

Mutual Savings Association Advisory Committee Economic Update

October 3, 2023



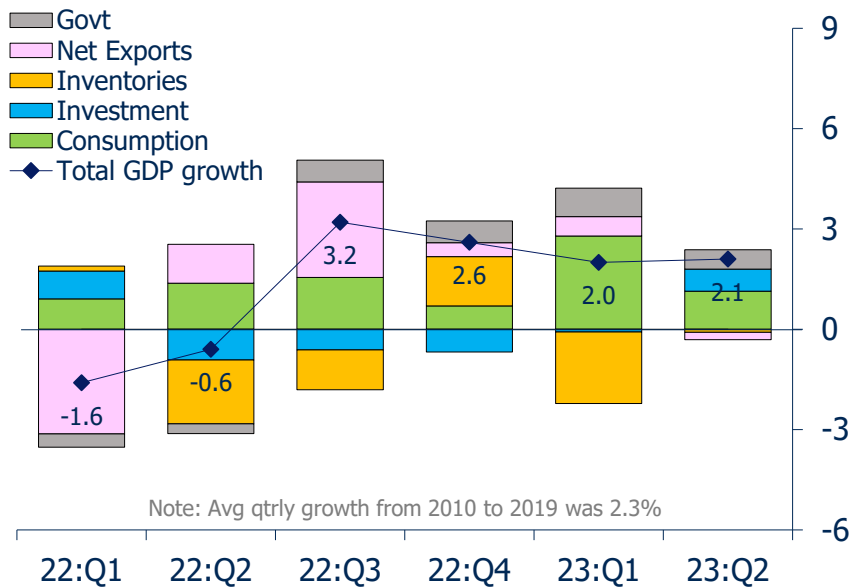
Takeaways

- **Economic growth continues despite inflation and higher interest rates**
 - After multiple rate hikes, the labor market is cooling but remains too tight to achieve Fed's inflation target
 - Higher rates for longer may be necessary to rein in inflation
- **After a brief decline in the fall of 2022, home prices are growing again**
 - Economists forecast national home prices to soften modestly over the next 18 months, but severe national price declines are not expected with supply constrained

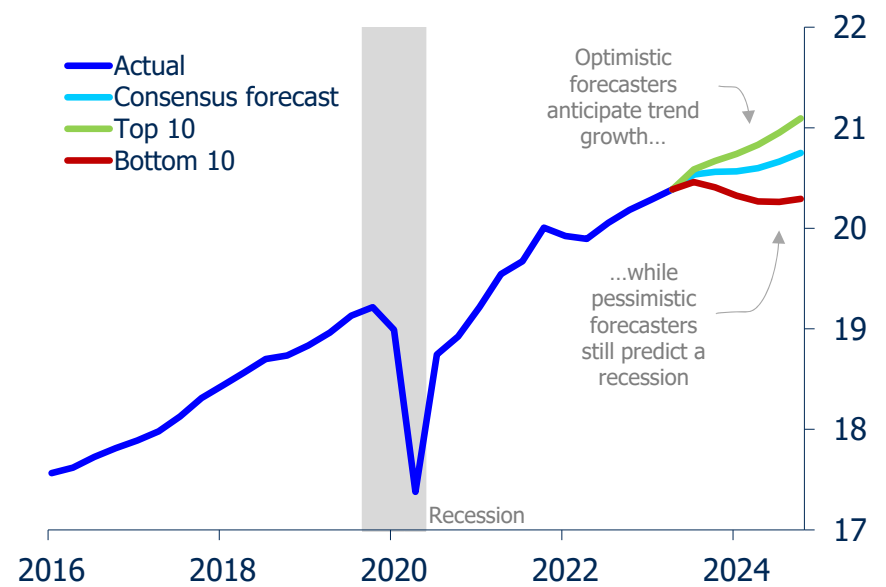


Economy continues growing near its post-Great Financial Crisis trend due to strong U.S. consumer spending

Contribution to real GDP growth rate, by component, %



Real GDP, SAAR, in trillions of 2012 \$'s

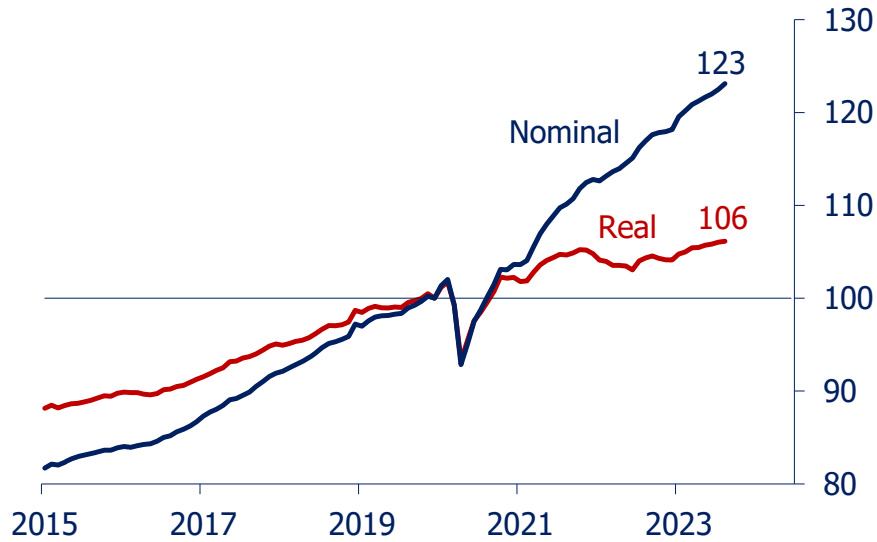


Source: BEA (2Q:2023 "second" estimate); Blue Chip Economic Indicators (September 2023).

