3%	102.9%	108.9%	108.3%	96.3%	97.1%	92.9%	91.1%	89.3%	91.1%	87.1%
Loading & Stocking Posts (b)	1.4%	-0.4%	-32.5%	-32.7%	-17.6%	-0.8%	4.6%	12.3%	28.2%	38.8%	39.0%	26.3%	38.9%	46.4%	61.7%	72.7%	76.6%	90.2%	72.0%	82.4%	92.4%	106.5%	114.9%	92.9%	97.5%	93.9%	80.7%	84.9%	83.5%	89.3%	74.1%	79.3%	77.8%
Jobs Hard to Fill (d)	37.6%	35.2%	23.5%	23.2%	31.9%	30.2%	33.4%	36.4%	33.1%	33.5%	32.3%	32.7%	39.6%	42.2%	44.0%	48.0%	46.0%	49.0%	50.0%	51.0%	49.0%	48.0%	49.0%	47.0%	48.0%	47.0%	47.0%	51.0%	50.0%	49.0%	49.0%	46.0%	46.0%

Notes: (a) 3-Month Annualized Rate, (b) versus February 2020, (c) Monthly Average, (d) Net % of Firms, Current Month Reflects Monthly Average of Available Data for All Series

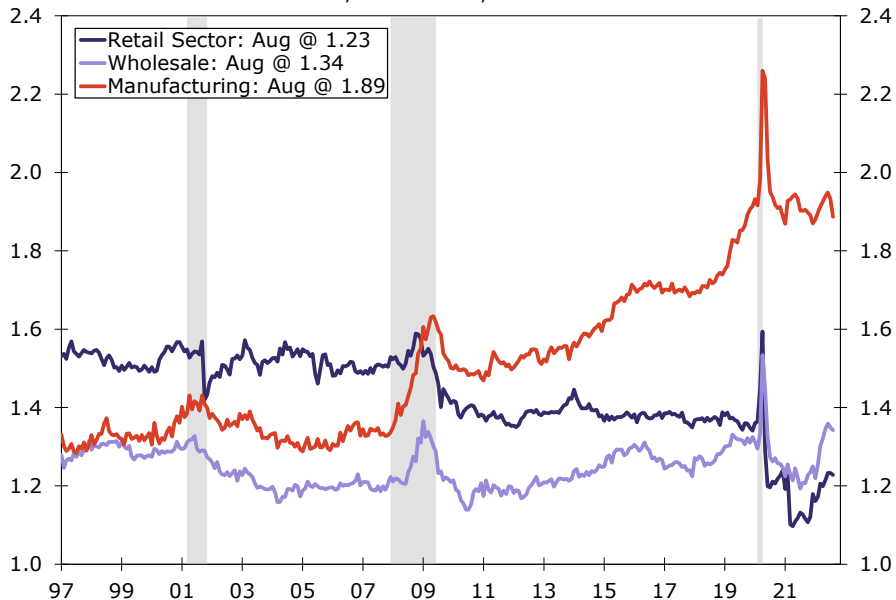
Weekly updates available [here](#).

Source: U.S. Department of Commerce, Bloomberg Finance L.P., Taiwan Ministry of Finance, Institute for Supply Management (ISM), Drewry, U.S. Department of Labor, National Federation of Independent Business (NFIB), Indeed.com and Wells Fargo Economics

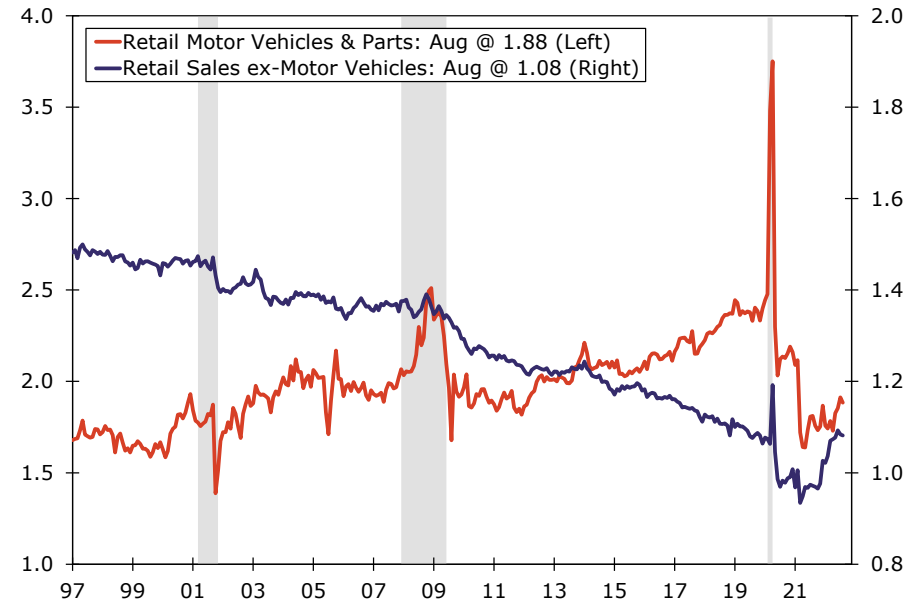
The easing of supply has allowed inventories to largely be replenished, notwithstanding the auto industry.

Real Inventory-to-Sales Ratios

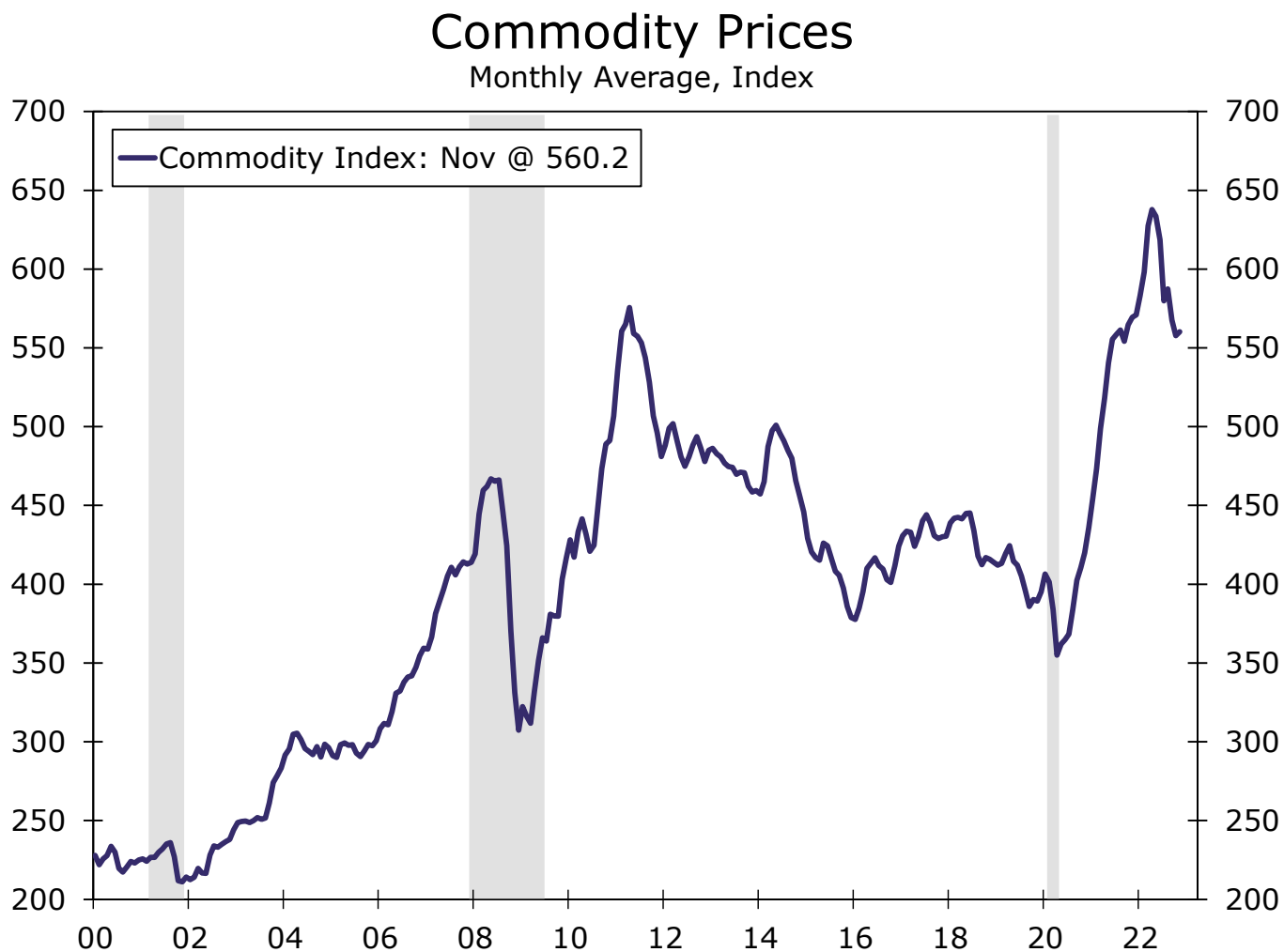
Retailers, Wholesalers, Manufacturers



Real Inventory-to-Sales Ratios

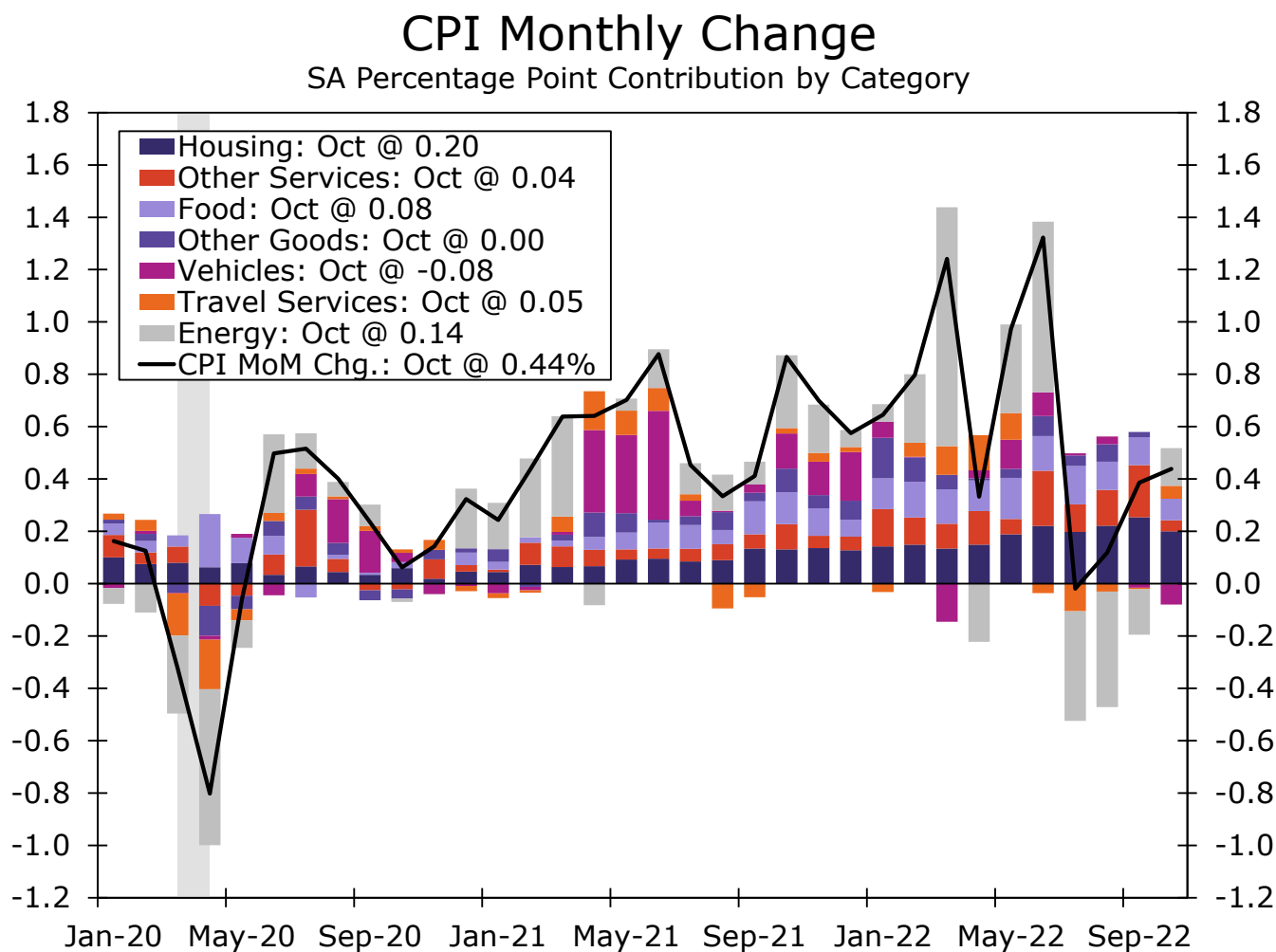


Commodity prices have fallen but remain high.



Inflation Breakdown

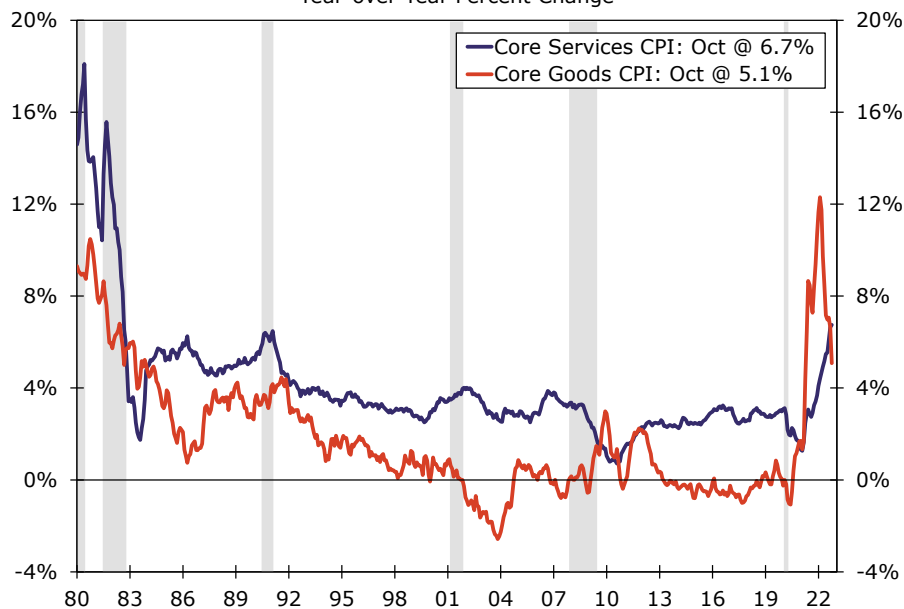
The climb in inflation remains broad-based.



The burst of inflation was heavily concentrated in the goods sector, but it has broadened.

