3Q22

United States Multifamily Capital Markets Report

NEWMARK

Market Observations

What We Know

- Following extraordinary property level fundamentals in 2021, quarterly absorption posted net negative demand of 82,035 units nationally in the third quarter of 2022, during the historically active leasing months of July, August and September, where absorption was negative.

- Housing remains undersupplied, with a 400,000-unit shortfall in 2021, when comparing single-family and multifamily completions to new households established. The lack of supply has resulted in an annual average effective rent growth of 13.5% as of the third quarter of 2022, 1,070 basis points above the long-term average.

- Nationally, vacancies remain near historic lows of 3.1% on a trailing 12-month basis; however, quarter-over-quarter vacancies have risen 90 basis points as demand has trailed off recently. The Class A and Class B segments have suffered the most as of late, with 194 and 200 basis point declines, respectively, in year-over-year occupancy as of September.

- The 30-year fixed-rate mortgage average rose to 6.7% in the third quarter of 2022, increasing 122.6% year-over-year, further adding to the elevated cost of single-family homes. As interest rates have climbed, mortgage applications have fallen 65.3% year-over-year as of September.

- Multifamily loan origination volume year-to-date totaled $228.8 billion, with a significant drop off in activity since May 2022. Continued volatility in the debt markets, the highest inflation in 40 years, sharp interest rate increases and war in Ukraine have materially impacted both investment sales and financing markets in the third quarter of 2022.

- While multifamily remains the most sought-out property type, accounting for 41.7% of all US commercial real estate year-to-date, sales volume in the third quarter of 2022 declined 17.2% year-over-year, to $74.1 billion. Compared with the first three quarters of 2021, sales volume has increased 25.0% and deal size continues to escalate.

- Nominal cap rates increased 55 basis points quarter-over-quarter according to Green Street Advisors; however, transactional cap rates have continued to compress in the third quarter of 2022, ticking down 4 basis points to 3.93% nationally. The sub-4% yield remains problematic as debt costs have risen substantially, and valuations between buyers and sellers remain far apart.

Market Observations

What We Expect

- After two consecutive quarters of negative net absorption, the fourth quarter of 2022 is likely to see positive absorption. Vacancy is expected to increase in the coming quarters, as demand remains muted and deliveries increase. Recently adjusted rental growth projections for 2023 to 4.4% from 9.5%, partially based on lower levels of demand, may be offset by persistent inflation.

- Single-family home purchases will remain prohibitive, as substantially higher costs of borrowing is likely to increase near term as the Federal Reserve tries to combat inflation. Additionally, a potential contraction in the economy, paired with recently announced layoffs, will further sideline would-be buyers, even as prices retreat. While a worsening economy will impact the rental market, as well, fewer homebuyers means more renters.

- Market dislocation, combined with further rate hikes, will materially impact investment sales and origination volumes in the fourth quarter of 2022 and into 2023. Nonetheless, the fourth quarter of 2022 should see a host of transactions close that have been under contract for an extended period, particularly those with pricing adjustments.

- Lagging markets such as New York and San Francisco that have underperformed, given the severity of the pandemic and subsequent COVID-19-related restrictions, should experience above-average fundamentals as a rotation is underway, with fast-growing markets, particularly throughout the Sun Belt, set to normalize.

- While the largest nontraded REITs remain well-capitalized presently, a sharp decline in fundraising and uptick in redemptions may result in reduction in activity in the core and core-plus market segments, where they've been the largest buyers over the past few years.

- Conversions from older vintage commercial properties to multifamily will grow in the years ahead; however, it will not be immediate. Though not all buildings will be suitable for conversions, the largest cities with an abundance of obsolete and/or commodity office product are likely to see the most activity.

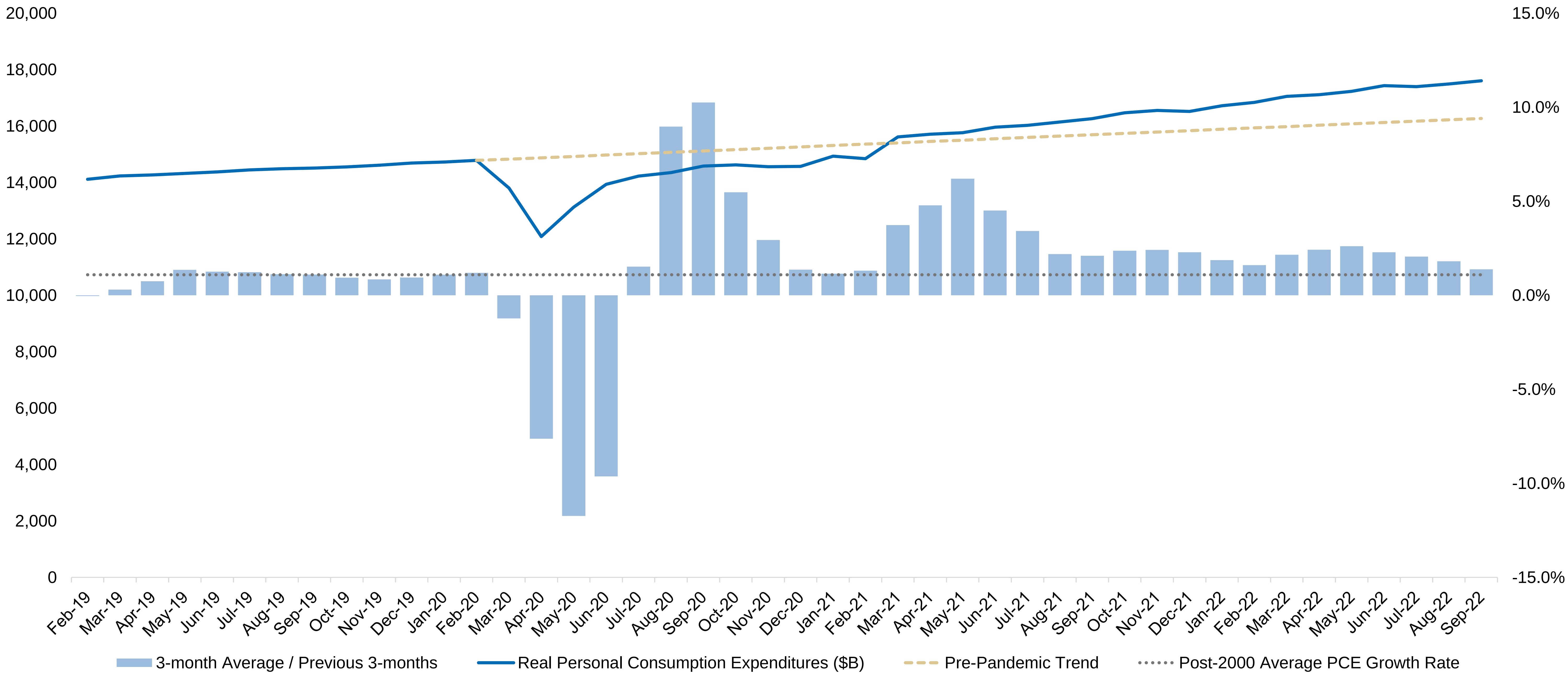
- According to Green Street Advisors, pricing declined 9.0% quarter-over-quarter. Further erosion of asset values is likely, as the market absorbs capital markets uncertainty, further FOMC hikes and price discovery. Additionally, cap rate expansion is highly likely in the coming quarters. While NCREIF total returns remain positive, returns have decelerated swiftly in the third quarter of 2022 and likely could see further erosion, like multifamily REITs have experienced.

Economy

The Economy Is Not in a Recession (Yet)

Consumer spending is still above the pre-pandemic trend, though the rate of growth is rapidly decelerating.

Real Personal Consumption Expenditures

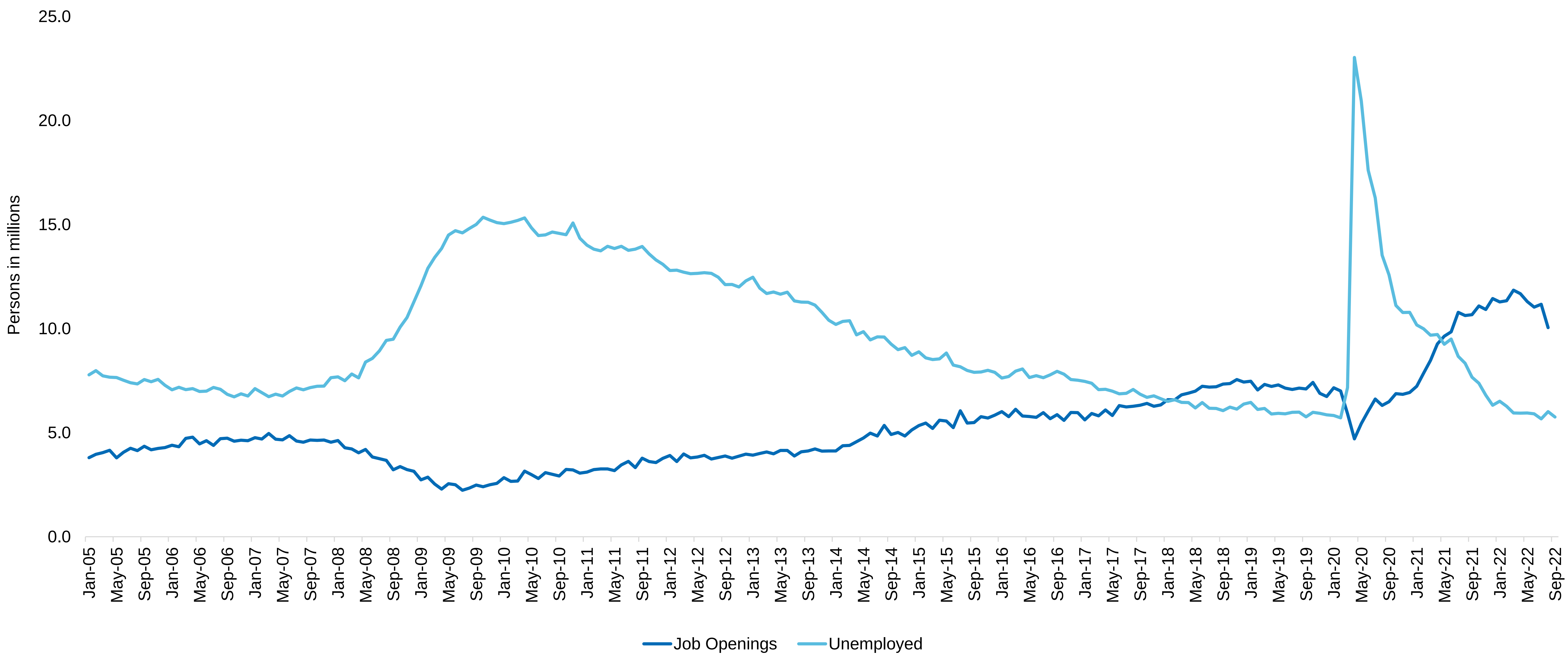


Source: U.S. Bureau of Economic Analysis, Newmark Research

The Economy Is Not in a Recession (Yet)

Jobs aren't scarce, but labor is. There are 1.7 open positions for every unemployed worker.

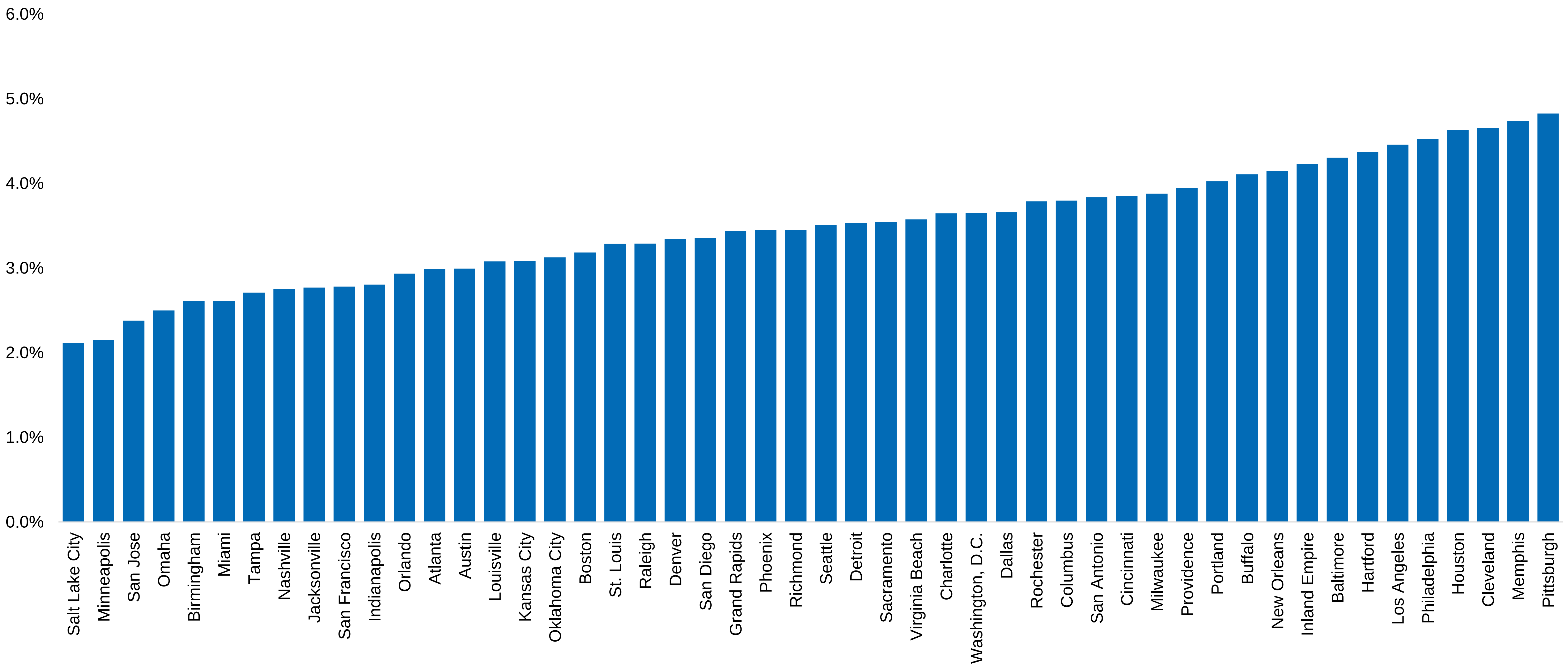
U.S. Labor Market Dynamics



Source: Bureau of Labor Statistics, Newmark Research

Labor Tight across Markets

Metro Area Unemployment Rate: August 2022

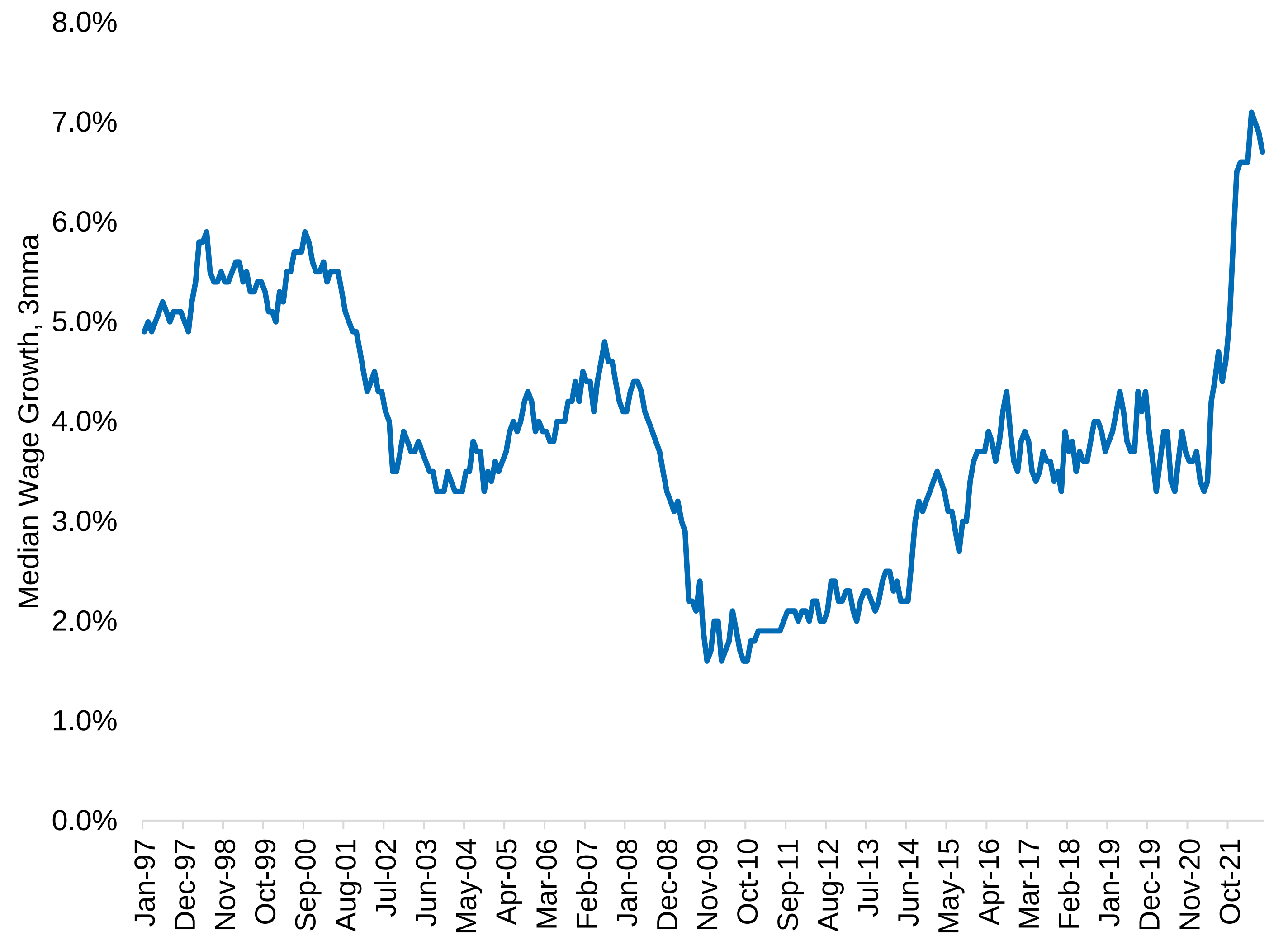


Source: Bureau of Labor Statistics, Newmark Research
Metros over 500,000 civilian labor force