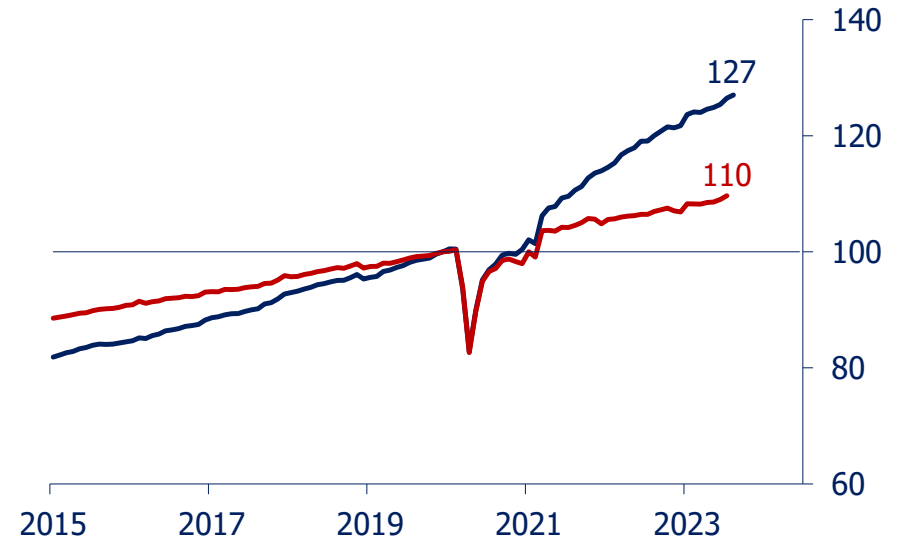


Aggregate real personal incomes and consumption continues to grow

Personal income excluding government transfers, Dec. 2019 = 100



Personal consumption expenditures, Dec. 2019 = 100

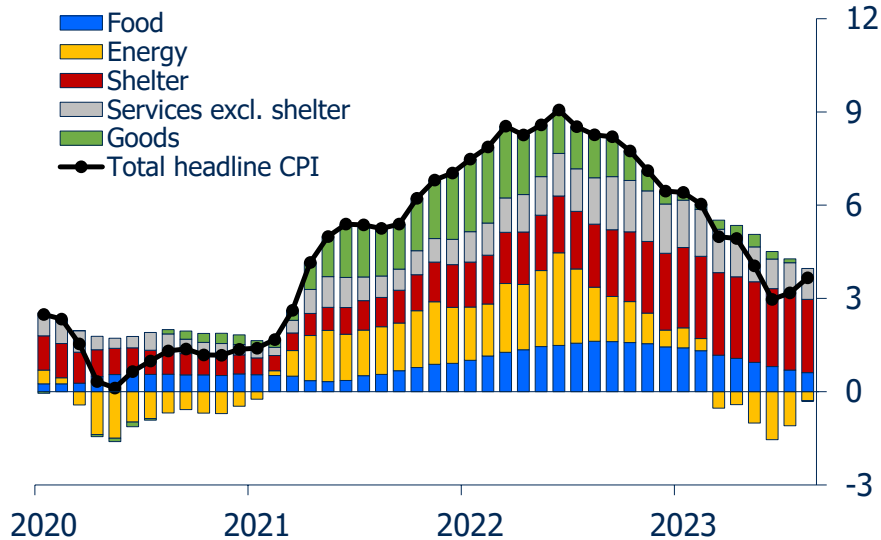


Source: Bureau of Economic Analysis (data through August 2023).

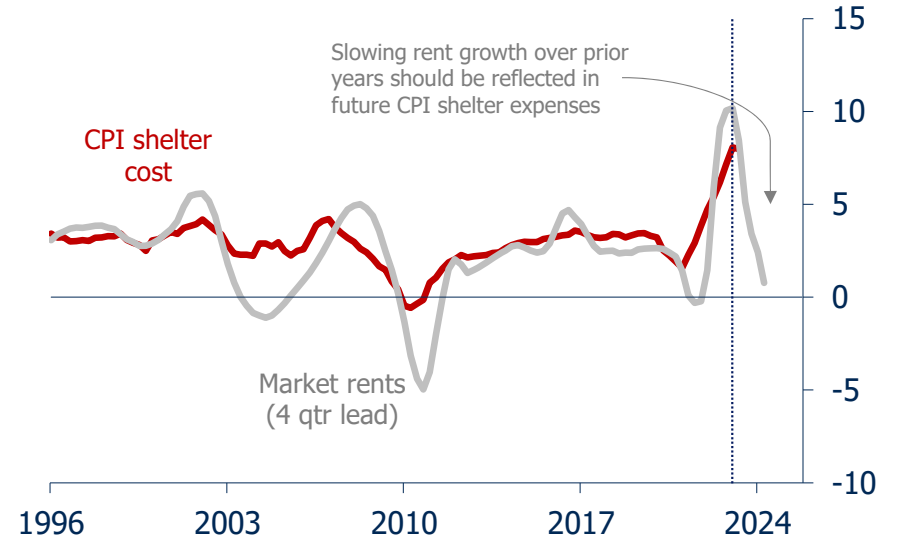


Housing costs are a key element for decreased rates of inflation

Contribution to YoY Consumer Price Index by item, %



YoY Consumer Price Index shelter cost and market rents, %

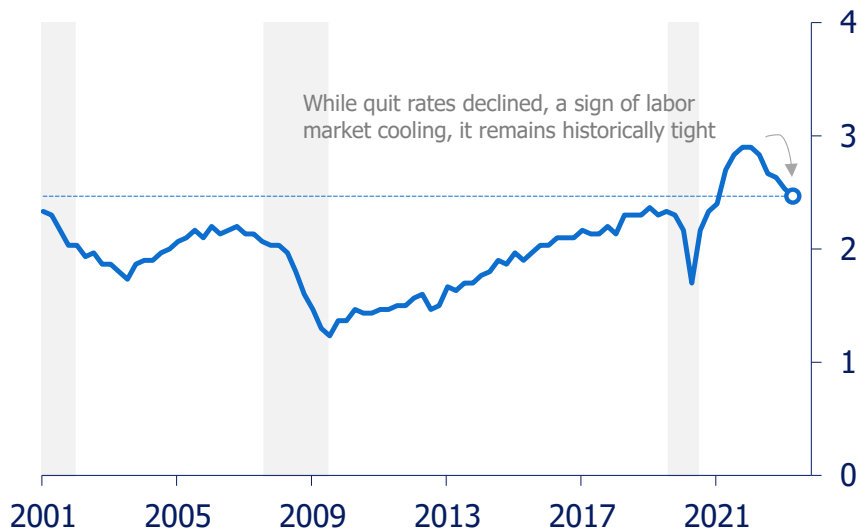


Sources: BLS (data through August 2023); CoStar (data through June 2023 for market rents of 54 major metros).



While the labor market is cooling, it remains historically tight, causing strong wage growth

Quarterly quits rate as a share of private employment, %



FRB Atlanta median wage growth, YoY pct chg, 3mo MA, SA, %



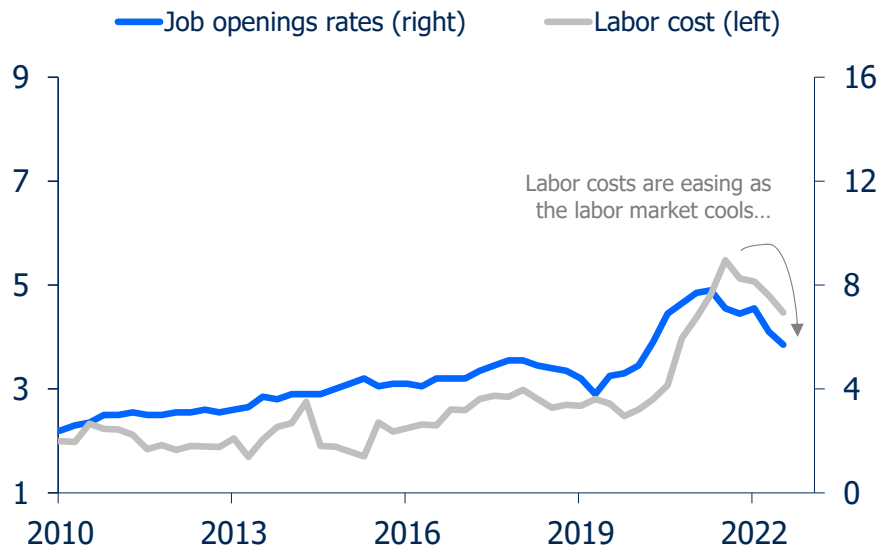
Note: The Atlanta Fed's Wage Growth Tracker is a measure of the nominal wage growth of individuals. It is constructed using microdata from the Current Population Survey (CPS) and is the median percent change in the hourly wage of individuals observed 12 months apart. Total FRB Atlanta wage data is weighted to be representative of each month's population of wage and salary earners in terms of sex, and broad age, education, industry, and occupation groups.

