



Servion Lending Conference

U.S. Macro & Housing Outlook

September 18, 2023

Five Key Questions for the Housing Market

- 1. Did the Recession Get Canceled?**
- 2. Are Consumers Tapped out?**
- 3. Is This the New Normal for Mortgage Rates?**
- 4. If Nobody Is Buying, Why Is the Housing Market so Tight?**
- 5. When Will Home Prices Come Back Down?**



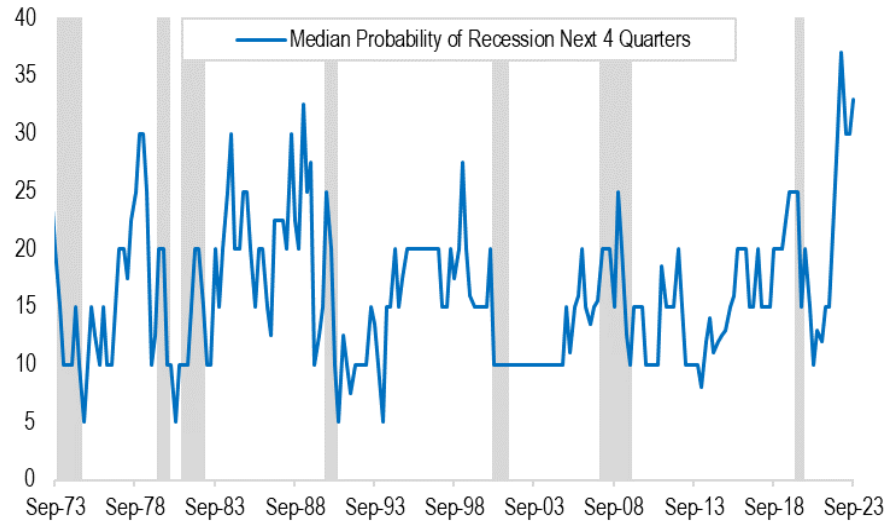
1. Did the Recession Get Canceled?

When Will the Next Recession Begin?

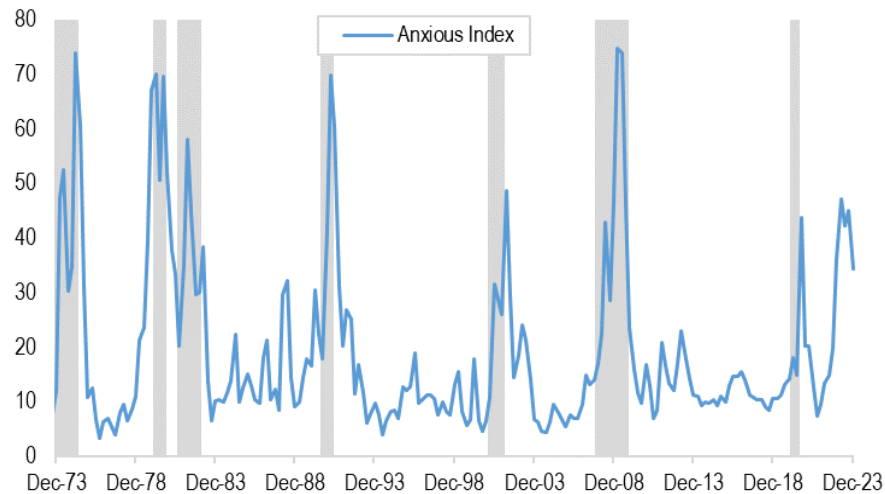
- A) Already Had/In One**
- B) By End of '23**
- C) 2024 or Later**

Economists Push Recession Start Date to 2024

Economists' Expectations for a Recession over Next Four Quarters Has Increased

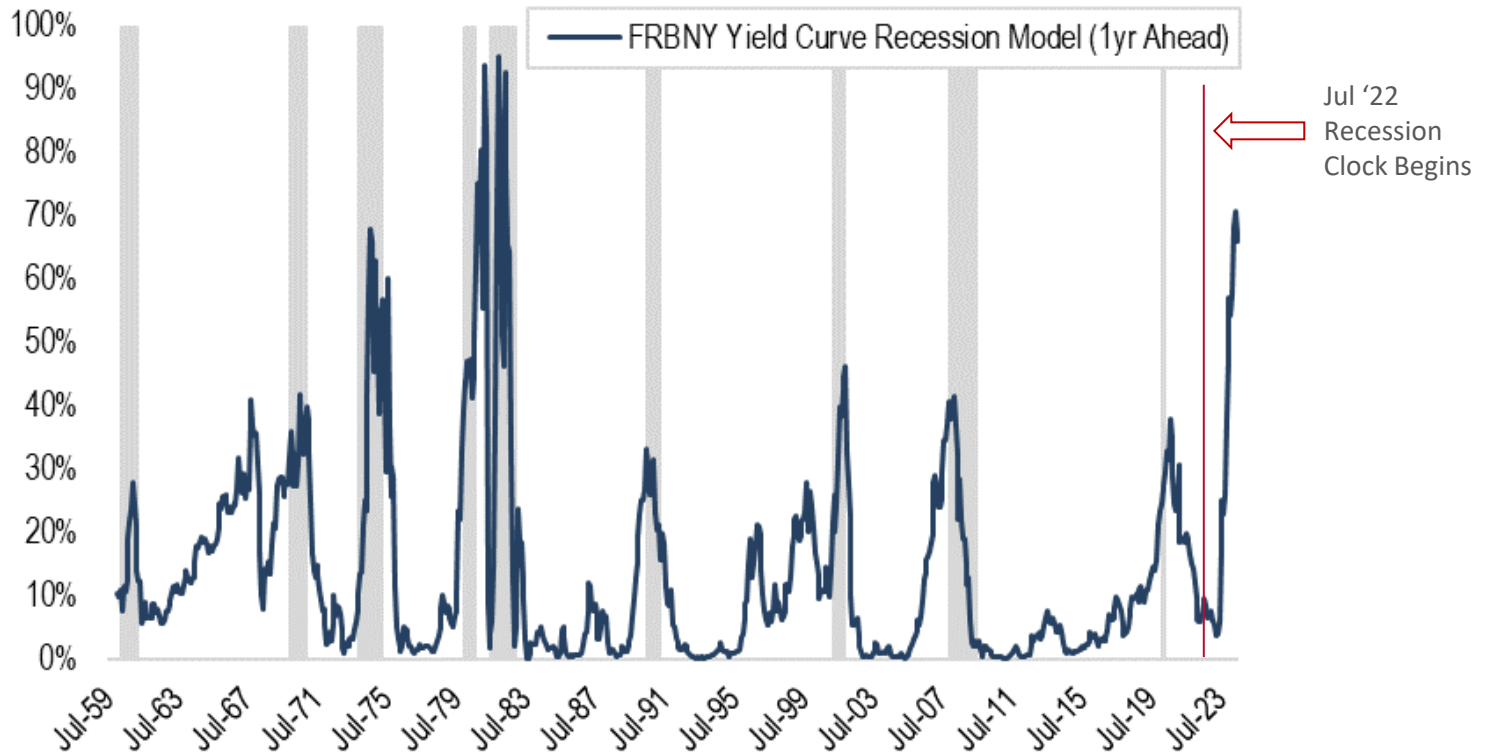


But Economists' Expectations for a Decline in GDP over Next Quarter Has Fallen



Economists Are Human and Prone to Errors

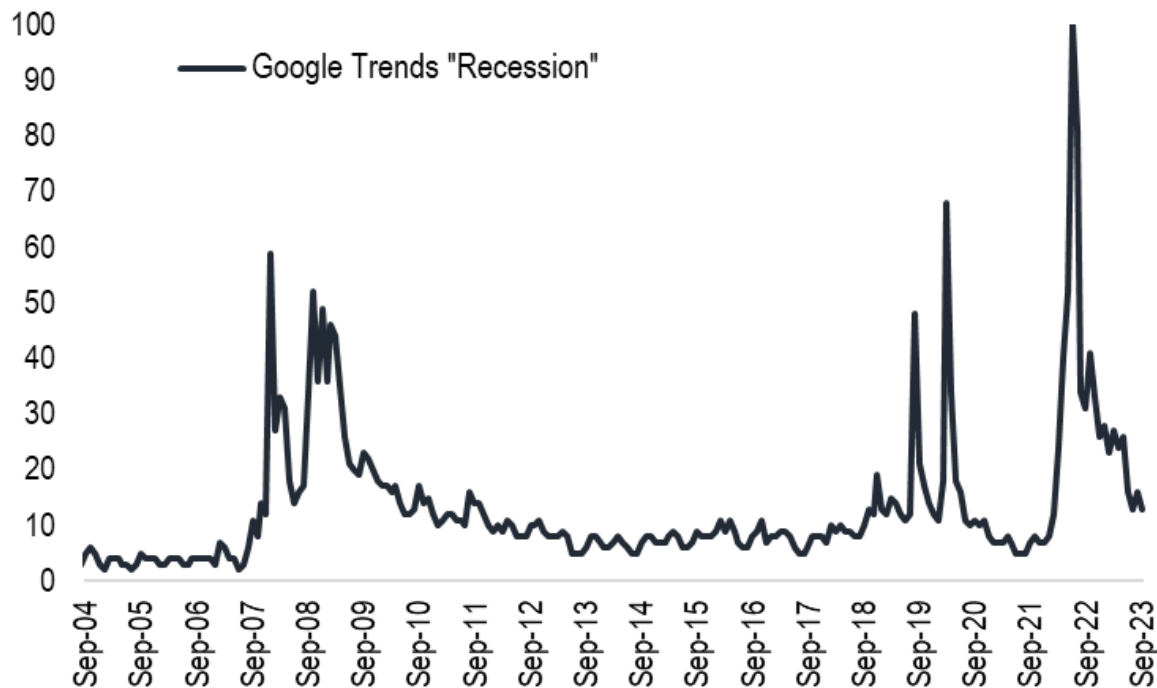
Yield Curve Has Average Lead Time of 15 Months, so We Are Due by October



Sources: FRBNY/Arch MI

The “Masses” Do Not Look Worried

Who Is Right? Markets, Economists or “the People”

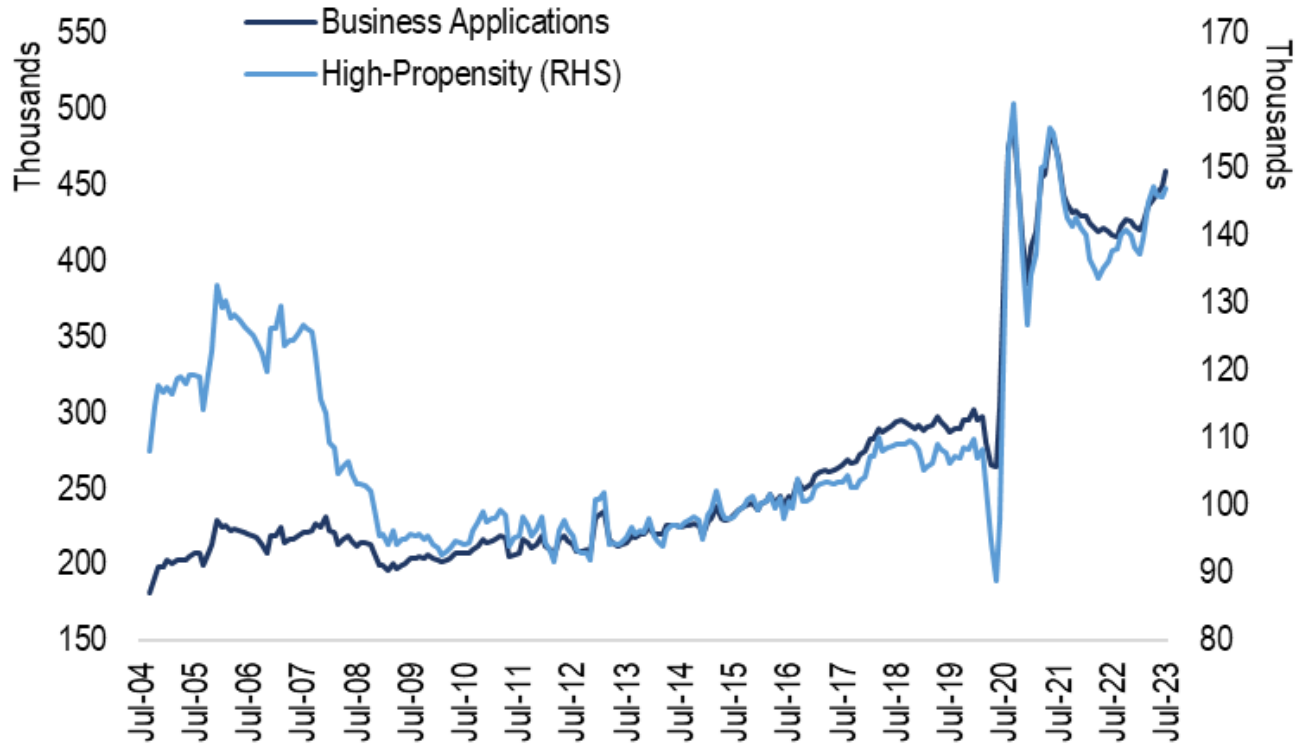


Note: Numbers represent search interest relative to the highest point on the chart for the given region and time. A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular. A score of 0 means that there was not enough data for this term.

Sources: Google Trends/Arch MI

People Start Businesses With a Recession Lurking?

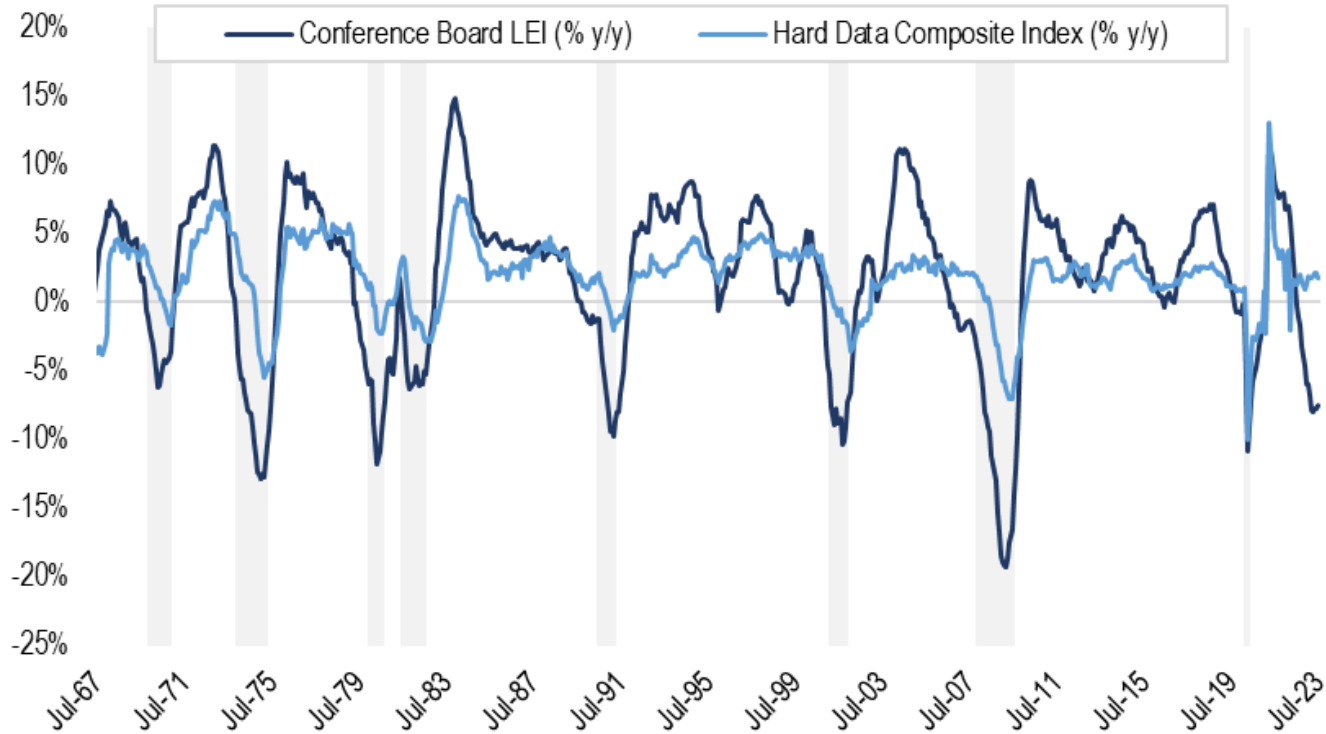
Way Above Pre-Pandemic Trends



Sources: Census Bureau/Arch MI

Beware of Dated Business Cycle Indicators

Are the Lead Times Just Longer This Cycle?