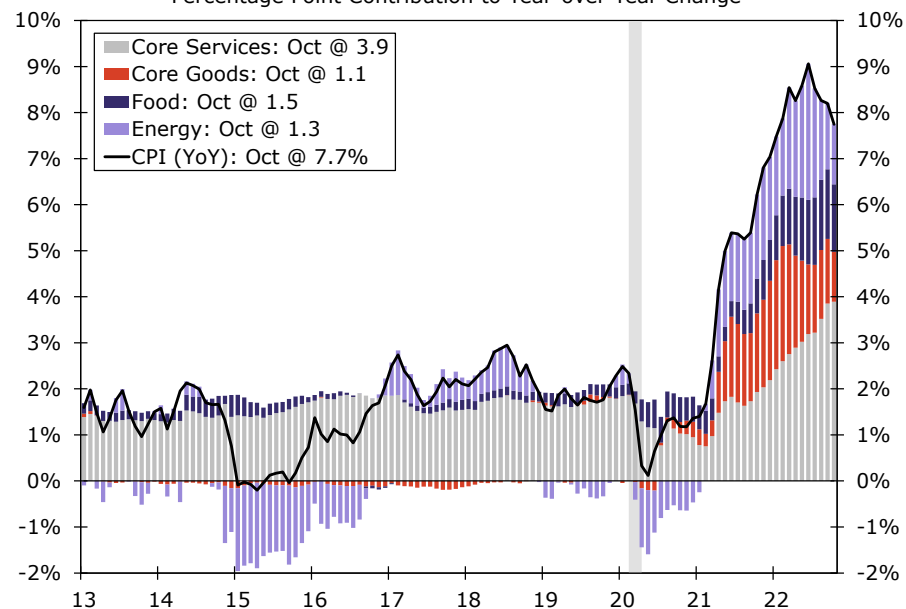
Core Goods vs. Core Services CPI

Year-over-Year Percent Change



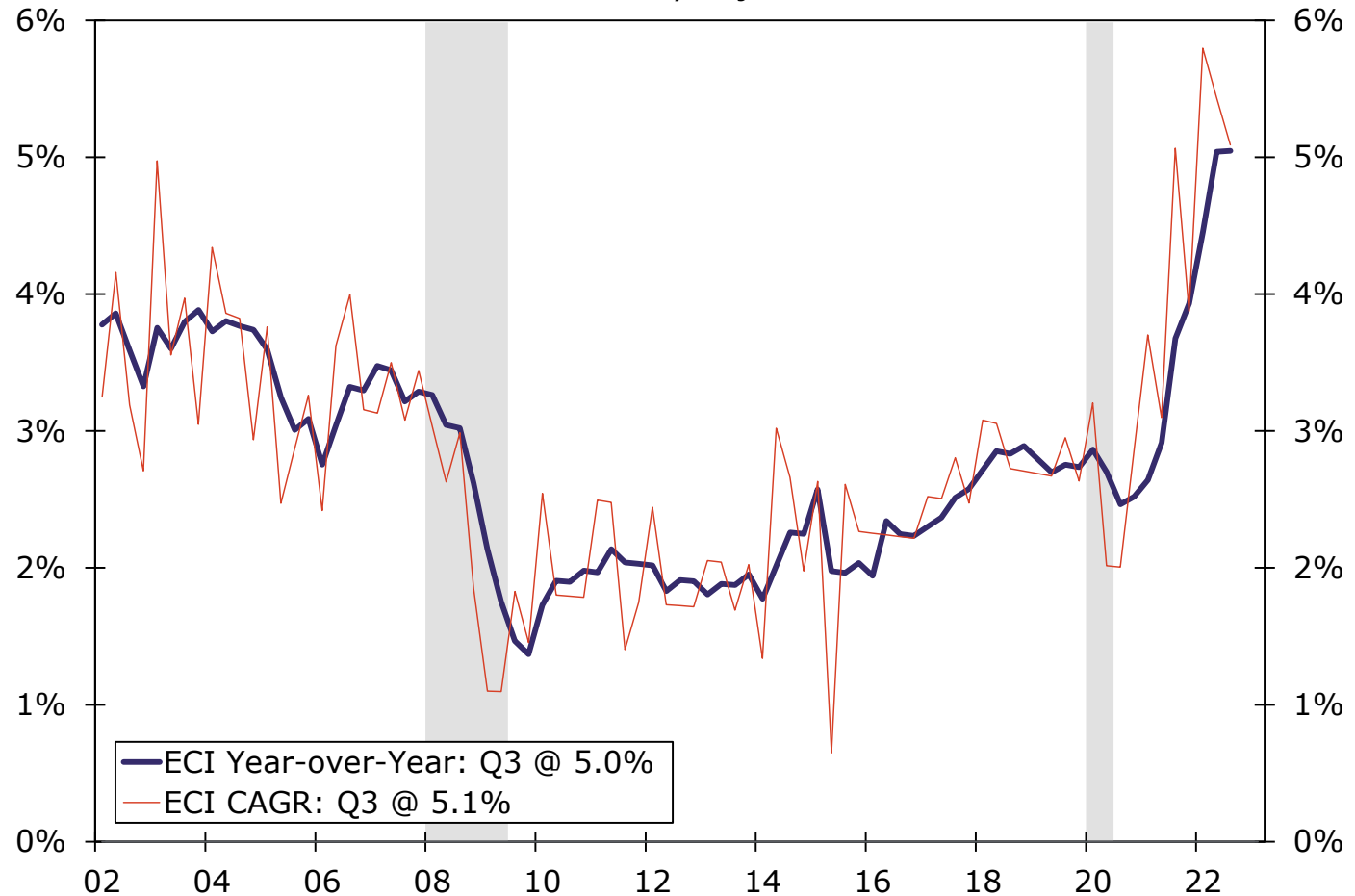
Consumer Price Index

Percentage Point Contribution to Year-over-Year Change

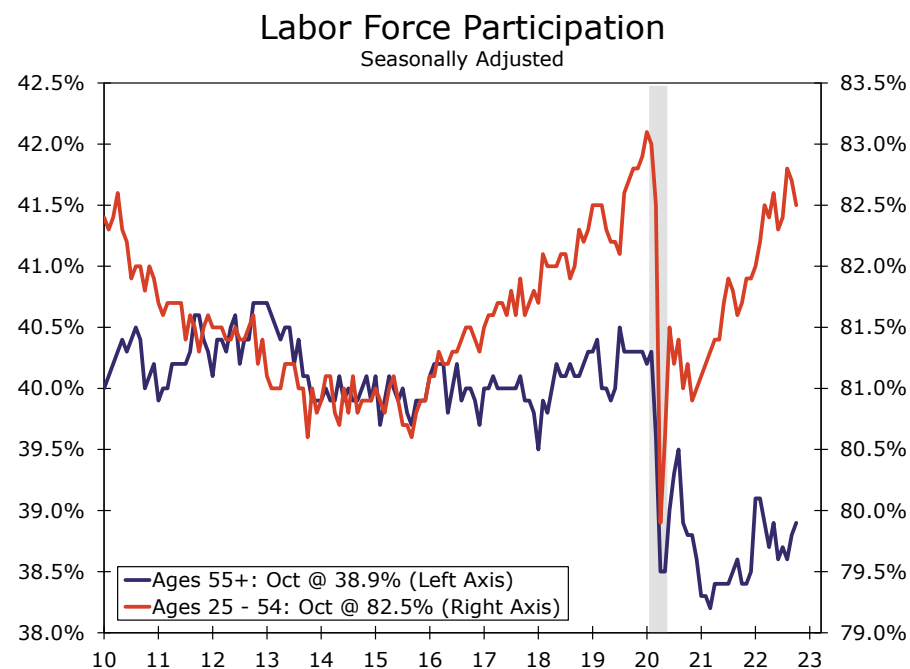
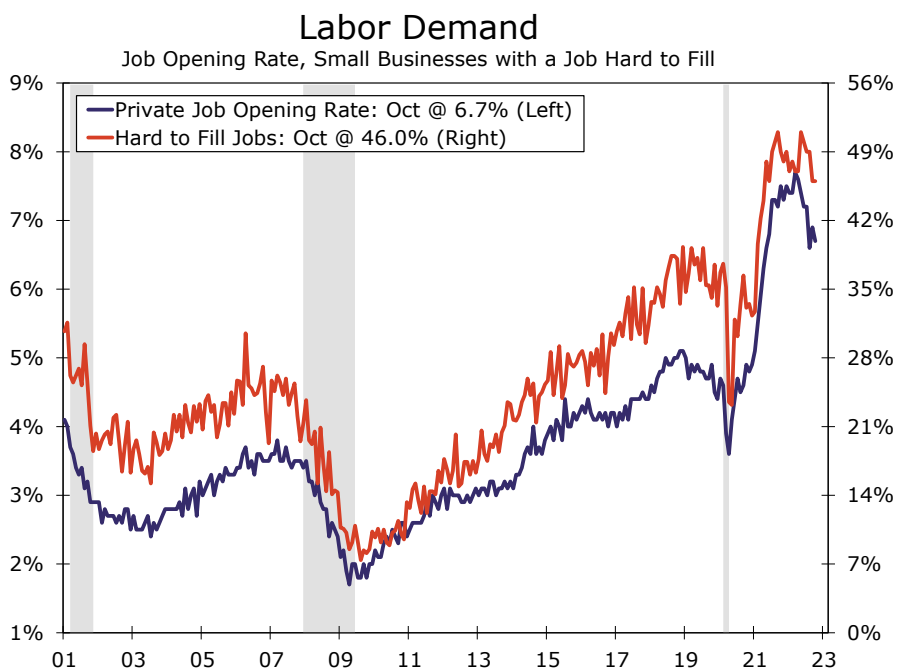


Labor costs continue to grow at a rapid pace.

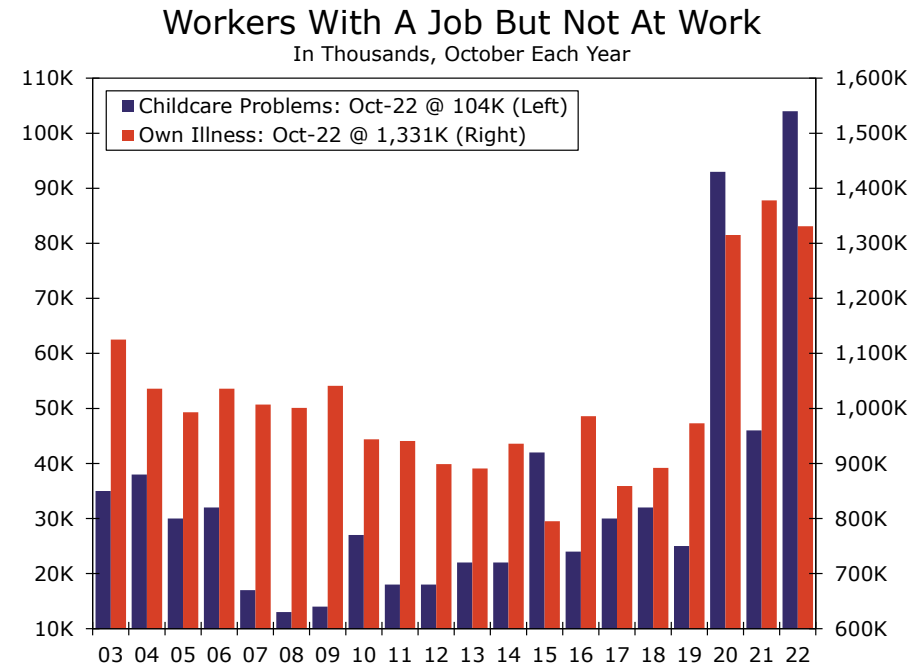
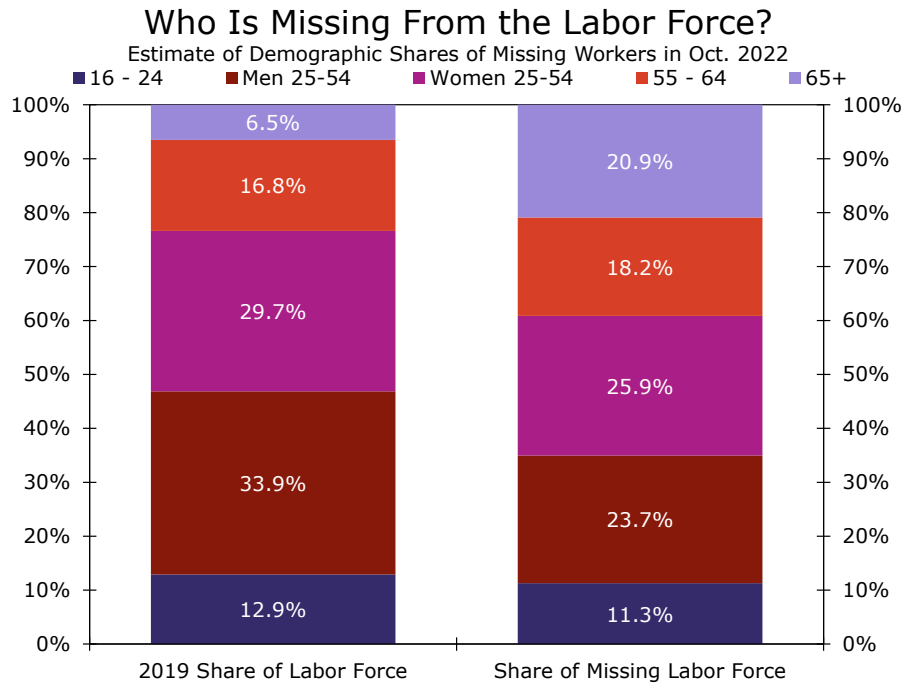
Employment Cost Index Seasonally Adjusted



The demand and supply of labor are only tip-toeing back toward balance. The recovery in supply remains highly uneven.