Source: BLS (June 2023); FRB Atlanta (Aug 2023)

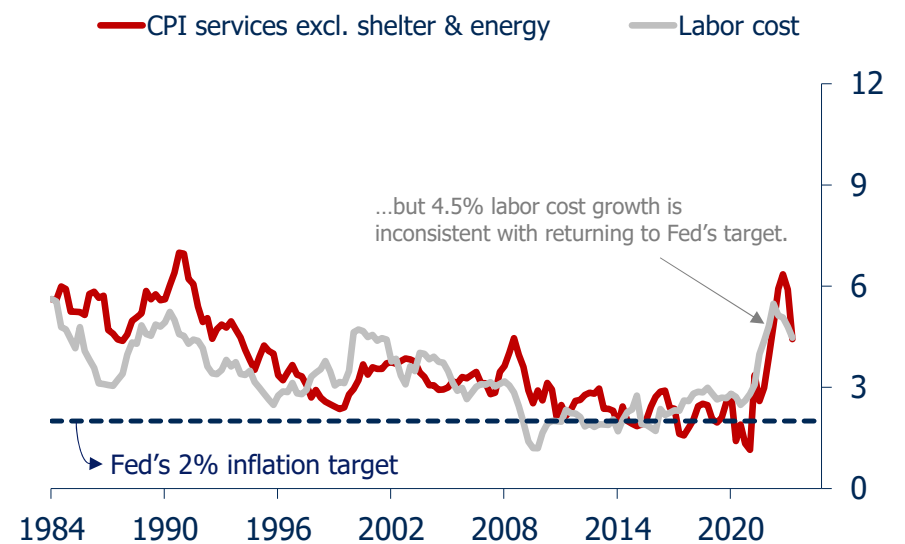


Today's labor cost growth is inconsistent with the Fed's 2% inflation target

Job openings rate and YoY percent chg in the cost of labor, %



Qtrly labor costs and CPI services excluding shelter & energy, YoY percent chg, %



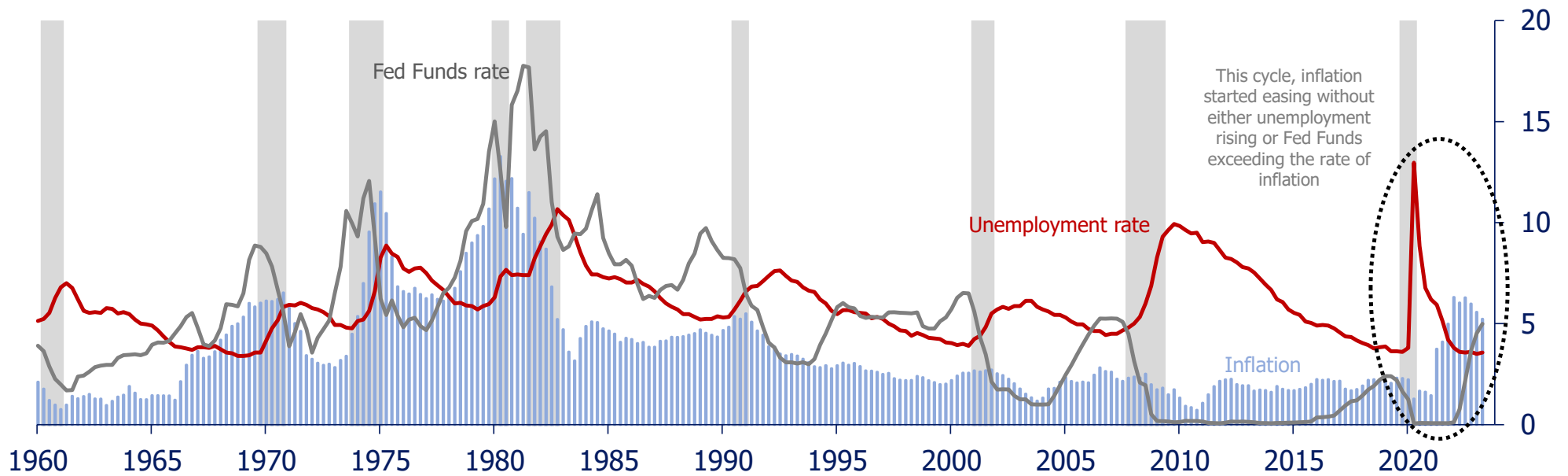
Note: Labor cost is measured by the Employment Cost Index (ECI), which measures the change in the cost of labor, independent of the influence of employment shifts among occupations and industry categories

Sources: BLS (data through 2Q:2023).



Fed rate increases are designed to lower inflation by softening the economy and cooling the labor market

Quarterly average inflation, Fed Funds and unemployment rate, %



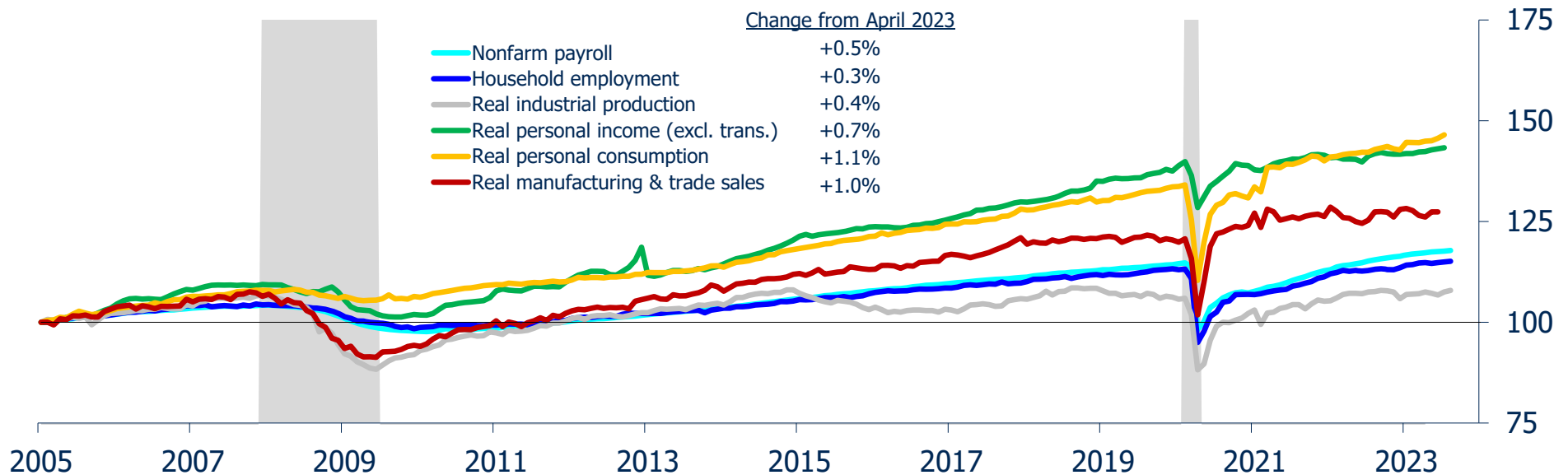
Source: Federal Reserve Board (data through 2Q:2023); BLS (2Q:2023).

Note: Inflation is core CPI.



Fed rate rise of 525 bps has not yet affected the six monthly indicators of a U.S. recession

Monthly indicators used to determine recessions, Jan 2005 = 100



Note: The National Bureau of Economic Research, or NBER, is a private, non-profit, non-partisan organization dedicated to conducting economic research and designated as the official U.S. recession arbiter. According to NBER, a recession is a significant decline in economic activity that is spread across the economy and lasts more than a few months. The six-monthly indicators generally used by the NBER are presented above.

Source: Federal Reserve Board (Aug 2023); BEA (July 2023); BLS (Aug 2023).