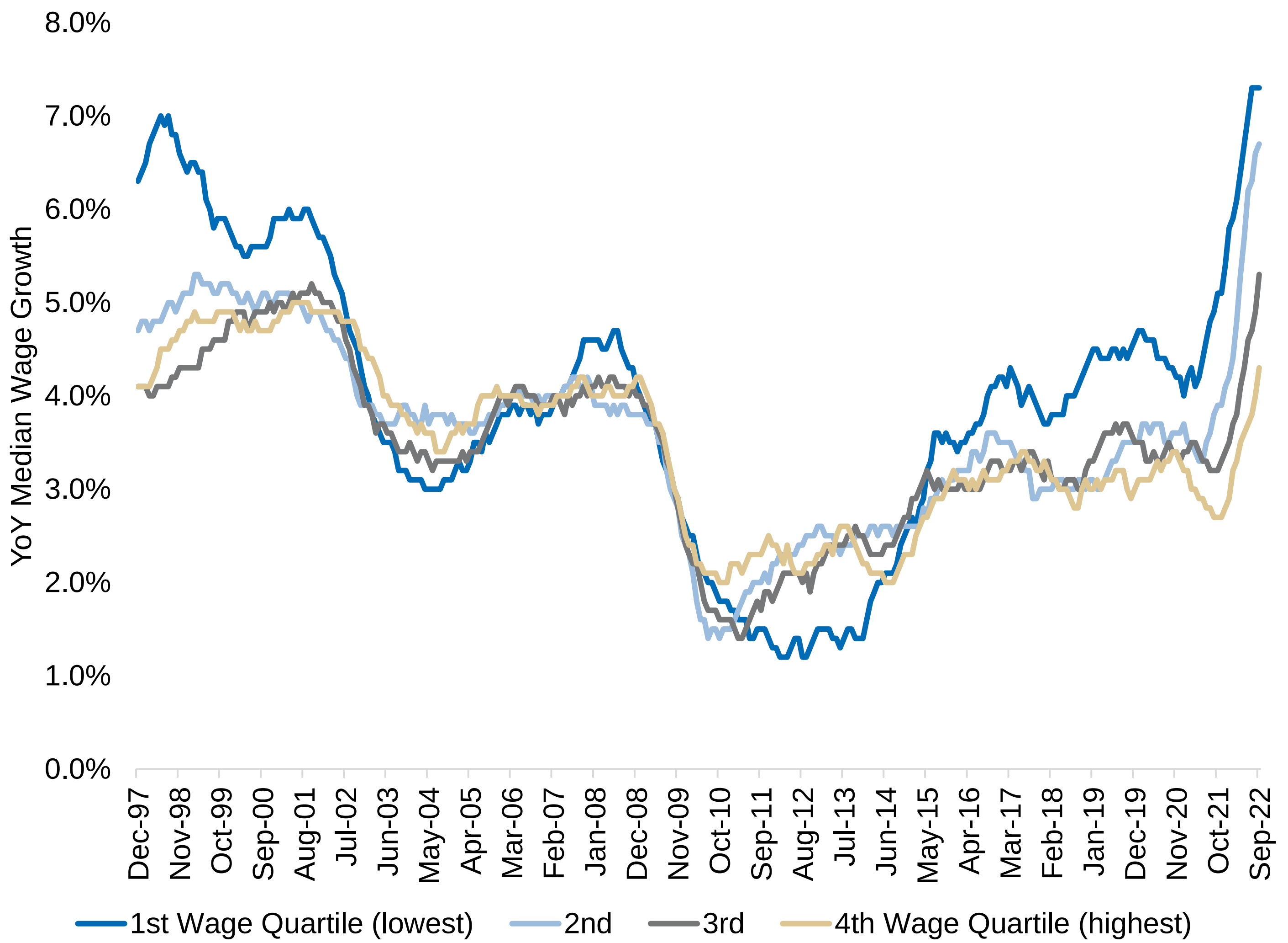
Fastest Wage Growth in Decades

Wage growth is broad-based, but lower income workers, service workers and those without a college degree are seeing the greatest wage growth. Even so, prices are rising faster resulting in negative *real* wage growth.

Median Wage Growth Highest on Record



Wage Growth Highest For Lower End of Income Spectrum

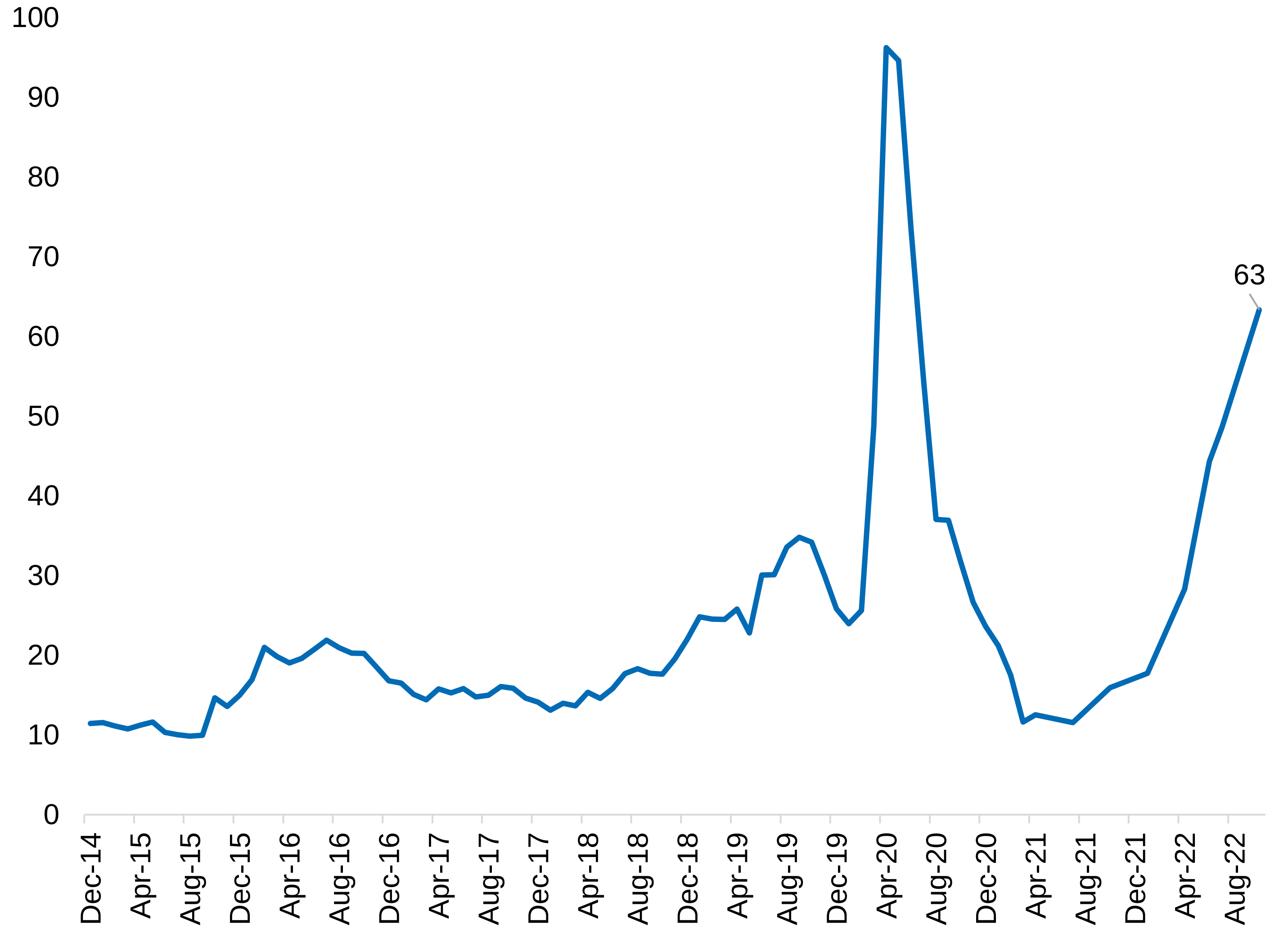


Source: Atlanta Fed Wage Tracker, Newmark Research

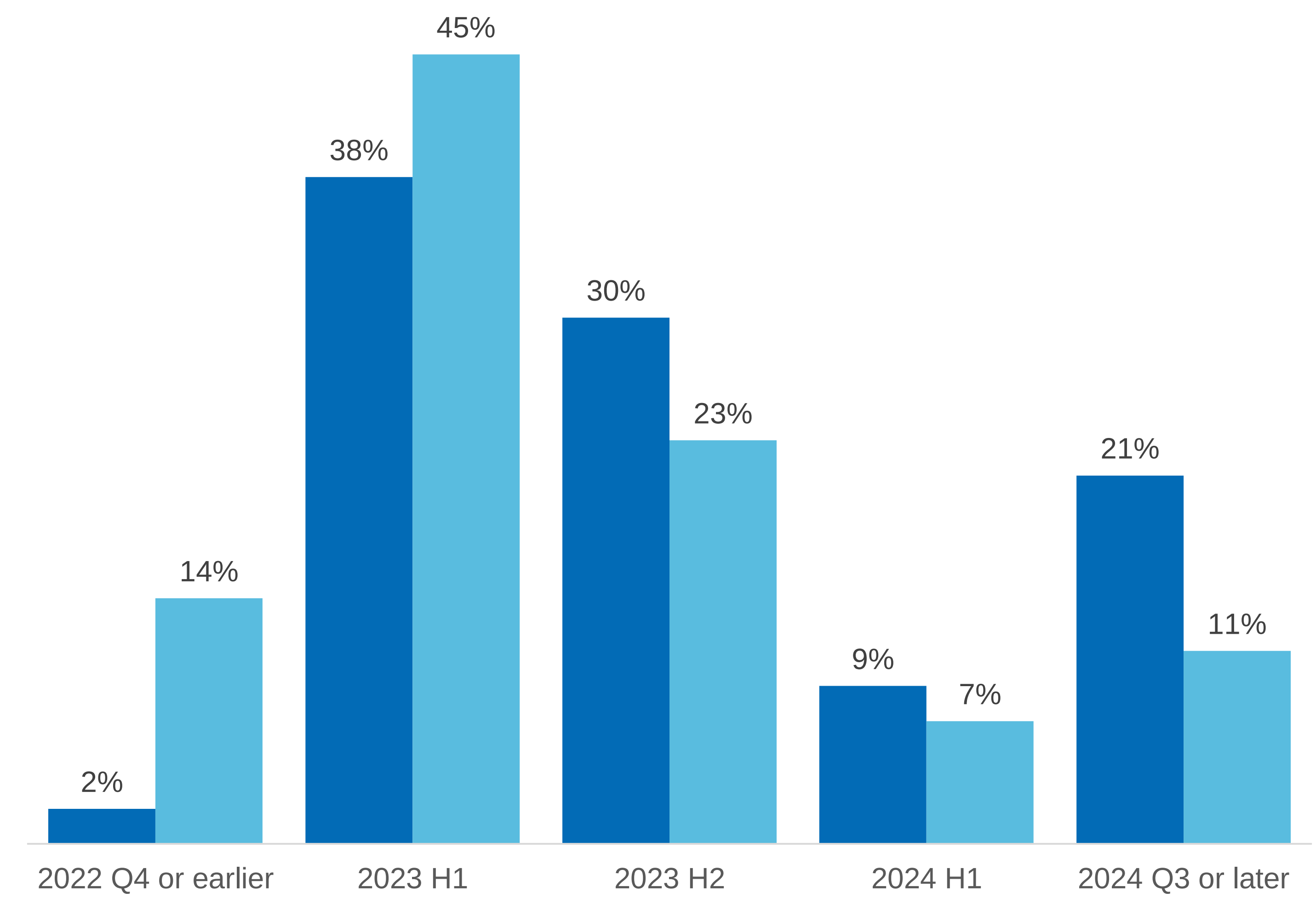
A Recession Is Widely Anticipated

Conference Board estimates 96% chance of recession in next twelve months. Moreover, a wide range of yield curve measures are inverted, including the 3-month / 10-year spread, which has predicted every recession within a year going back to the 60's *with no false positives*.

Probability of Recession in Next Twelve Months Over 60%



With Most Expecting Recession in Early 2023

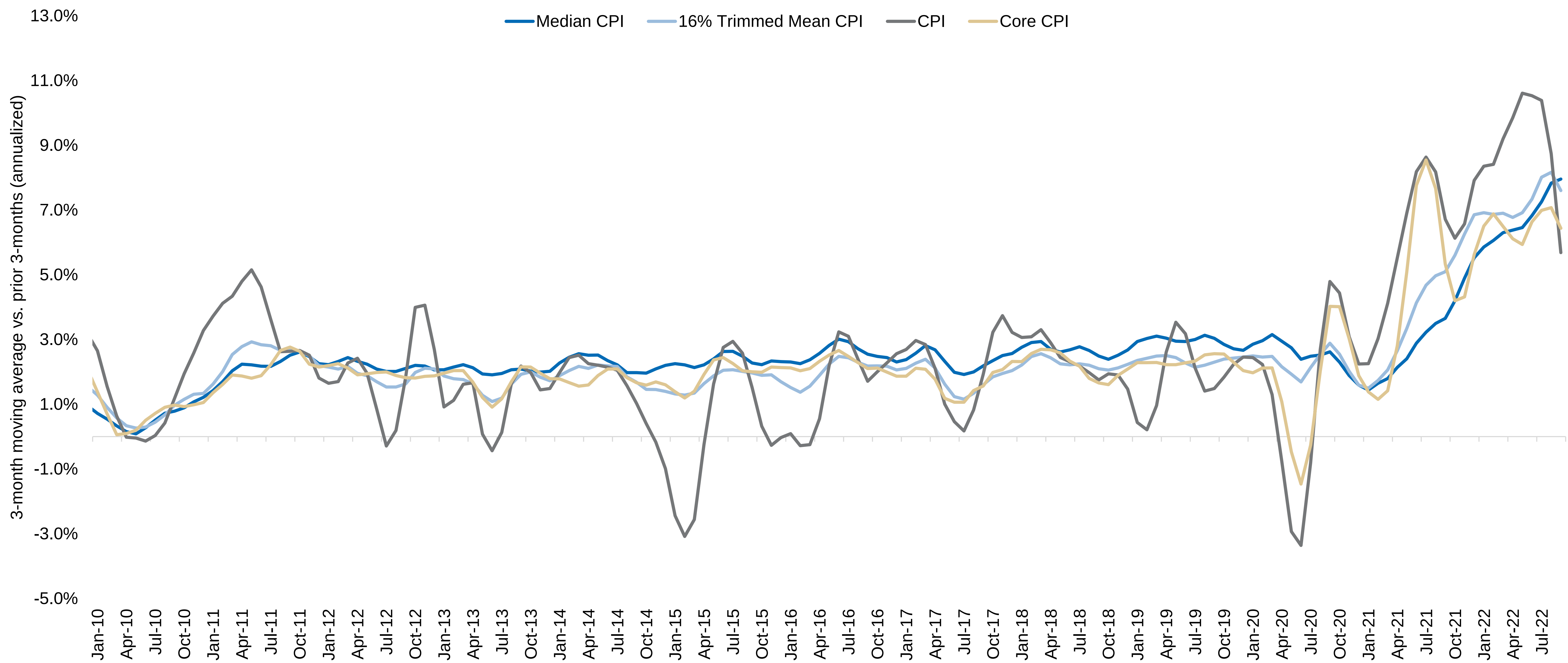


Source: WSJ Economic Forecasting Survey, Financial Times – Chicago Booth Initiative on Global Markets June 2022 Survey, Newmark Research

Inflation Is Far From Where the Fed Wants It

Median and trimmed means CPI strips out effects of strong outliers, showing that inflation remains both high and broad-based.