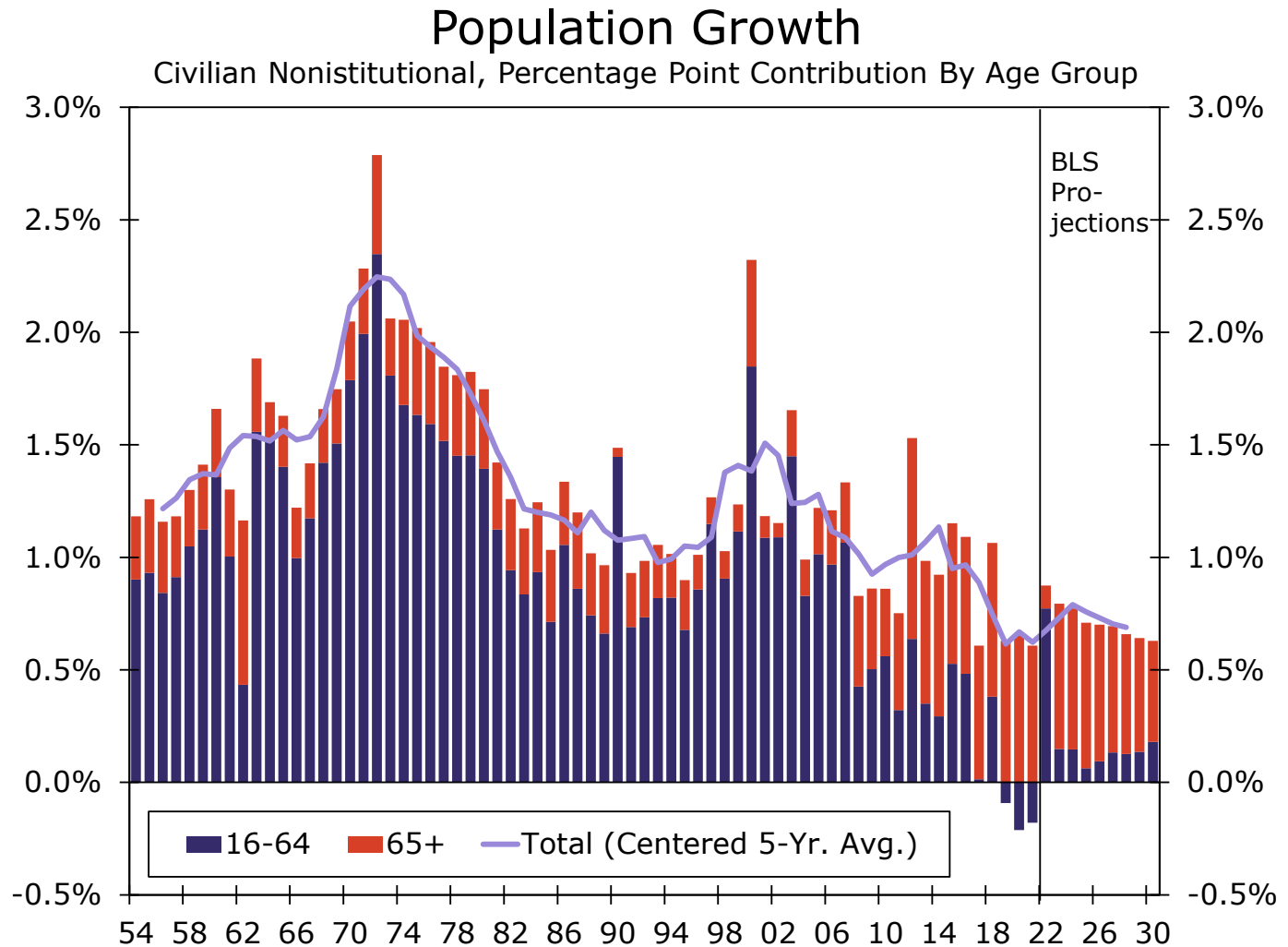


Some labor market exits have proved stickier than others. Illness and care constraints remain a hurdle to attendance and some workers re-joining the labor force

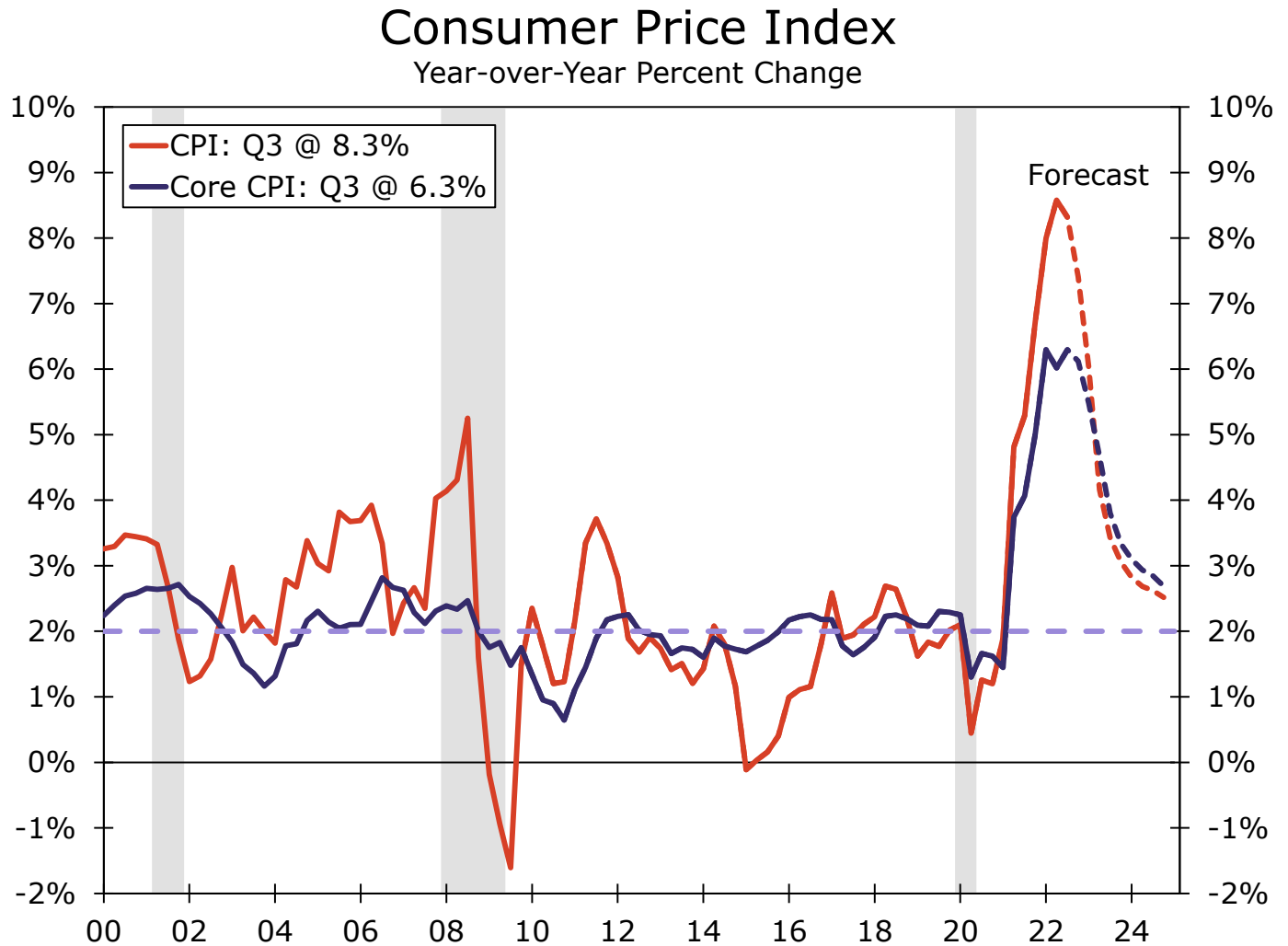


Labor Supply: Longer-Term Considerations

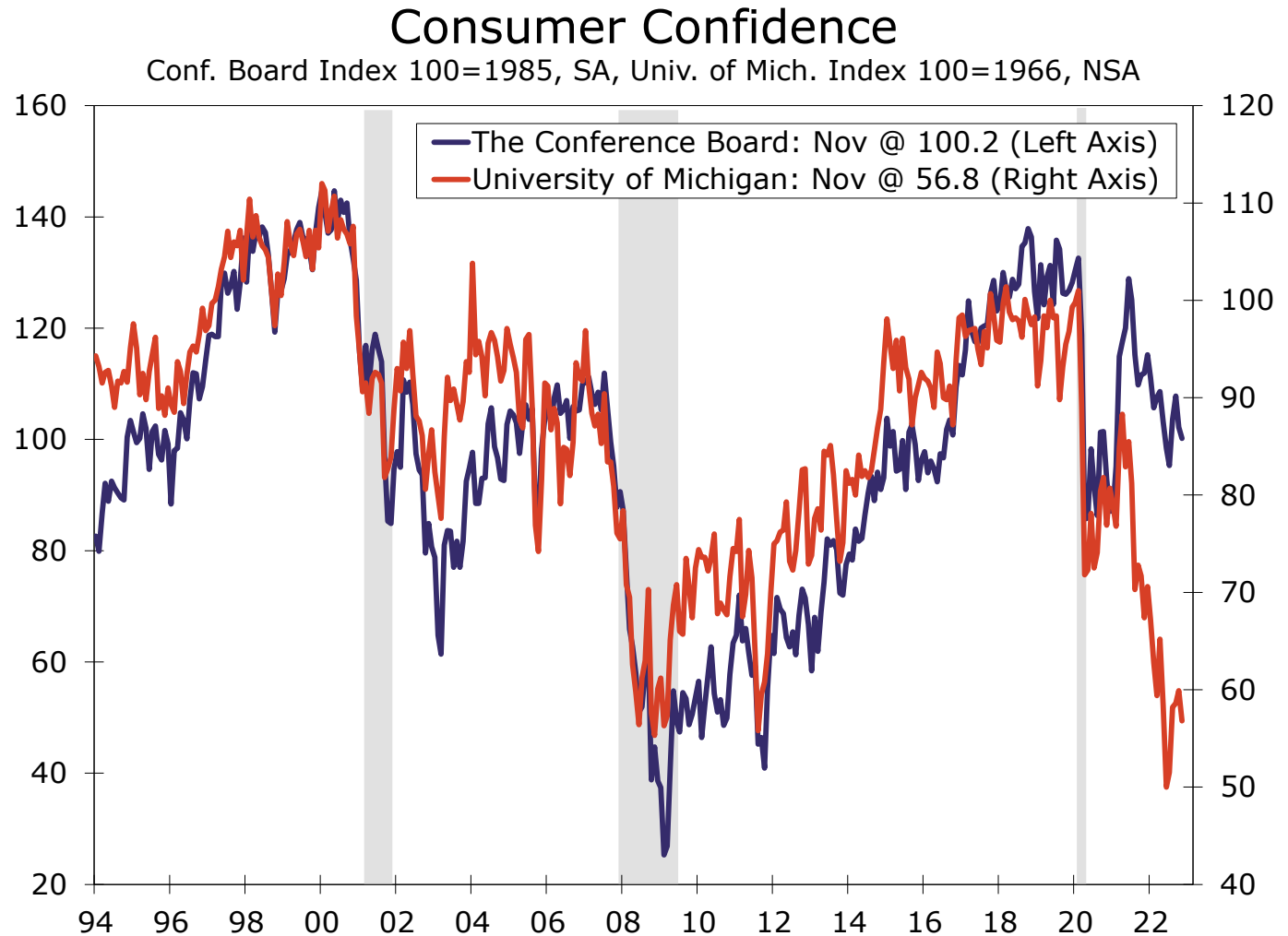
Without a significant rise in participation, the supply of labor is going to be a long-term issue.



Inflation is expected to ease ahead, but remain uncomfortably high.

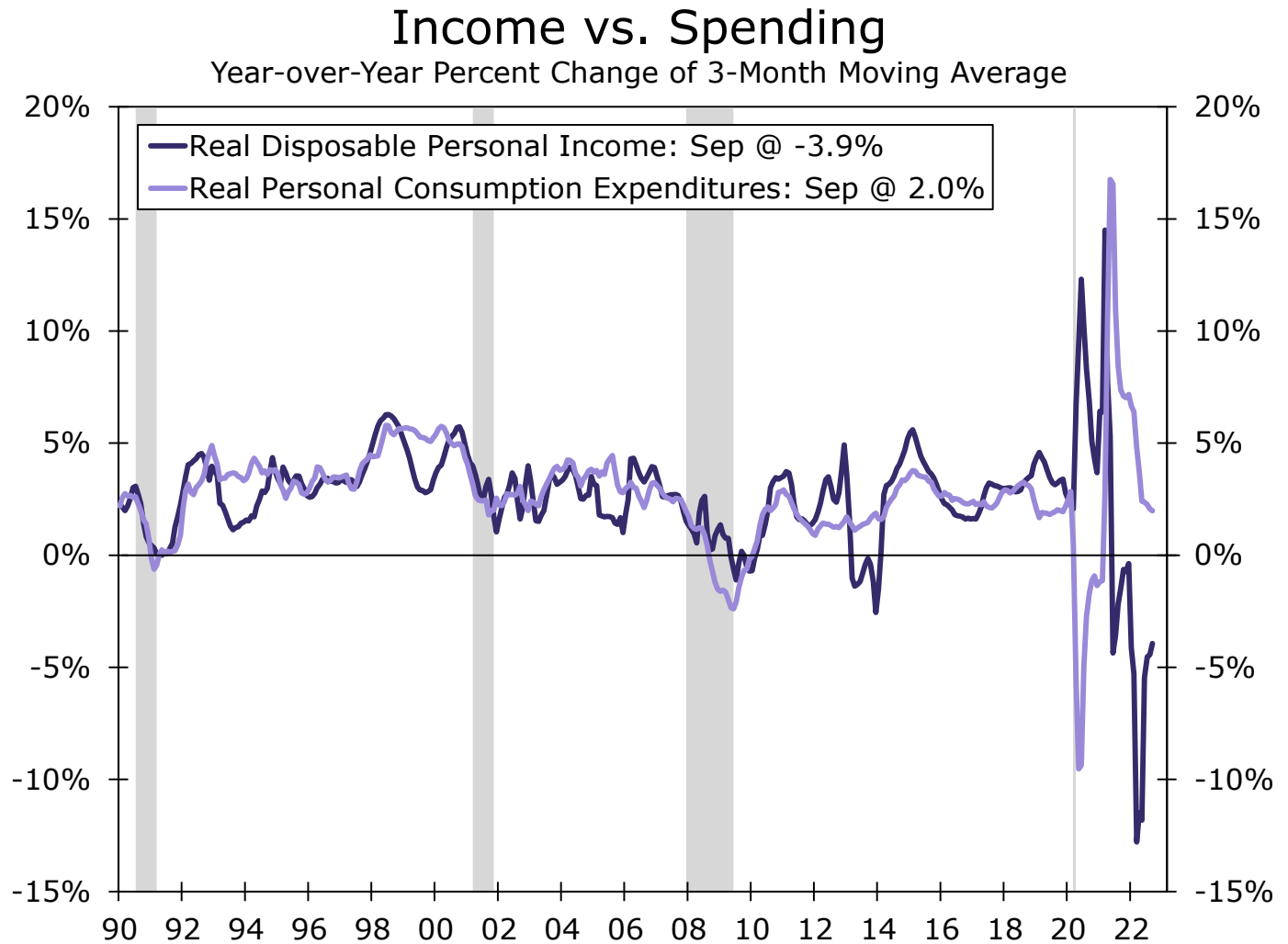


Consumer optimism has tumbled.