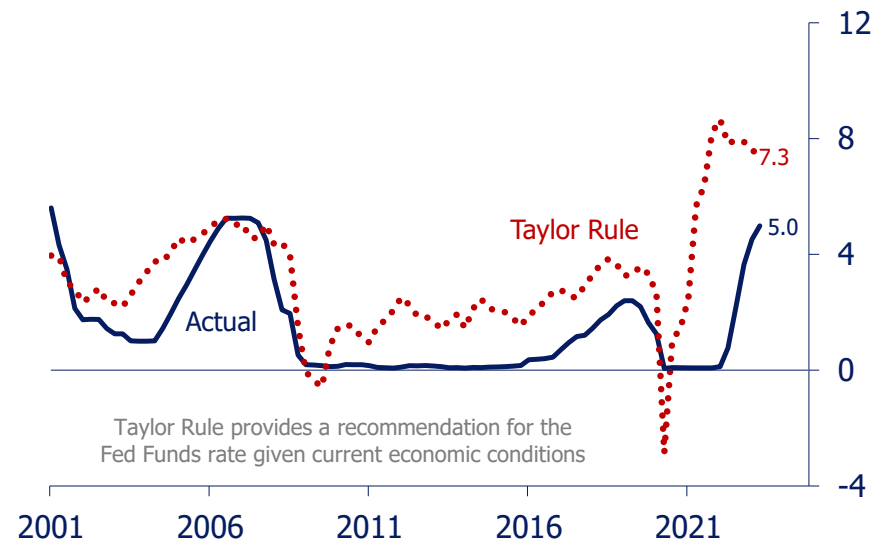


Rates affect economy after “long and variable lags”; yet popular policy rule suggests more hikes may be needed

Fed rate hiking cycles and recessions

Start of hiking cycle	Start of recession	Months till recession	Peak rise in Fed Funds, %
Dec 1968	Dec 1969	13	5.8
Feb 1972	Nov 1973	23	8.1
Dec 1977	Jan 1980	26	8.3
Jul 1980	Jul 1981	13	12.1
Feb 1988	Jul 1990	30	3.8
Jan 1994	No recession	-	3.5
May 1999	Mar 2001	23	2.3
May 2004	Dec 2007	44	4.4
Nov 2015	Feb 2020	52	2.4
Mar 2022	?	20	5.3

Actual quarterly average federal funds rate and policy rate recommendations, %

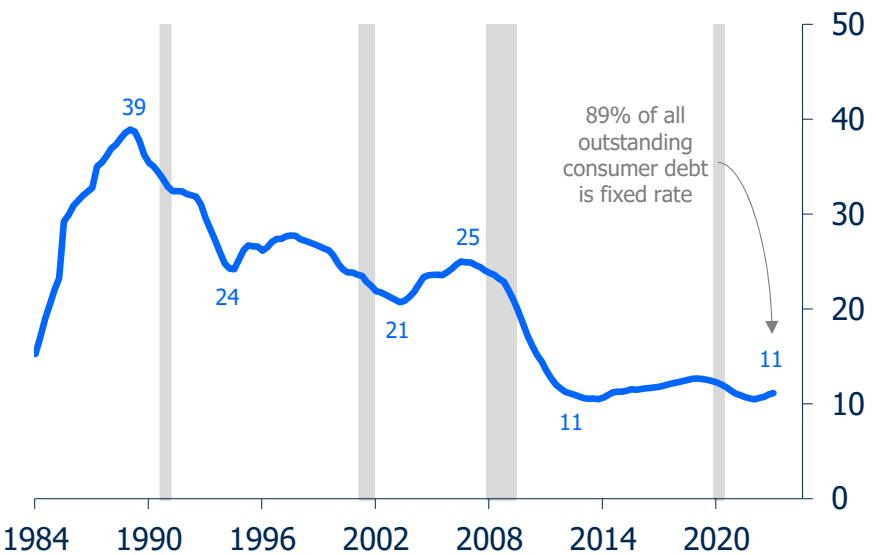


Note: Equal weight Median Taylor Rule using $r^* = 2$ with Core PCE inflation.

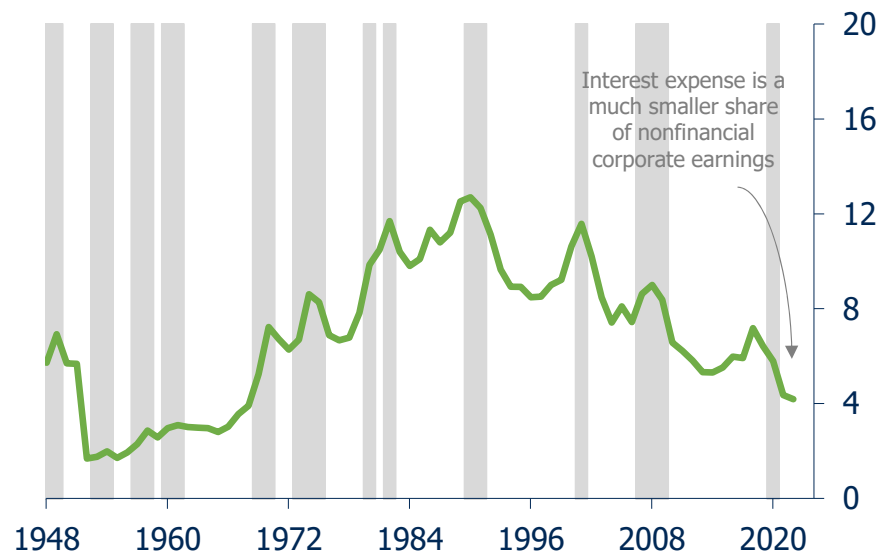


The economy may be less sensitive to rising rates this cycle, necessitating increased rates for longer periods

Share of household debt that adjusts with market interest rates, %



Nonfinancial corporate business interest expense as a share of earnings before interest & tax, %



Source: Moody's Analytics (data through March 2023); Federal Reserve Board (4Q:2022).



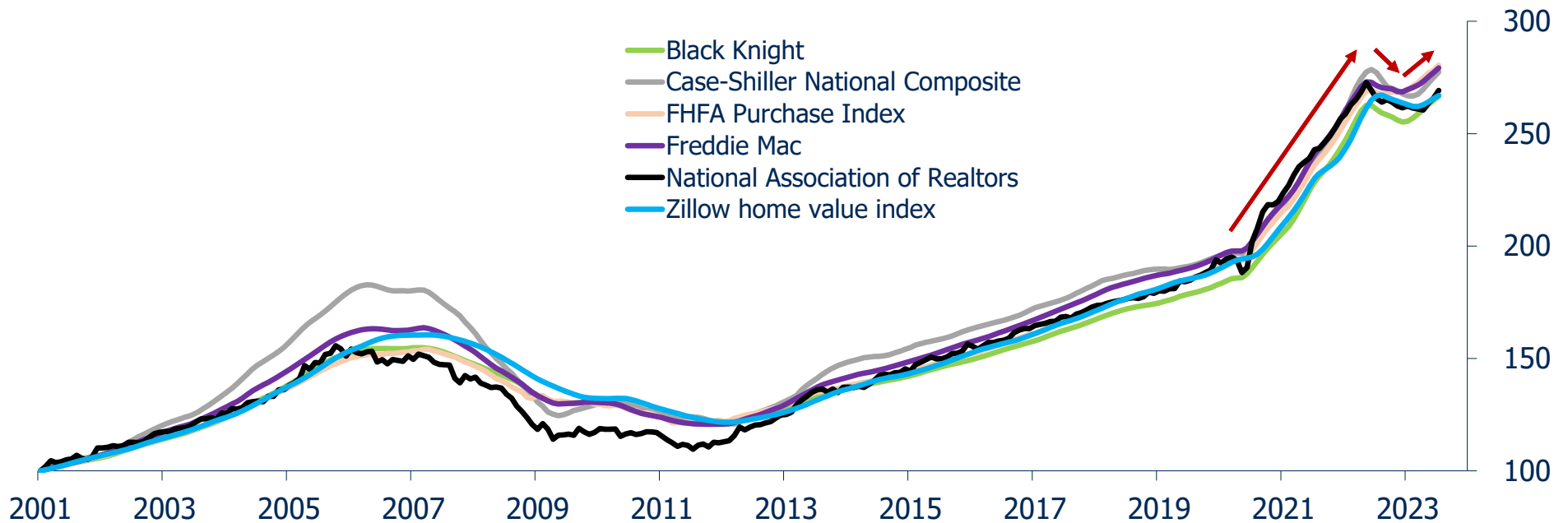
Takeaways

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 - After multiple rate hikes, the labor market is cooling but remains too tight to achieve Fed's inflation target
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Regardless of methodology, all home price indices report accelerating prices