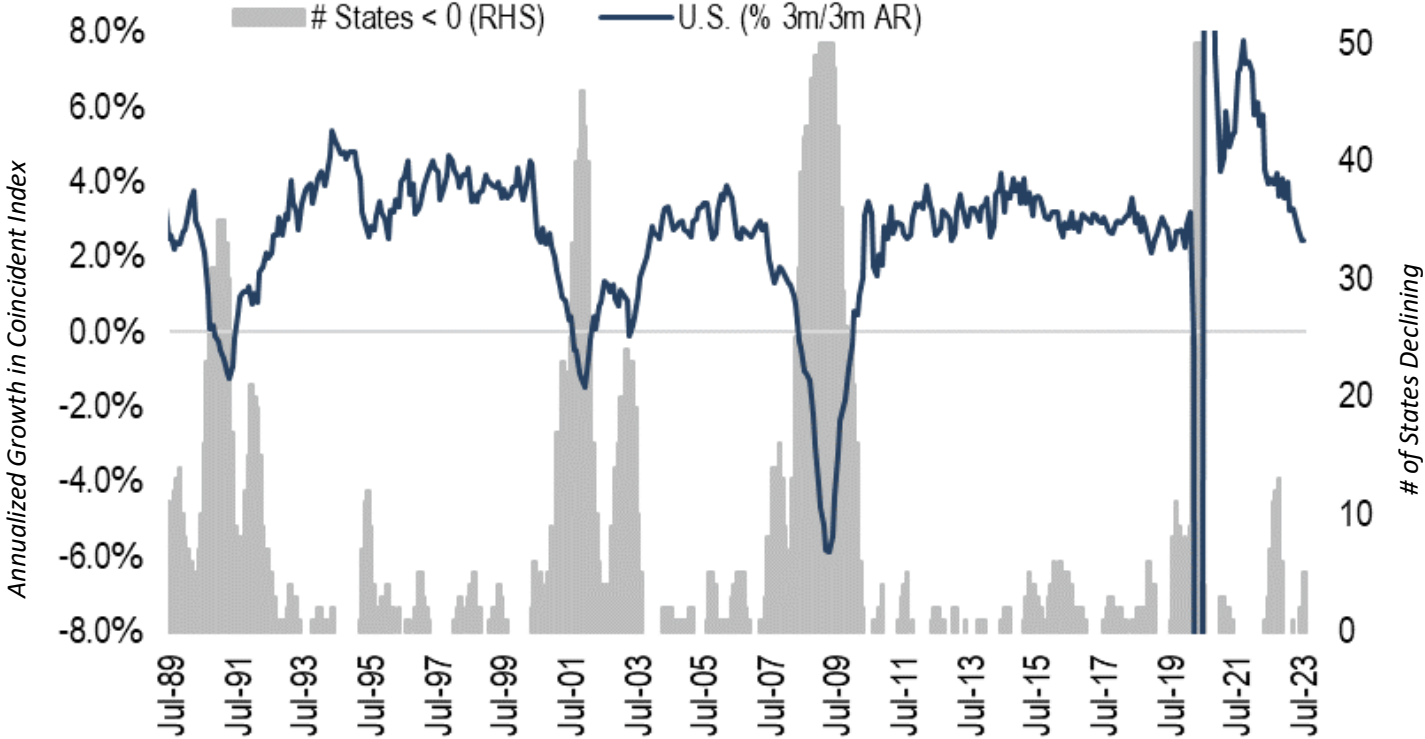


Note: Hard Data Composite consists of establishment payrolls, household employment, real business sales, real disposable income and real personal consumption expenditures.

Sources: U.S. Census Bureau/ U.S. Bureau of Economic Analysis (BEA)/Federal Reserve Bank (FRB)/U.S. Bureau of Labor Statistics (BLS)/The Conference Board/Arch MI

Are There Pockets of Weakness?

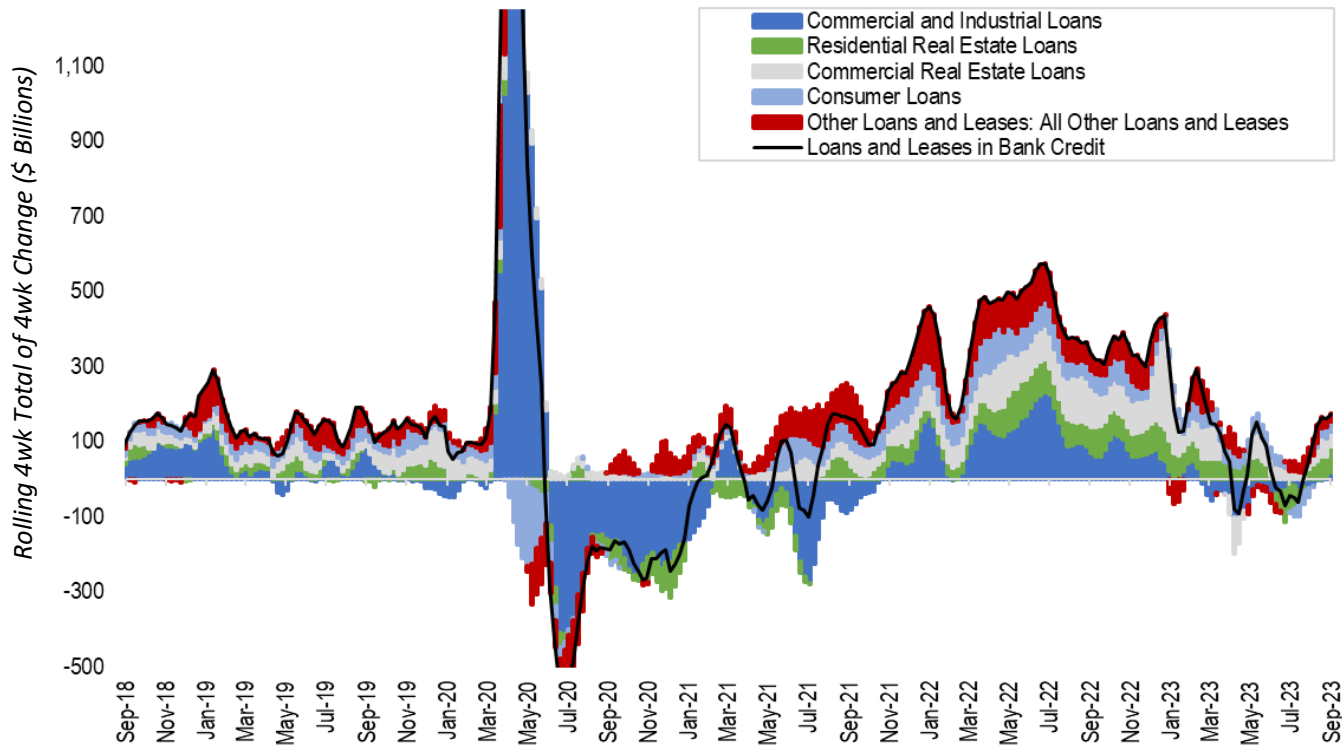
Can You Name the States That Are Negative? How Much of National GDP Do They Represent?



Sources: FRBPHI/Arch MI

Bank Lending Has Slowed, Right?

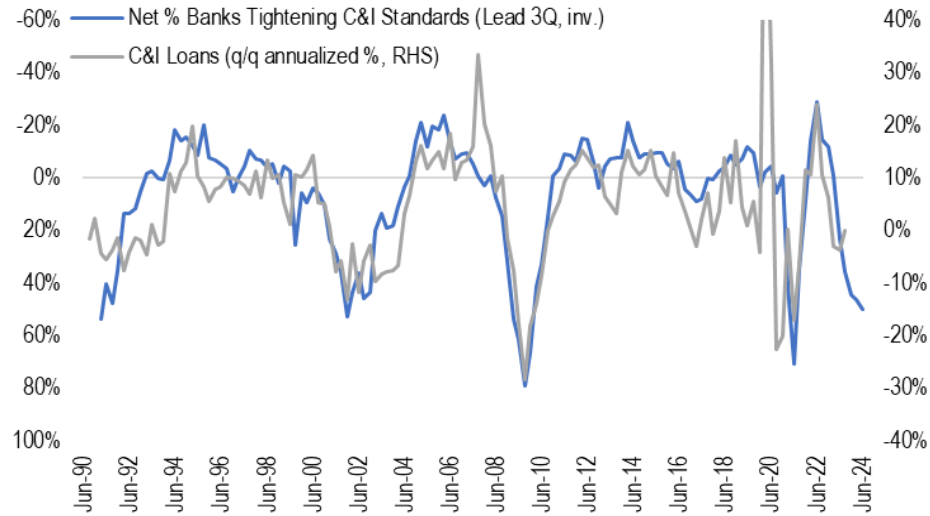
Banks Usually Do Not Lend with a Looming Recession on the Horizon



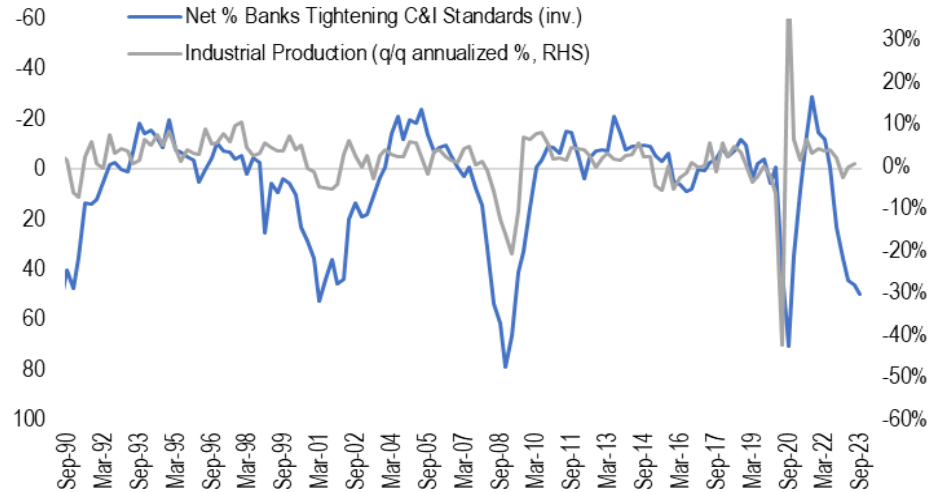
Sources: FRB/Arch MI

Banks Sound Scared

Standards Look Extremely Tight ...



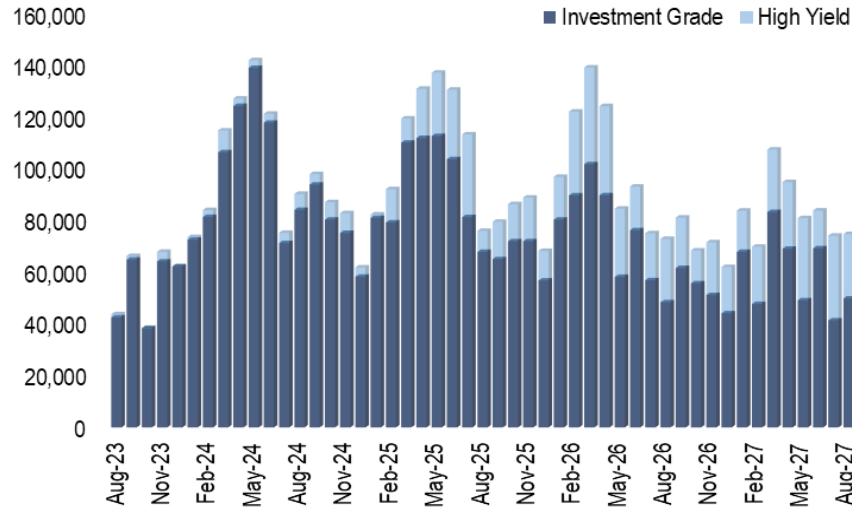
... But Correlation Seems to Be Off This Cycle



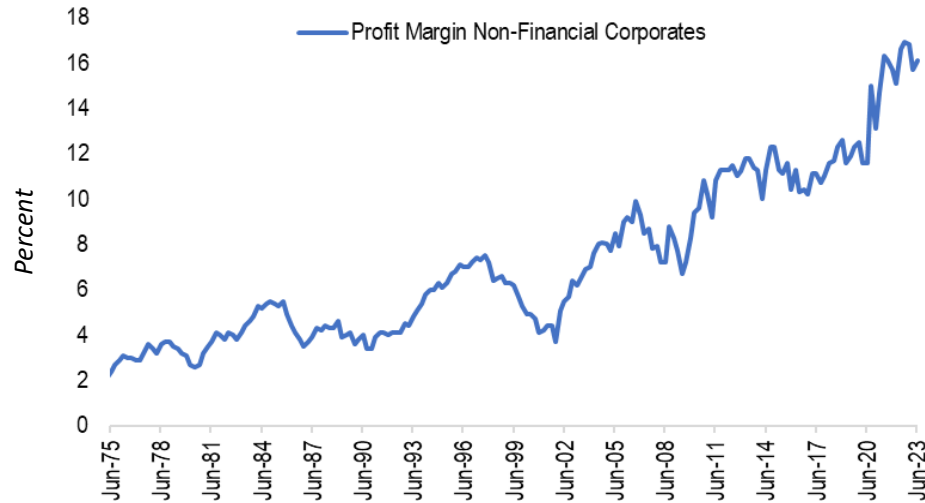
Sources: FRB/Arch MI

Corporates Have Prepared for Higher Rates

Debt Maturity Wall Looks Very Manageable



Profit Margins Are Healthy



Sources: FRB/BEA/Arch MI

2. Are Consumers Tapped out?

Consumers Are Financially Stretched

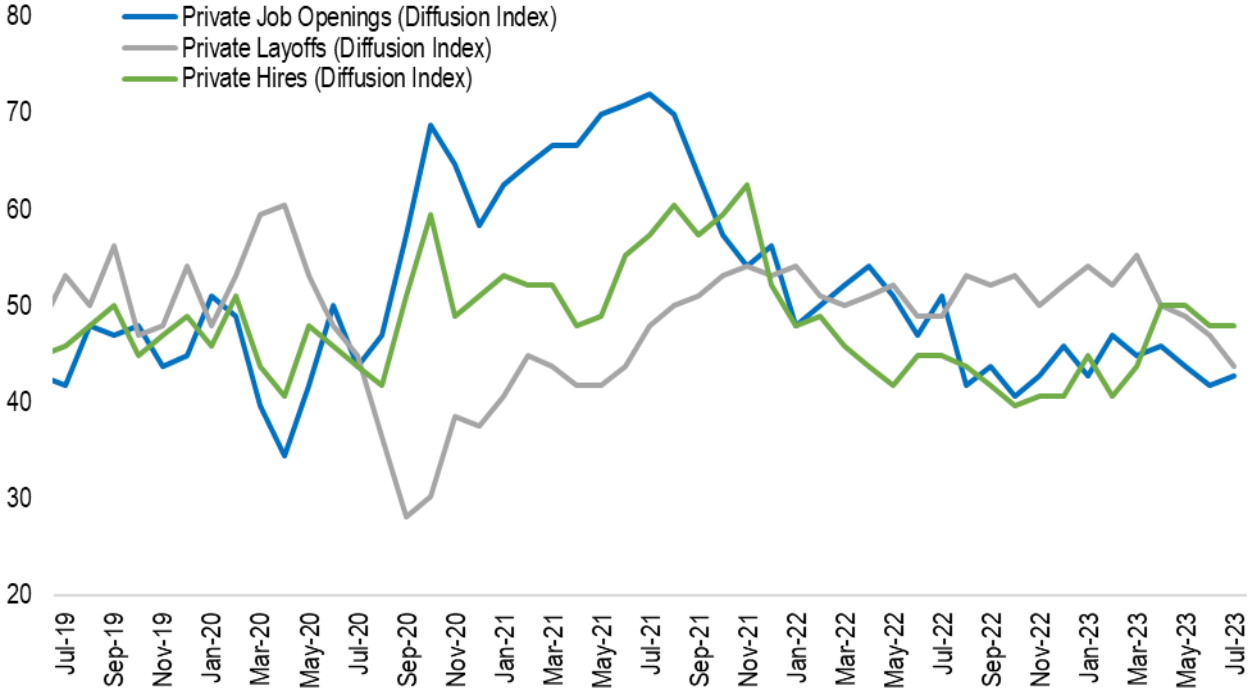
A) True — They Are Broke

B) No — Wallets Are Fat

C) Meh — Somewhere in between

One Chart to Explain the Labor Market

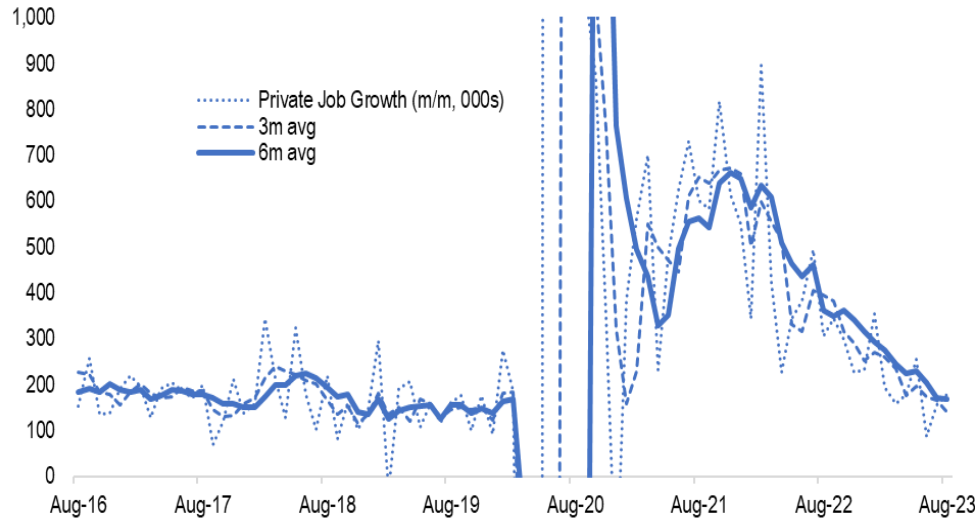
Looks Like a Normalization More Than Anything Else