Consumer Price Inflation

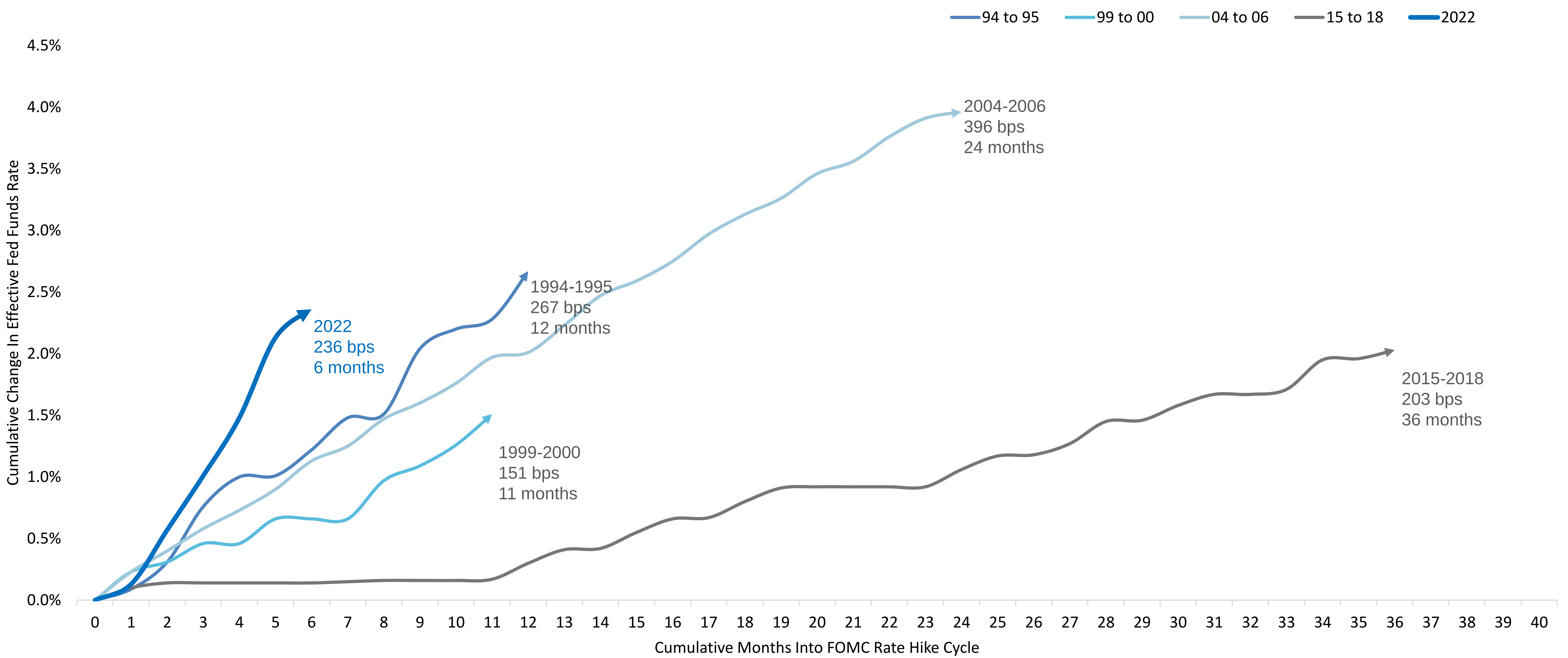


Source: Federal Reserve Bank of Cleveland, U.S. Bureau of Labor Statistics, Newmark Research

FOMC Hiking Rates Faster than Any Time in Modern History

FOMC being caught flat-footed by inflation earlier in the year now means “all gas, no brakes.”

Effective Federal Funds Rate

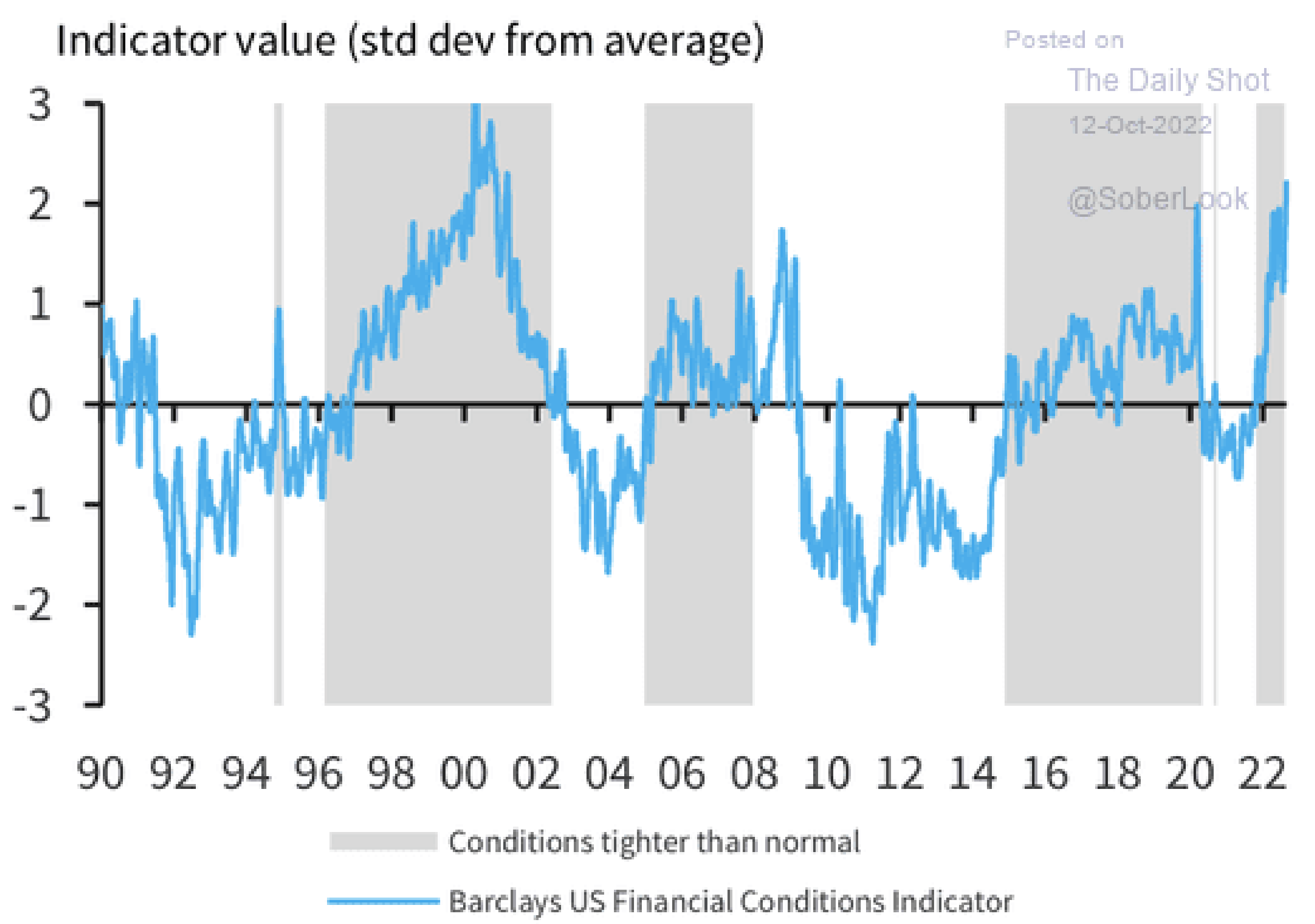


Sources: Newmark Research, Federal Reserve

Tightening Financial Conditions

Meanwhile, 10-year real yields, while the highest they have been in more than a decade, would have been considered normal in the mid-2000s. Similarly, the term premium on a 10-year bond, a measure of compensation for rate uncertainty, has increased sharply since bottoming at negative 0.9% in 2020, but now sits at only 0.2%, well below the pre-financial crisis average. Financial conditions, while tight, could reasonably become tighter.

Barclays Says Tighter Than During the Financial Crisis



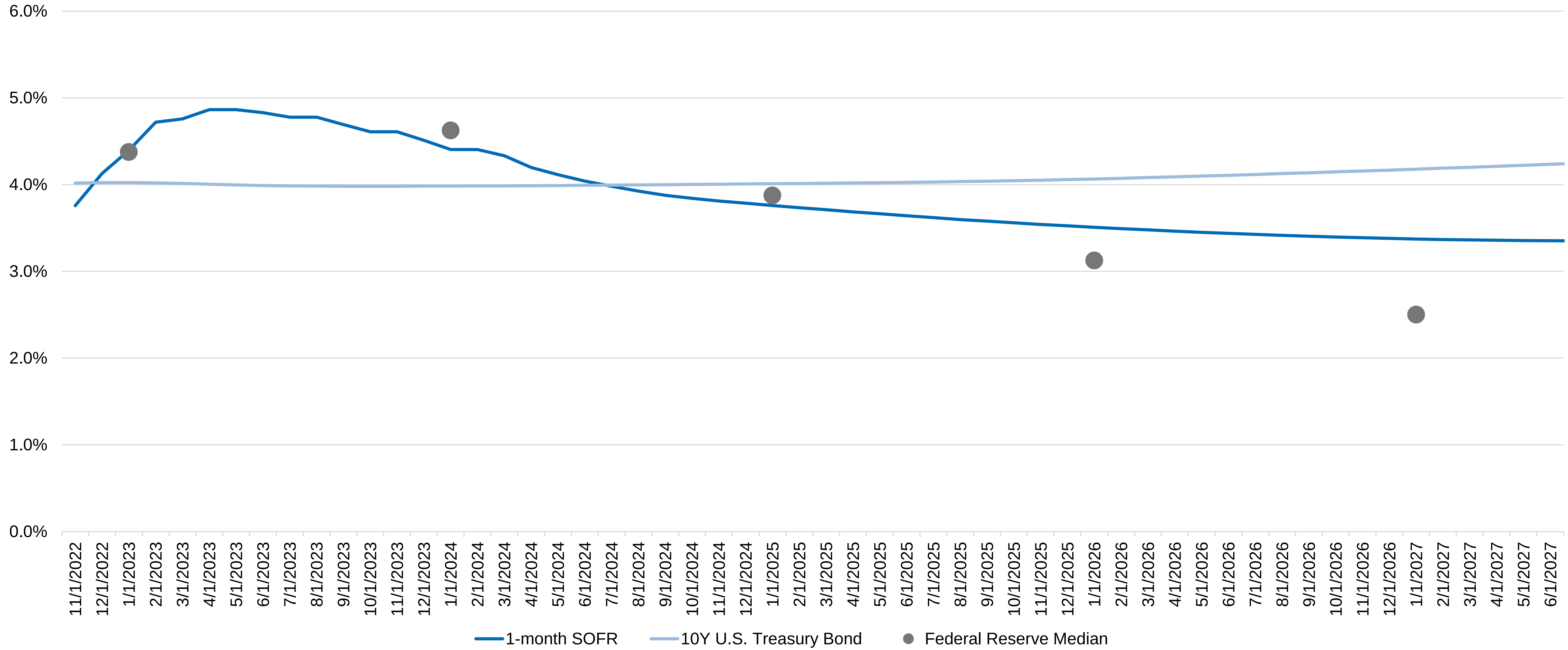
Goldman Says Since Tightest Since HY Debt Implosion of 2015

Source: Barclays and Goldman Sachs via the Daily Shot, Newmark Research

Rates Expected to Peak Next Year but Remain over 3% For Years to Come

Meanwhile, the 10-year U.S. Treasury yields are expected to remain above 4%. Market expectations are highly sensitive to new data developments, fostering uncertainty around the outlook.

U.S. Rates Forward Curve

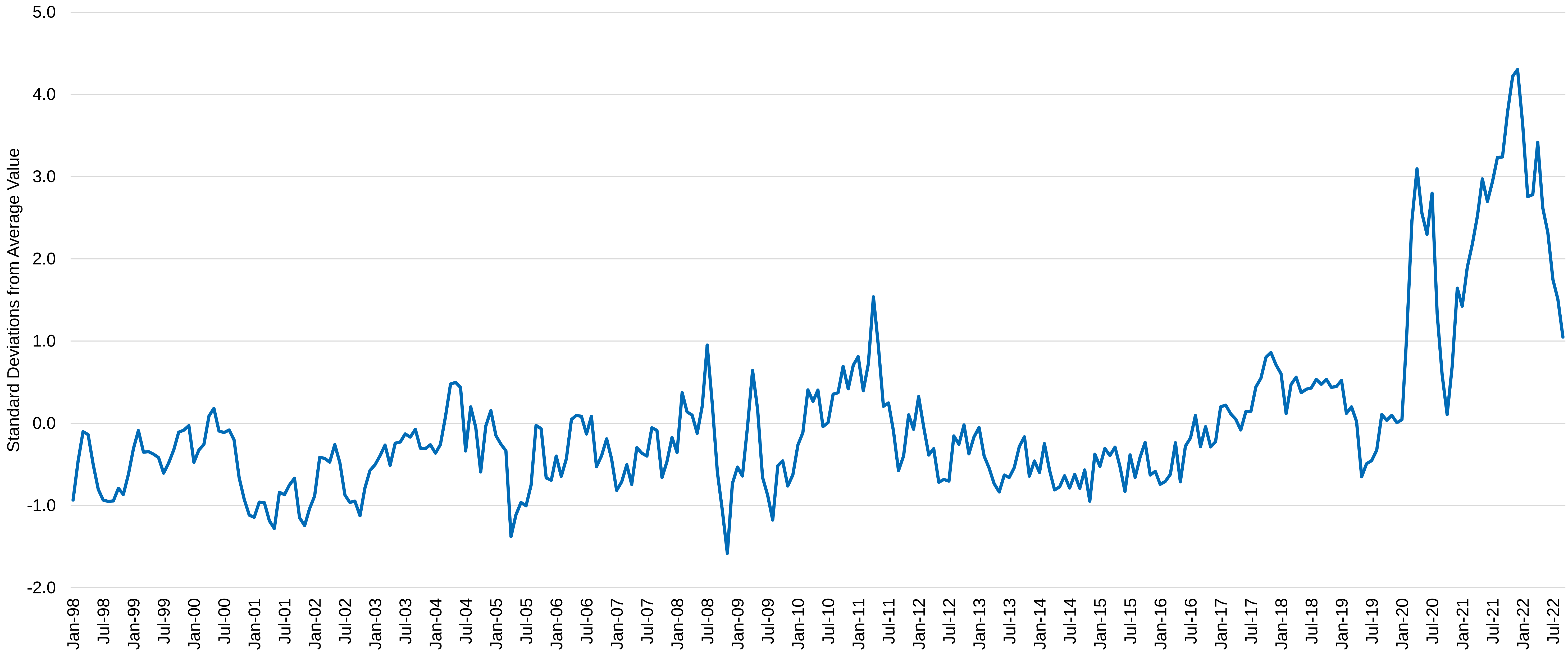


Source: Chatham Financial, Newmark Research

Not All Bad News; Indications That Supply Side Pressures Are Easing

Stress is still a standard deviation above normal, but the pace of easing has been rapid.

Federal Reserve Global Supply Chain Stress Index

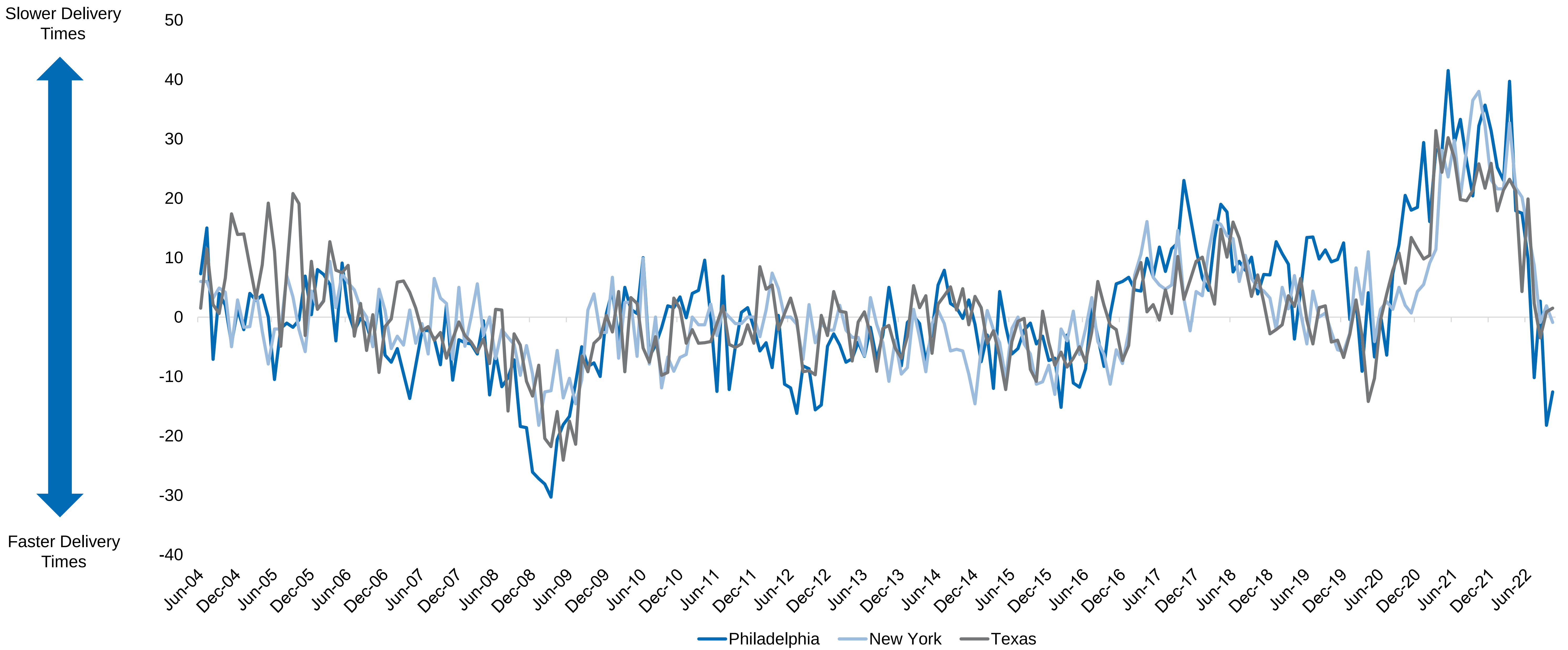


Source: Federal Reserve Bank of New York, Global Supply Chain Pressure Index, Newmark Research

Delivery Times Faster; Declining Order Backlogs

Purchasing manager indices and small business sector surveys show the same trends.