Monthly national home price indices (SA), Jan. 2001 = 100

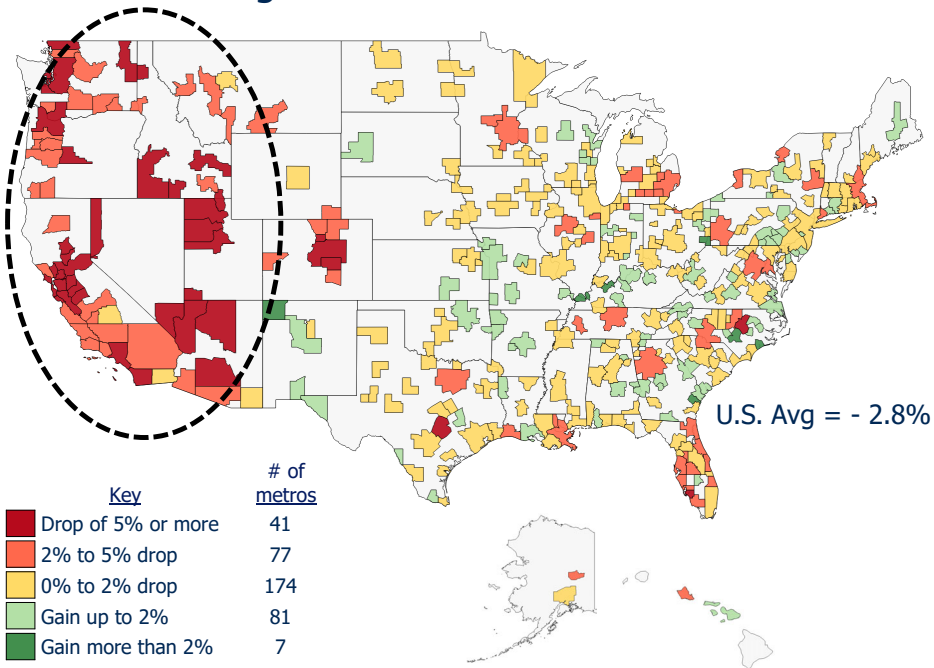


Sources: Black Knight (data through July 2023); FHFA; Freddie Mac; National Association of Realtors; Standard & Poor's; Zillow.

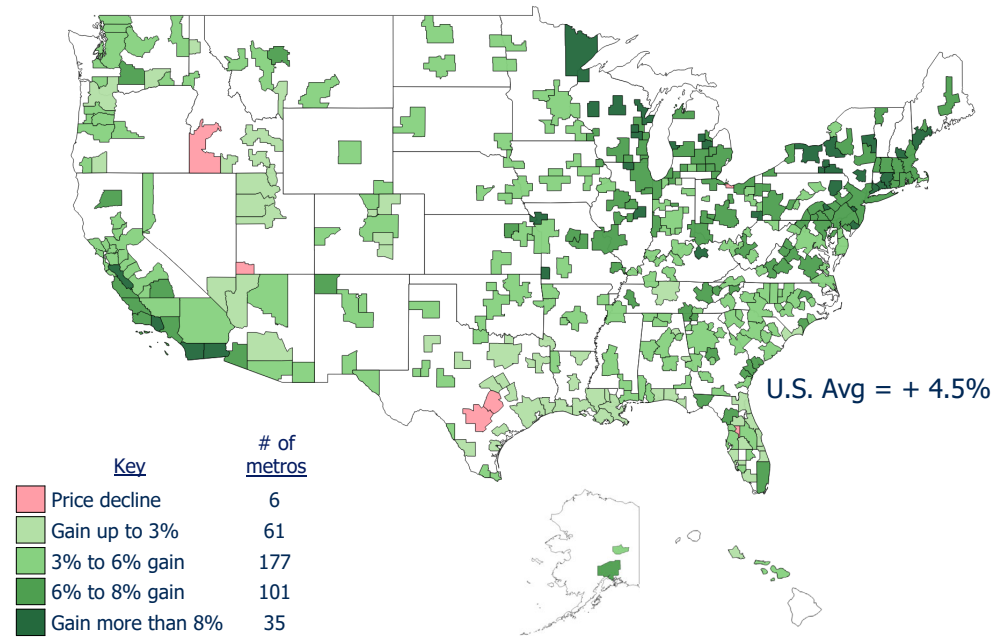


Price declines observed in western U.S. during late 2022; since then, prices rebounded across nearly all metros

HPI change from June 2022 to Dec 2022



HPI change from Dec 2022 to July 2023

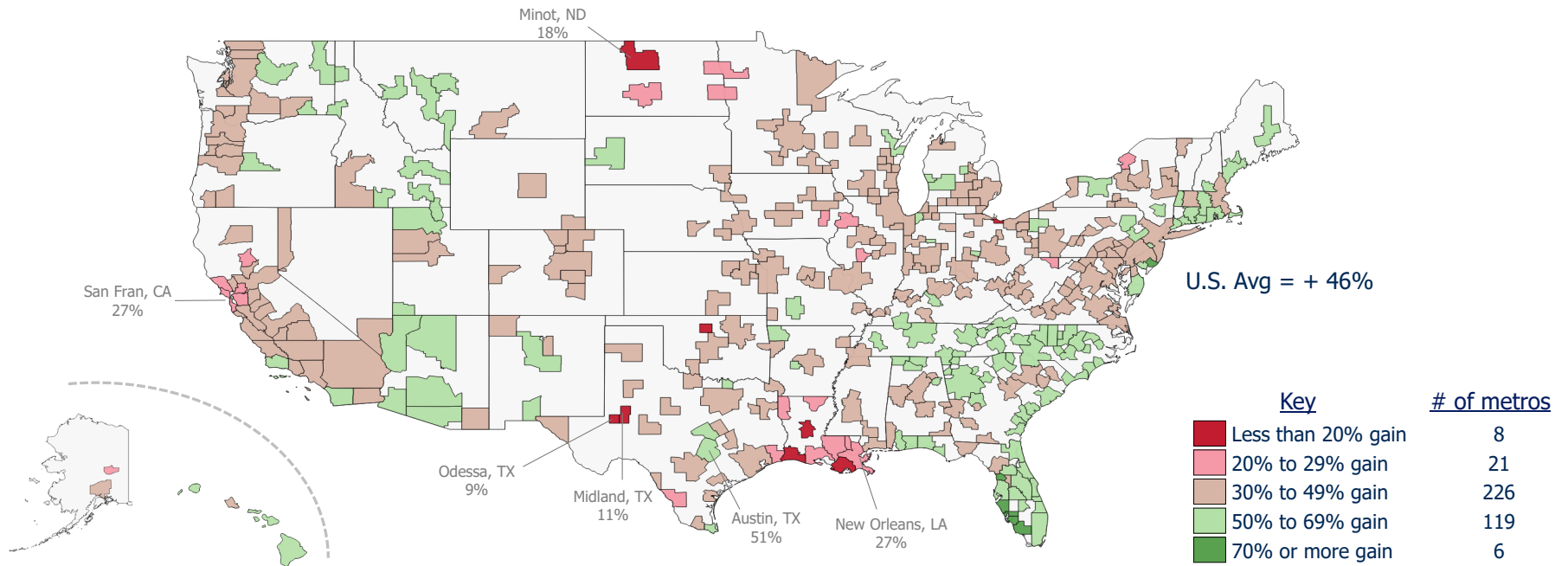


Sources: Black Knight Financial (single-family data through July 2023).



Home prices across all U.S. metros are at least 9% higher today than Dec. 2019

HPI change from Dec 2019 to July 2023

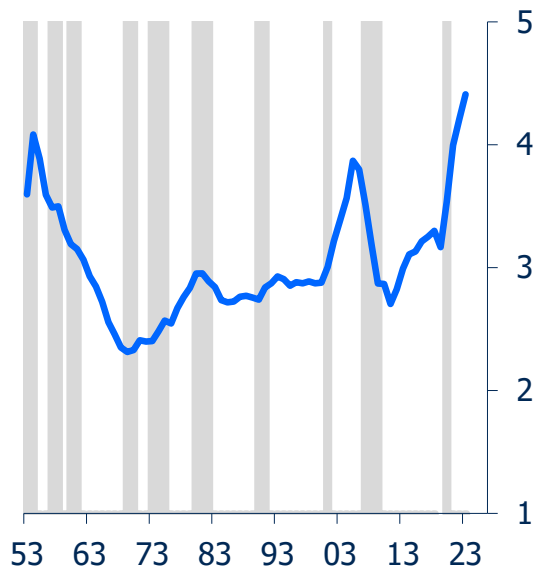


Sources: Black Knight Financial (single-family data through July 2023).