Household Income and Spending

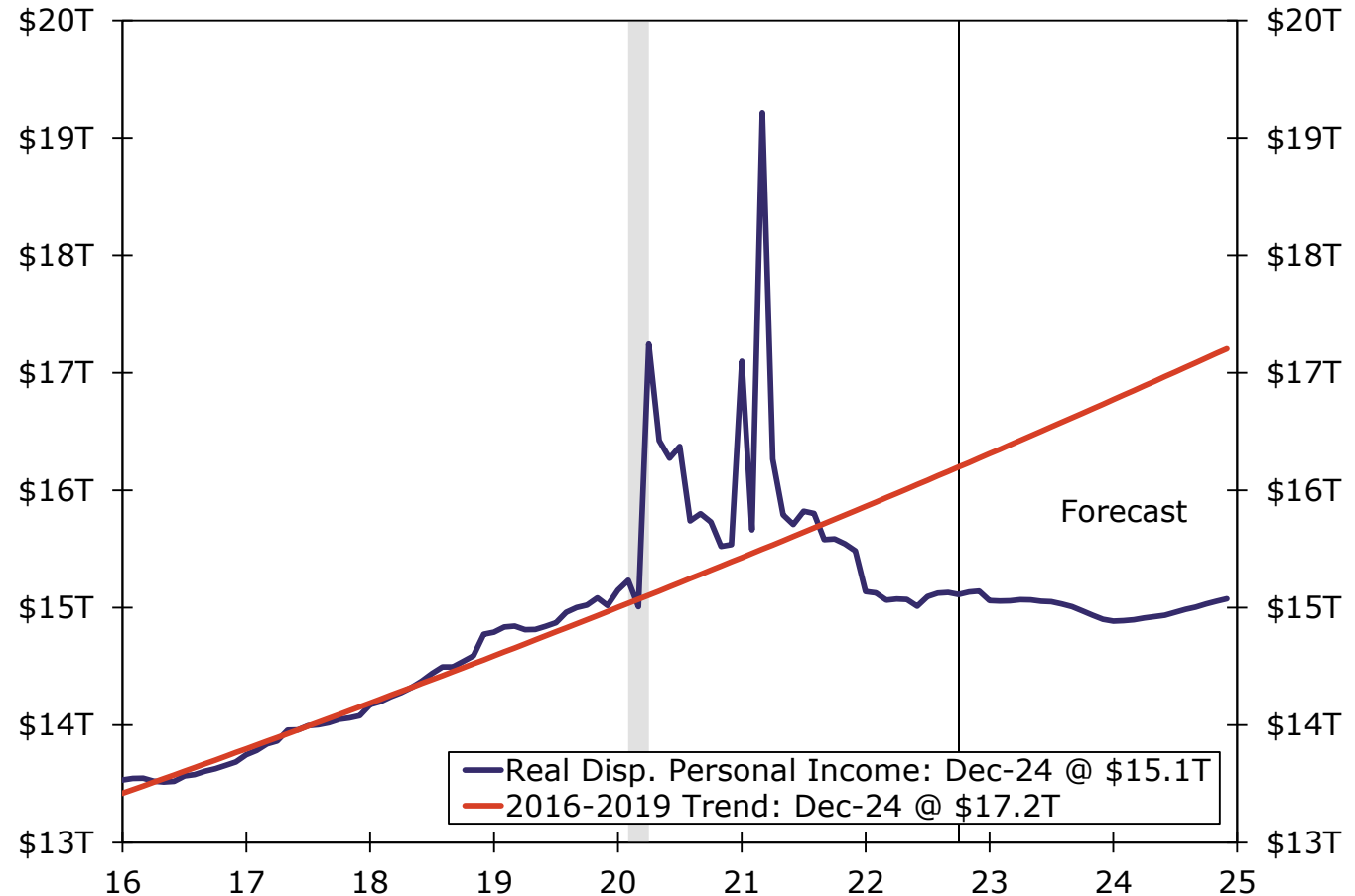
Income and spending have decoupled since the pandemic.



Weaker job growth and elevated inflation is pushing real income below its pre-COVID trend.

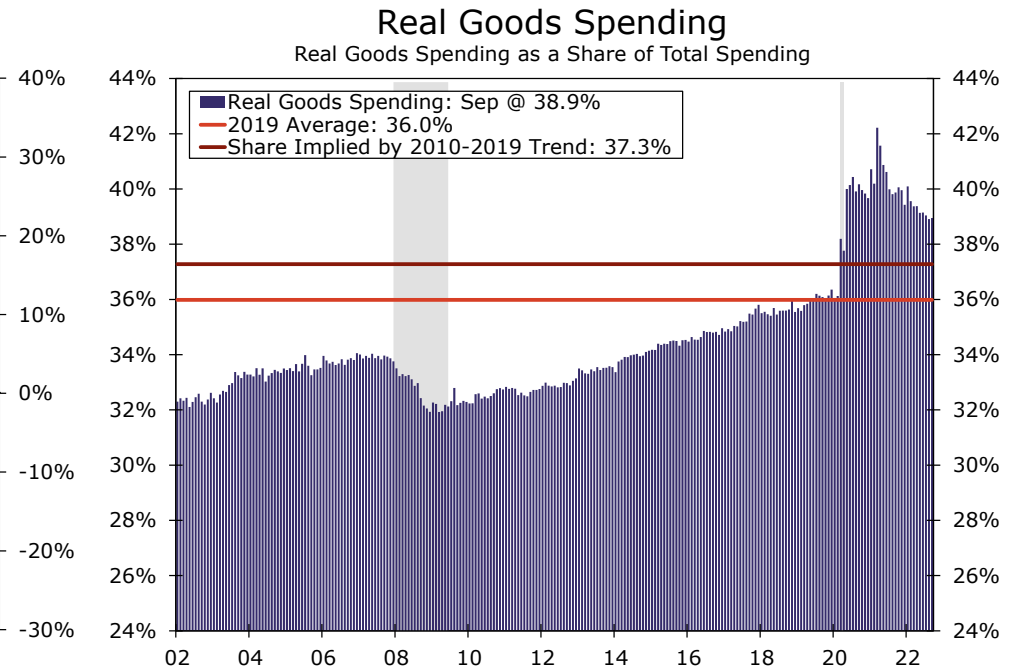
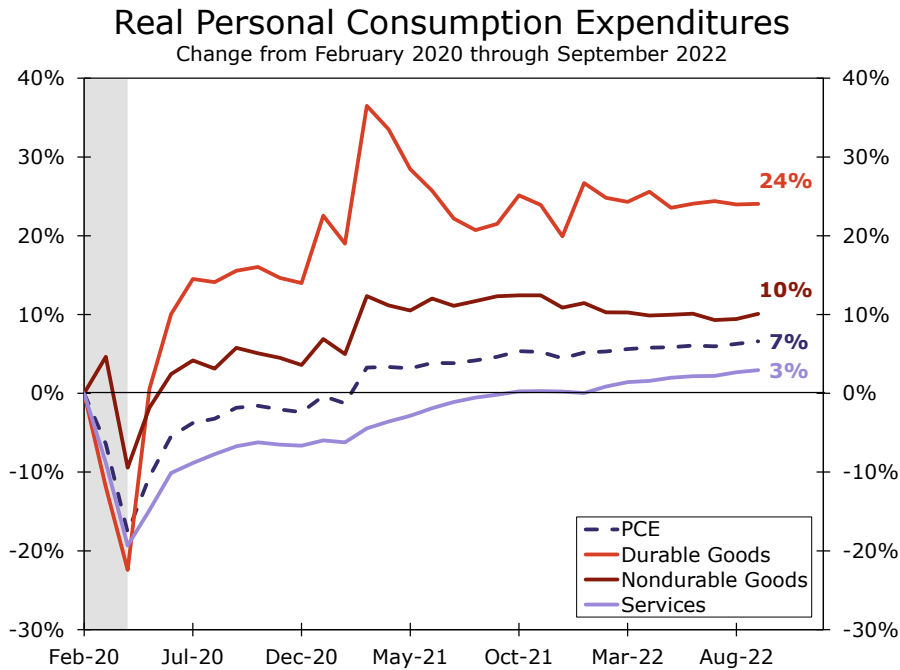
Real Disposable Personal Income

Trillions of 2012 Dollars



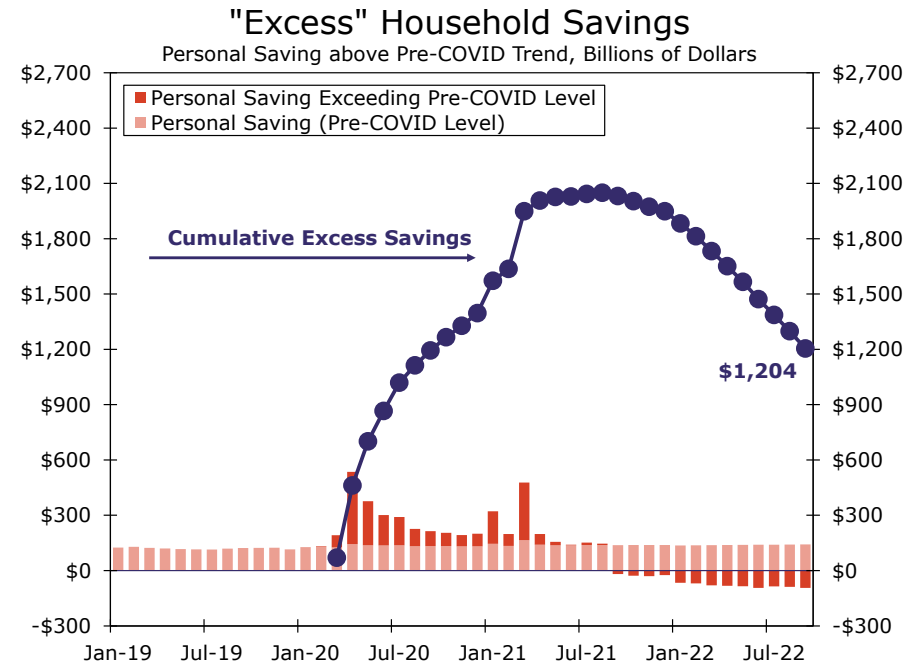
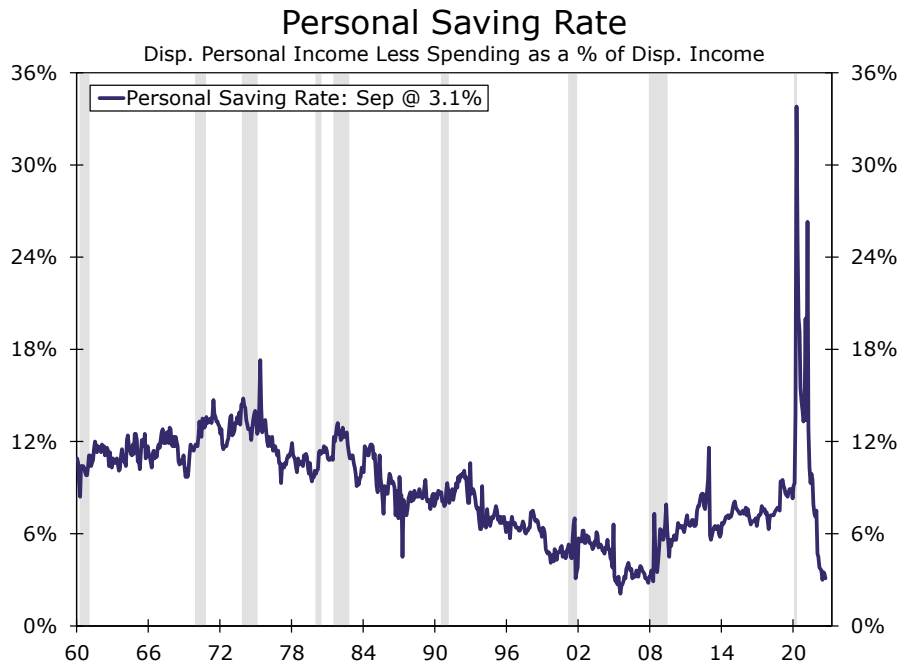
Household Spending

Consumer spending has remained resilient. While spending patterns remain transformed by the pandemic, the advance in real spending is being driven by services so far this year.



Household Staying Power

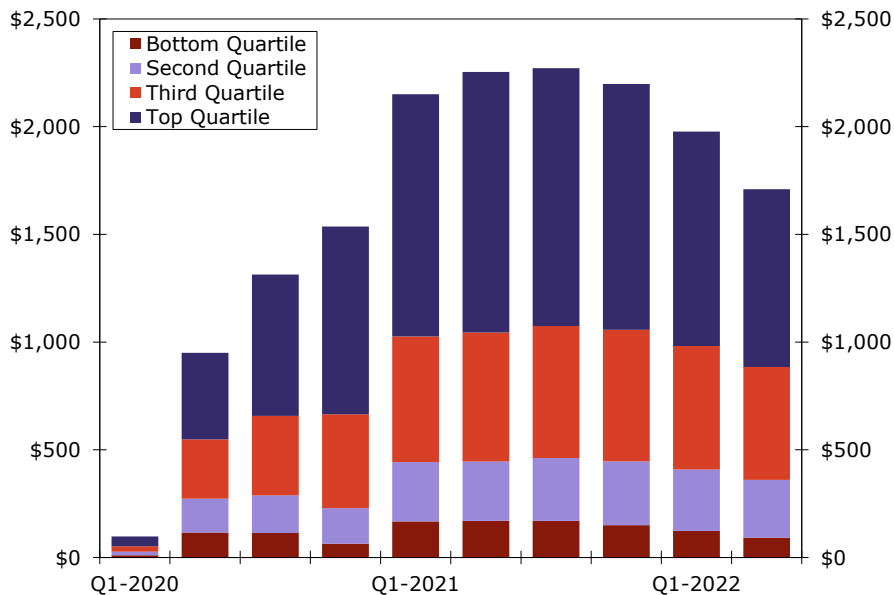
Consumers are leaning more on their balance sheets to spend. They're saving less and relying on excess savings accumulated over the pandemic.



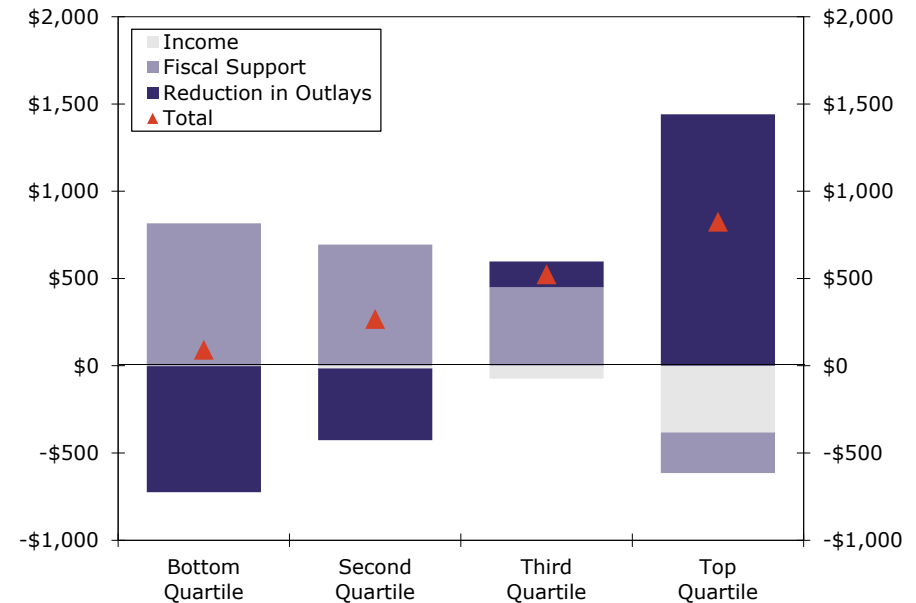
Excess Savings by Income

All income quartiles experienced an increase in excess savings, though most of the excess stock is concentrated in higher-income quartiles.