Federal Reserve Global Supply Chain Stress Index

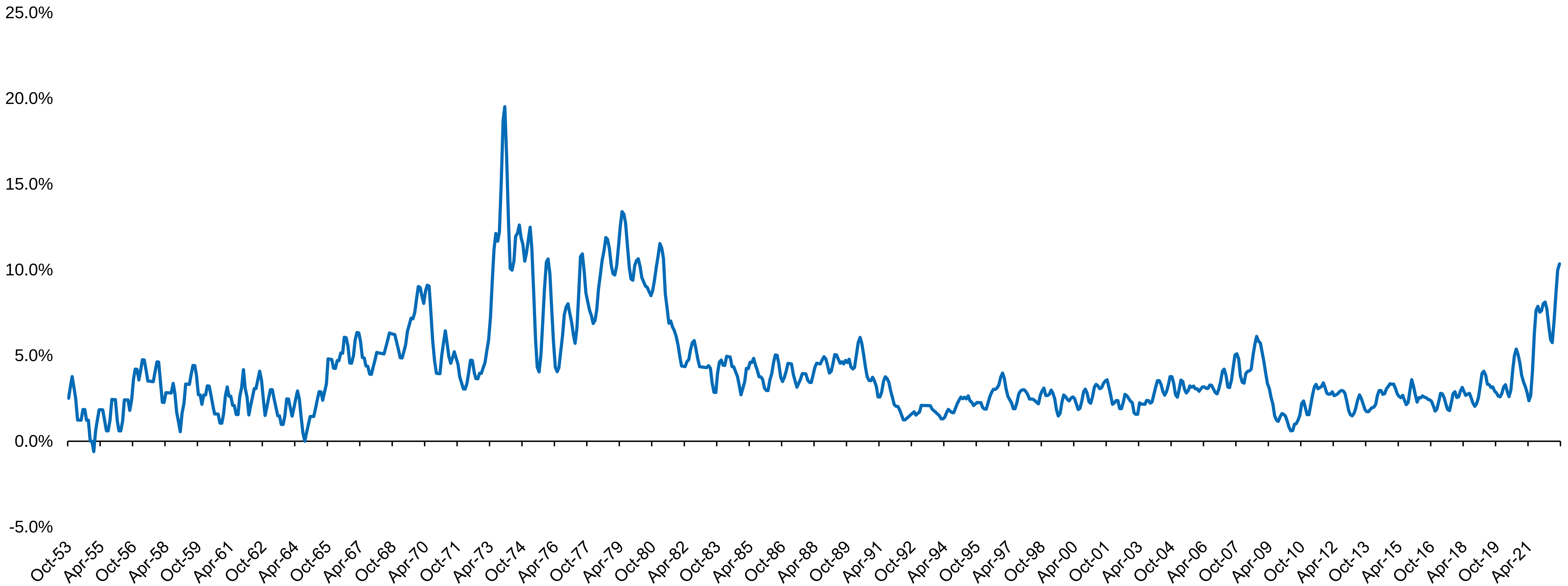


Source: FRB Philadelphia, FRB New York, FRB Texas

Wage/Labor Scarcity-Driven Inflation Continues to Accelerate

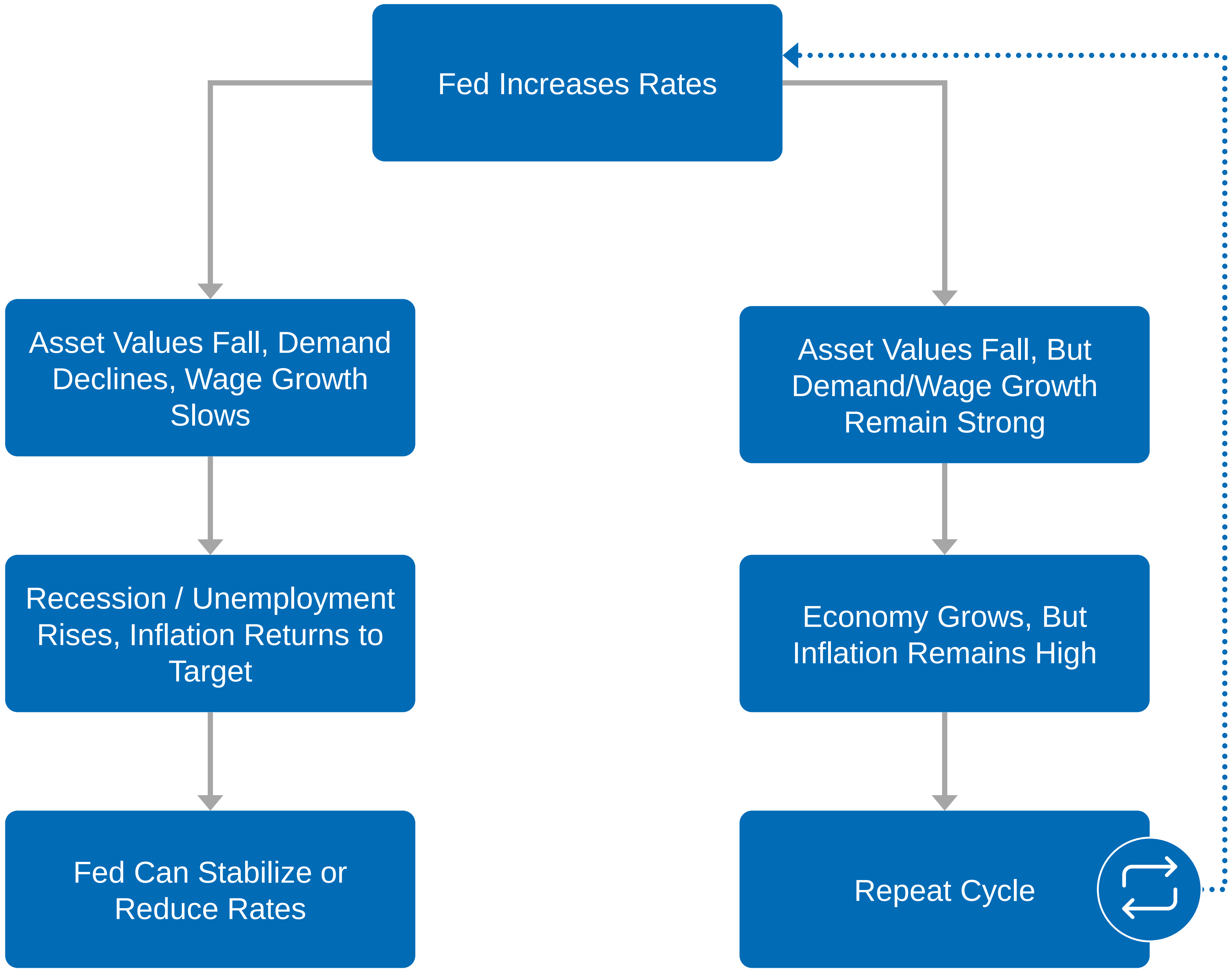
Food away from home is a strong predictor of wage/labor market-driven inflation in the broader economy. Unfortunately, even as supply-side drivers of inflation have waned, the wage, or endogenous, drivers of inflation have, if anything, accelerated. Inflation will not be controlled until the labor market weakens and endogenous inflation slows.

Food Away From Home Inflation: 3-month / 3-month (Annualized)



Source: U.S. Bureau of Labor Statistics, Newmark Research

The More Resilient the Economy, the Harder the Fed Will Push Rates

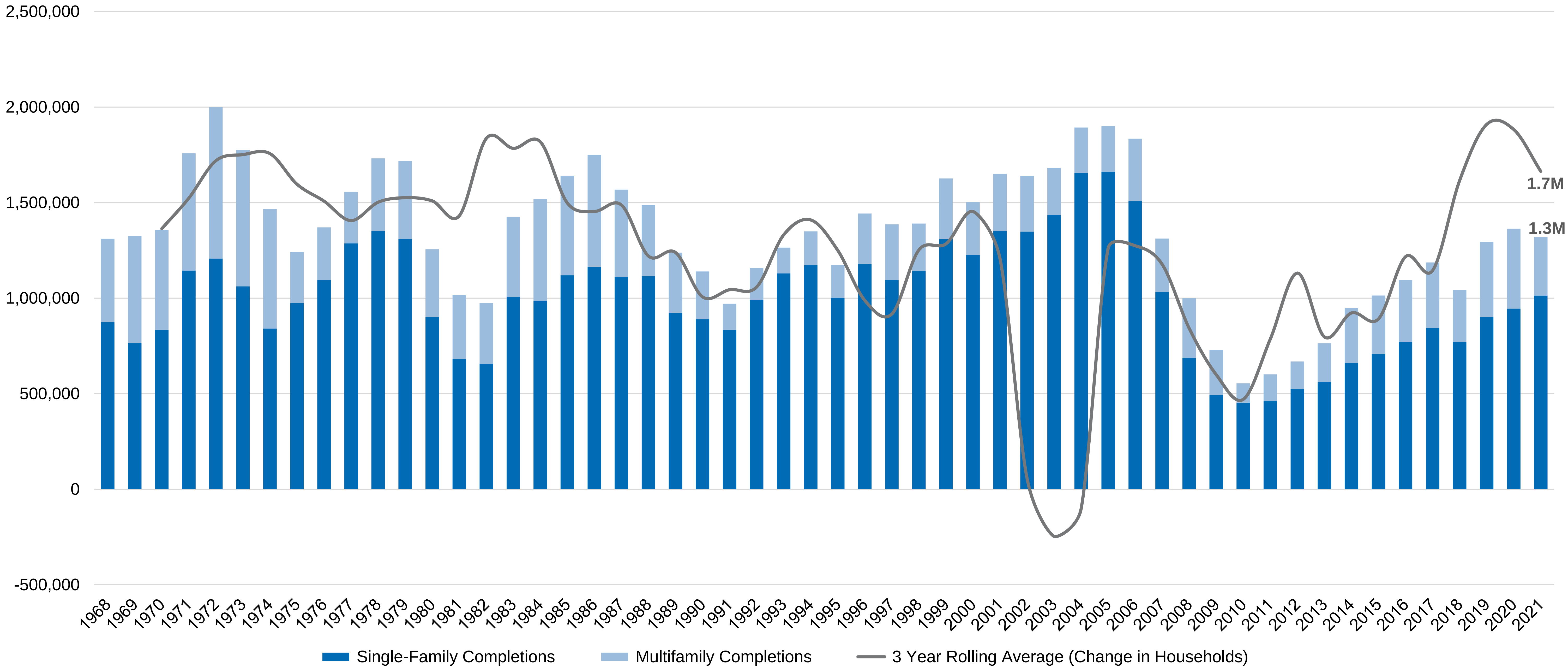


Multifamily Drivers

Housing is Undersupplied Relative to Household Formation

Completions have lagged new household formation since 2018.

United States

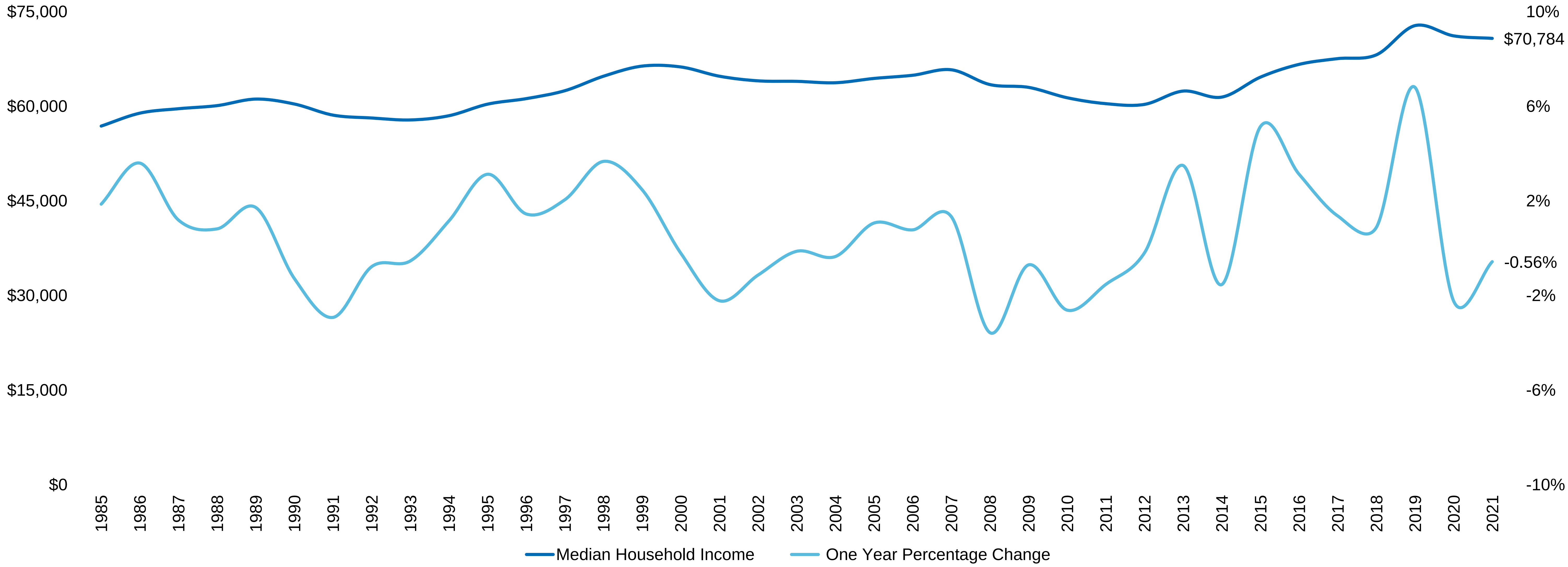


Source: Newmark Research, Federal Reserve Bank of St. Louis

Pace of Household Income Growth Has Moderated in Recent Years

The rate of growth for median household income has slowed as of late, after trending upwards from 2015 to 2019. From 1985 through 2021, the compounded annual growth rate of real median household income was just 0.59%, limiting the ability to purchase homes. In 2020, household income fell by 2.2%, the largest annual decrease since 2010, as COVID-19 disrupted incomes.

Real Median Household Income

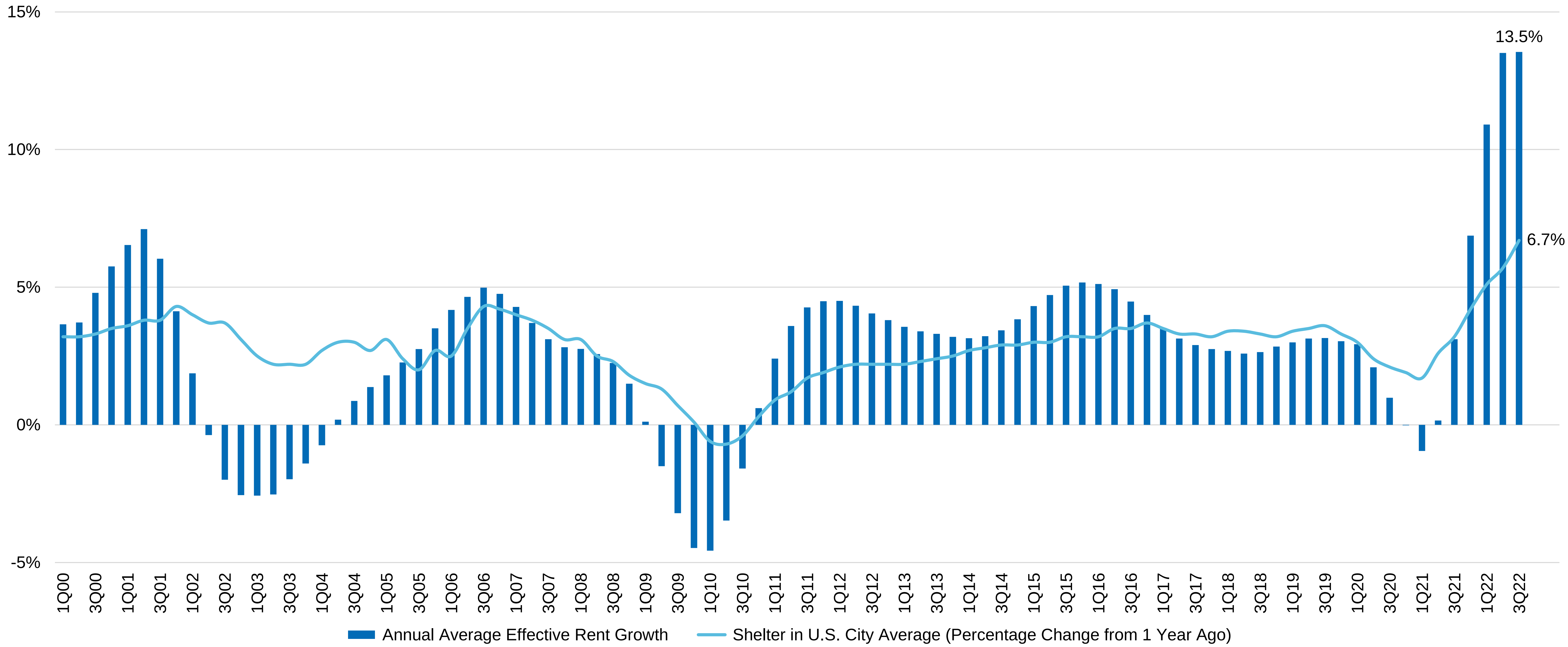


Source: Newmark Research, Federal Reserve Bank of St. Louis

Shelter Inflation Continues to Escalate but Likely to Slow as Rents Decelerate

Gap between effective rent growth and shelter inflation has averaged 4.7% since 2000. The spread in the third quarter of 2022 is 6.8%.