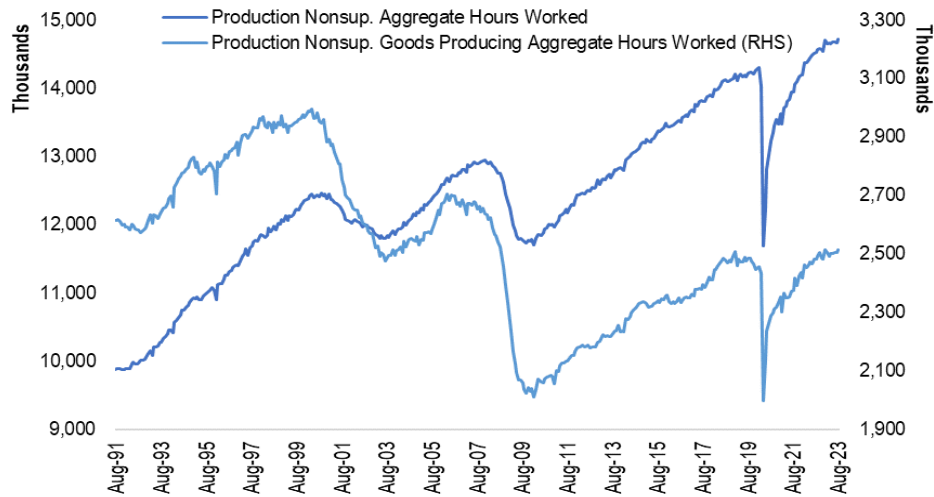
Sources: BLS/Arch MI

Not Very Alarming

Job Growth Has Slowed, Not Collapsed



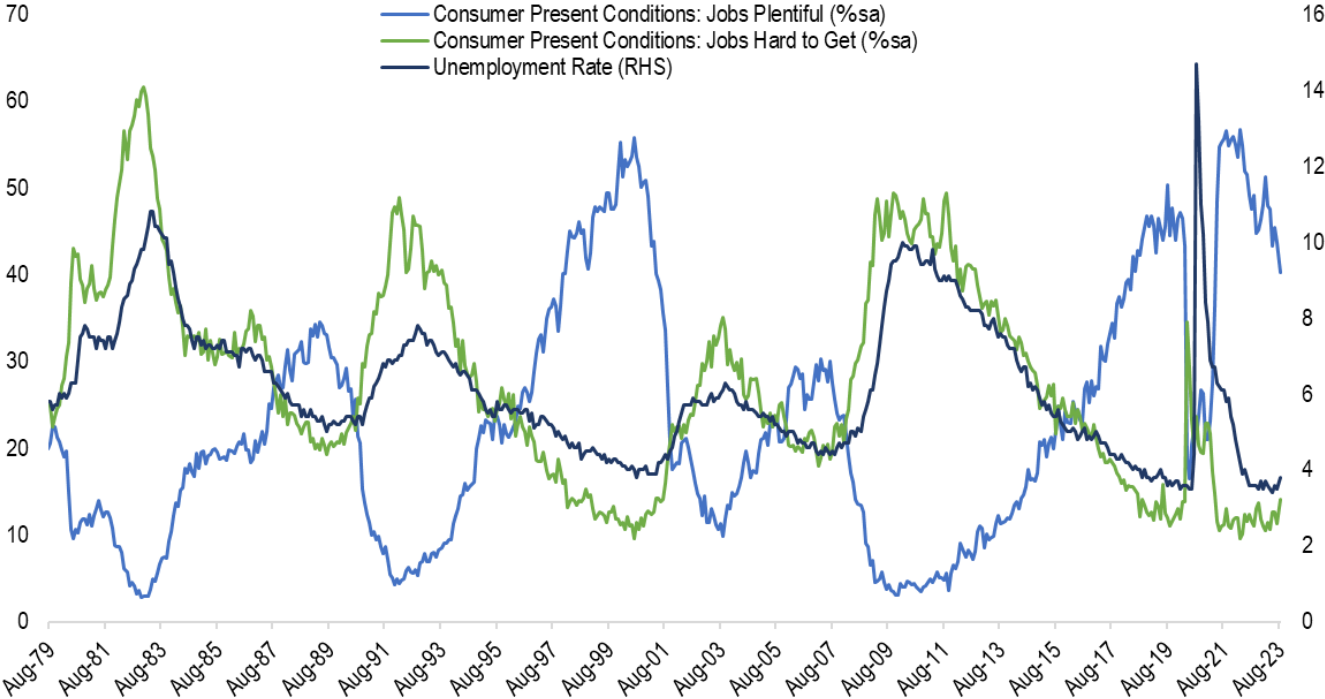
Firms Still Require Labor Inputs



Sources: BLS/Arch MI

What About Household Perceptions?

Jobs May Not Be as “Plentiful” but They Are Not “Hard to Get”



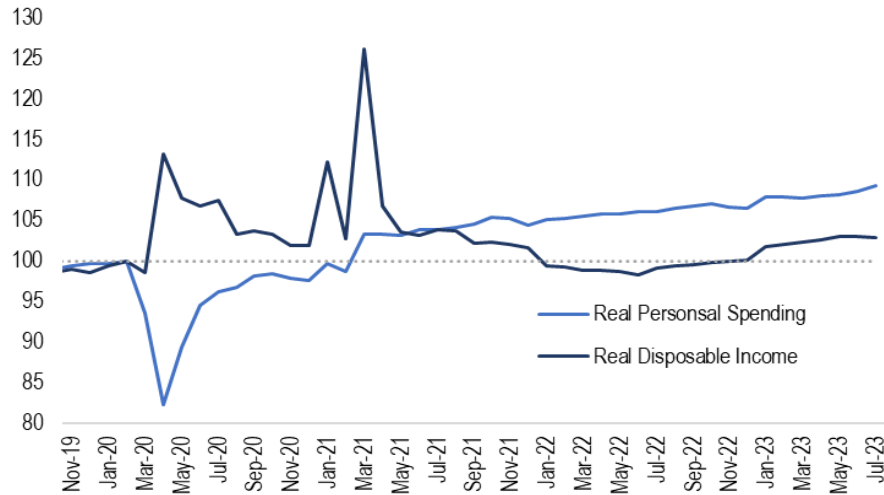
Sources: Conference Board/BLS/Arch MI

Earnings Potential Looks Solid

Still Pays to Jump Ship, Just Not as Much as It Used To



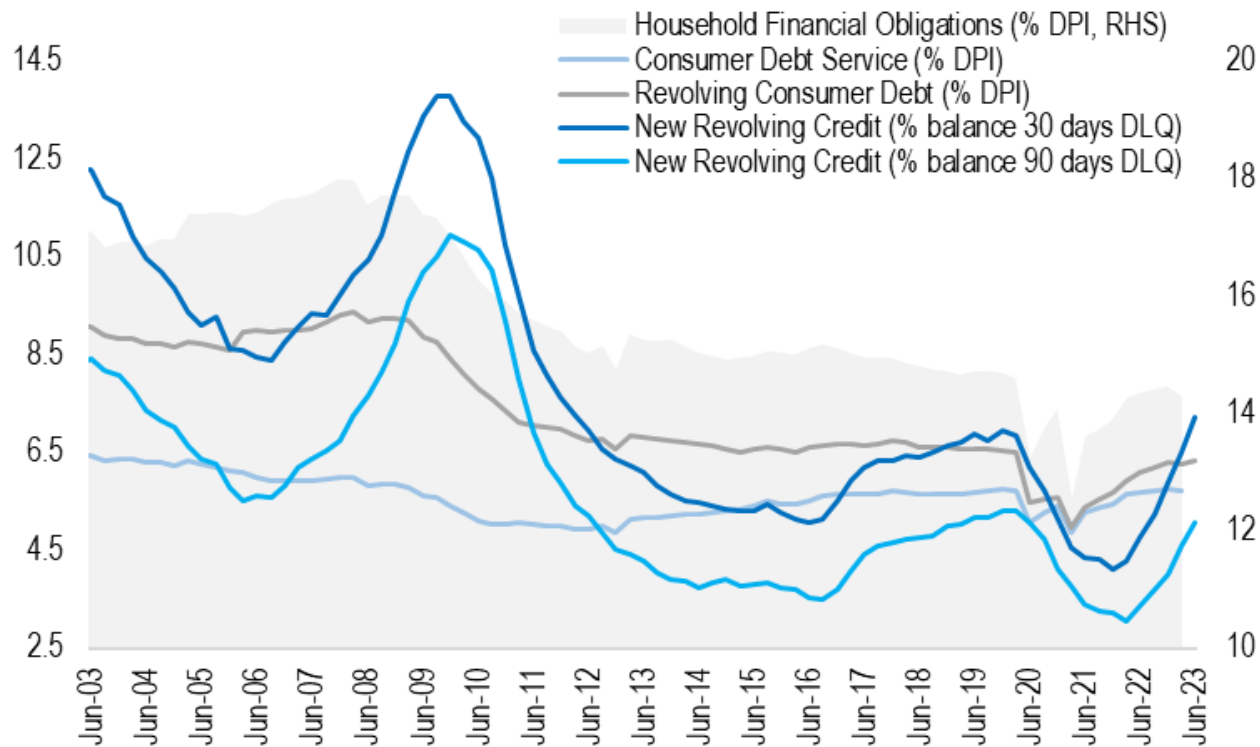
Real Disposable Incomes Rising



Sources: BLS/BEA/Arch MI

Should We Be Concerned about Consumer Credit?

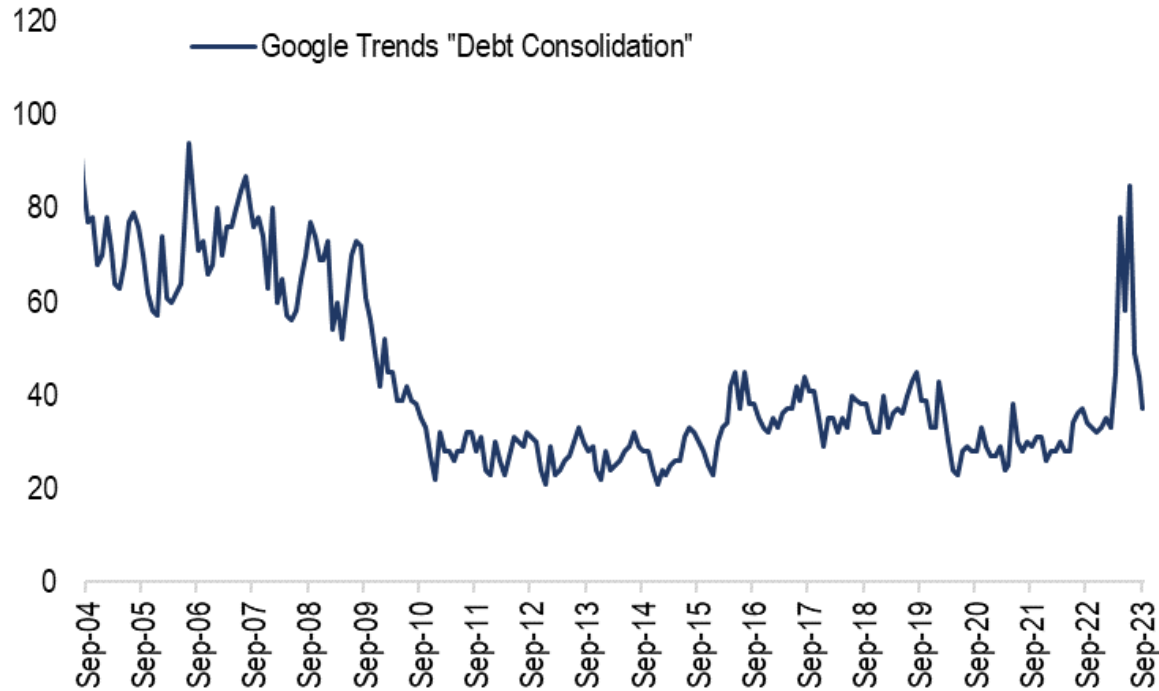
Household Stress Looks Uneven



Sources: BEA/FRBNY/FRB/Arch MI

What Do the “Masses” Think?

Looks Like Debt Is Not A Material Issue



Note: Numbers represent search interest relative to the highest point on the chart for the given region and time. A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular. A score of 0 means that there was not enough data for this term.

Sources: Google Trends/Arch MI

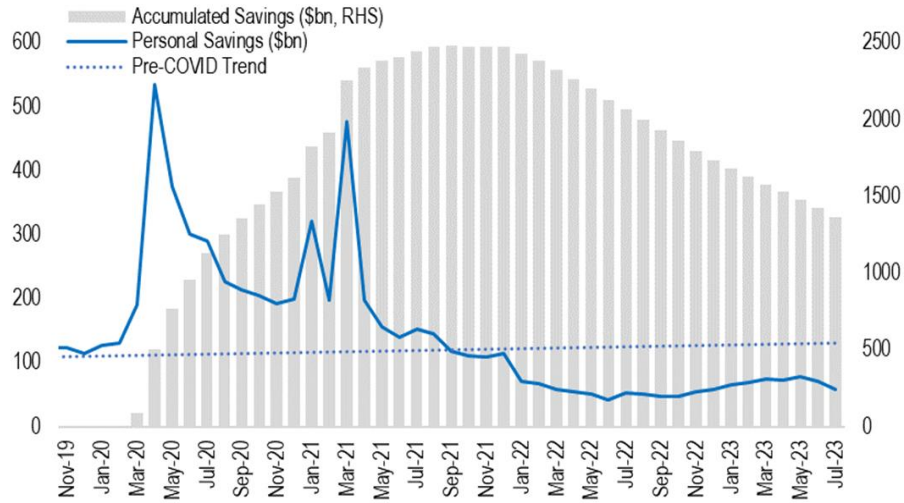
Have Households Run out of “Excess” Savings?

YES

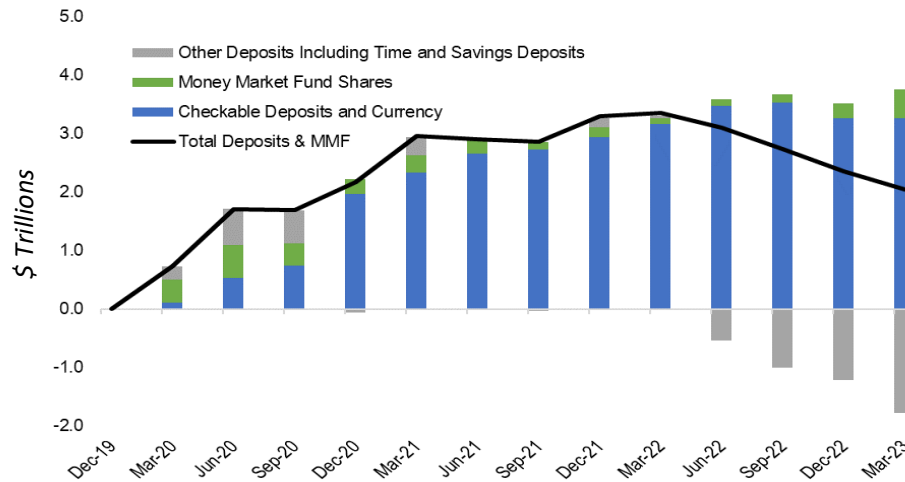
NO

Buffers Look Ample

Data Based on Pre-COVID-19 Savings Rate Trend of ~7%



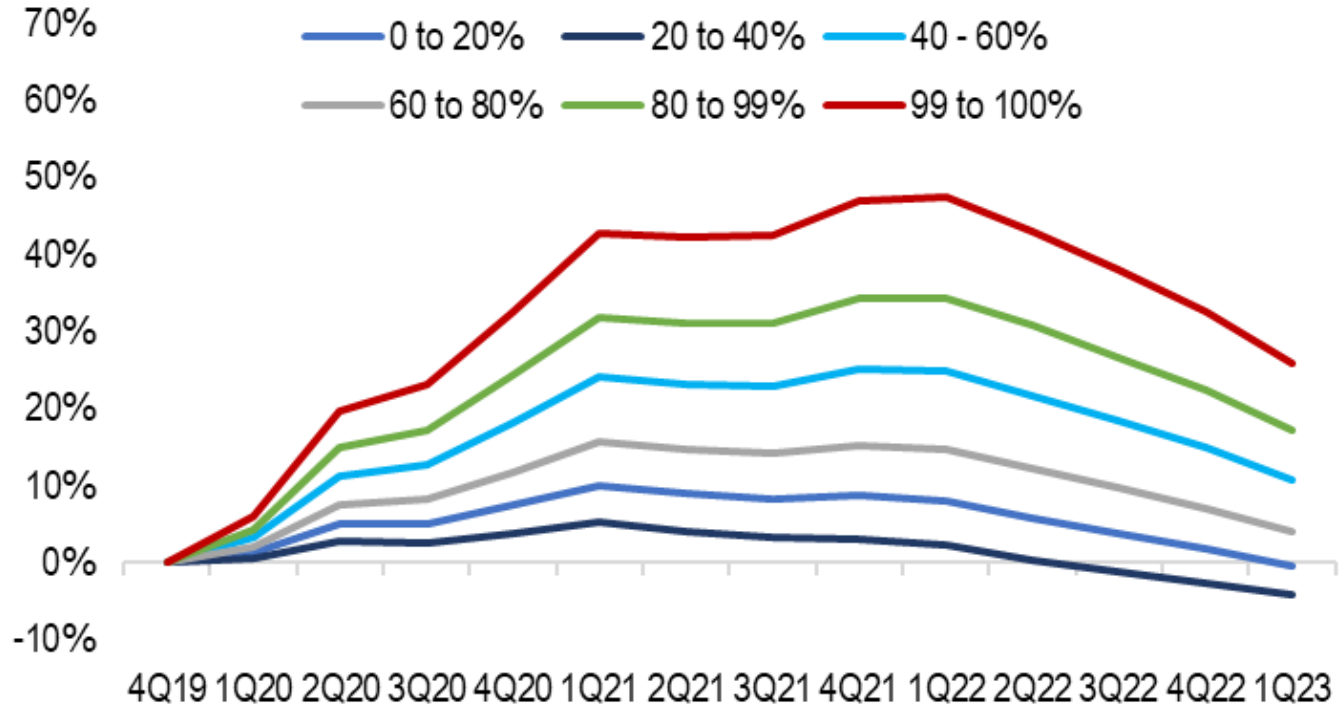
Even Using Alternate Sourced Data from the Fed, Savings Cushion Exists



Sources: BEA/FRB/Arch MI

Just Like Consumer Stress Is Not Uniform, Neither Are Savings

On an Inflation-Adjusted Basis, Savings Have Vanished for Income Groups below the 40% Percentile



Sources: FRB/Arch MI

3. Is This the New Normal for Mortgage Rates?

Mortgage Rates Will Be “X” by the End of ‘23?