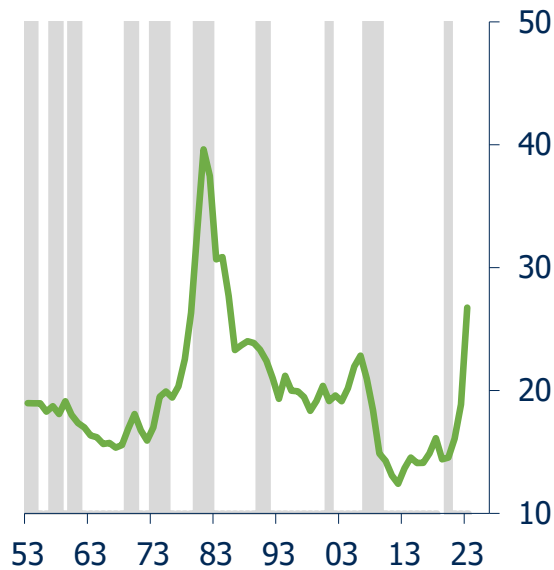


Despite record highs in national home prices, intrinsic valuation measures are mixed

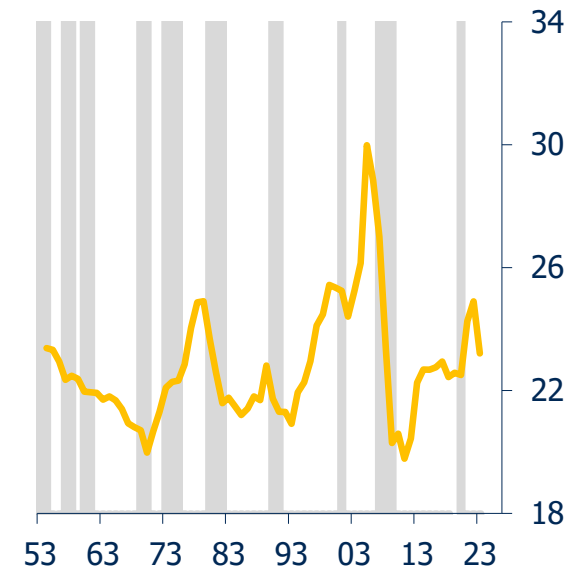
Home price-to-median family income ratio, %



Mortgage payment as a share of income, %



Home price to rent ratio, %



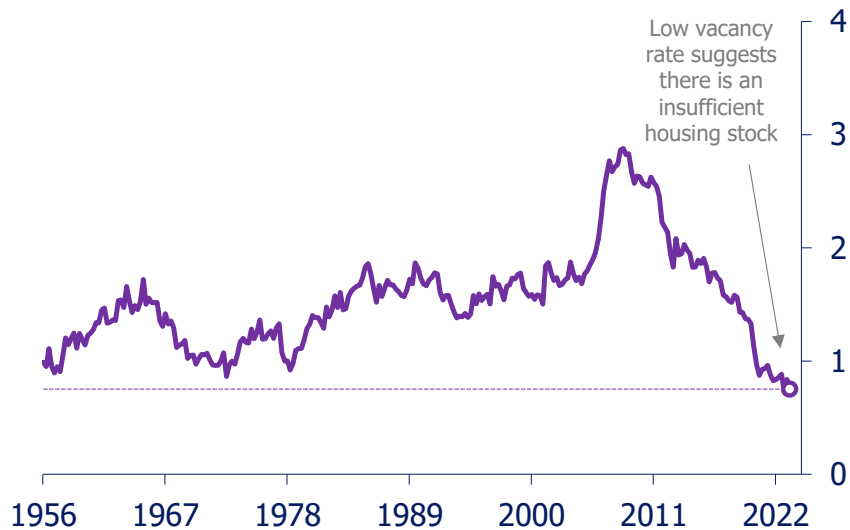
Note: Mortgage payment as a share of income assumes a median-priced home purchased with a 20% down payment at the prevailing 30-year fixed-rate mortgage rate.

Source: Census; S&P; BEA; EBC calculations (annual observations except for last observation as of 2Q:23).

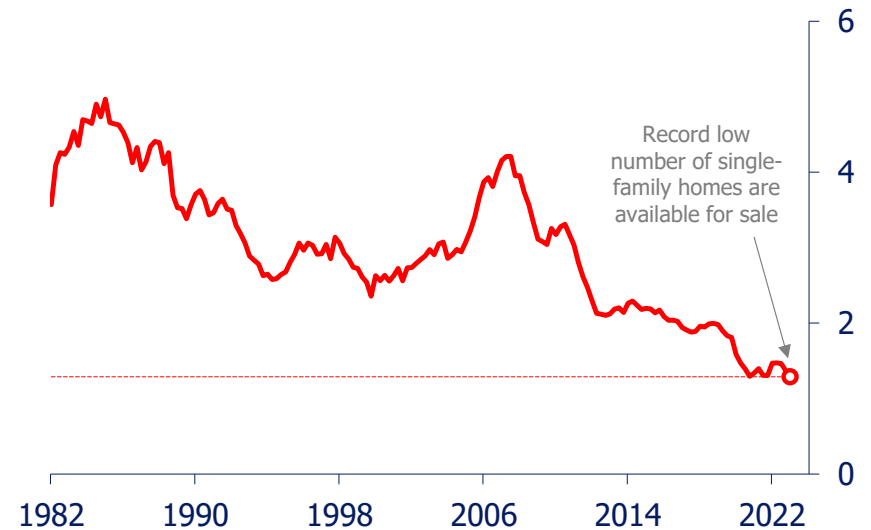


Housing shortages, both in homes for sale and housing stock, continue to support home prices

Homeowner vacancy rate, SA, %



Share of new & existing single-family homes for sale to total single-family homes, %



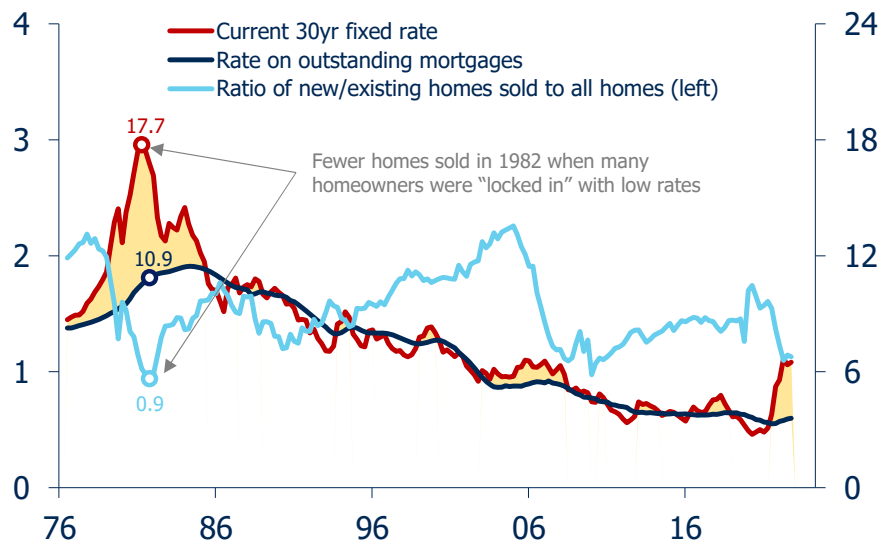
Homeowner Vacancy Rate = Vacant Year-Round Housing Units for Sale Only divided by (Owner-Occupied Housing Units + Vacant Year-Round Housing Units Sold but Awaiting Occupancy + Vacant Year-Round Housing Units for Sale Only)

Sources: Census (data through 2Q:2023).