Shelter Inflation in U.S. City Average

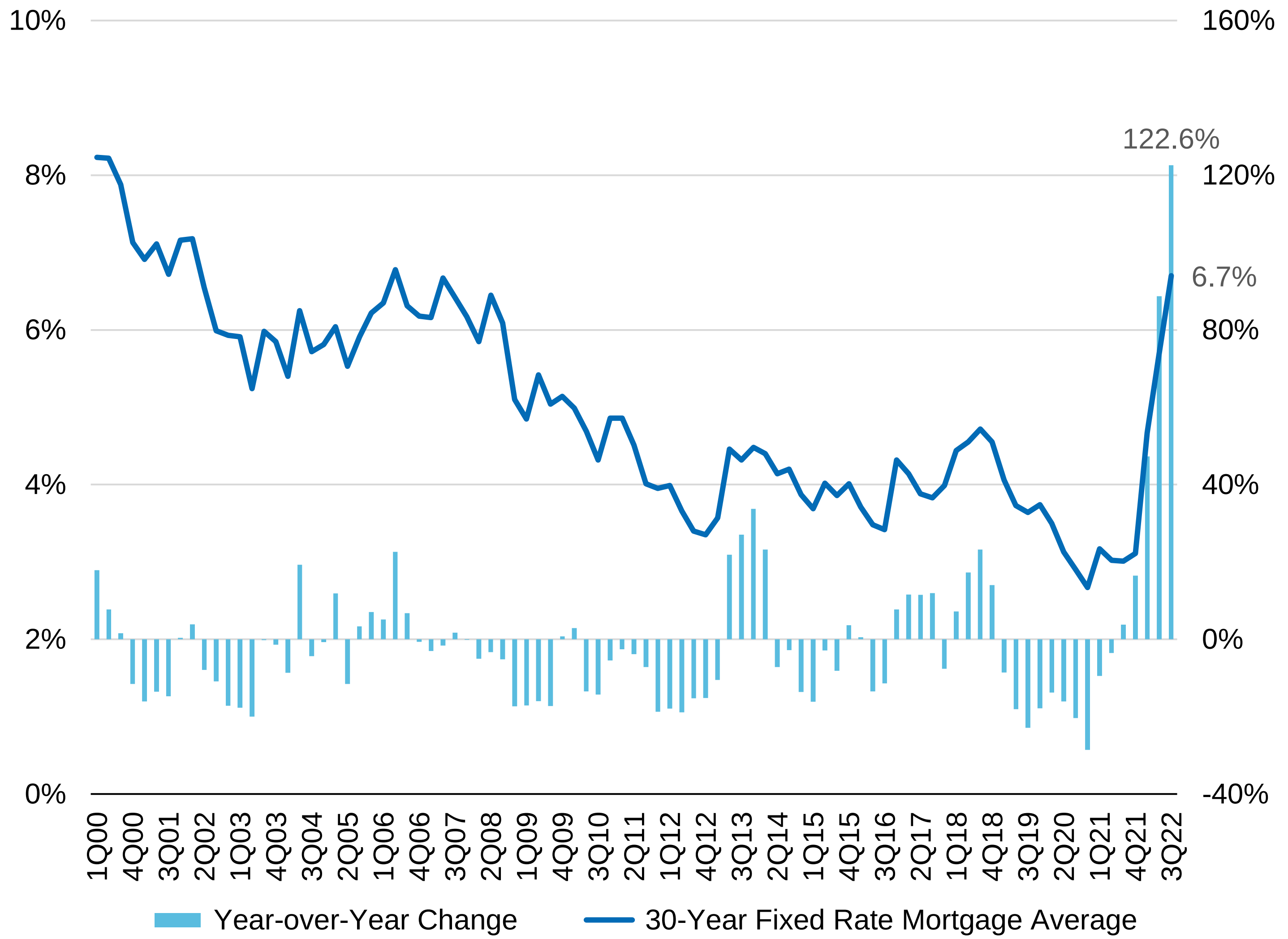


Source: Newmark Research, RealPage, Federal Reserve Bank of St. Louis

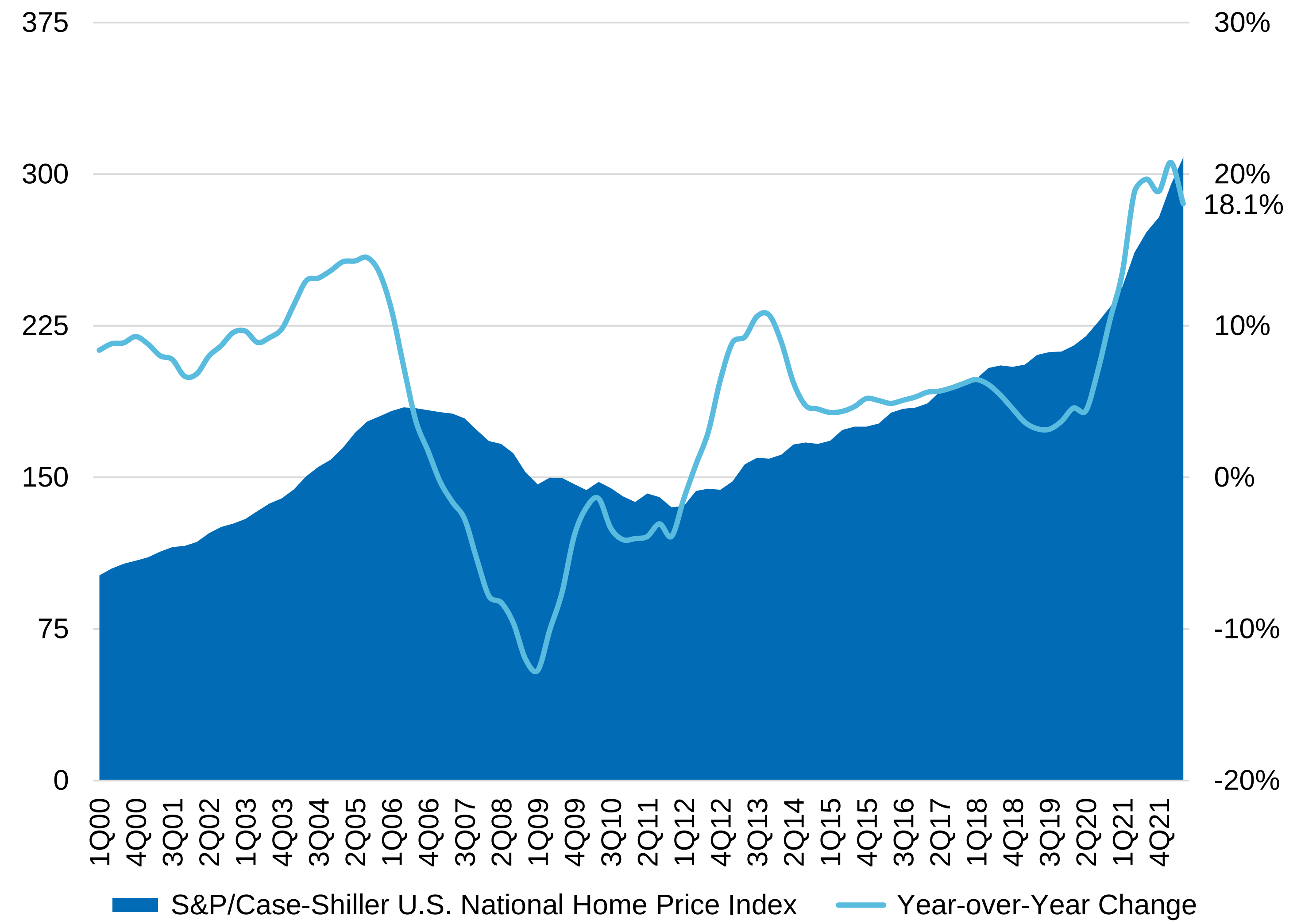
Mortgage Rates and Elevated Home Prices Continue to Benefit Multifamily

Home prices have increased nearly 20% year-over year, even as mortgage rates have more than doubled in the same period. There is now some tentative evidence that home prices are beginning to either stabilize or decline in some cases. First, principles would suggest that prices inflated by lower mortgage rates should deflate amid higher ones, but with most homeowners having refinanced in 2020 to 2021, most do not need to sell. The most likely outcome is therefore a mix of price reductions and a significant deceleration in home sales, both to current homeowners and current renters.

30-Year Fixed Rate Mortgage Average



S&P/Case-Shiller U.S. National Home Price Index

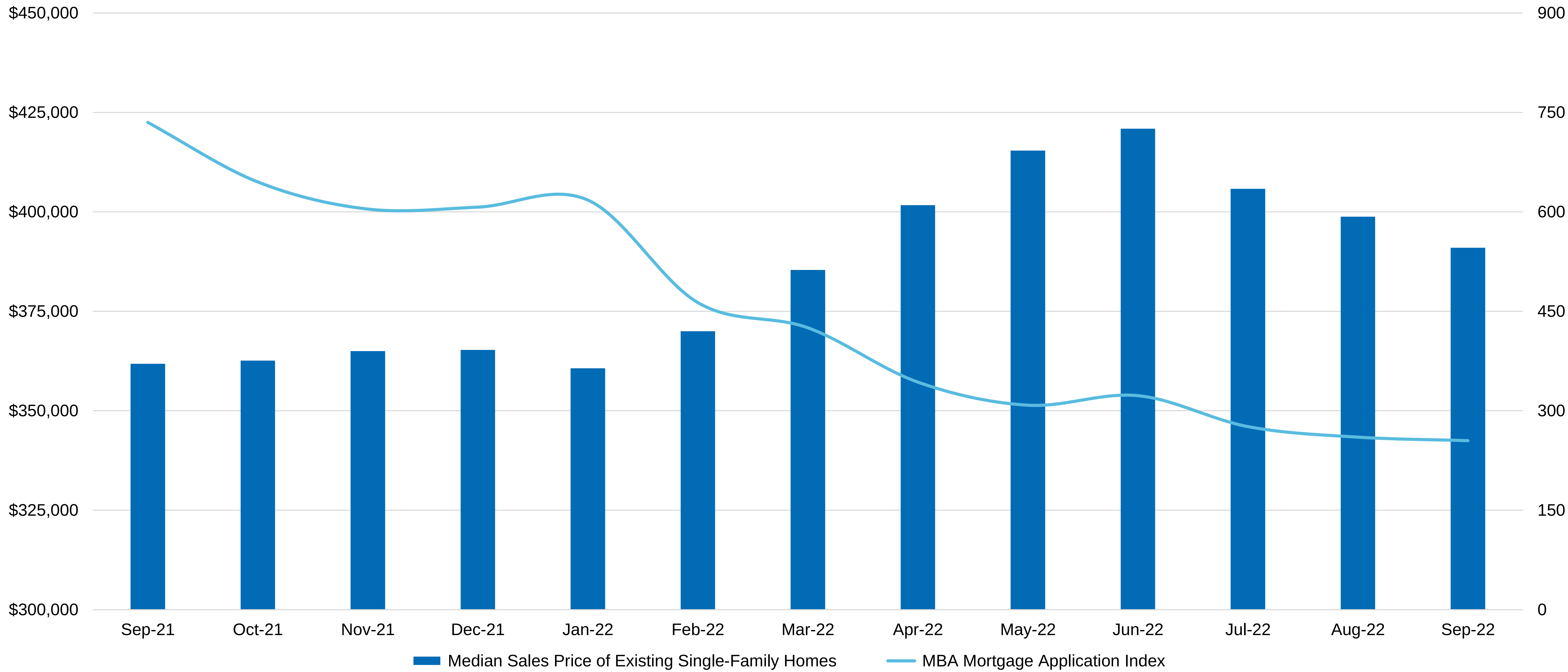


Source: Newmark Research, Federal Reserve Bank of St. Louis

Single-Family Prices Decelerating as Mortgage Applications Drop

Applications for mortgages have decreased 65.3% since September 2021.

Mortgage Applications vs. Median Sales Price

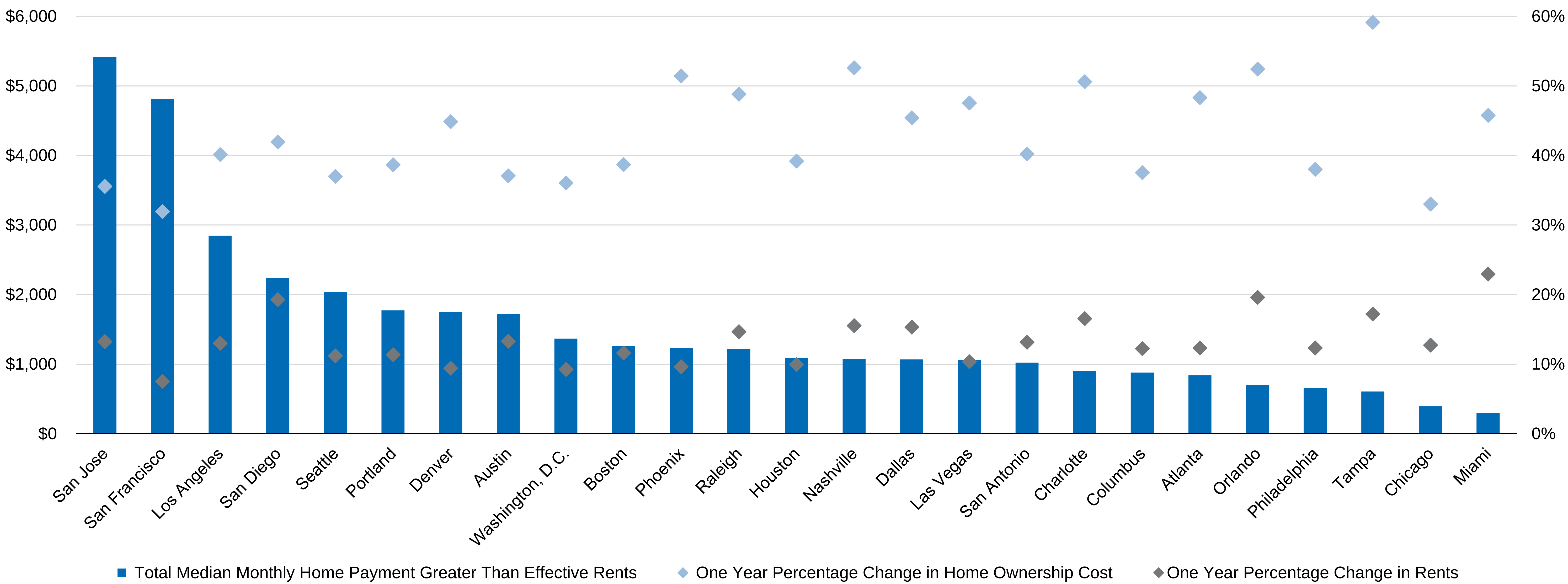


Source: Newmark Research, Mortgage Bankers Association, Federal Reserve Bank of St. Louis

West Coast and Tech Markets Particularly Favorable for Renters

Markets with concentrated technology employment, as well as markets located on the West Coast, have seen the greatest disparity between the cost to rent and own. Across all markets, the one-year change in home ownership cost has grown substantially more than change in apartment rents, partly due to higher mortgage rates. High-growth cities, such as Denver, Phoenix, Nashville, Las Vegas, Atlanta and Tampa, experienced a one-year change difference between cost to own versus rent of 35% or higher.

Own vs. Rent



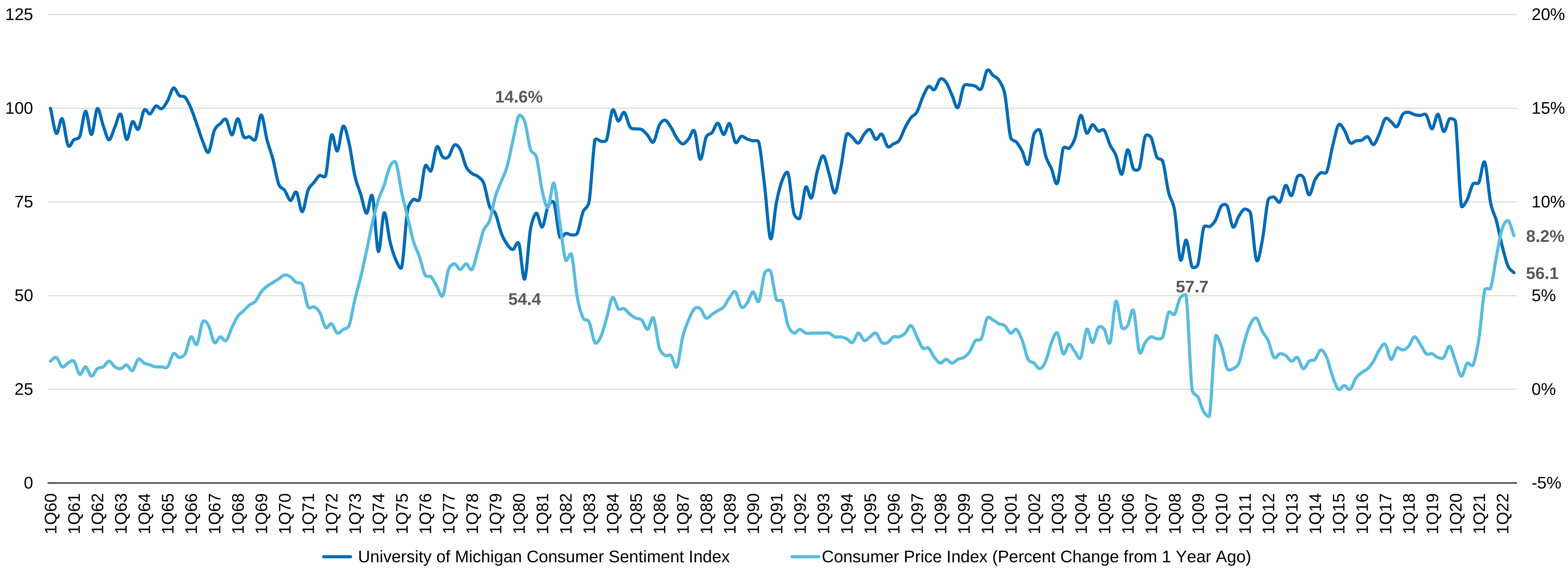
Source: Newmark Research, Federal Reserve Bank of Atlanta, RealPage

** Total Median Monthly Home Payments includes P&I, Taxes, Insurance, PMI)*

Sinking Consumer Sentiment Likely to Keep Renters from Buying And/or Trading Up

While inflation has begun to retract from a 40-year high, consumer sentiment has yet to rebound, sinking below GFC levels. Fueling this historically low consumer sentiment is rapidly rising CPI, which has increased 8.2% from a year ago. This increase, however, is still not as drastic as the 14.6% increase seen during the early 1980s. With uncertainty in the global economy looming, many renters will likely continue to rent, rather than risk buying.