A) 5.0-5.5%

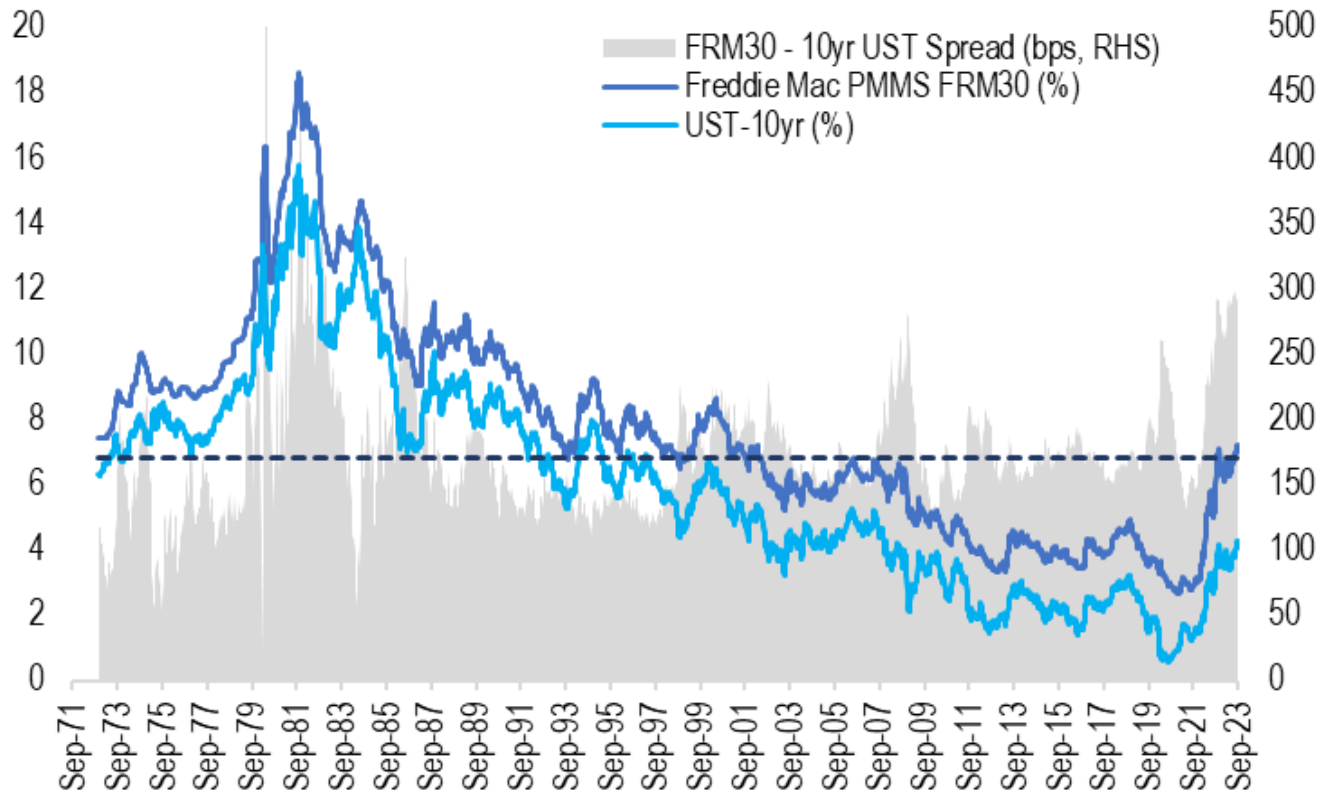
B) 6.0-6.5%

C) 7.0-7.5%

D) 8.0%+

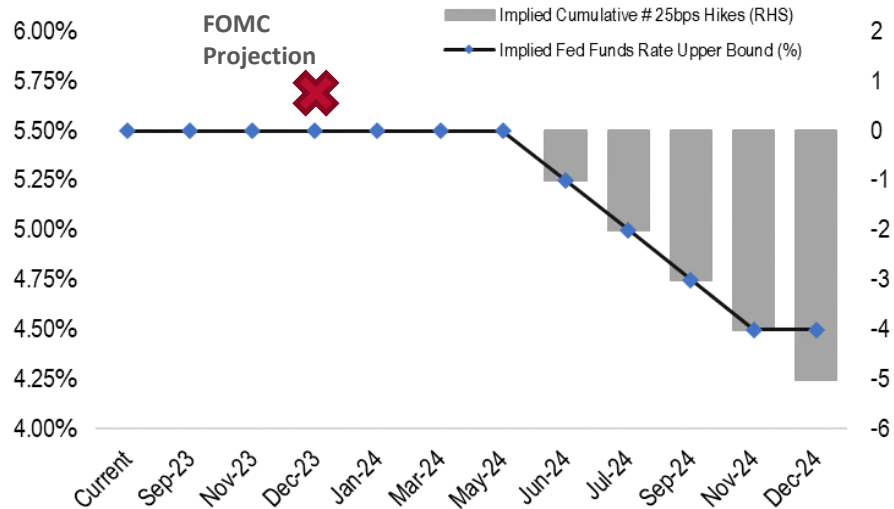
Mortgage Rate Remains Near 20+ Year High

Fed Rate Hikes and Near-Record Wide Mortgage Spreads Have Kept Mortgage Rates Elevated

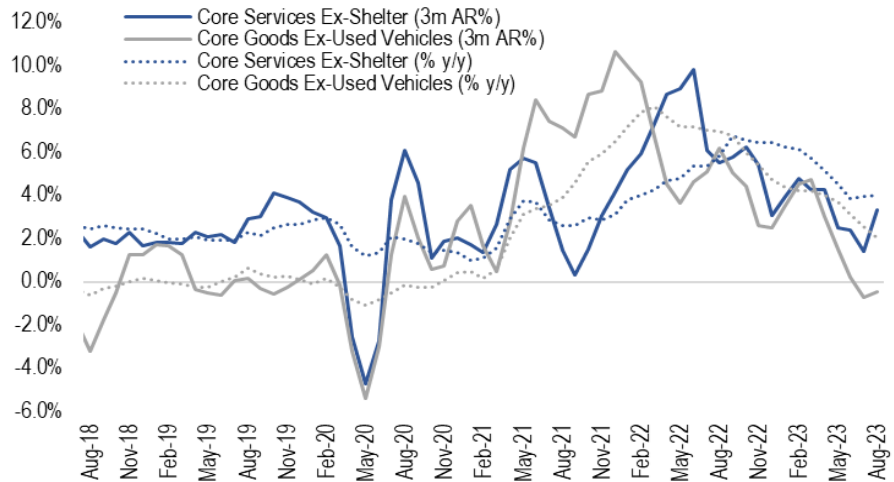


Great Expectations

Market Expectations Calling for Cuts to Begin in 2Q24



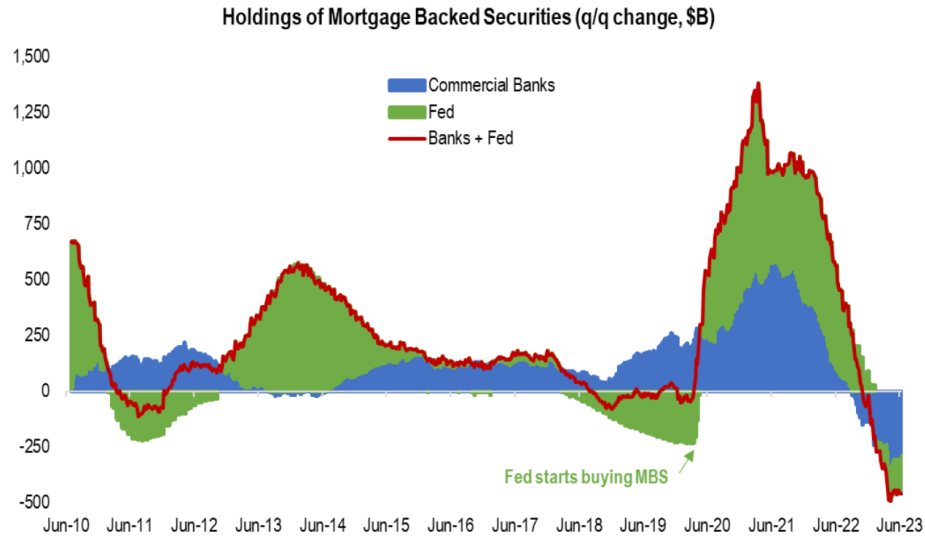
Looks Like Inflation Is Behaving



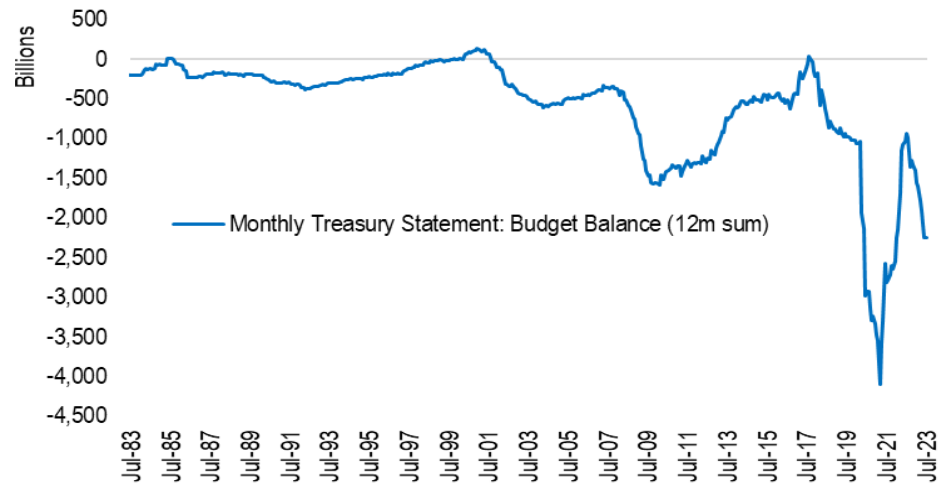
Sources: Bloomberg/FRB/Mortgage Bankers Association (MBA)/Arch MI

Mortgage Spreads Higher for Longer?

Flow of Mortgage-Backed Securities Holdings Not Supportive of Tighter Spreads



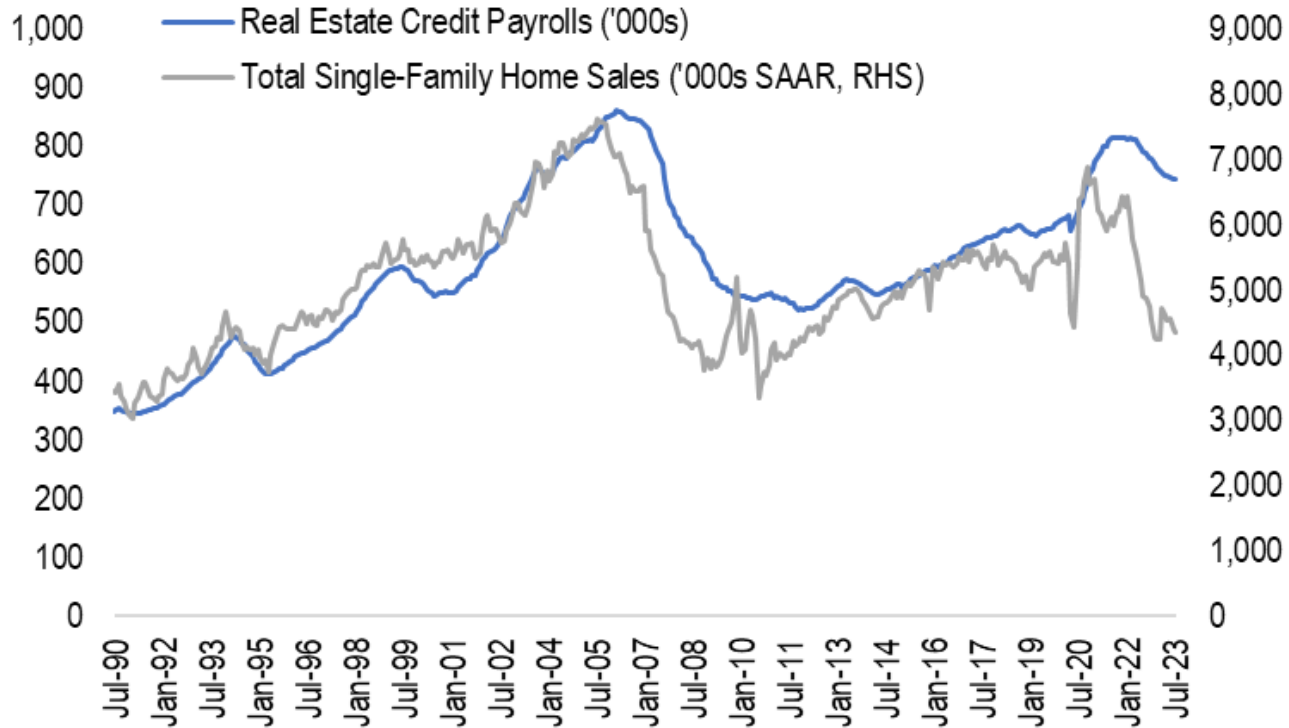
Higher U.S. Government Debt Issuance Also Not Helping



Sources: Bloomberg/FRB/MBA/Arch MI

Overstaffed Much?

Labor Costs per Home Sale Are Elevated = Higher Mortgage Spread Premium to Compensate



Sources: BLS/National Association of Realtors® (NAR)/U.S. Census Bureau/Arch MI

4. If Nobody Is Buying, Why Is the Housing Market so Tight?

How Would You Assess Recent Housing Activity?

Compared to Three Months Ago,
The Housing Market Is ...