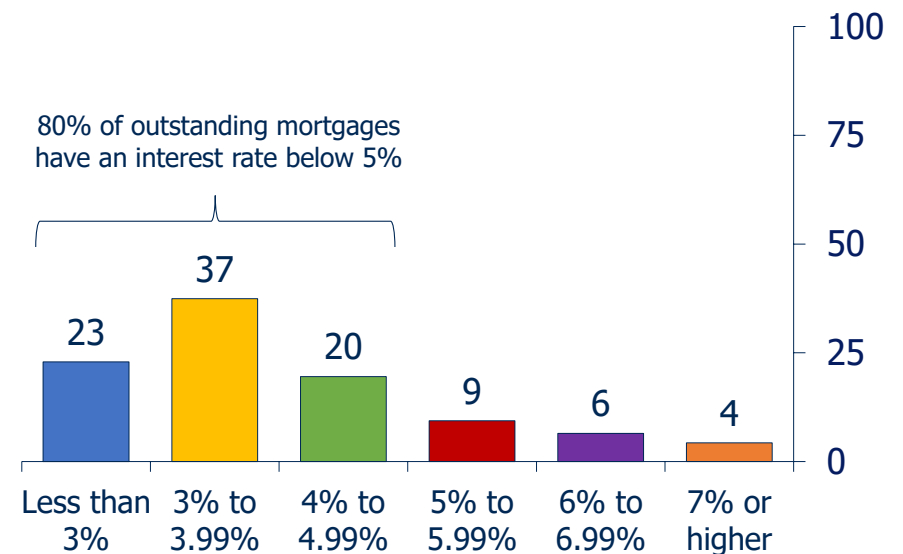


80% of mortgages have an interest rate below 5%, which discourages current owners from moving

Quarterly interest rates and ratio of new & existing homes sold to total homes, %



Share of outstanding mortgages by interest rate at June 2023, %

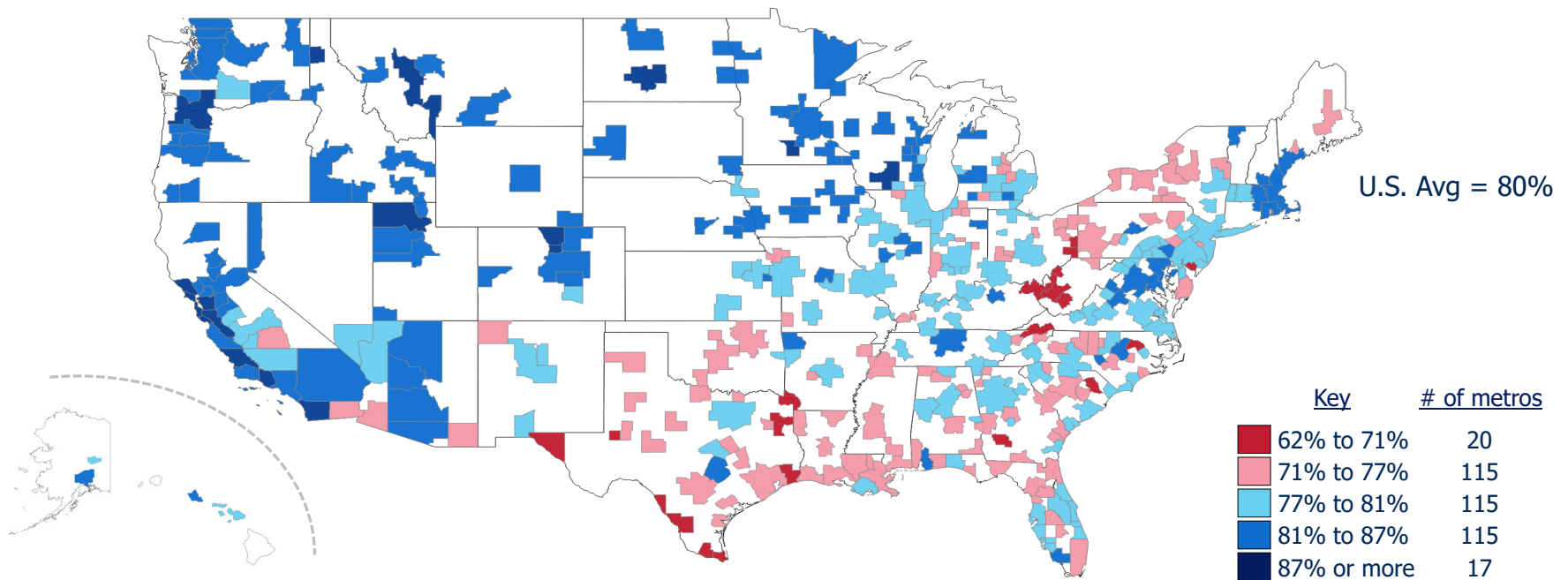


Sources: Freddie Mac (data through 2Q:2023); BEA (2Q:23); FHFA National Mortgage Database (2Q:23).



However, prevalence of low mortgage rates varies by region and locality

Share of outstanding mortgages with an interest rate below 5 percent at June 2023, %



Sources: FHFA National Mortgage Database (data through 2Q:2023).

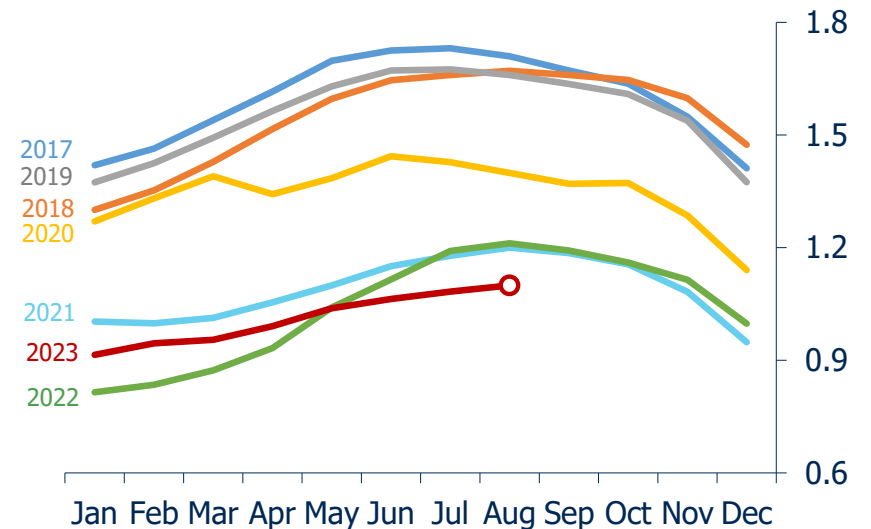


Residential total listings fall to new seasonal lows as mortgage rates near 23-year high total