Consumer Sentiment Index



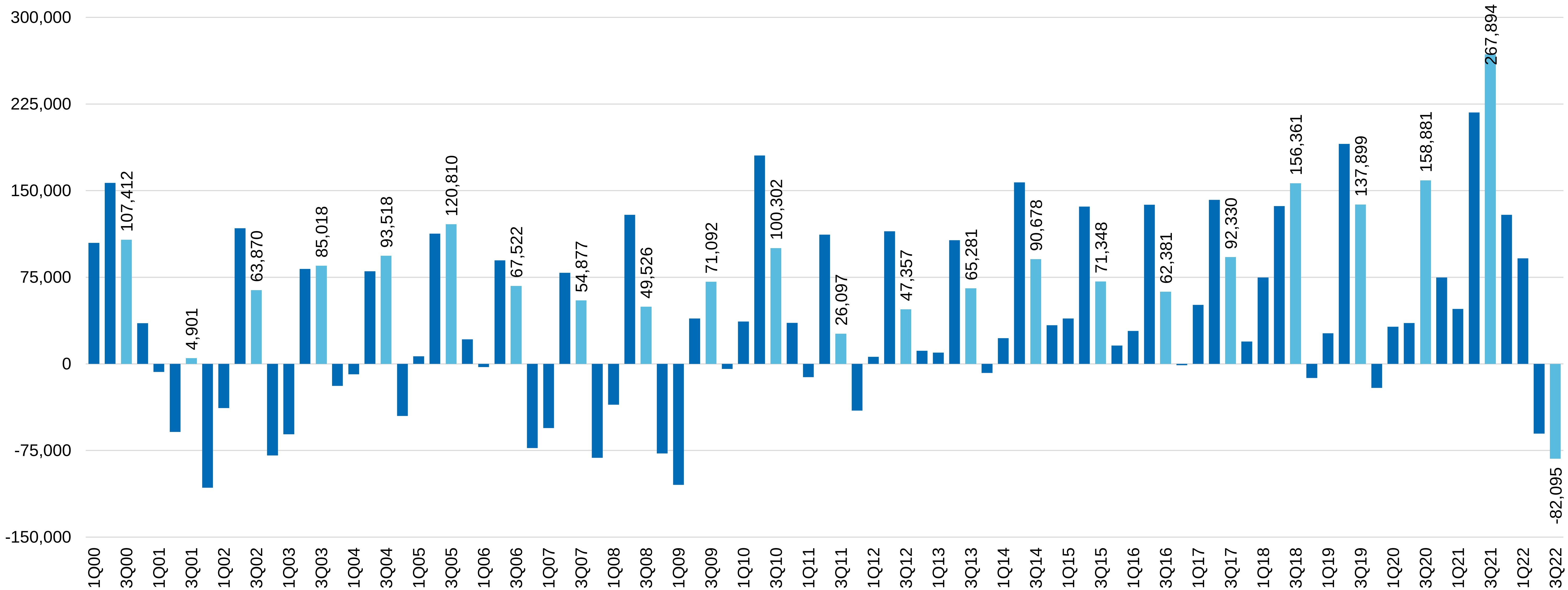
Source: Newmark Research, University of Michigan, Federal Reserve Bank of St. Louis

Property Fundamentals

Leasing Activity Historically Strong in Third Quarter, Not in 2022

The third quarter has typically been one of the strongest for leasing activity, as the summer season has historically been one where renters move out or re-sign leases at a high rate. However, the third quarter of 2022 saw a negative net absorption of 82,095 units, the lowest single quarter absorption figure since the first quarter of 2009, as well as the first third quarter with negative absorption. Demand is anticipated to remain lower through the end of 2022 but is forecasted to bounce back in 2023.

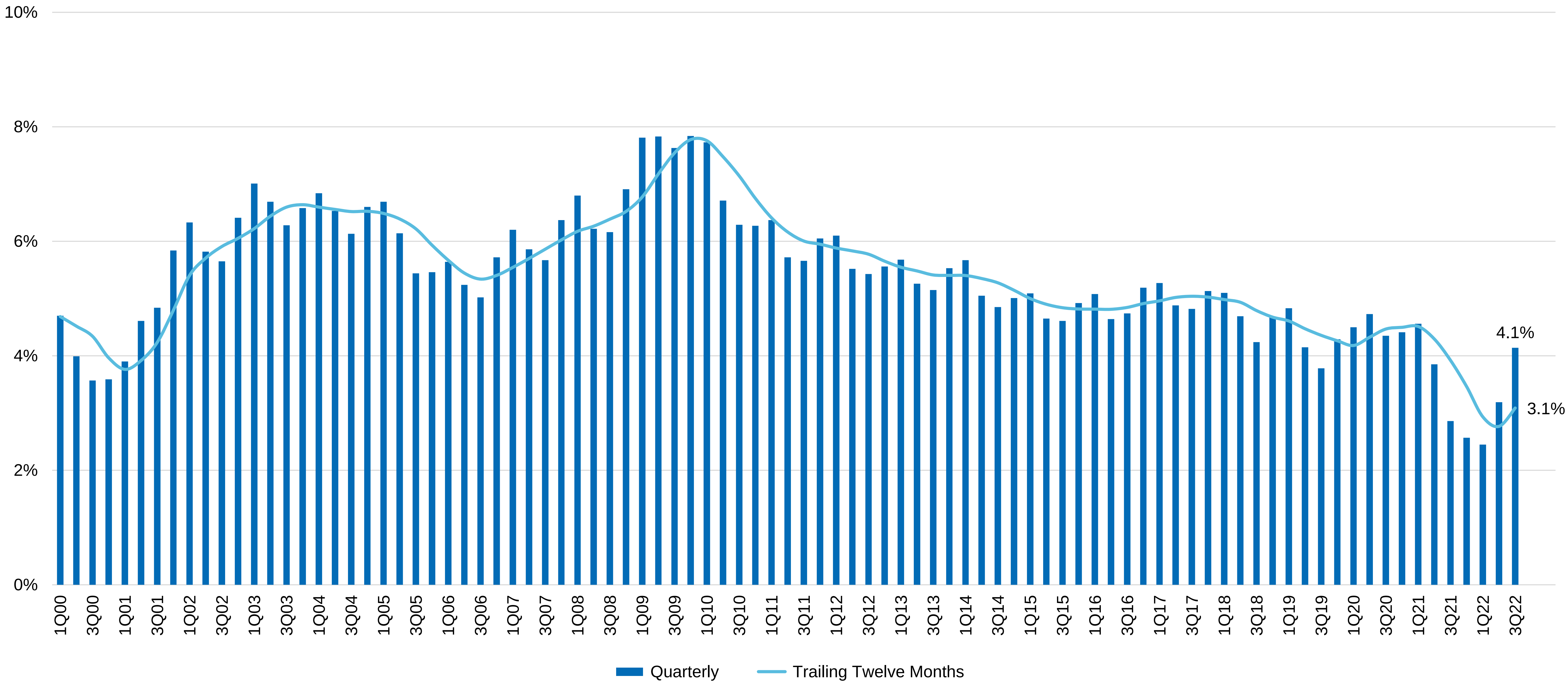
Quarterly Absorption



Source: Newmark Research, RealPage

Tight Vacancy Has Propelled Rent Growth, but Vacancies Have Risen in 2022

Vacancy Rate

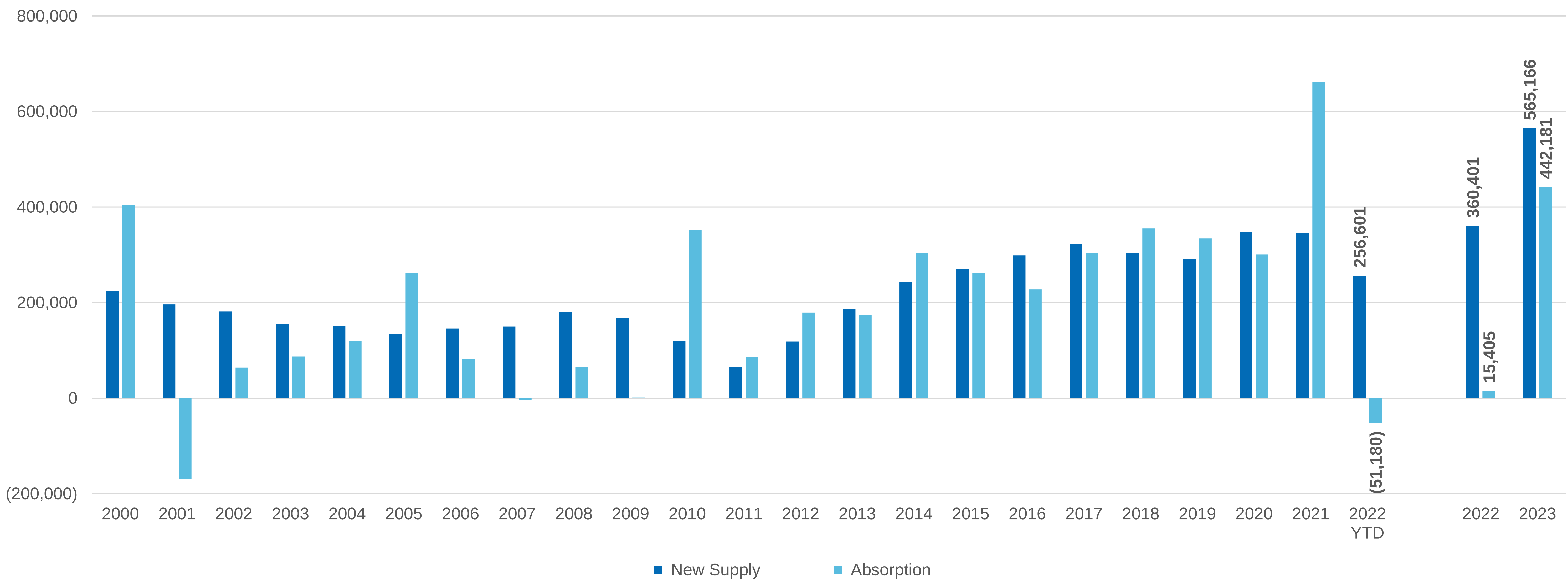


Source: Newmark Research, RealPage

Demand Falls from Record 2021 Activity; Supply to be High in the Short Term

Coming off a record high level of demand of 662,269 units in 2021, absorption slowed significantly in 2022, with negative absorption year-to-date. Lower demand is anticipated through the end of 2022 but is forecasted to bounce back in 2023. Demand is expected to reach nearly 450,000 units in 2023, but high levels of new supply coming online in the new year will offset this, with 565,166 new units set to be added to the current national stock.

New Supply and Demand

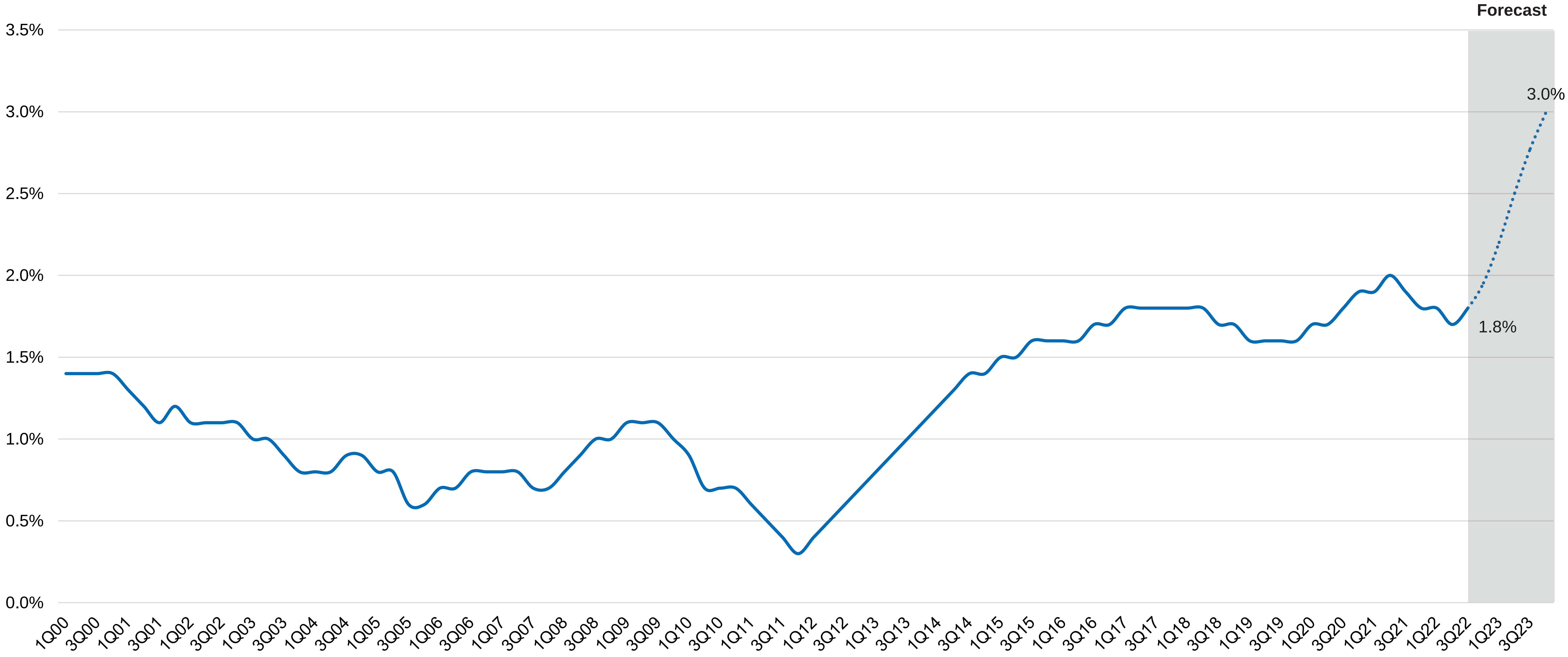


Source: Newmark Research, RealPage

Inventory Growth to Surge over the Next Year

The building boom continues in 2023 as projects kick into overdrive.

New Supply and Demand

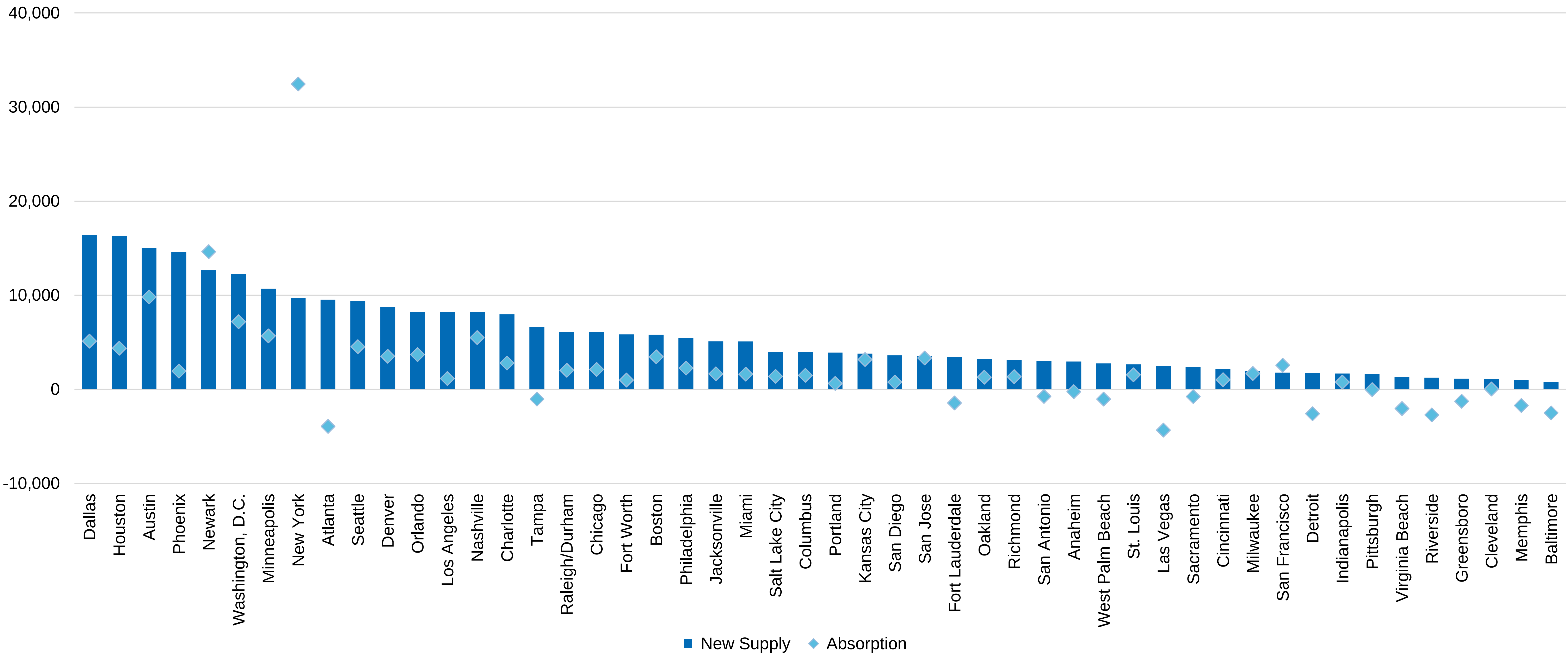


Source: Newmark Research, RealPage

Demand Slows; However, Bellwether Markets Show Resiliency

Over the trailing 12 months, absorption in just three markets of the top 50 has had demand outpace new supply: New York, nearby Newark and San Francisco. As large, dense cities recover following COVID-19-related restrictions, some of the hardest-hit cities have gone from laggards to leaders.