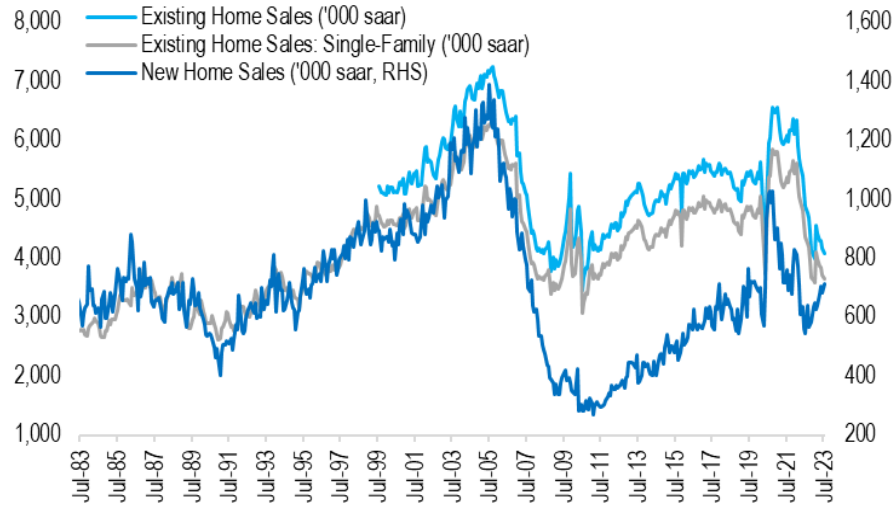
A) Worse

B) About the Same

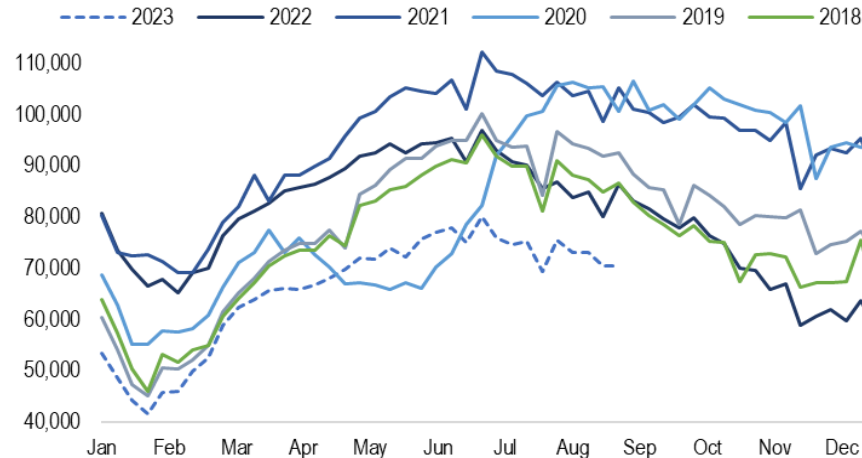
C) Better

If Prices Are Coming Back, Home Sales Must Be ... Right?

Home Sales Are Now Well below Pre-Pandemic Pace ...



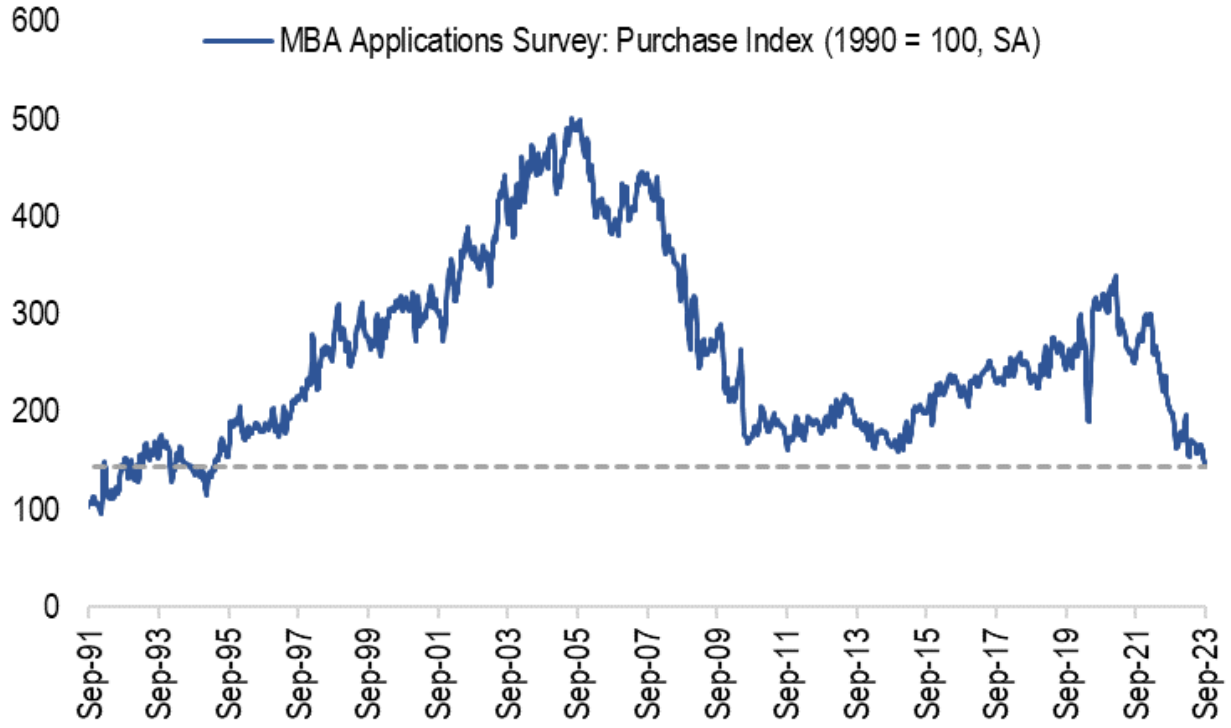
... and Have Tapered off Further Lately



Sources: NAR/U.S. Census Bureau /Redfin/Arch MI

How Low Can We Go?

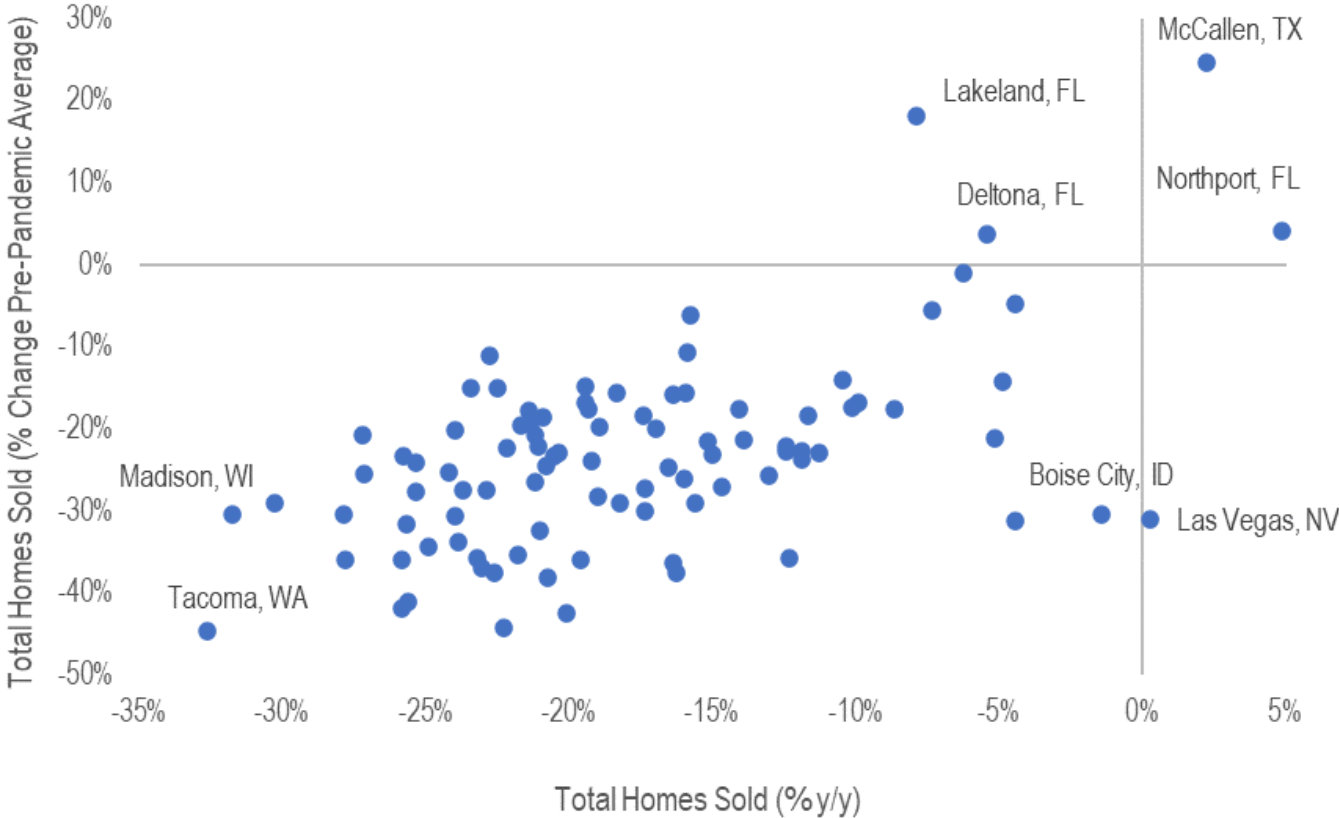
Anybody Remember Windows 95?



Sources: MBA/Arch MI

Sales Count for Top 100 Metros Signals Weak Demand?

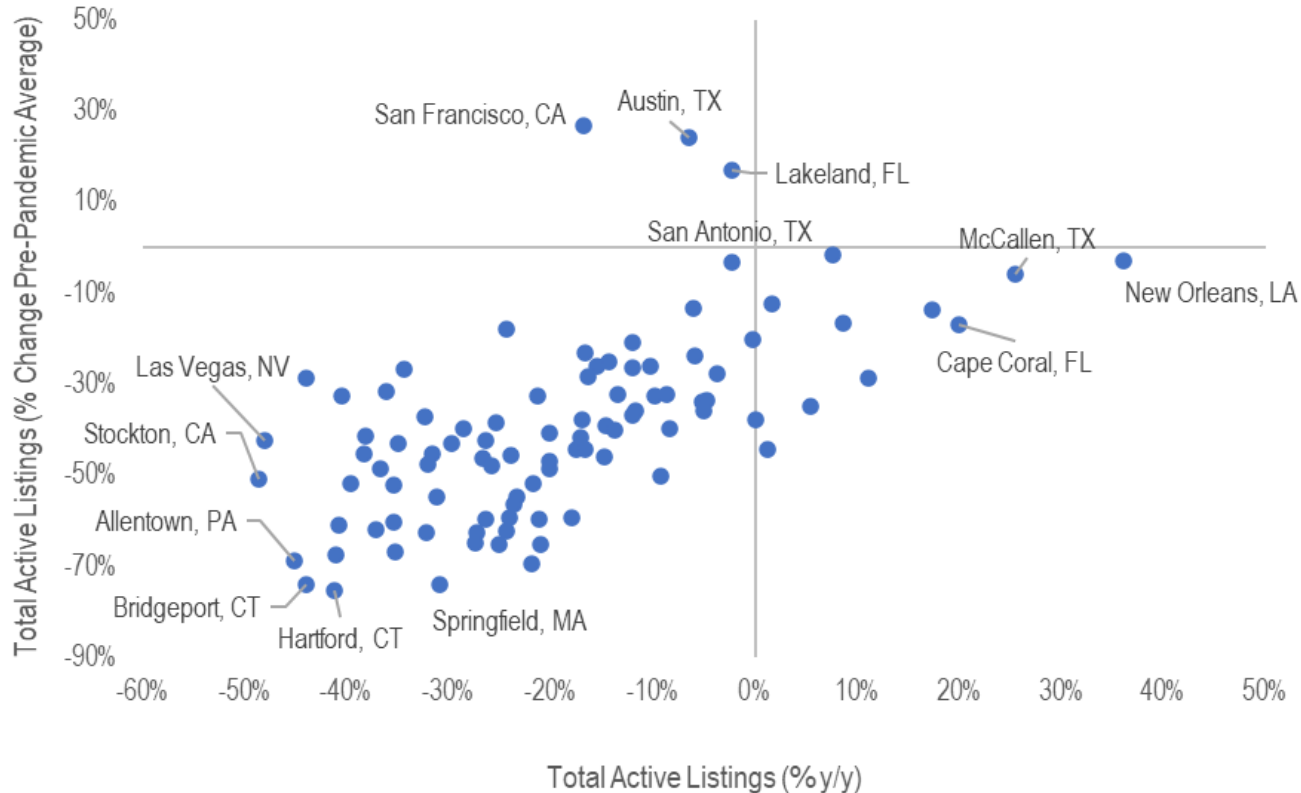
Average Sales Count Down -23% from pre-Pandemic Average (September '23)



Sources: Redfin/Arch MI

Inventory for Top 100 Metros Signal Strong Demand?

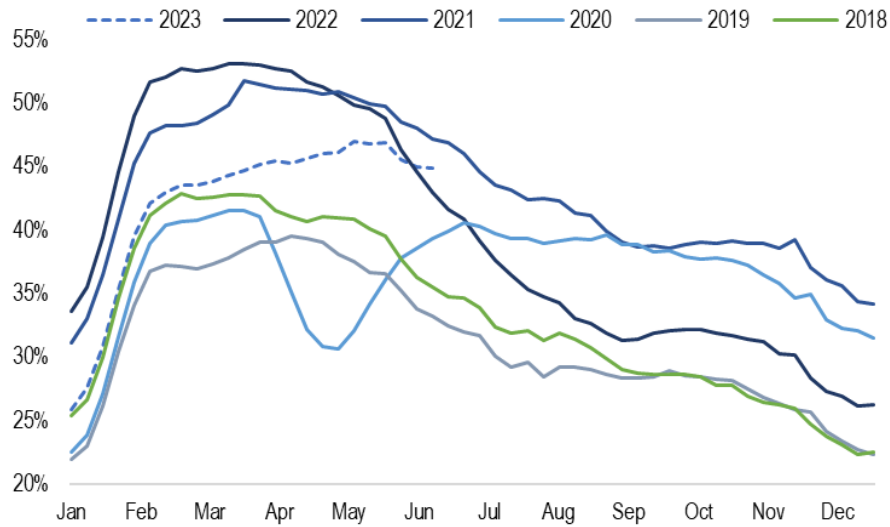
Average For Sale Inventory Down -40% from pre-Pandemic Average (Jul '23)



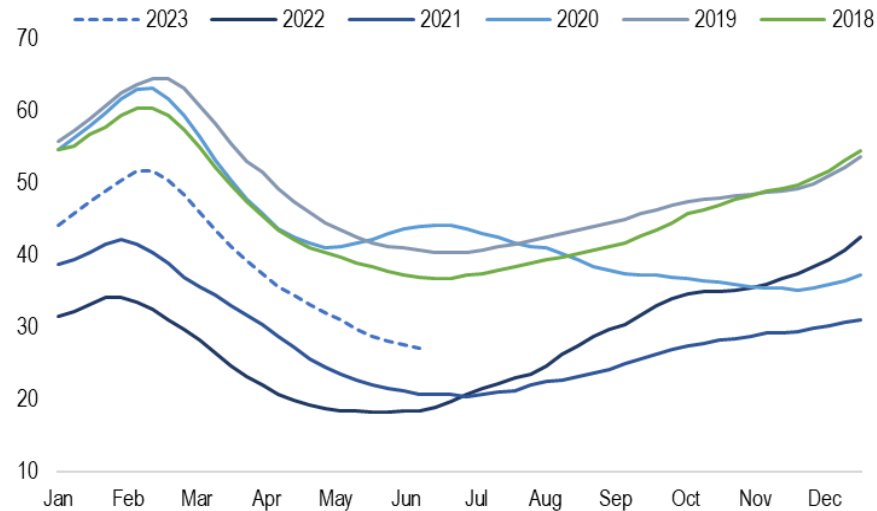
Sources: Redfin/Arch MI

It's Both! However, Demand Is Still Outstripping Supply

Percentage of Homes Off Market in Two Weeks (%) ...