Weekly average of available 30-year fixed mortgage rates, %



Total U.S. residential listing for sale, in millions



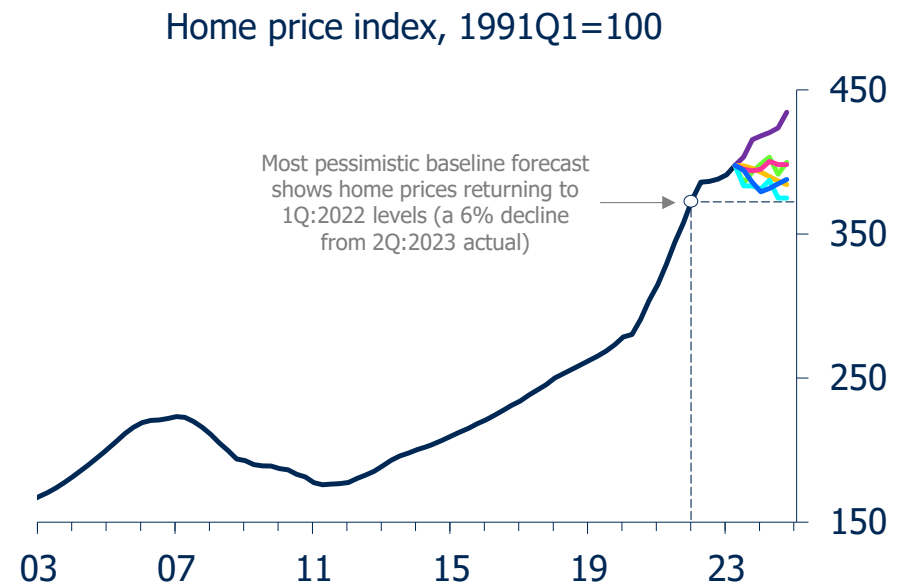
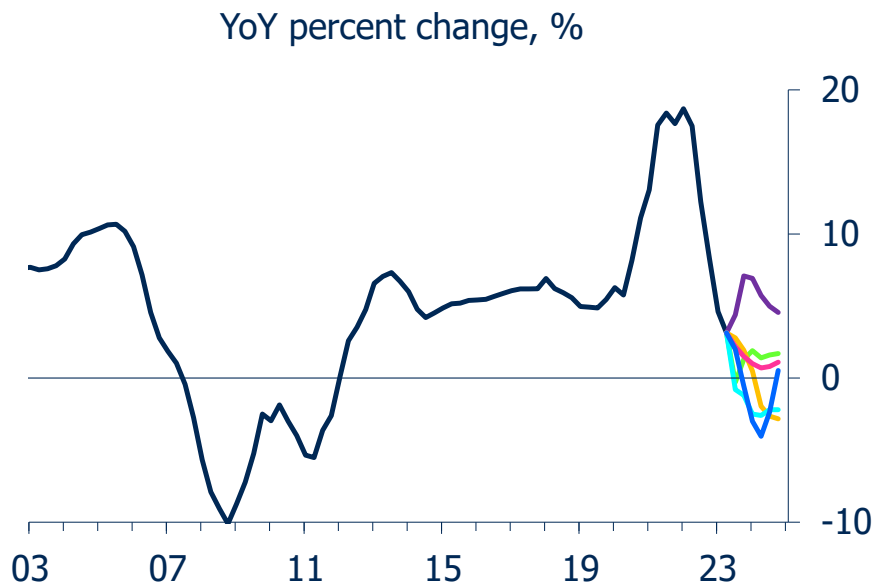
Sources: Freddie Mac (data through Sept 28, 2023); Realtor.com (Aug 2023).



Economists expect national home prices to moderate over next two years

Single-family home price forecast

■ Black Knight
 ■ Economy.com
 ■ Fannie Mae
 ■ Goldman Sachs
 ■ Mortgage Bankers
 ■ Oxford



Sources: FHFA (data through 2Q:23); Oxford Economics (Sept 2023 forecast); Moody's Economy.com (Sept 2023 baseline); Goldman Sachs (Sept 2023 forecast); Fannie Mae (Sept 2023 forecast); Mortgage Bankers Assoc. (Sept. 2023).

Note: Historical HPI is based on FHFA single-family purchase-only index.



Conclusion

- Economic growth continues despite inflation and higher interest rates, but higher rates may be needed for longer periods to tame inflation
- Continued home price growth makes Fed's job tougher; significant home price declines not expected as supply remains constrained



Appendix



Federal student loan payment resumption estimated to reduce GDP by 30-80bps, but likely overestimated

Annual estimates of federal student loan payment resumption

Firm	\$ billions	% of GDP
Goldman Sachs	\$70	0.3%
Moody's Economy.com	\$73	0.3%
Oxford Economics	\$108	0.4%
Apollo Global Mgmt	\$108	0.4%
Deutsche Bank	\$168	0.6%
Barclays	\$190	0.7%
Jefferies	\$216	0.8%

Most estimates do **NOT** adjust for Income Dependent Repayment plans (existing or proposed), or borrowers making optional payments during forbearance

Deriving estimates for the resumption of federal student loan payments

- Most estimates multiply an average monthly payment by some portion of the 43 million federal student loan borrowers
- Not all student loan borrowers will resume payment. Currently, 16.5 million borrowers are in school, deferment, or default. Another portion of those in automatic forbearance will be eligible for financial hardship. Some estimates assume all 43 million borrowers will resume payment
- With Income Dependent Repayment plans and flexibility in selecting a payment option, it is difficult to estimate actual future monthly payments

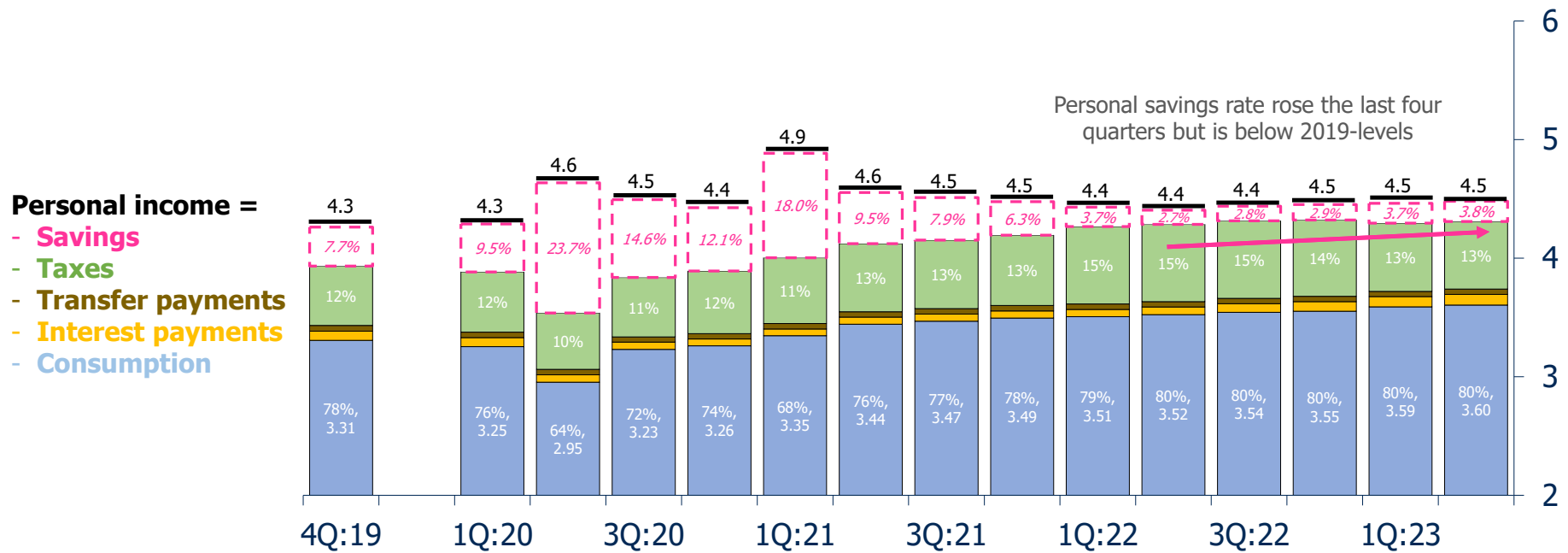
Source: FRBNY and Department of Education.

Note: Percent of GDP is based on the "advanced" 2Q:23 nominal GDP figure.



Despite flat aggregate real incomes, consumers continue spending growth by reducing (not eliminating) savings

Real quarterly disposition of personal income, \$ trillions



Source: Bureau of Economic Analysis (data through June 2023).