New Supply and Demand, Past 12 Months

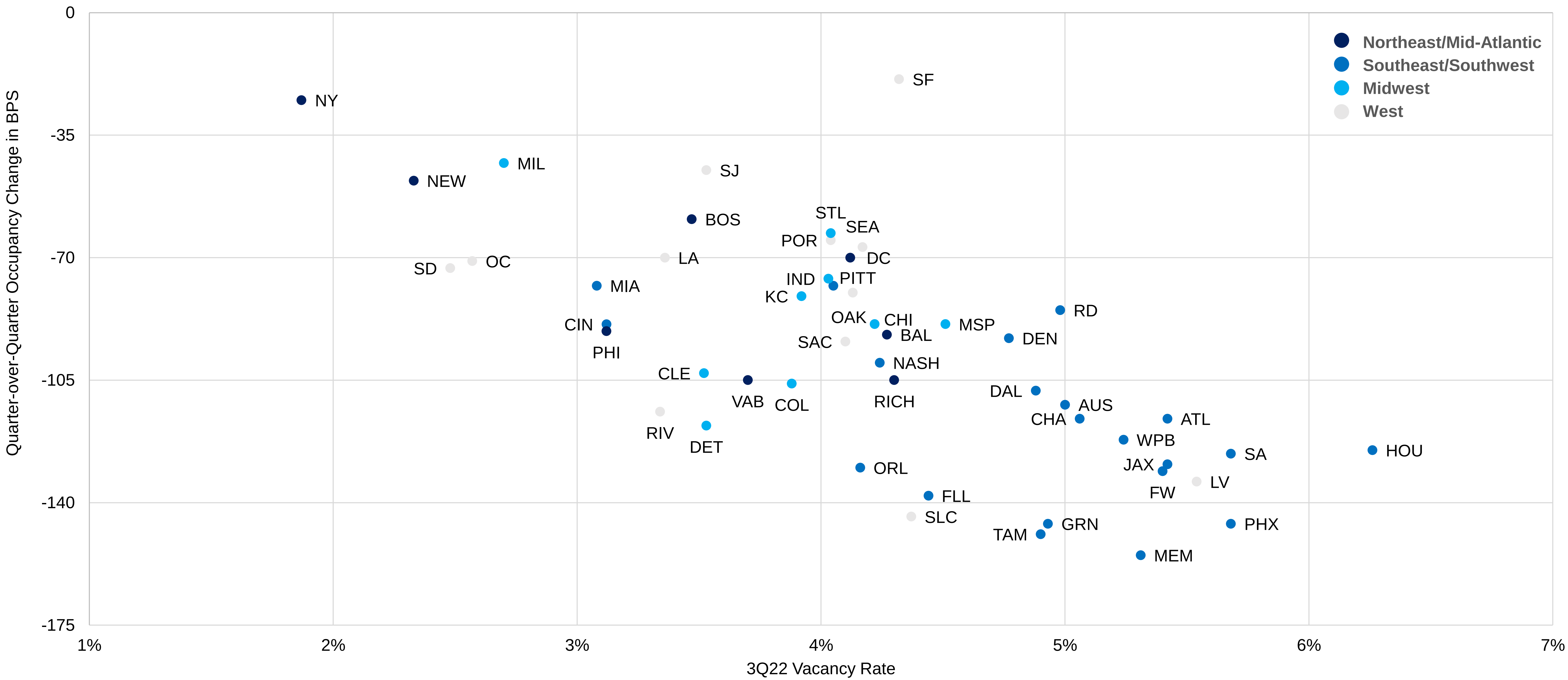


Source: Newmark Research, RealPage

Top 50 Markets All Experiencing Occupancy Reduction

Sun Belt markets are being hit the hardest, while coastal markets are exhibiting stickiness.

Vacancy by Market

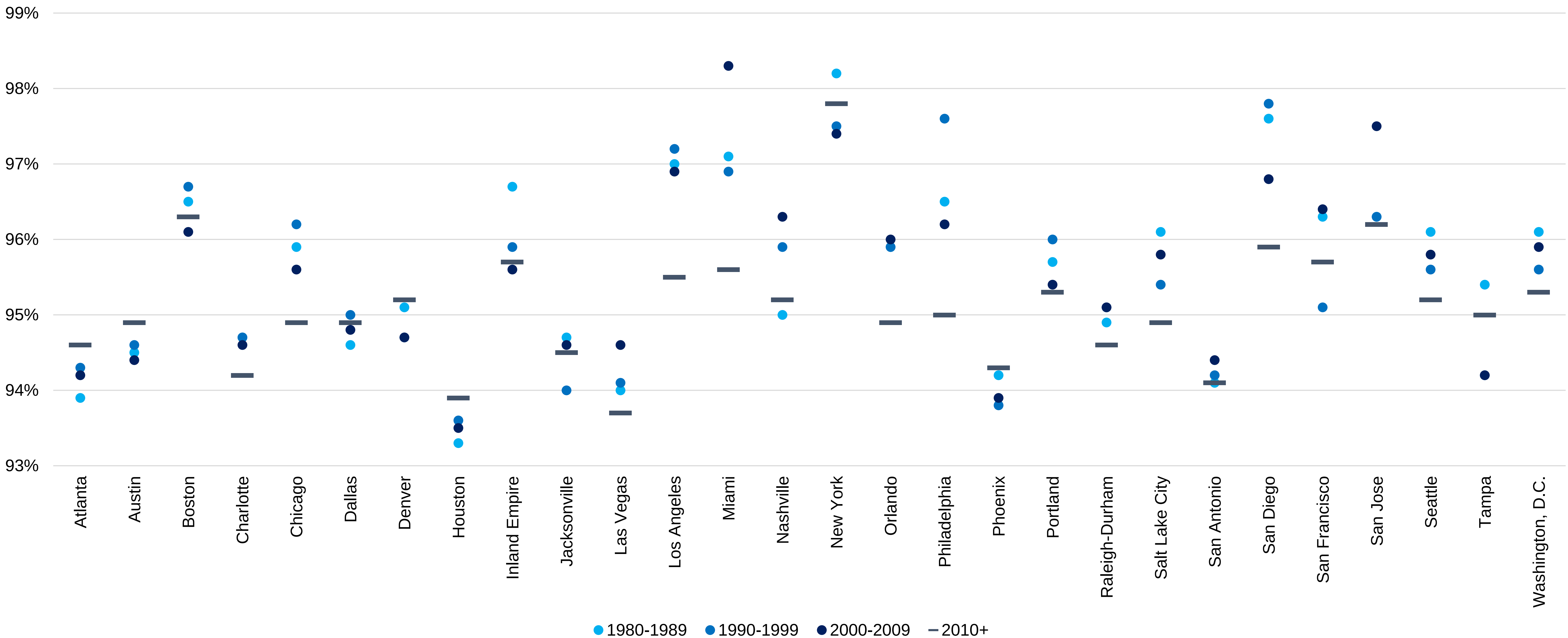


Source: Newmark Research, RealPage

Newer Assets Outperforming in Sun Belt Markets; Workforce Shines in Major Markets

Occupancy for properties built in 2010 or later has outpaced older vintages in growth markets, such as Atlanta, Austin, Denver, Houston and Phoenix, while older workforce housing has performed strongest primarily in high-barrier, coastal markets, such as Boston, Chicago, Inland Empire, Los Angles, New York, Philadelphia, Portland, San Diego, Seattle and Washington, D.C.

Occupancy by Vintage

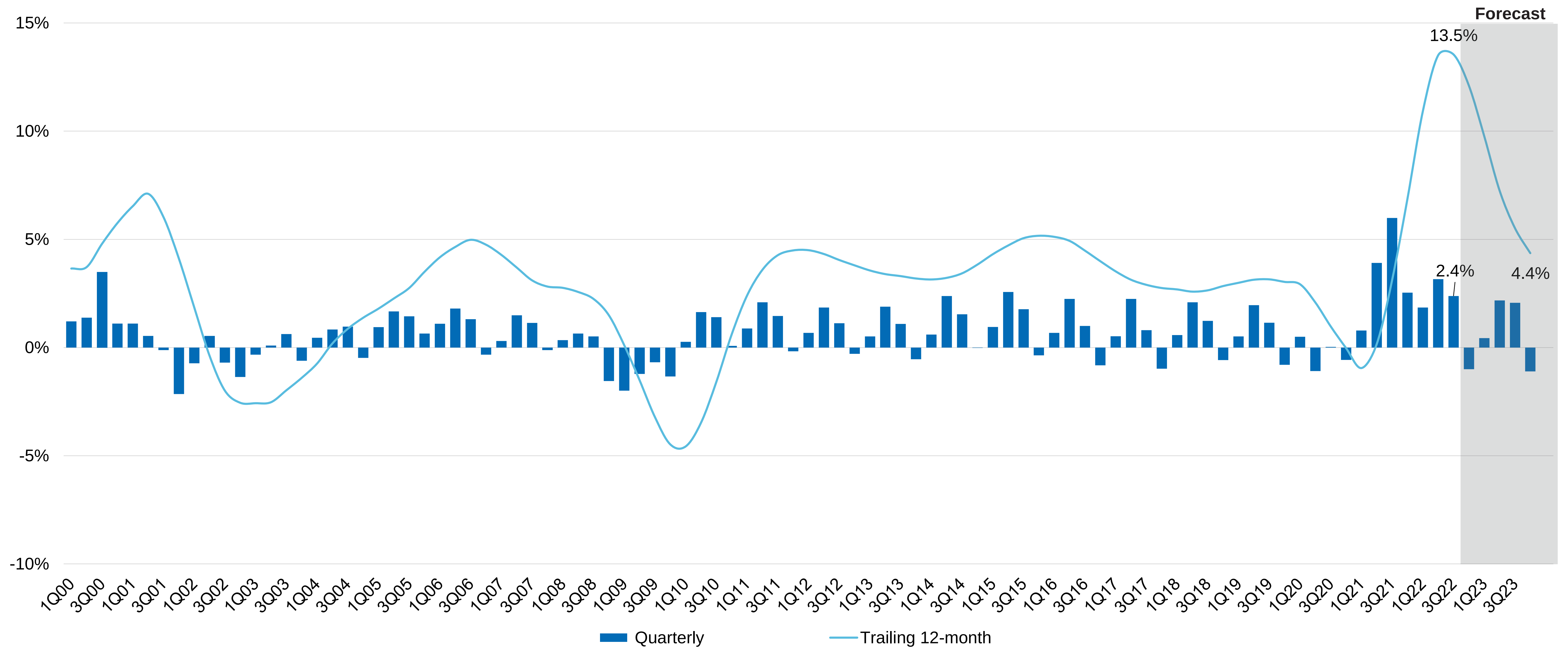


Source: Newmark Research, RealPage

Record Rent Growth Remains Intact for Now, but Moderation Coming in 2023

Trailing 12-month average effective rent growth remained at 13.5% in the third quarter of 2022, posting the same result as of the second quarter of 2022. Effective rental growth is projected to materially slow in 2023 as absorption has declined in the past two quarters and inventory growth is anticipated to rise throughout 2023, yet annual average rental growth is expected to remain elevated compared with the long-term average of 2.8%. Inflation remains a key indicator to watch, as persistent inflation could considerably impact "real" rental

Effective Rent Growth

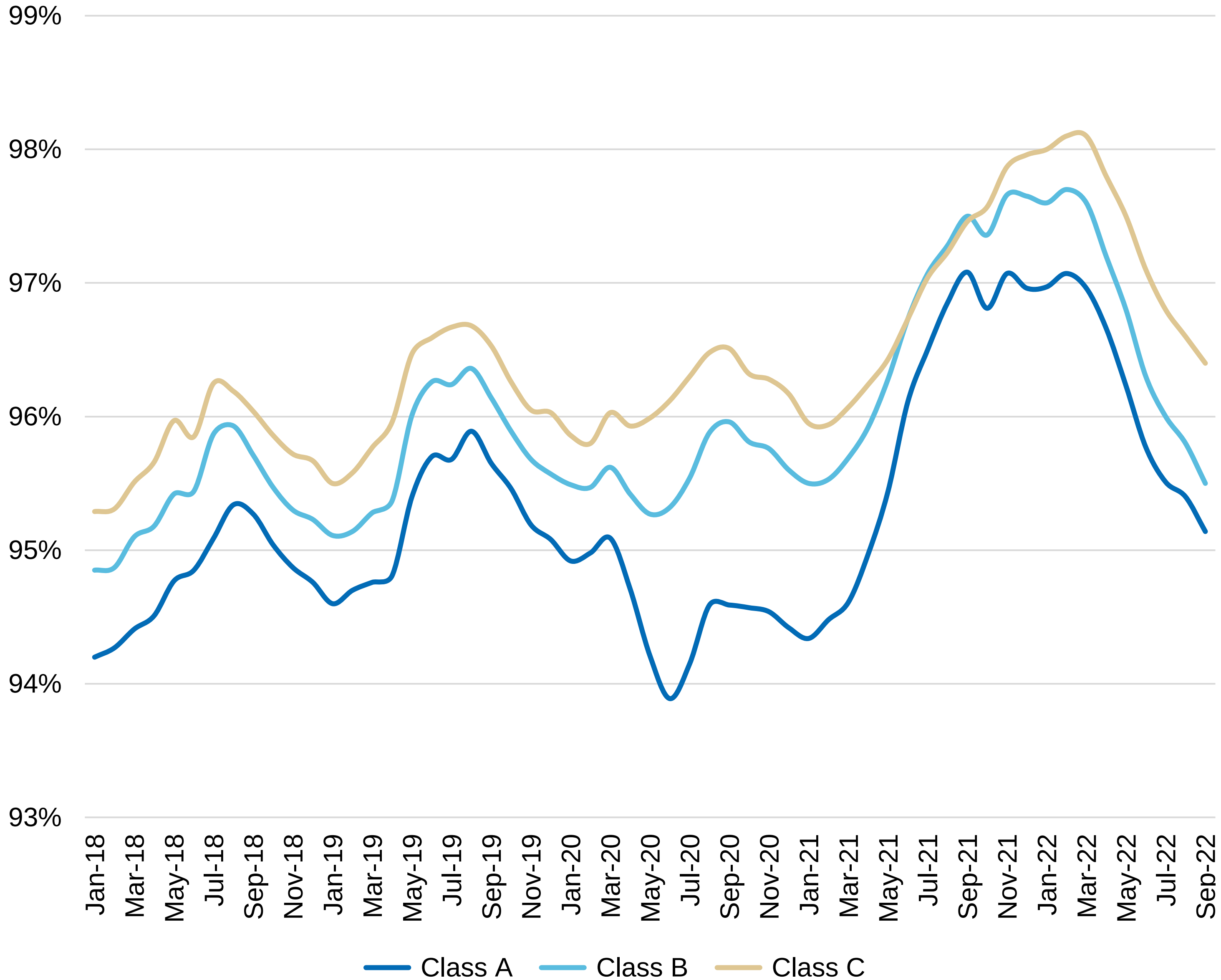


Source: Newmark Research, RealPage

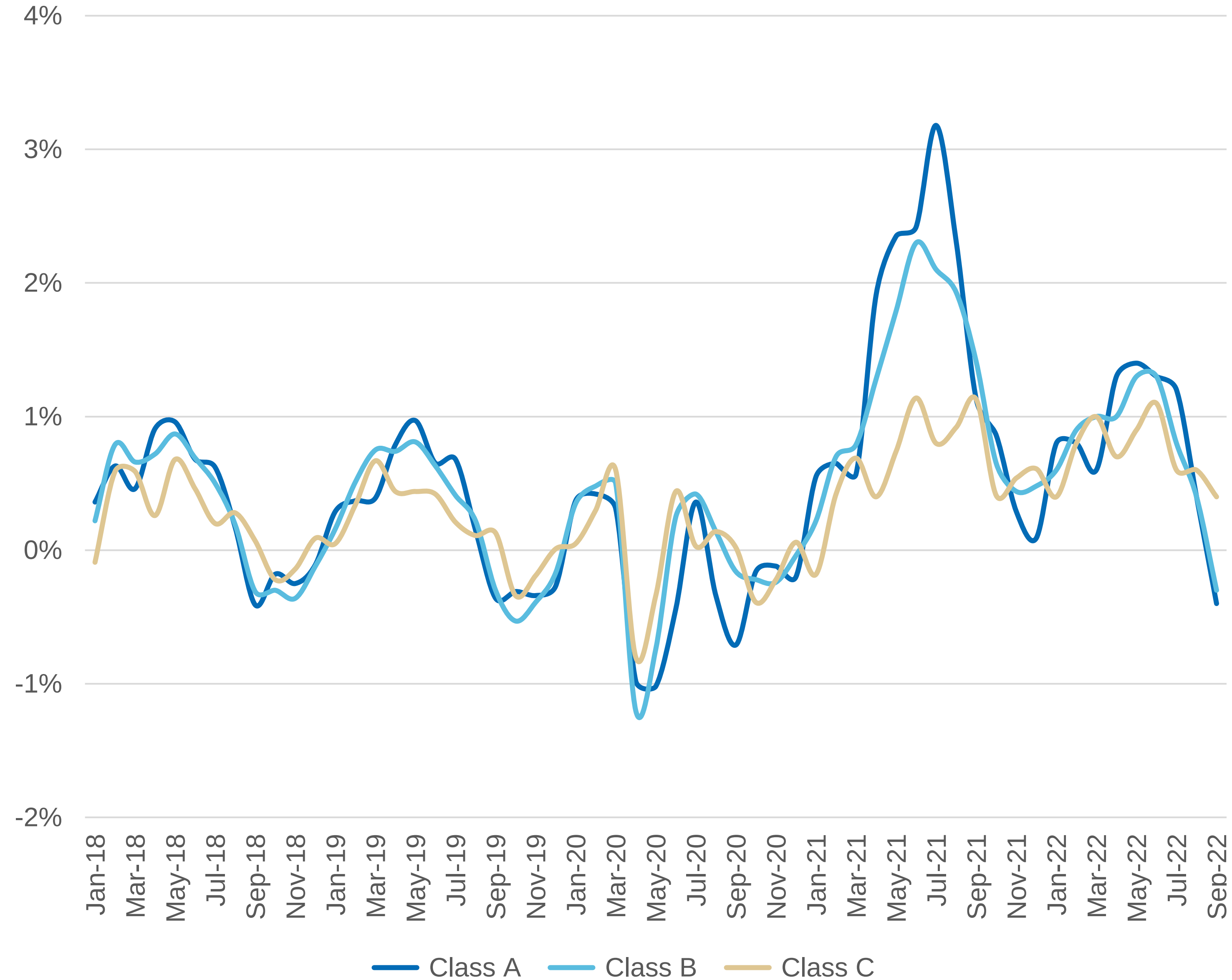
Occupancy and Rent Growth Has Fallen in Tandem Recently

Defensive characteristics of Class C have led to outperformance in the third quarter of 2022.