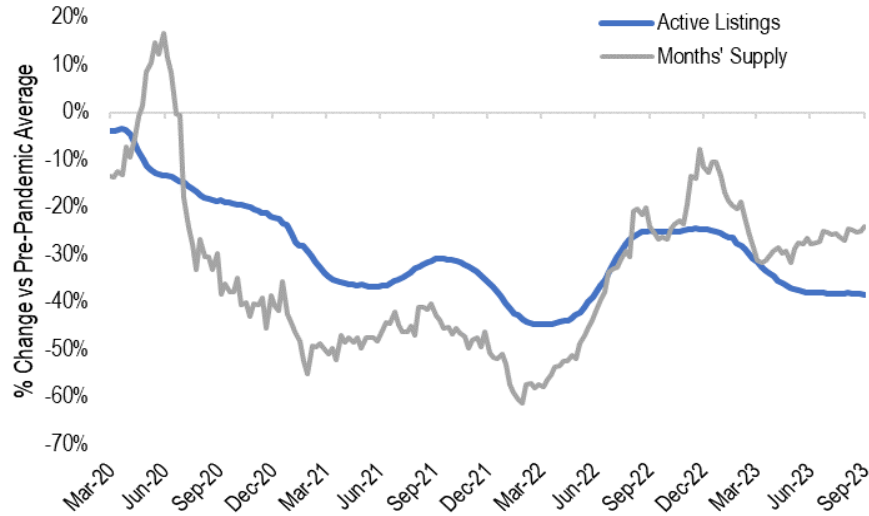
.. and Median Days on Market Tracking -31% below Pre-COVID-19 Average



Sources: Redfin/Arch MI

Market Still Tighter Than Pre-Pandemic

Inventory Is Still ~40% Below Pre-COVID-19 Norm

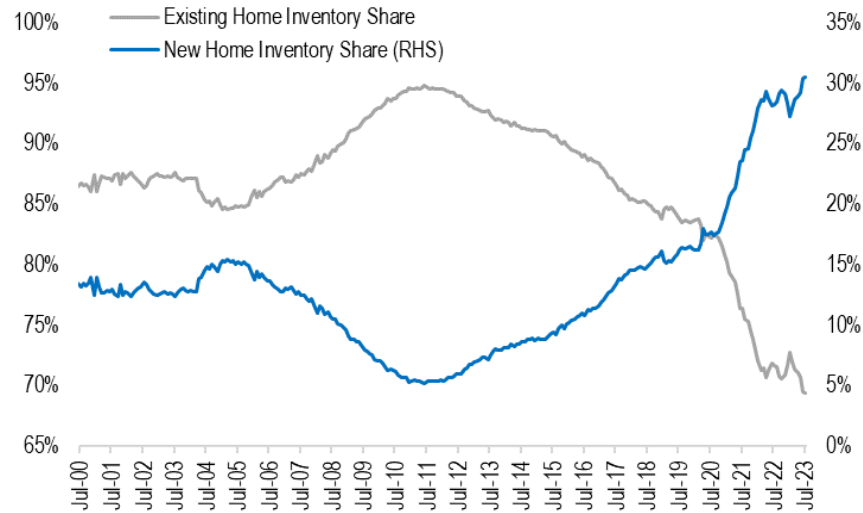


Sellers Increasingly Deciding to Stay Put, Offsetting Pullback in Buyer Demand

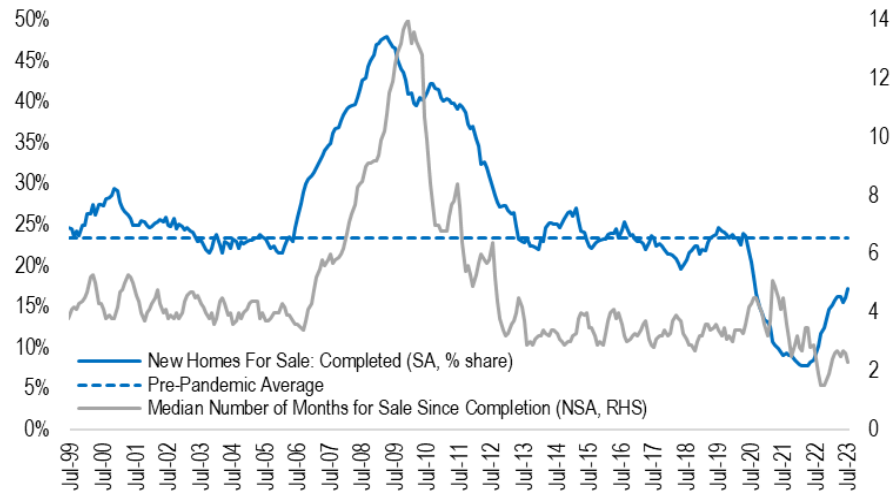


Homebuyers Have An Option

New Home Inventory at Record Share



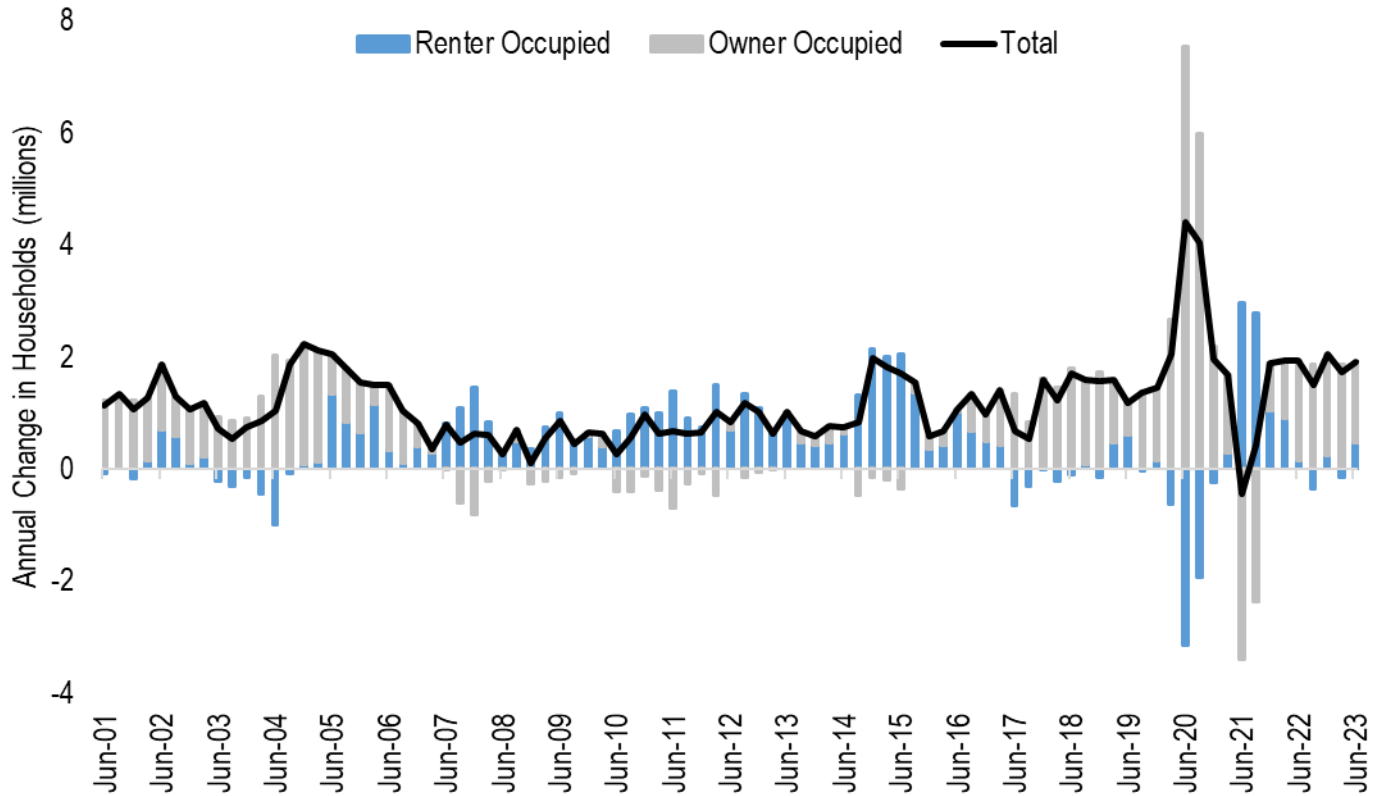
New Home Sales Gaining Ground



Sources: U.S. Census Bureau/Arch MI

Household Formation Skewing Towards “Owned” Units

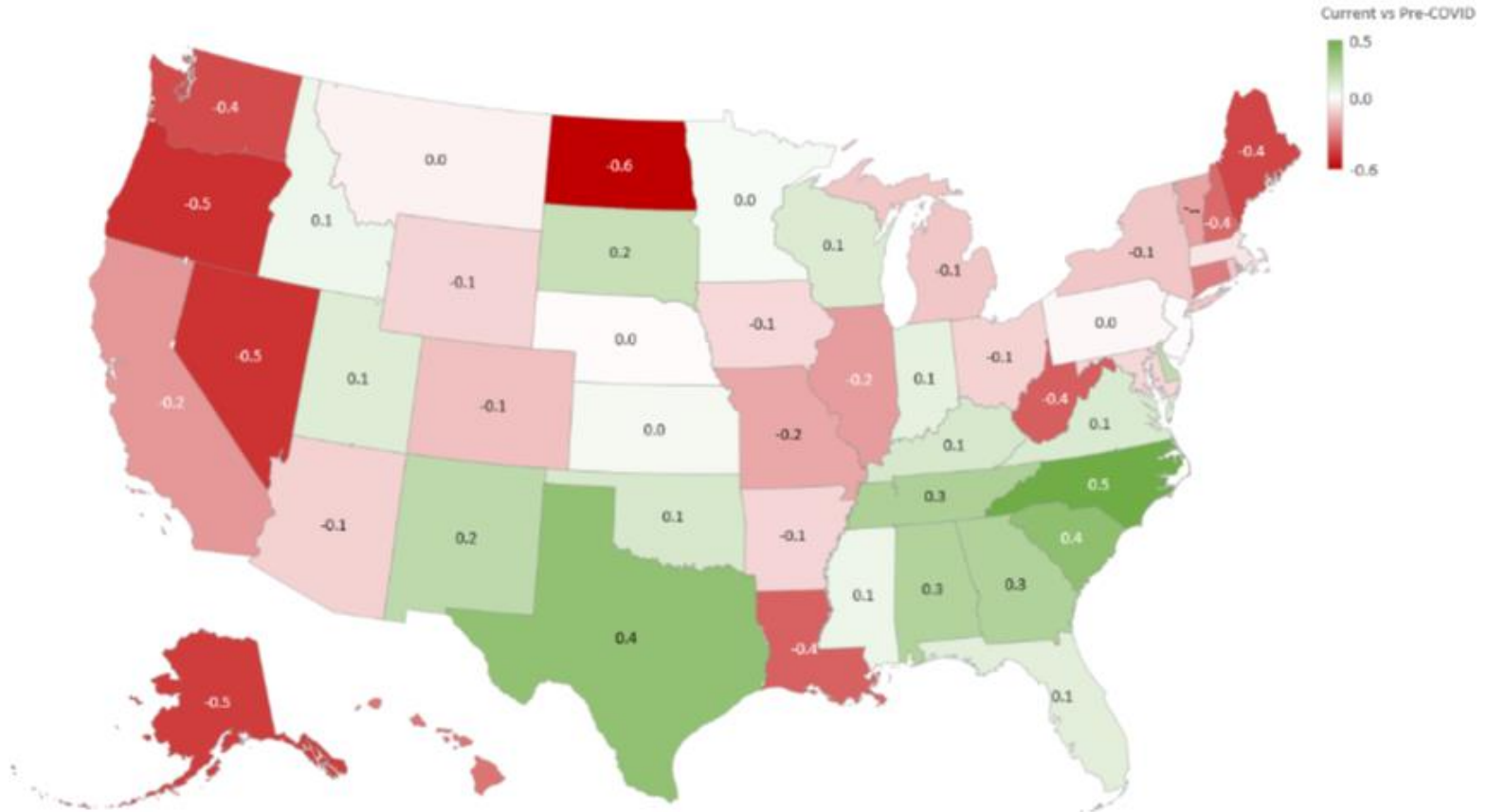
New Trend in Place Since 2018



Sources: U.S. Census Bureau/Arch MI

Migration Trends Not Letting Up

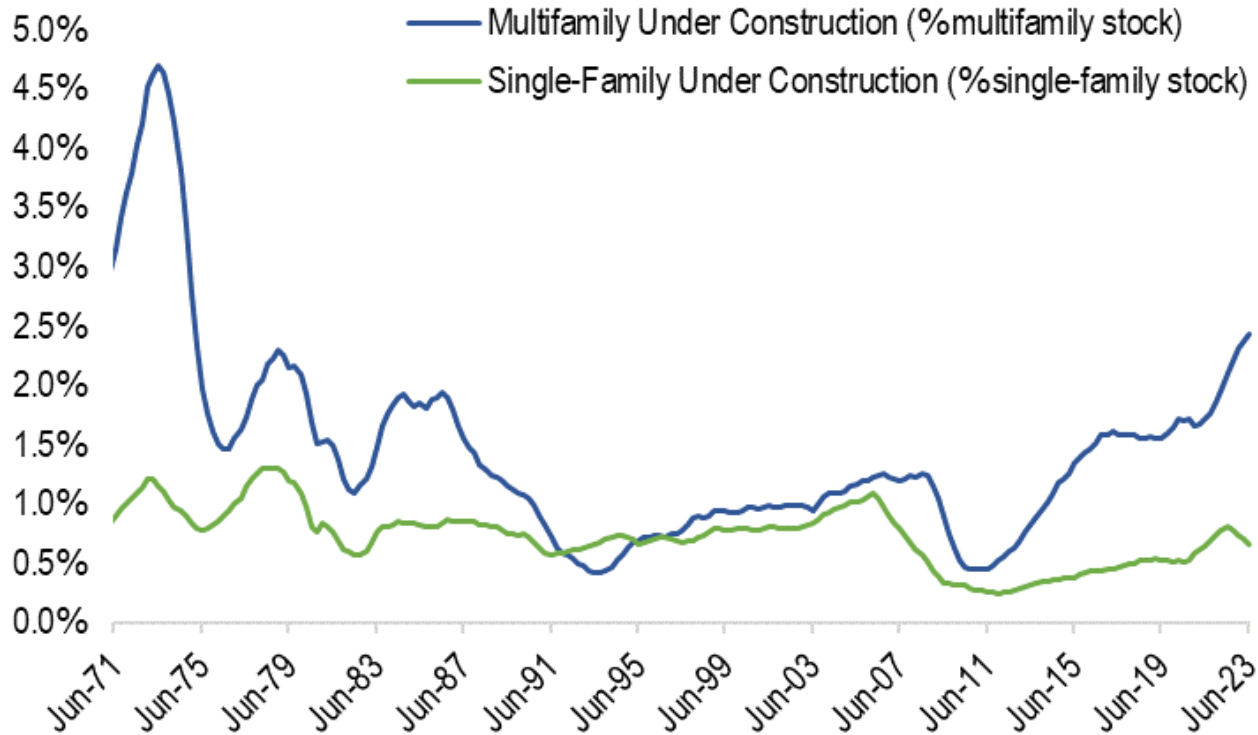
Change in Household Formation by State



Sources: USPS/Arch MI

Builders Likely Will Shift Focus

Will Potential Buyers Shift to Renting Instead?



Sources: U.S. Census Bureau/Arch MI

5. When Will Home Prices Come Down?

What Is Your Sense of Direction for Home Prices?

Three to Six Months From Now,
Home Prices Will Be ...

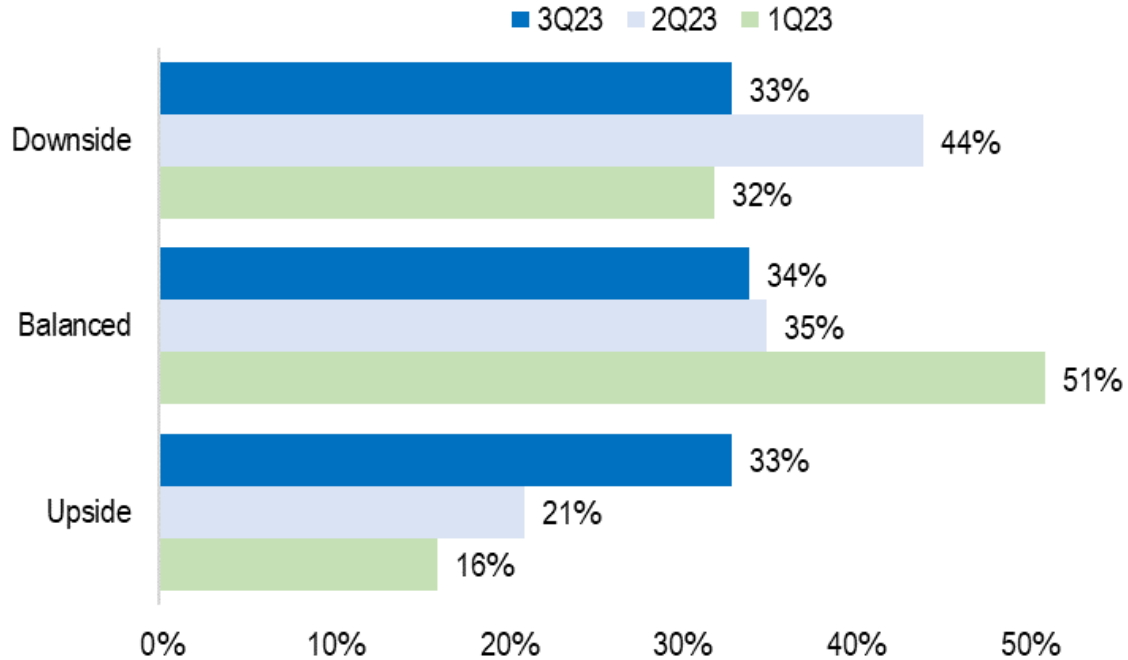
- A) Negative
- B) About the Same
- C) Positive

What Do Housing Economists Think?

3Q23 Putsenomics® Survey: Which Best Applies to Your Long-Term Outlook for Home Values?