Stock of Excess Savings by Income Quartile
Billions of Dollars



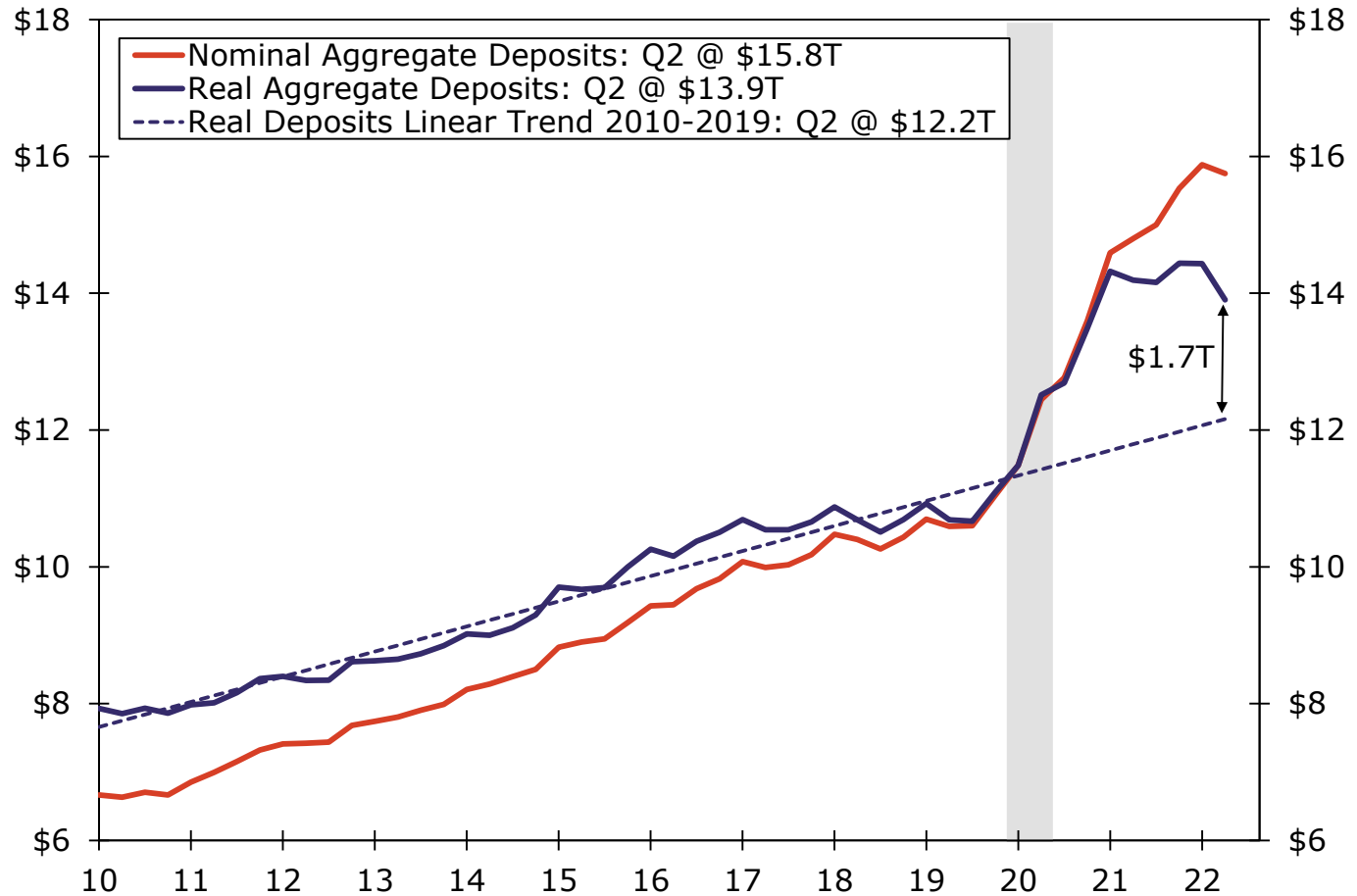
Contributions to Excess Savings by Income Quartile
Q2-2022, Billions of Dollars



Households still have ample cash reserves.

Household Checking and Savings Deposits

Trillions of USD & Trillions of Q1-2020 Chained-USD (CPI-deflated), NSA

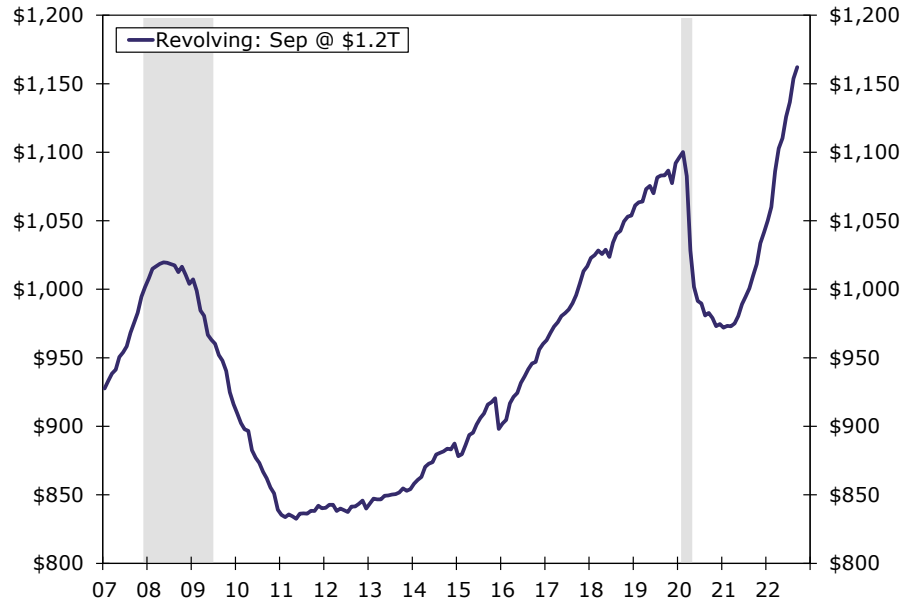


Household Staying Power

Consumers are also increasingly tapping sources of credit to consume. Household debt payments remain broadly manageable.

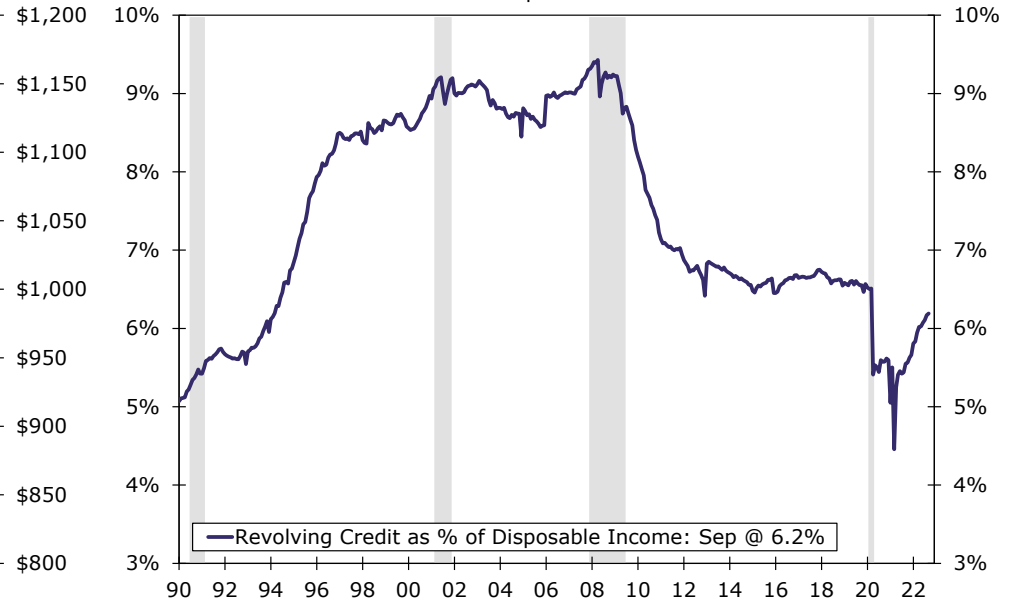
Revolving Consumer Credit

Billions of USD

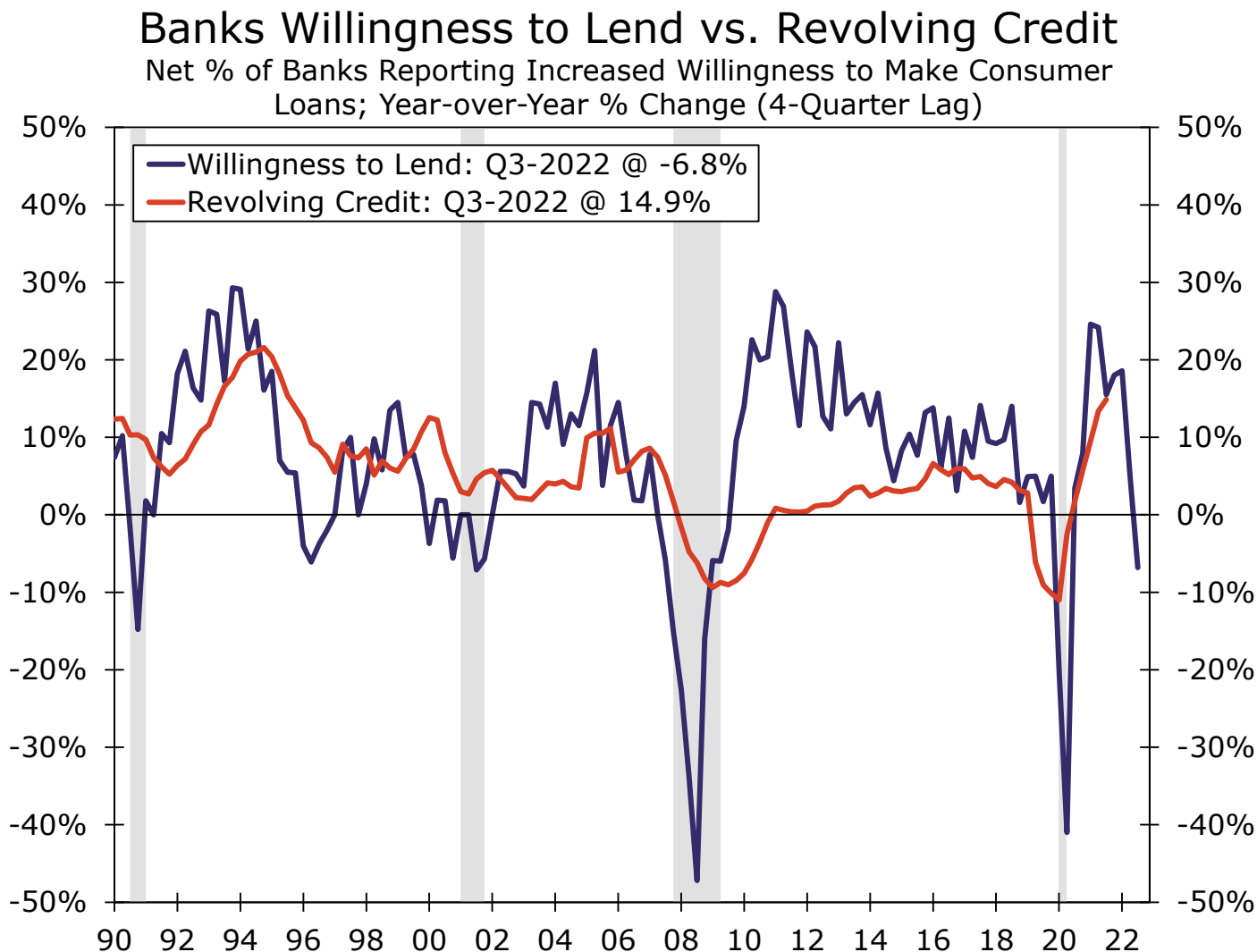


Revolving Consumer Credit

As a Percent of Disposable Personal Income

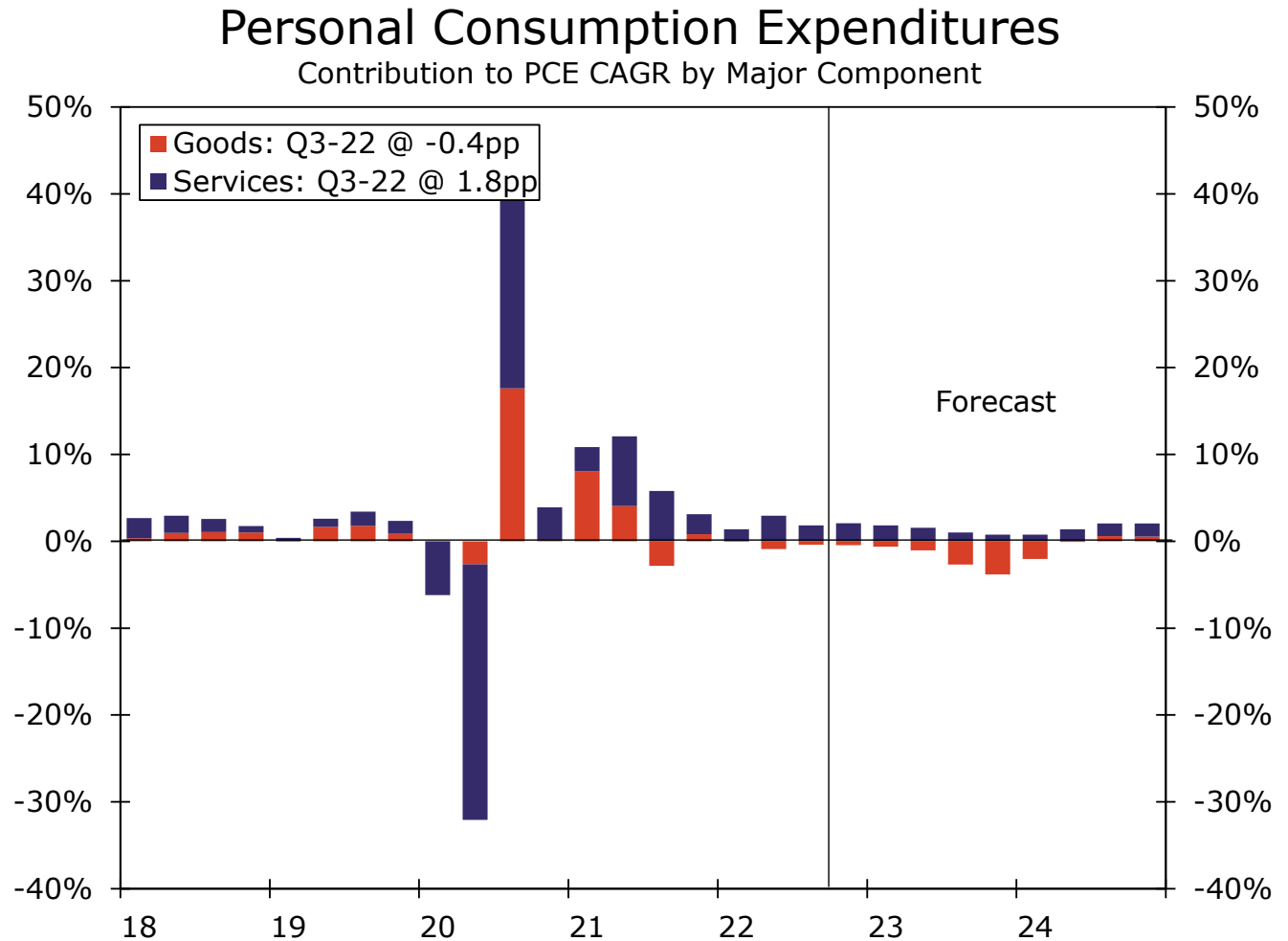


Banks' willingness to make loans to consumers is slipping, which spells trouble for revolving credit.