Putsenomics Home Price Forecast

	Median Value	
	2Q23	3Q23
2023	0%	4%
2024	2%	3%
2025	3%	3%
2026	4%	4%
2027	4%	4%

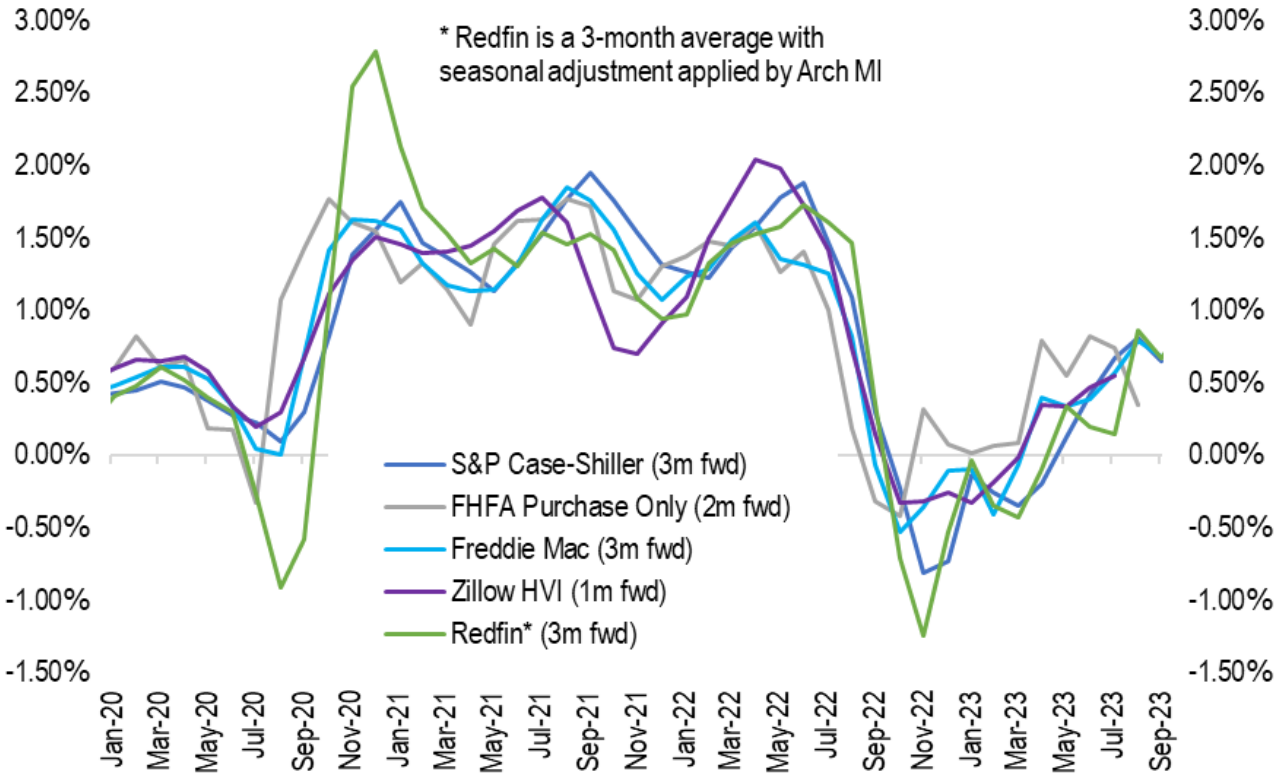


Note: Putsenomics survey of housing economists taken between July 31 and Aug. 14 with 107 respondents to this particular question.

Sources: Putsenomics/Arch MI

Sellers Seemingly Still in Driver's Seat

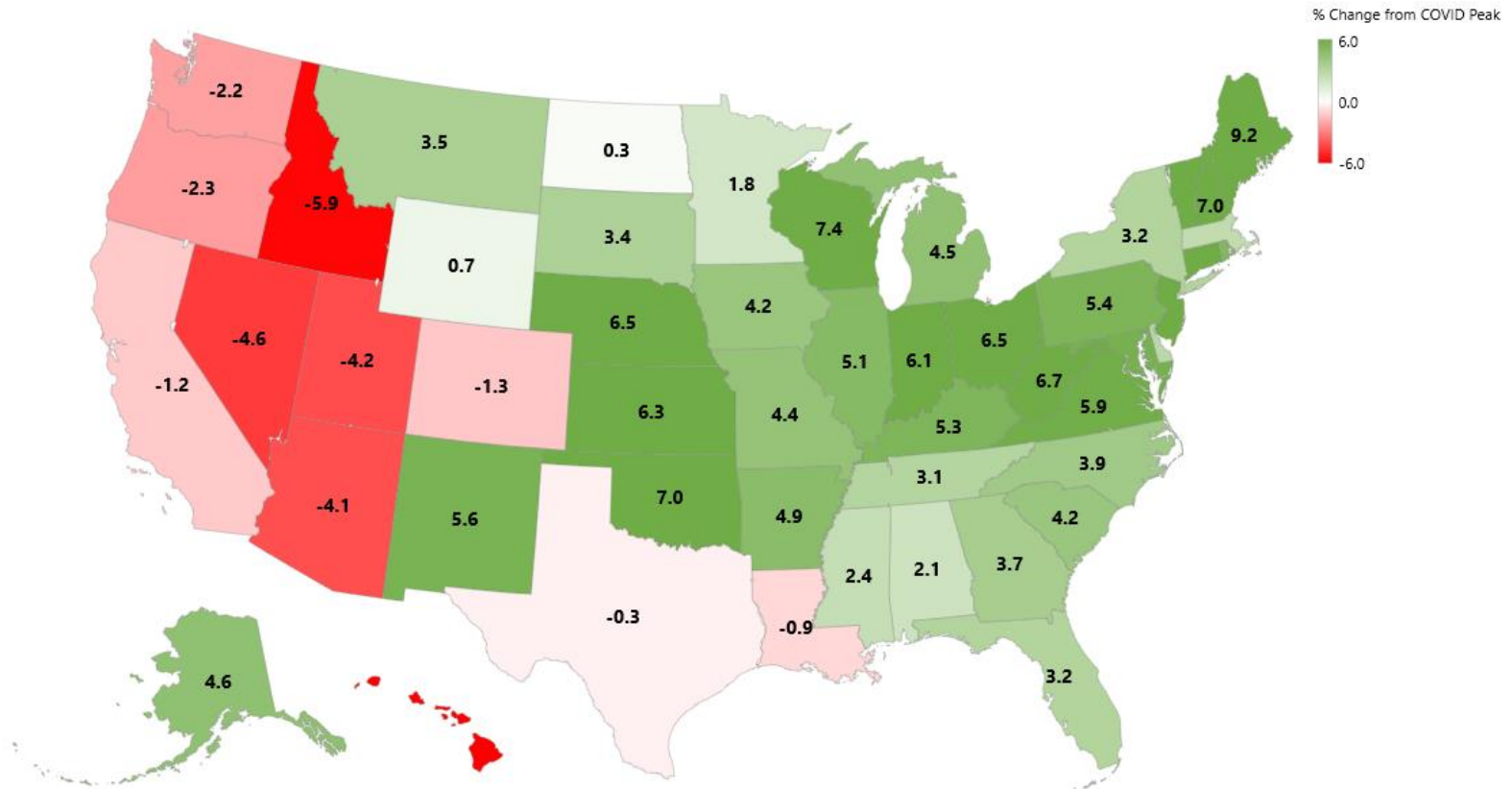
Home Price Momentum Looks Like It Could Gather Steam



Sources: Redfin/Arch MI

“Green Wall” Going to Break?

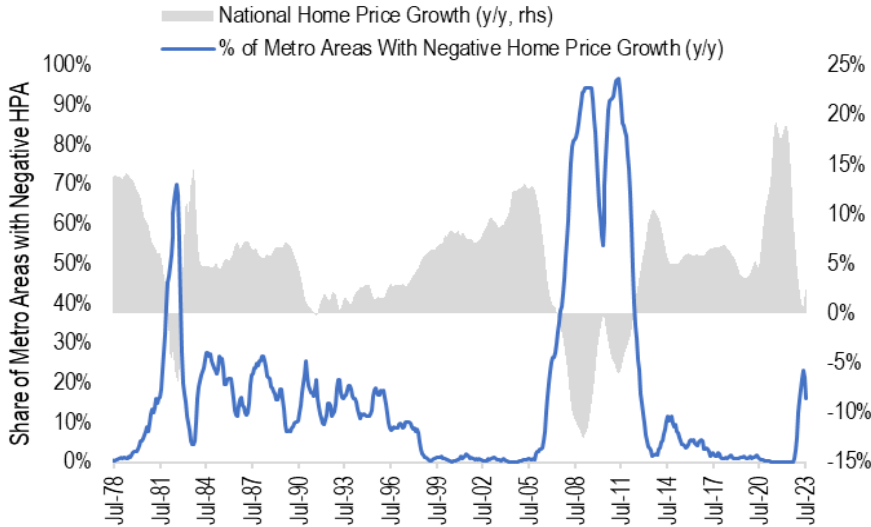
Change in Home Prices from 2020-2022 COVID Peak (%)



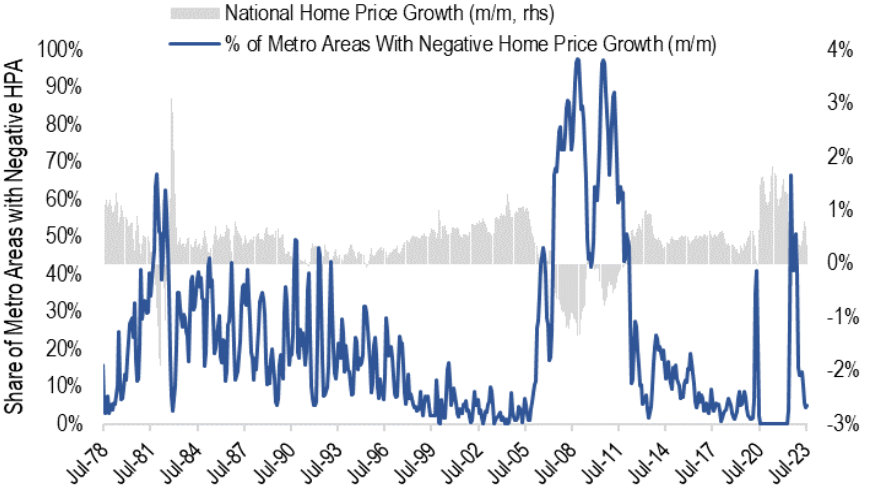
Sources: Freddie Mac/Arch MI

Annual Declines Shrinking

Percentage Share of Metros with Annual Home-Price Declines (as of July 2023)



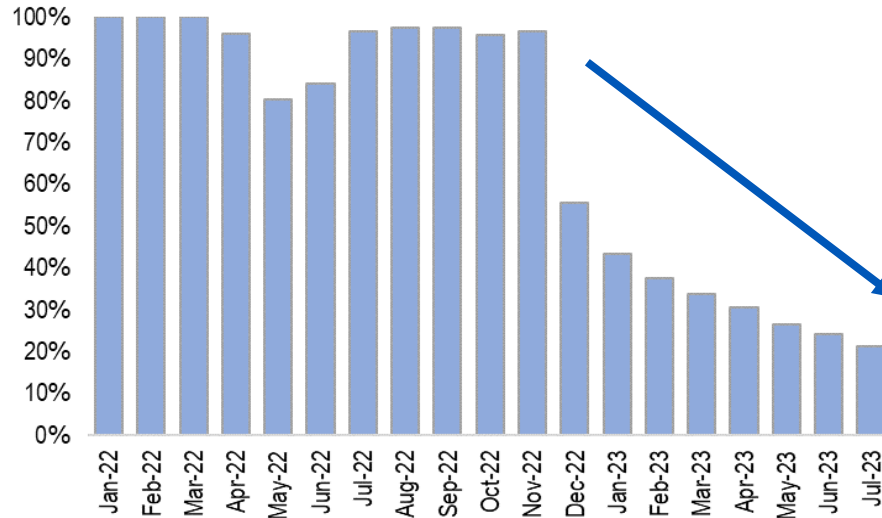
Percentage Share of Metros with Monthly Home-Price Declines (as of July 2023)



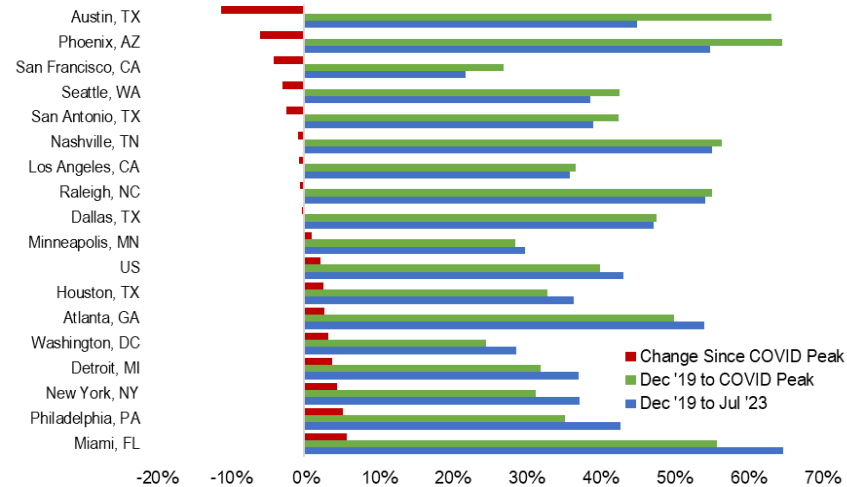
Sources: Freddie Mac/Arch MI

Swift Turnaround

Share of Metros BELOW the COVID-19 Home-Price Peak (as of July 2023)



A Lot of Built-Up Equity before Current Downturn



Sources: Freddie Mac/Arch MI

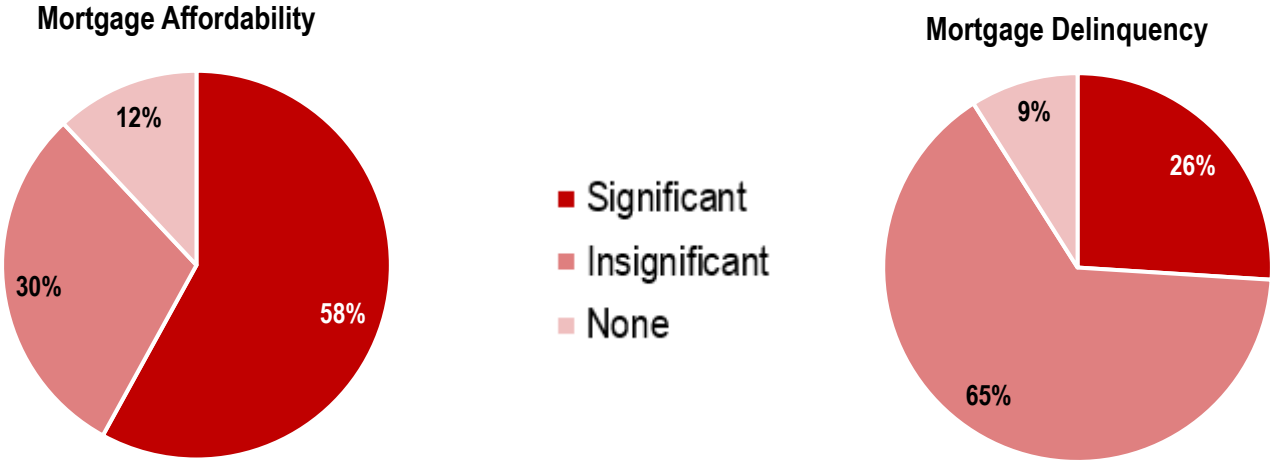
Will Resumption of Student Loan Payments Significantly Impact the Housing Market?

YES

NO

What Do Housing Economists Think?

3Q23 Pulsenomics Survey: How Significant of a Negative Impact Will Resumption of Student Loan Payments Be?

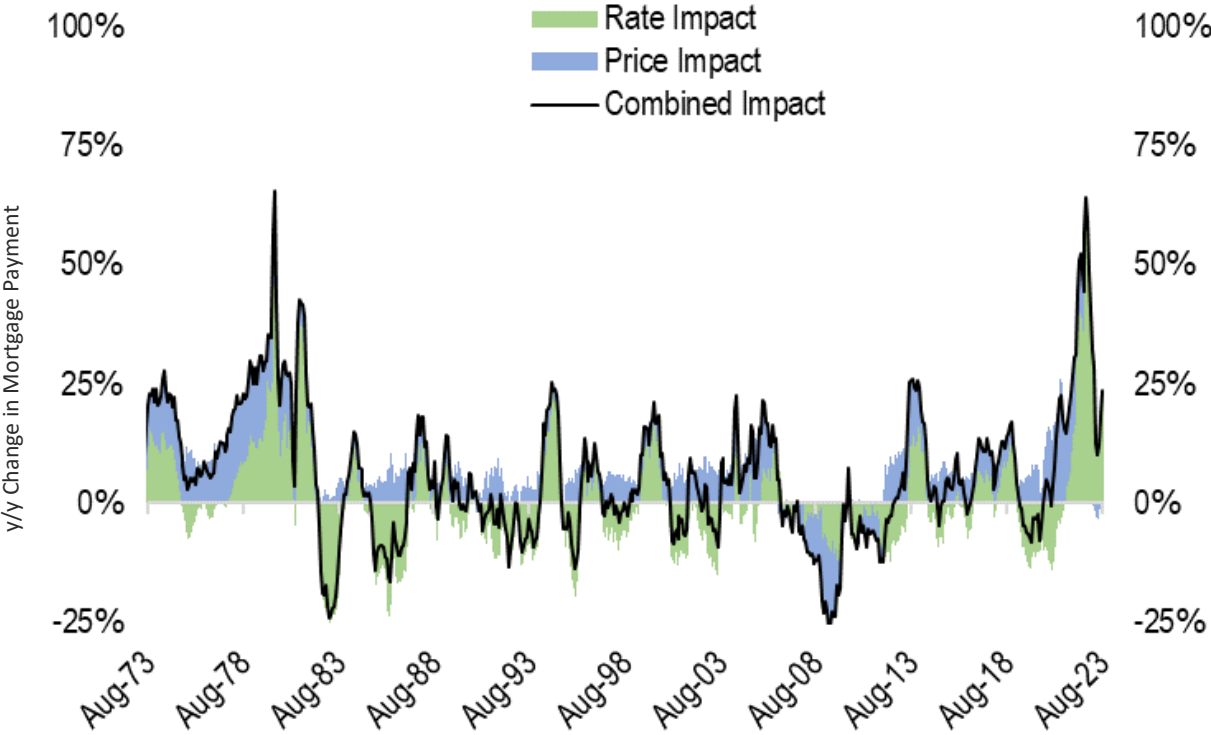


Note: Pulsenomics survey of housing economists taken between July 31 and Aug. 14 with 83 respondents regarding “Mortgage Affordability” and 81 respondents regarding “Mortgage Delinquency.”