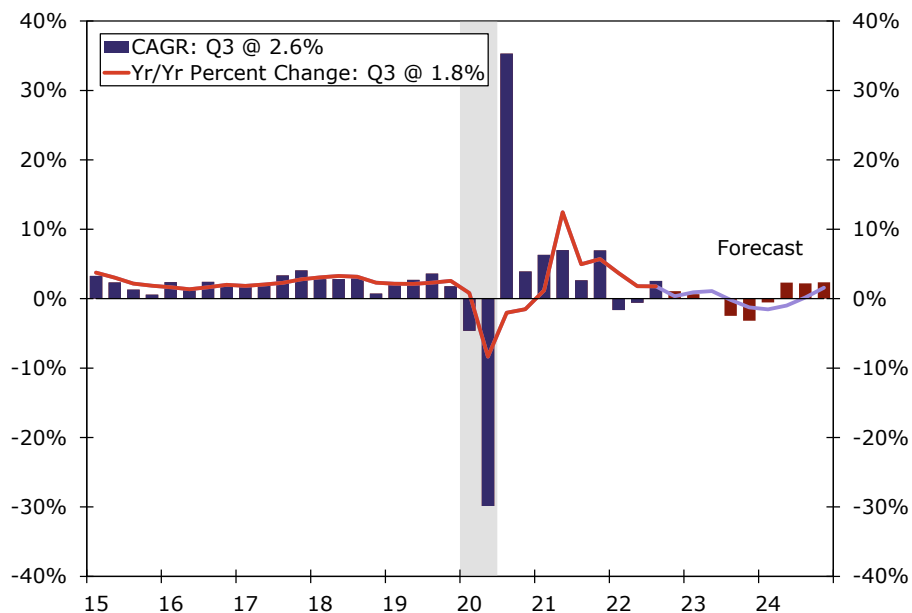
Household Spending Forecast

As rates move higher, inflation persists and businesses begin to shed workers, we expect households to pull back on spending.



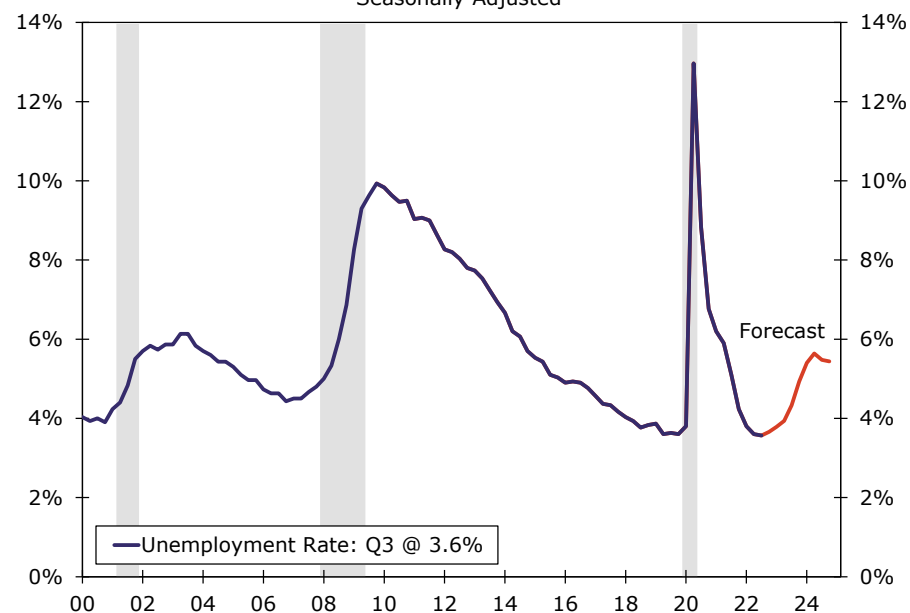
We expect the economy to slip into a mild recession next year. The pullback in demand will cause businesses to shed workers, but the recent short supply of labor will likely prevent a massive round of layoffs.

U.S. Real GDP Growth



Unemployment Rate

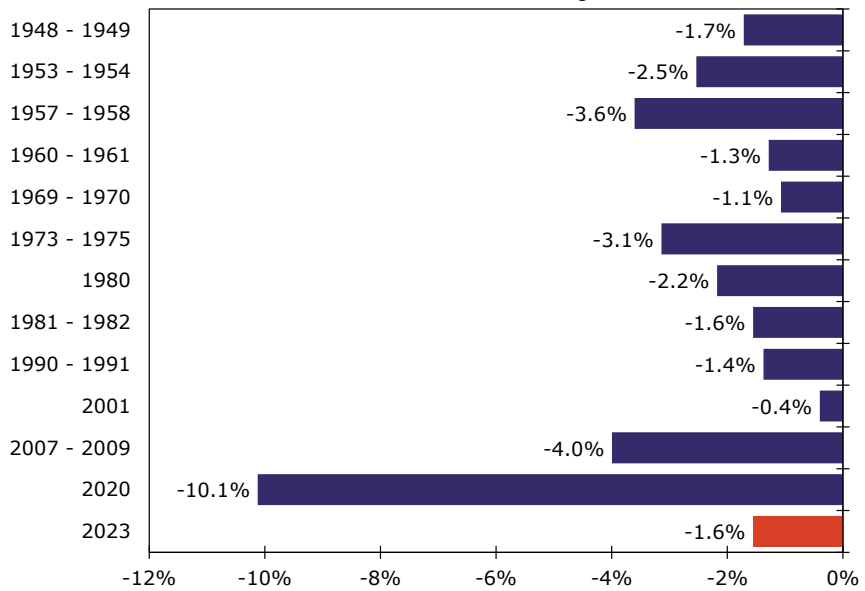
Seasonally Adjusted



While we expect the Fed's efforts to tame inflation to tip the economy into a recession, we do not expect the downturn to be as severe the recessions in most recent memory.

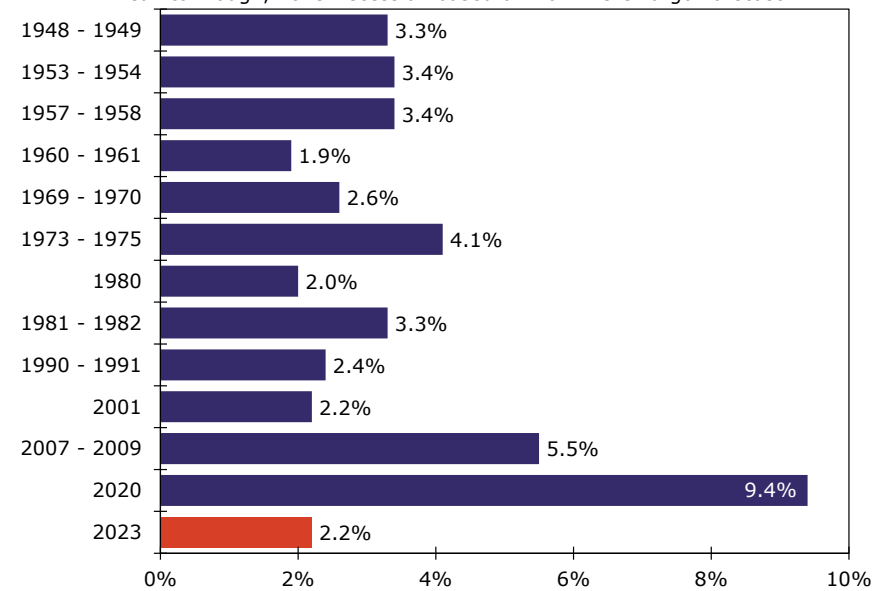
Recession GDP Peak to Trough

2023 Recession based on Nov. Wells Fargo Forecast

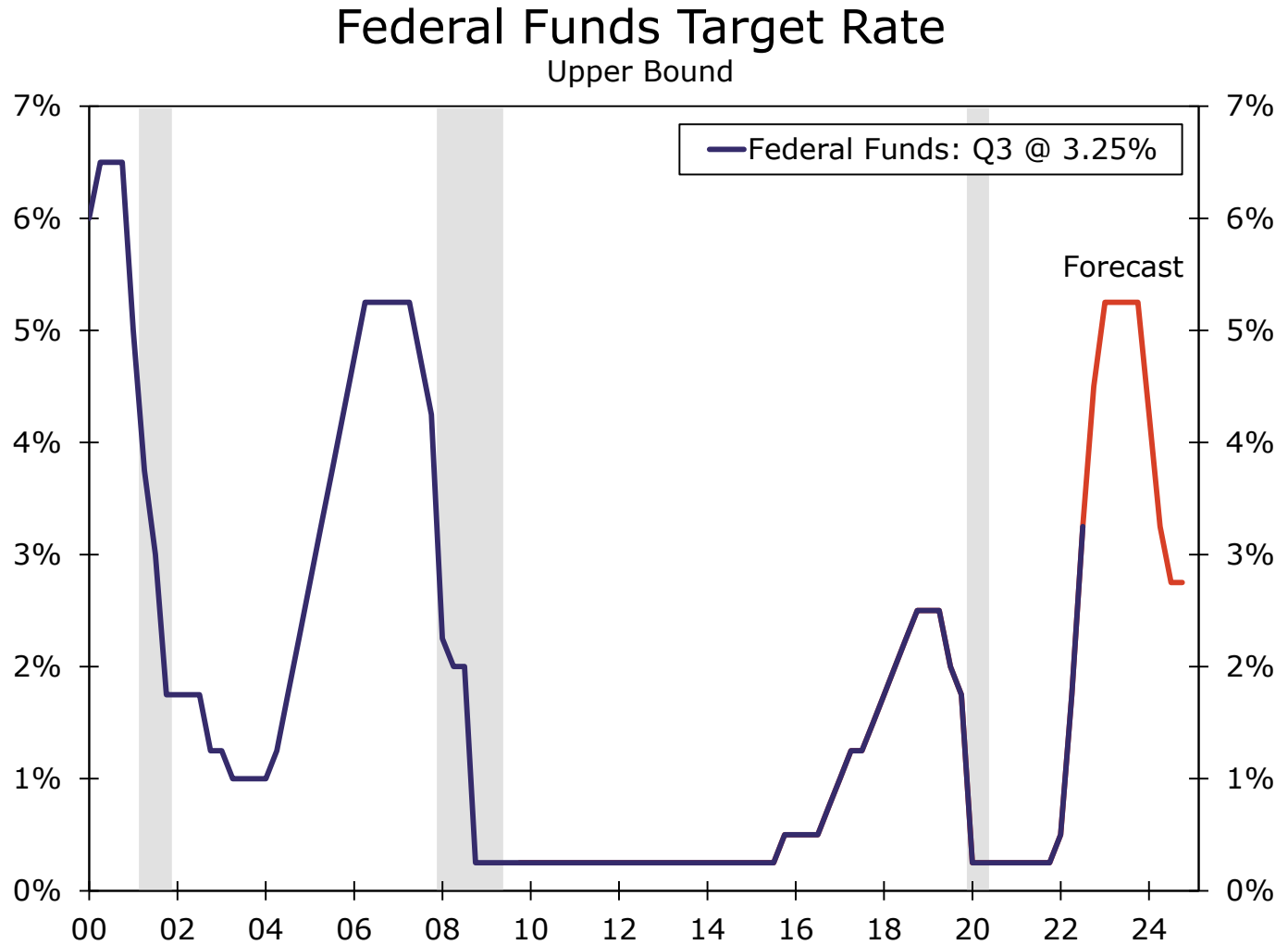


Recession Unemployment Rate Change

Peak to Trough, 2023 Recession based on Nov. Wells Fargo Forecast



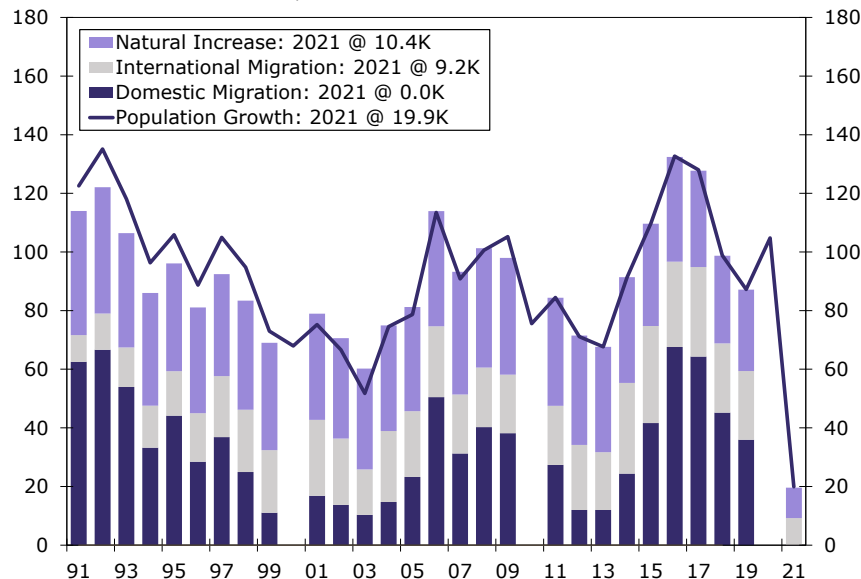
After taking policy restrictive, we expect subsequent cuts due to slowing growth beginning at the start of 2024.



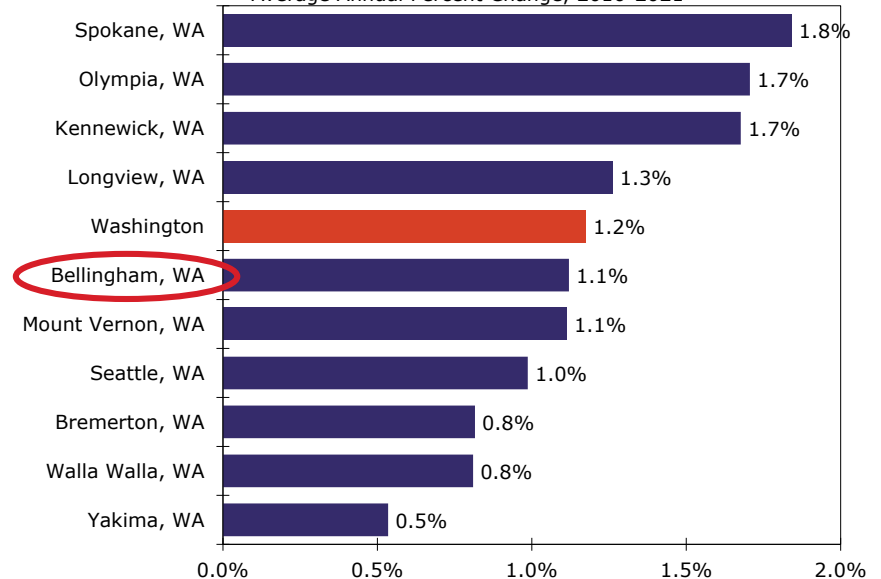
Regional Commentary

Population growth slowed to a crawl during the pandemic but conditions were favorable previously and likely recovered somewhat this year.

Components of Population Change: Washington
In Thousands; Series Breaks in Decennial Census Years



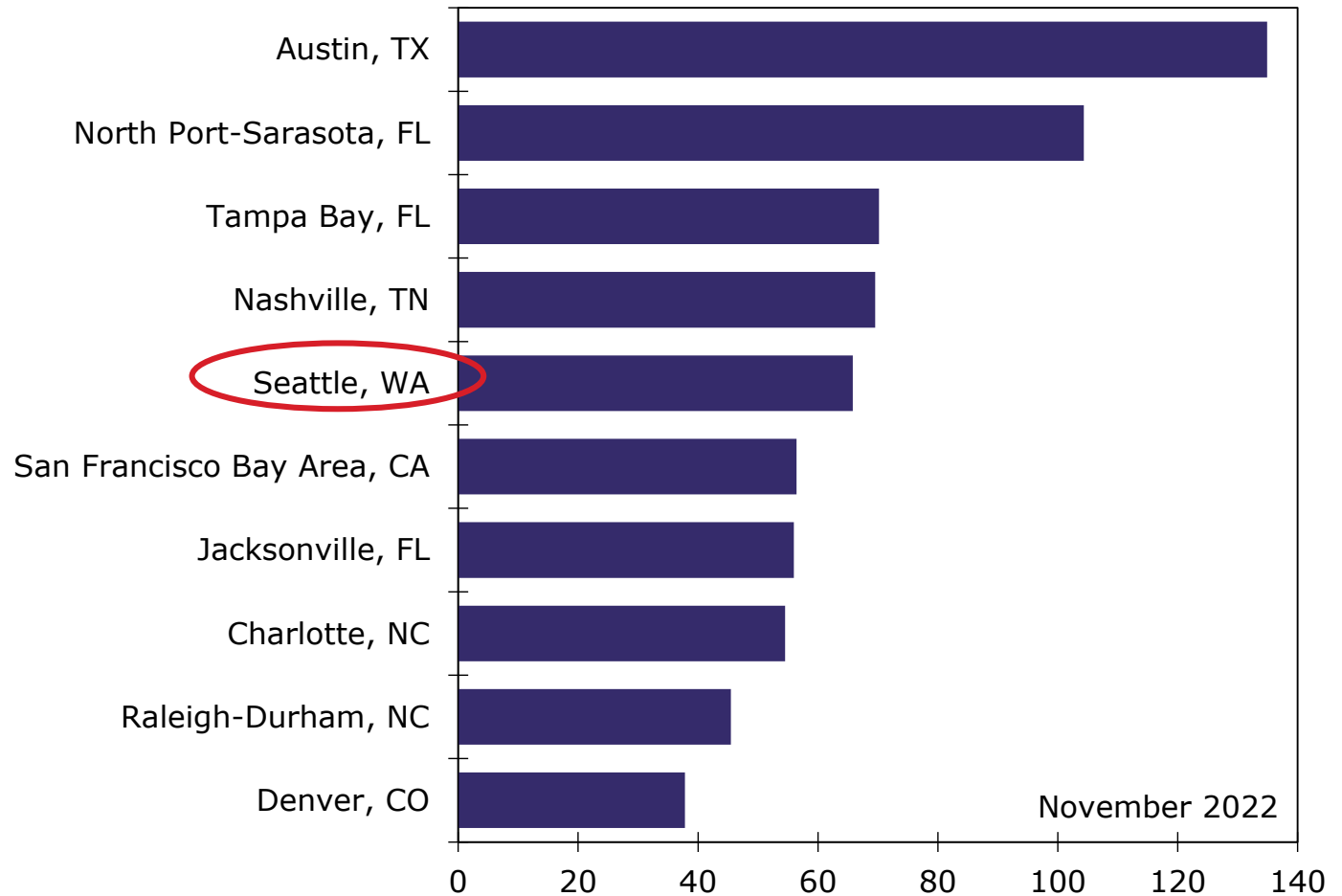
Washington Population Growth
Average Annual Percent Change, 2016-2021



There is a growing body of evidence of an affordability migration to traditionally smaller, secondary markets across the South and in parts of the West.

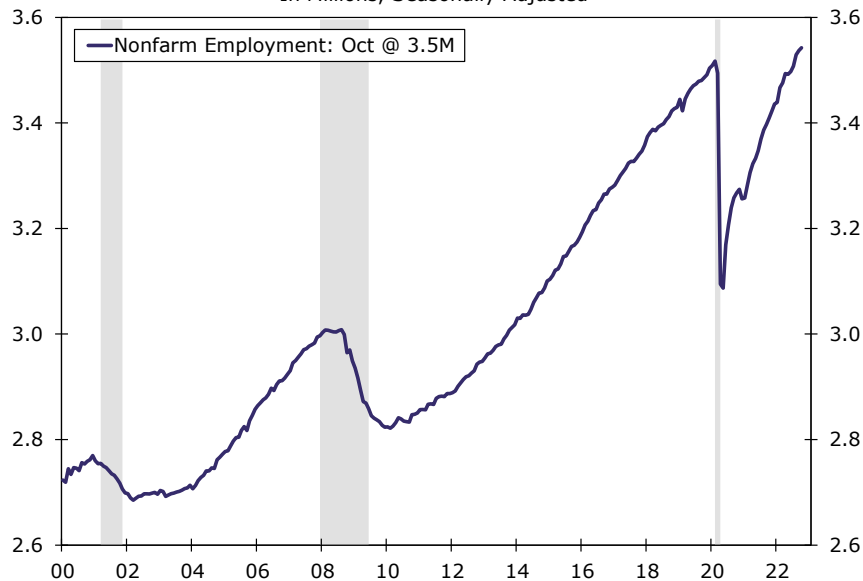
Cities that Gained the Most Workers

LinkedIn Population Gain per 10,000 Members, Over Past 12 Months

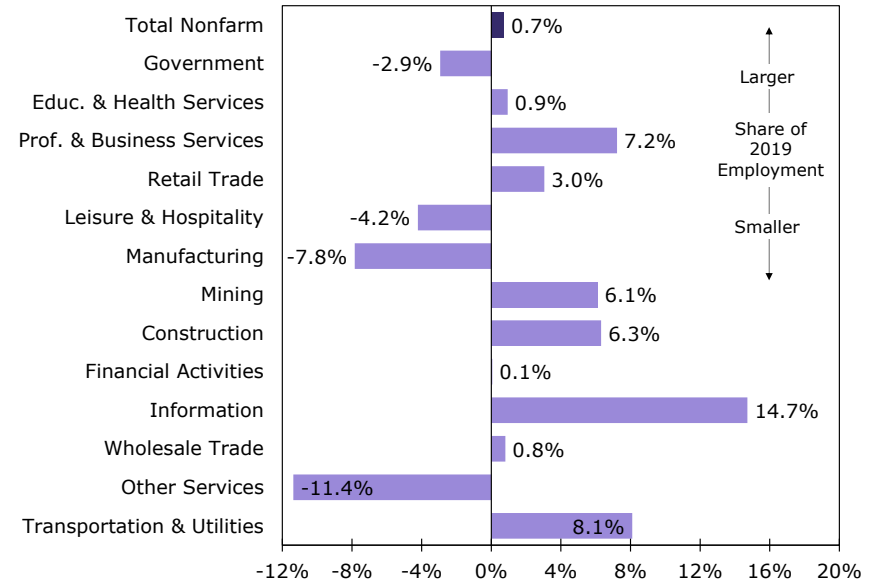


Employment is now 0.7% above its pre-pandemic level in Washington, with the profile of pre-pandemic jobs still missing similar to that seen across the nation.

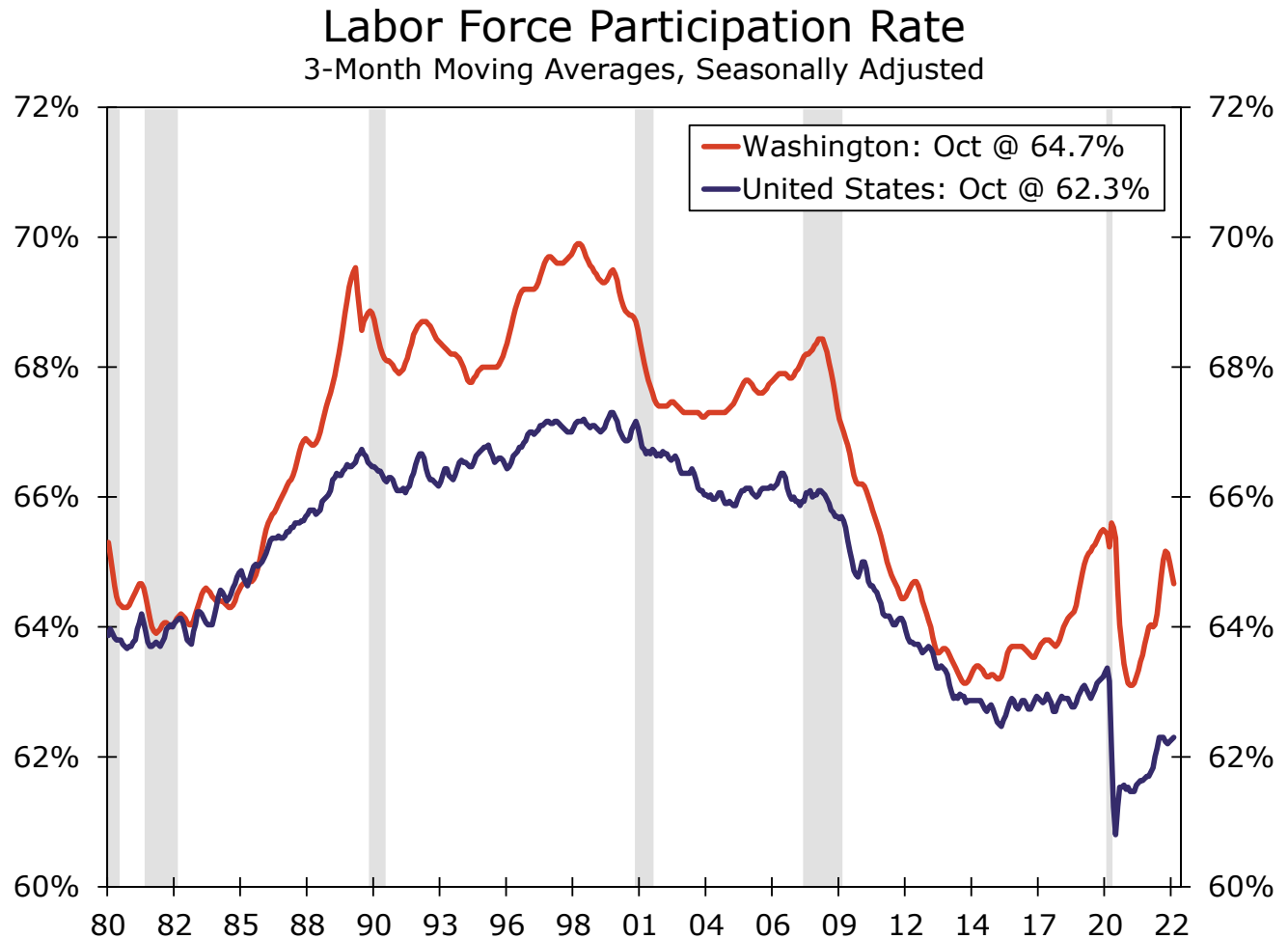
Washington Nonfarm Employment
In Millions, Seasonally Adjusted



Employment below Pre-Pandemic Levels
Percent Change from February 2020 to October 2022



Labor force participation has recovered but remains below pre-pandemic levels.

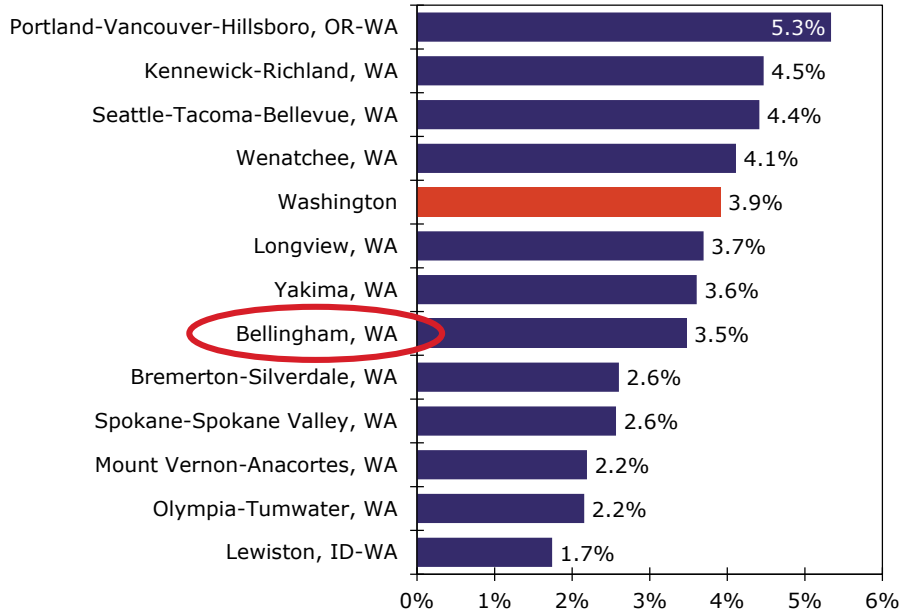


Bellingham, WA Employment

Bellingham has seen job growth slightly below the statewide average in Washington over the past year, and total employment in the metro still remains below pre-pandemic levels.