Sources: Pulsenomics/Arch MI

Annual Growth In Mortgage Payment Making a U-Turn

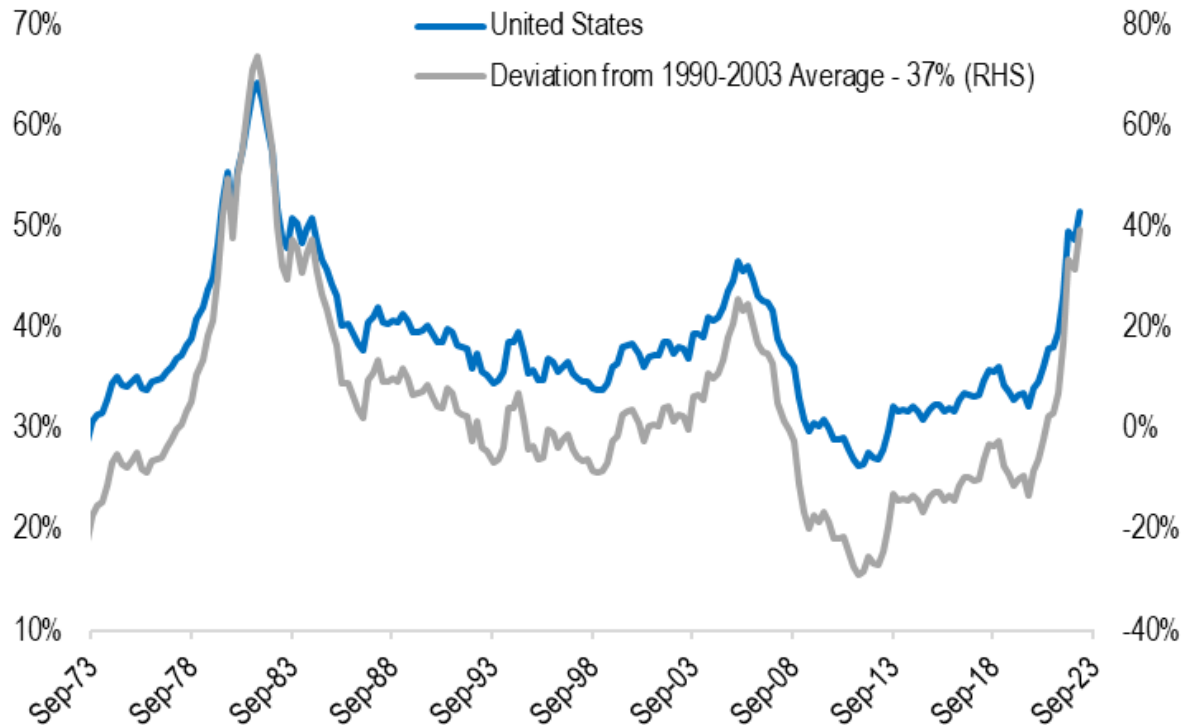
Buyers Hoping for More Relief, Preferably from Rates



Sources: NAR/Freddie Mac/Arch MI

Owning a Home Getting out of Reach for Many

Homeownership Cost-to-Income Ratio (%)

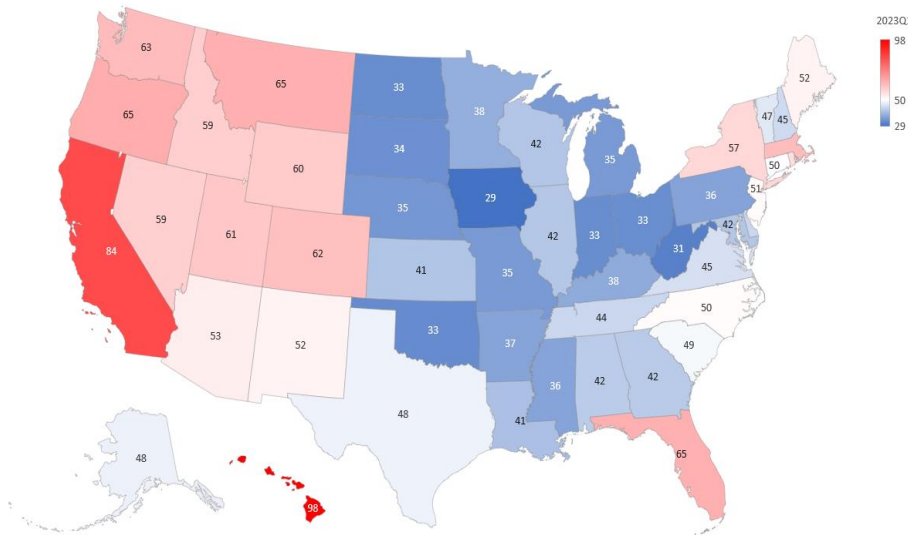


Calculations are based on pre-tax median household income, a 10% down payment, escrow of annual expenses of roughly 1.5% of the initial home price (for insurance and property taxes, which vary by state), the prevailing 30-year fixed mortgage rate, plus 0.75% to cover mortgage insurance and risk add-ons, as well as roughly 1% of the initial home price to cover annual maintenance costs.

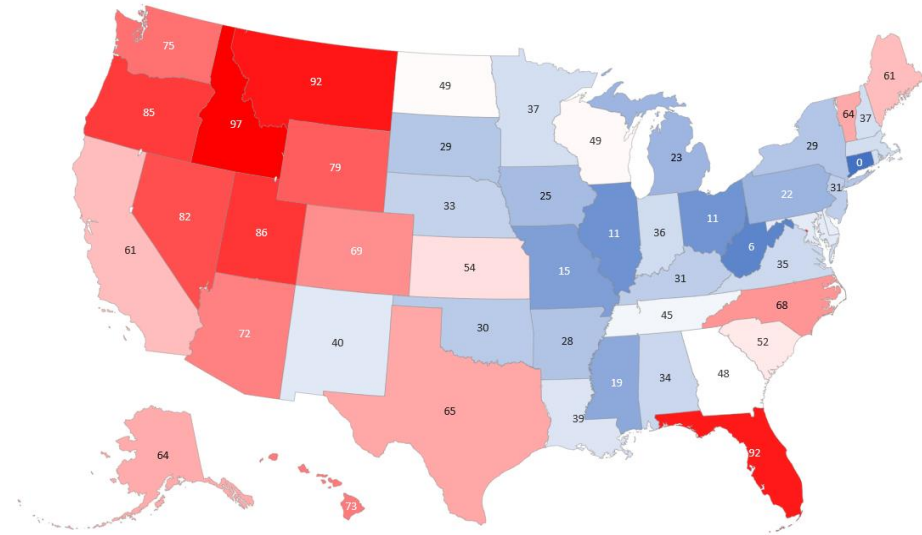
*Sources: U.S. Census Bureau/NAR median home price/Freddie Mac 30-year fixed-rate mortgage/
Arch MI estimate of median household income*

Heartland Keeps American Dream Attainable

Homeownership Cost-to-Income Ratio (%)



Now vs. Normal Years (1990–2003)

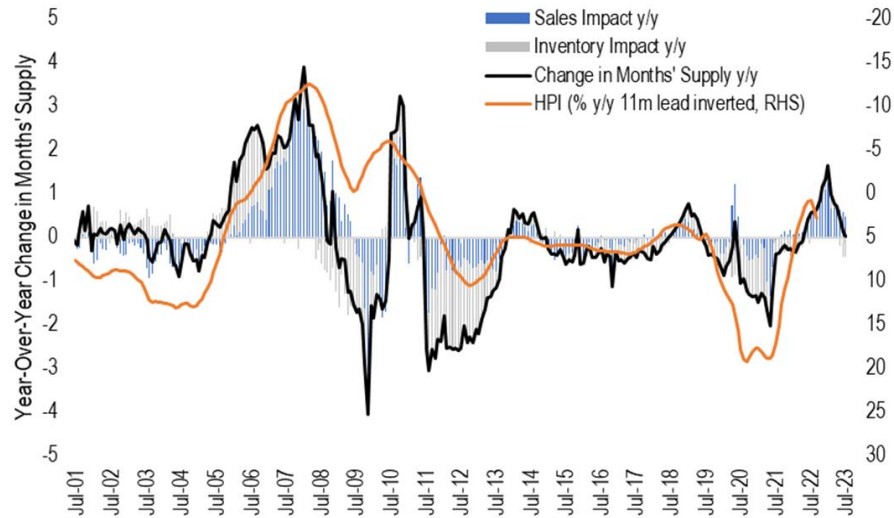


Calculations are based on pre-tax median household income, a 10% down payment, escrow of annual expenses of roughly 1.5% of the initial home price (for insurance and property taxes, which vary by state), the prevailing 30-year fixed mortgage rate, plus 0.75% to cover mortgage insurance and risk add-ons, as well as roughly 1% of the initial home price to cover annual maintenance costs.

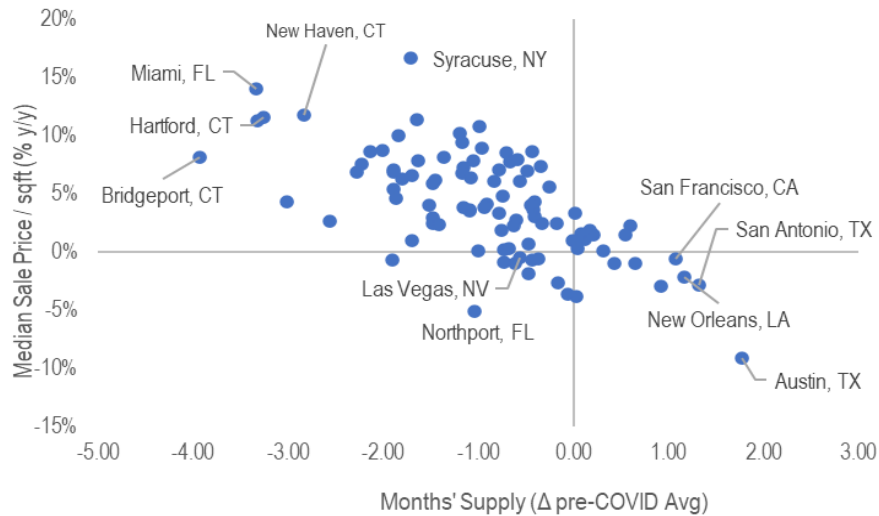
*Sources: U.S. Census Bureau/NAR median home price/Freddie Mac 30-year fixed-rate mortgage/
Arch MI estimate of median household income*

Why Are Home Prices Not Correcting More?

Months' Supply Holds the Answer



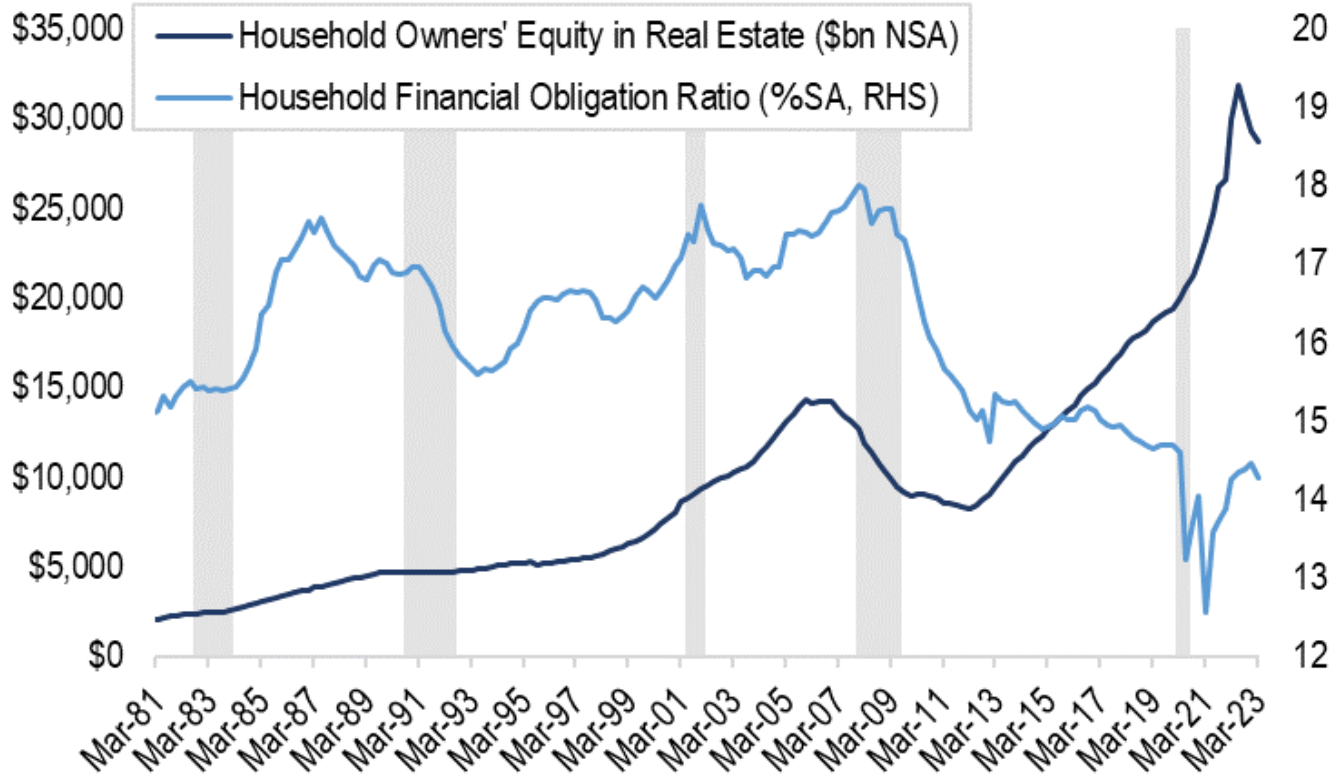
Top 100 Metros



Sources: NAR/U.S. Census Bureau/BEA/Redfin/Arch MI

Forced Selling Looks Like a Pipe Dream

Household Finances in Solid Shape



Sources: FRB/Arch MI

SAFE HARBOR STATEMENT

Cautionary Statement: The Private Securities Litigation Reform Act of 1995 (“PSLRA”) provides a “safe harbor” for forward-looking statements. This release or any other written or oral statements made by or on behalf of Arch Capital Group Ltd. and its subsidiaries may include forward-looking statements, which reflect our current views with respect to future events and financial performance. All statements other than statements of historical fact included in or incorporated by reference in this release are forward-looking statements. Forward-looking statements, for purposes of the PSLRA or otherwise, can generally be identified by the use of forward-looking terminology such as “may,” “will,” “expect,” “intend,” “estimate,” “anticipate,” “believe” or “continue” and similar statements of a future or forward-looking nature or their negative or variations or similar terminology.

Forward-looking statements involve our current assessment of risks and uncertainties. Actual events and results may differ materially from those expressed or implied in these statements. A non-exclusive list of the important factors that could cause actual results to differ materially from those in such forward-looking statements includes the following: adverse general economic and market conditions; increased competition; pricing and policy term trends; fluctuations in the actions of rating agencies and our ability to maintain and improve our ratings; investment performance; the loss of key personnel; the adequacy of our loss reserves, severity and/or frequency of losses, greater than expected loss ratios and adverse development on claim and/or claim expense liabilities; greater frequency or severity of unpredictable natural and man-made catastrophic events; the effect of contagious diseases (including COVID-19); the impact of acts of terrorism and acts of war; changes in regulations and/or tax laws in the United States or elsewhere; our ability to successfully integrate, establish and maintain operating procedures as well as integrate the businesses we have acquired or may acquire into the existing operations; changes in accounting principles or policies; material differences between actual and expected assessments for guaranty funds and mandatory pooling arrangements; availability and cost to us of reinsurance to manage our gross and net exposures; the failure of others to meet their obligations to us; changes in the method for determining the London Inter-bank Offered Rate (“LIBOR”) and the potential replacement of LIBOR and other factors identified in our filings with the U.S. Securities and Exchange Commission. The foregoing review of important factors should not be construed as exhaustive and should be read in conjunction with other cautionary statements that are included herein or elsewhere. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by these cautionary statements. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.



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