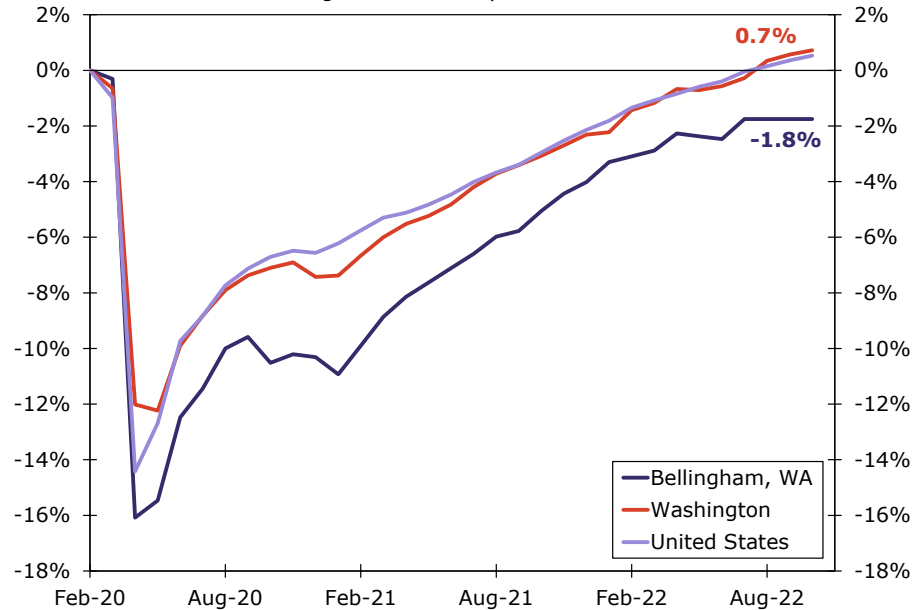
WA Employment Growth by Metro Area

Year-over-Year Percent Change, October 2022

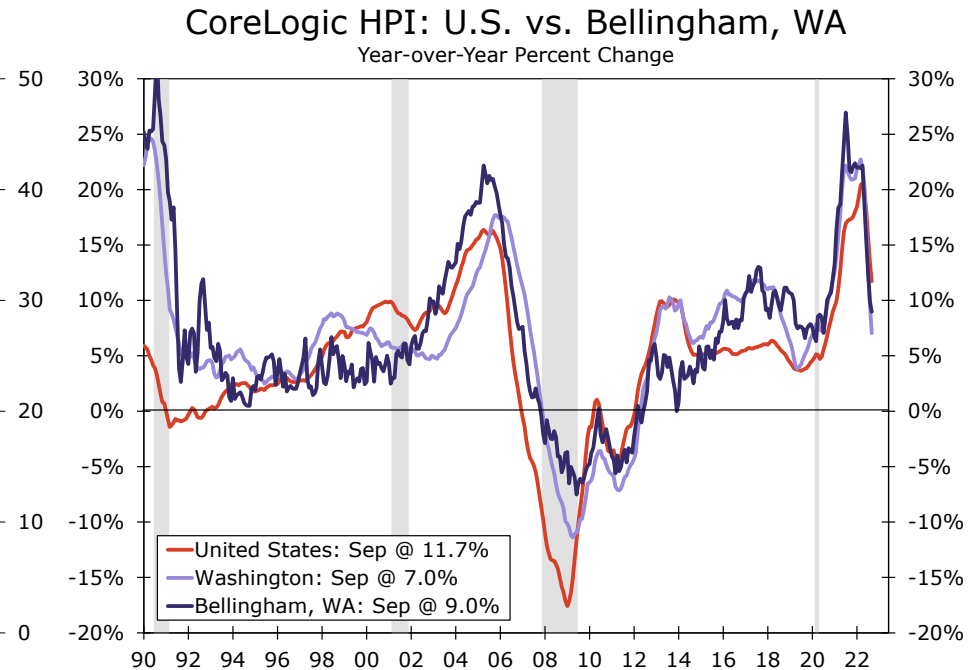
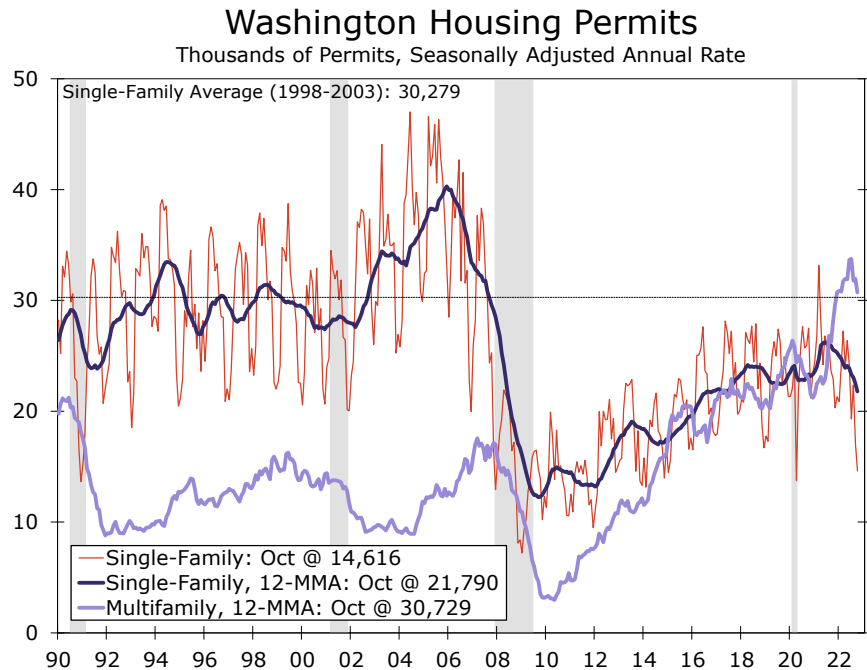


Bellingham, WA Employment

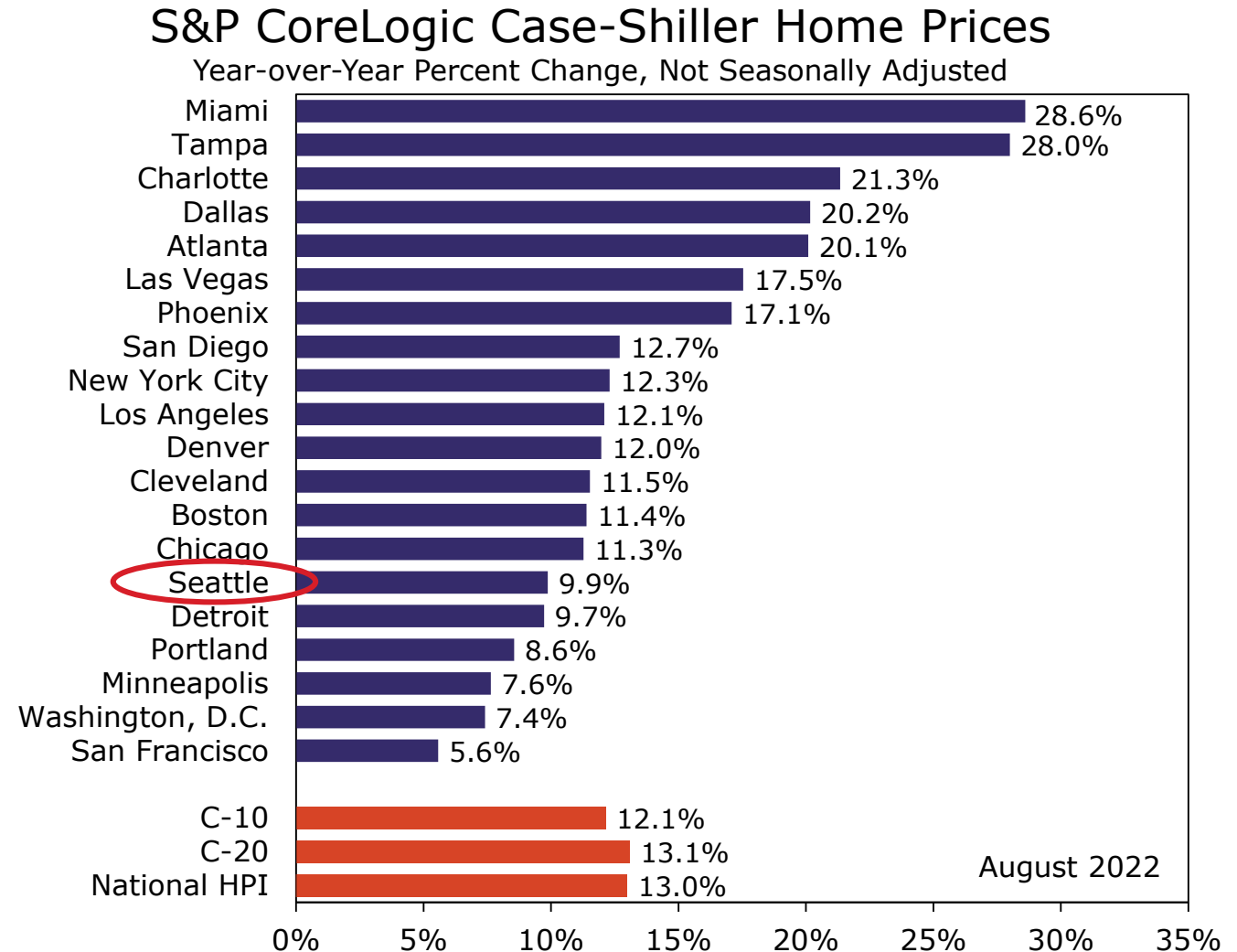
Percent Change from February 2020 to October 2022



Multifamily permits appear to be meaningfully outpacing single-family permits in Washington. Home prices have rolled over in the region as they have in the broader U.S.



Markets where home prices shot the highest are now vulnerable to a disproportionate swing to the downside.



Wells Fargo U.S. Economic Forecast

	Actual				Forecast								Actual		Forecast	
	2022				2023				2024				2021	2022	2023	2024
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q				
Real Gross Domestic Product ¹	-1.6	-0.6	2.6	1.1	0.7	0.1	-2.5	-3.2	-0.5	2.3	2.2	2.4	5.9	1.9	0.1	-0.2
Personal Consumption	1.3	2.0	1.4	1.5	1.2	0.5	-1.7	-3.0	-1.3	1.3	2.0	2.0	8.3	2.7	0.6	-0.5
Business Fixed Investment	7.9	0.1	3.7	5.7	1.7	1.2	-2.7	-3.9	-1.6	1.5	3.3	4.4	6.4	3.7	1.6	-0.5
Equipment	11.4	-2.0	10.8	8.0	1.5	1.3	-3.9	-6.1	-2.6	1.7	3.5	4.3	10.3	5.0	2.3	-1.2
Intellectual Property Products	10.8	8.9	6.9	6.9	2.9	2.0	-1.8	-2.2	-0.4	2.2	3.7	5.5	9.7	8.9	3.4	0.6
Structures	-4.3	-12.7	-15.3	-4.5	-1.3	-1.5	-2.1	-2.4	-2.4	-1.9	1.2	1.5	-6.4	-9.1	-4.8	-1.5
Residential Investment	-3.1	-17.8	-26.4	-21.0	-20.5	-18.0	-15.5	-10.8	-5.4	3.5	5.4	8.2	10.7	-10.2	-19.7	-5.0
Government Purchases	-2.3	-1.6	2.4	0.1	1.0	1.1	1.1	1.2	1.2	1.3	1.4	1.4	0.6	-1.0	0.9	1.2
Net Exports ²	-3.1	1.2	2.8	-0.2	-0.2	-0.3	0.3	0.7	0.5	-0.3	-0.2	-0.3	-1.7	-0.7	0.4	0.2
Inventories ²	0.2	-1.9	-0.7	0.1	0.3	0.2	-1.0	-1.0	0.0	1.2	0.1	0.1	0.2	0.7	-0.3	0.0
Nonfarm Payroll Change ³	539	349	381	229	150	63	-50	-233	-258	-142	0	125	562	374	-18	-69
Unemployment Rate	3.8	3.6	3.6	3.7	3.8	3.9	4.3	4.9	5.4	5.6	5.5	5.4	5.4	3.7	4.2	5.5
Consumer Price Index ⁴	8.0	8.6	8.3	7.4	6.0	4.2	3.4	3.1	2.8	2.7	2.6	2.5	4.7	8.1	4.1	2.7
Real Disposable Income ⁴	-12.8	-5.5	-3.9	-2.6	-0.3	0.0	-0.6	-1.2	-0.9	-0.7	0.0	0.9	1.9	-6.4	-0.6	-0.2
Quarter-End Interest Rates ⁵																
Federal Funds Target Rate	0.50	1.75	3.25	4.50	5.25	5.25	5.25	5.25	4.25	3.25	2.75	2.75	0.25	2.50	5.25	3.25
Conventional Mortgage Rate	4.42	5.81	6.70	6.95	7.00	6.80	6.50	5.80	5.35	5.15	5.00	4.90	2.95	5.97	6.53	5.10
2 Year Note	2.28	2.92	4.22	4.65	4.80	4.70	4.30	3.40	2.95	2.80	2.75	2.75	0.27	3.52	4.30	2.81
10 Year Note	2.32	2.98	3.83	4.15	4.25	4.20	4.00	3.40	3.05	2.95	2.90	2.90	1.45	3.32	3.96	2.95

Forecast as of: November 10, 2022

¹ Compound Annual Growth Rate Quarter-over-Quarter

² Percentage Point Contribution to GDP

³ Average Monthly Change

⁴ Year-over-Year Percentage Change

⁵ Annual Numbers Represent Averages



Forecast as of: November 10, 2022

Latest U.S. Forecast available [here](#).

Source: U.S. Department of Commerce, U.S. Department of Labor, Federal Reserve System, Bloomberg Finance L.P. and Wells Fargo Economics

Wells Fargo Economics Group

Economists

Jay H. Bryson, Chief Economist	jay.bryson@wellsfargo.com
Sam Bullard, Senior Economist	sam.bullard@wellsfargo.com
Nick Bennenbroek, International Economist	nicholas.bennenbroek@wellsfargo.com
Tim Quinlan, Senior Economist	tim.quinlan@wellsfargo.com
Sarah House, Senior Economist	sarah.house@wellsfargo.com
Azhar Iqbal, Econometrician	azhar.iqbal@wellsfargo.com
Charlie Dougherty, Economist	charles.dougherty@wellsfargo.com
Michael Pugliese, Economist	michael.d.pugliese@wellsfargo.com
Brendan McKenna, International Economist	brendan.mckenna@wellsfargo.com
Jackie Benson, Economist	jackie.benson@wellsfargo.com
Shannon Seery, Economist	shannon.seery@wellsfargo.com

Analysts

Nicole Cervi, Economic Analyst	nicole.cervi@wellsfargo.com
Jessica Guo, Economic Analyst	jessica.guo@wellsfargo.com
Karl Vesely, Economic Analyst	karl.vesely@wellsfargo.com
Patrick Barley, Economic Analyst	patrick.barley@wellsfargo.com
Jeremiah Kohl, Economic Analyst	jeremiah.j.kohl@wellsfargo.com

Assistants

Coren Burton, Administrative Assistant	coren.burton@wellsfargo.com
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