Occupancy



Effective Rent Growth

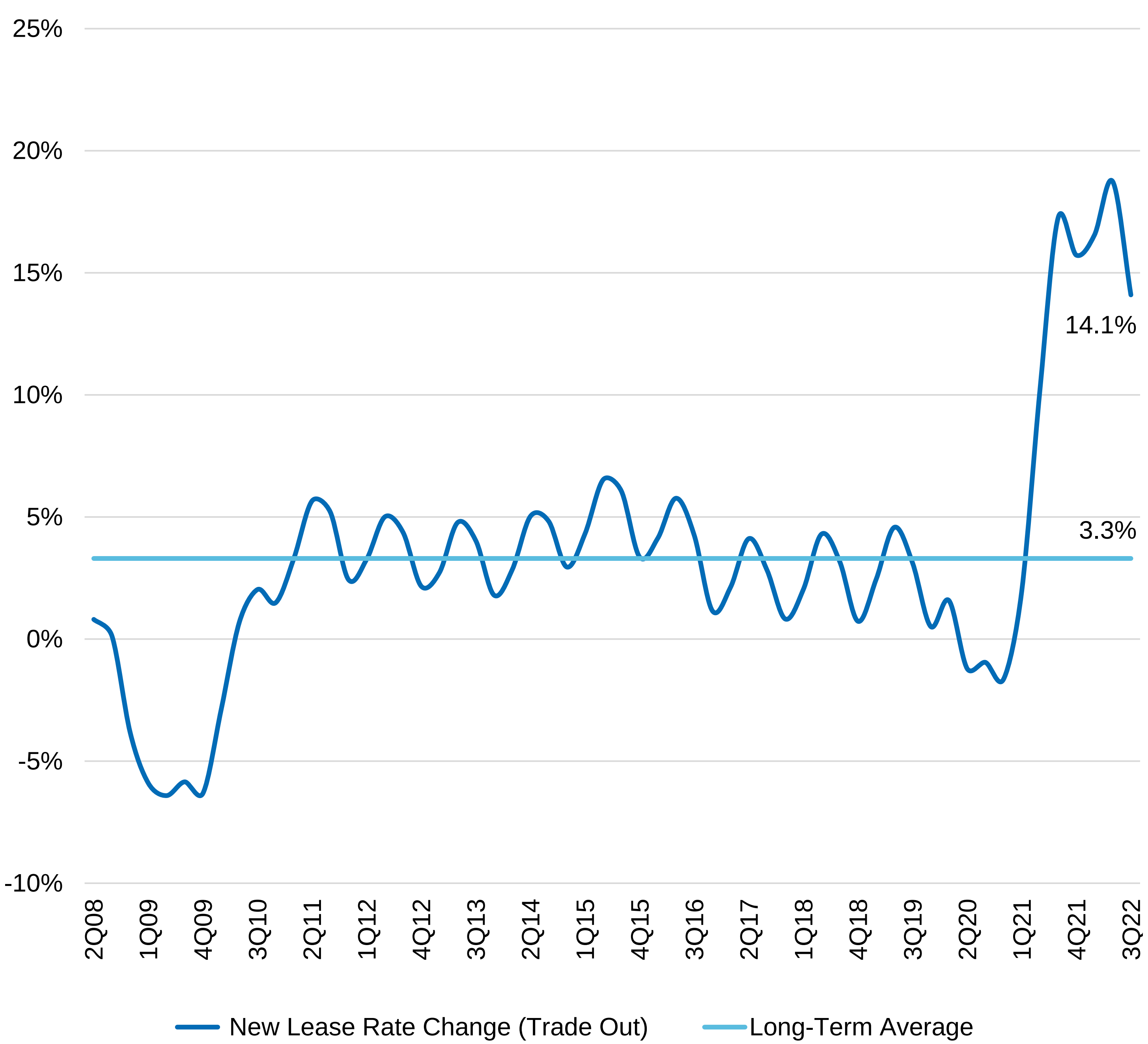


Source: Newmark Research, RealPage

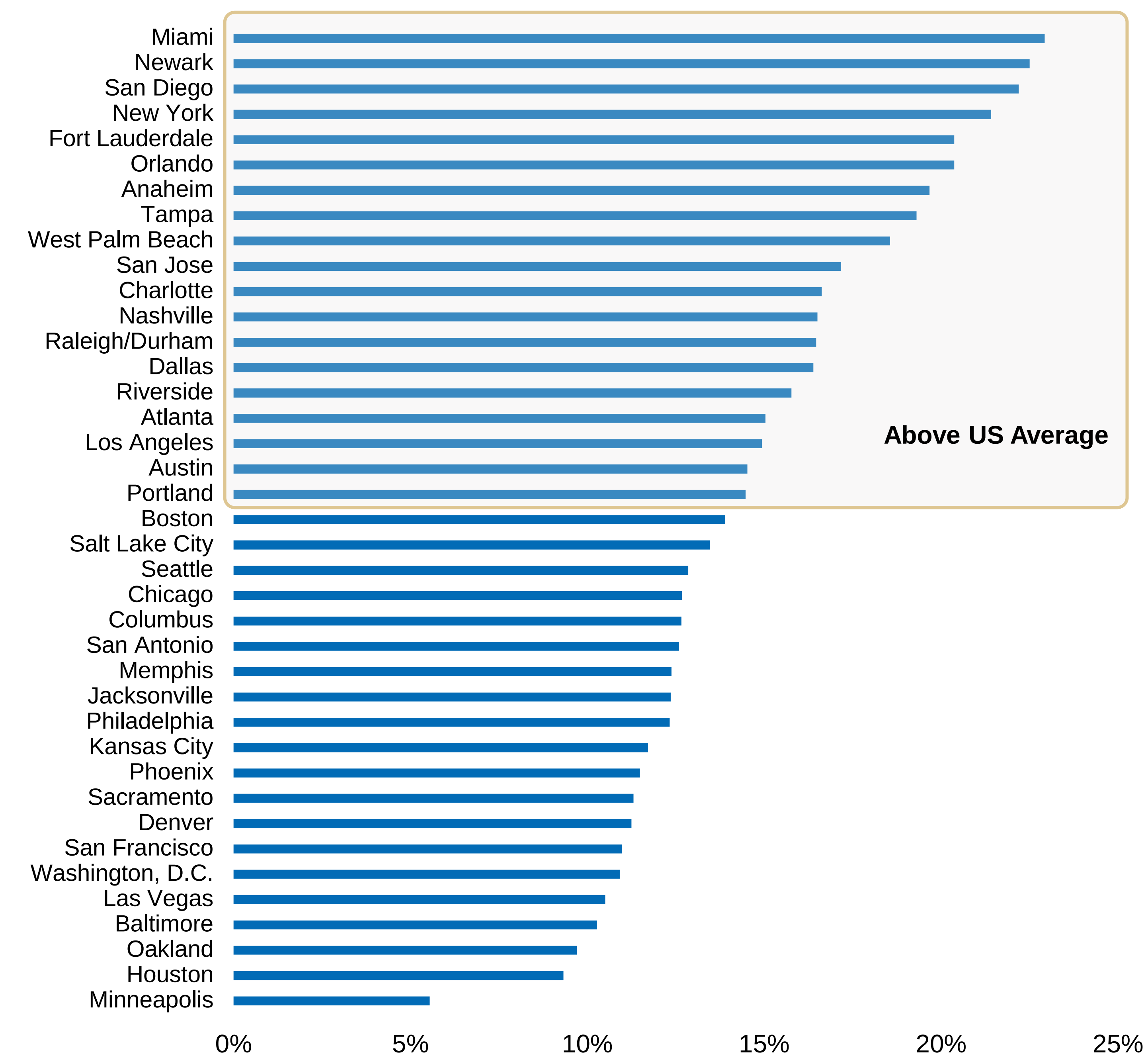
New Lease Trade-Outs near Record Highs; Sun Belt Remains Largest Beneficiary

New lease trade-outs remain near a record high of 14.1%, 10.8% above the long-term average. High-growth Sun Belt markets have benefited the most from this, with 13 Sun Belt markets exhibiting above-average trade-outs. In a tightening market with rent growth poised to slow, landlords stand to benefit from markets where new lease trade-outs are robust.

United States



By Market (3Q22)

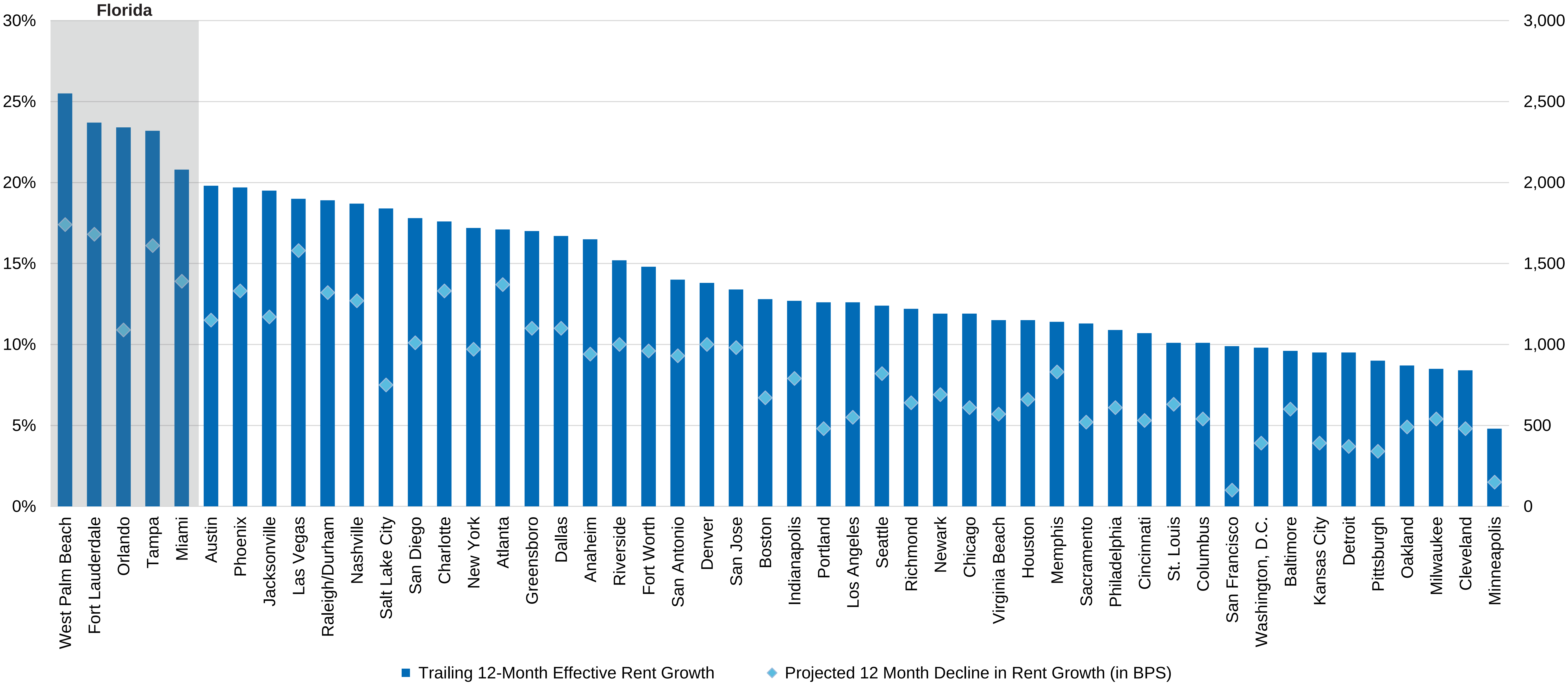


Source: Newmark Research, RealPage

Florida and Sun Belt Display Rent Growth Strength; Declines Projected Universally

Trailing 12-month average effective rent growth throughout Florida outperformed, with the top five markets on an annual average effect growth basis, all coming from the Sunshine State. Additionally, Sun Belt markets, such as Austin, Phoenix and Nashville, recorded rental growth in excess of 18%. Of the top 50 markets, all are expected to see declines in rental growth over the next 12 months as the market has softened in recent months; a recession seems imminent.

Effective Rent Growth by Market



Source: Newmark Research, RealPage

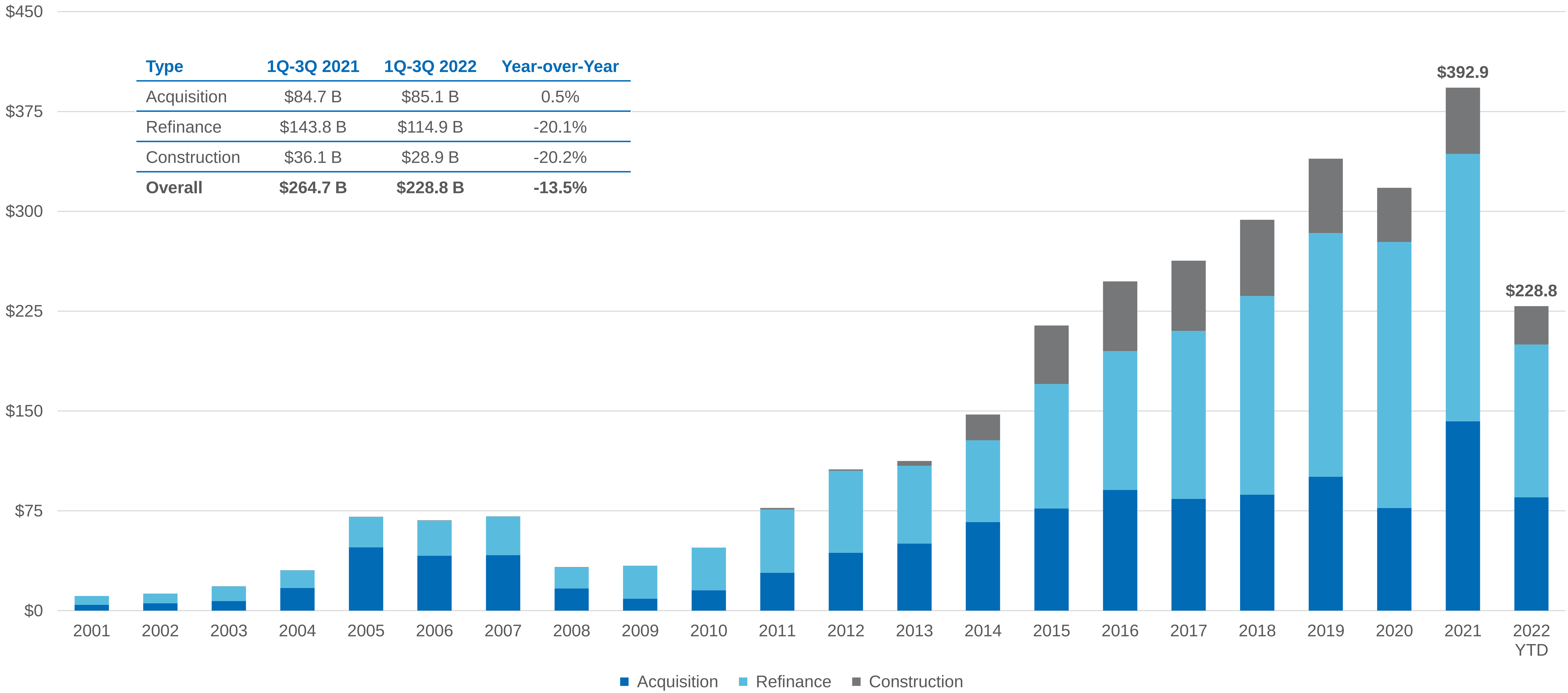
Capital Markets

Origination Volume Has Slowed Due to Rapid Rate Increases and Volatility

Refinance, construction and overall loan activity is down compared to the first three quarters of 2021.

Dollars in Billions

Type	1Q-3Q 2021	1Q-3Q 2022	Year-over-Year
Acquisition	$84.7 B	$85.1 B	0.5%
Refinance	$143.8 B	$114.9 B	-20.1%
Construction	$36.1 B	$28.9 B	-20.2%
Overall	**$264.7 B**	**$228.8 B**	**-13.5%**

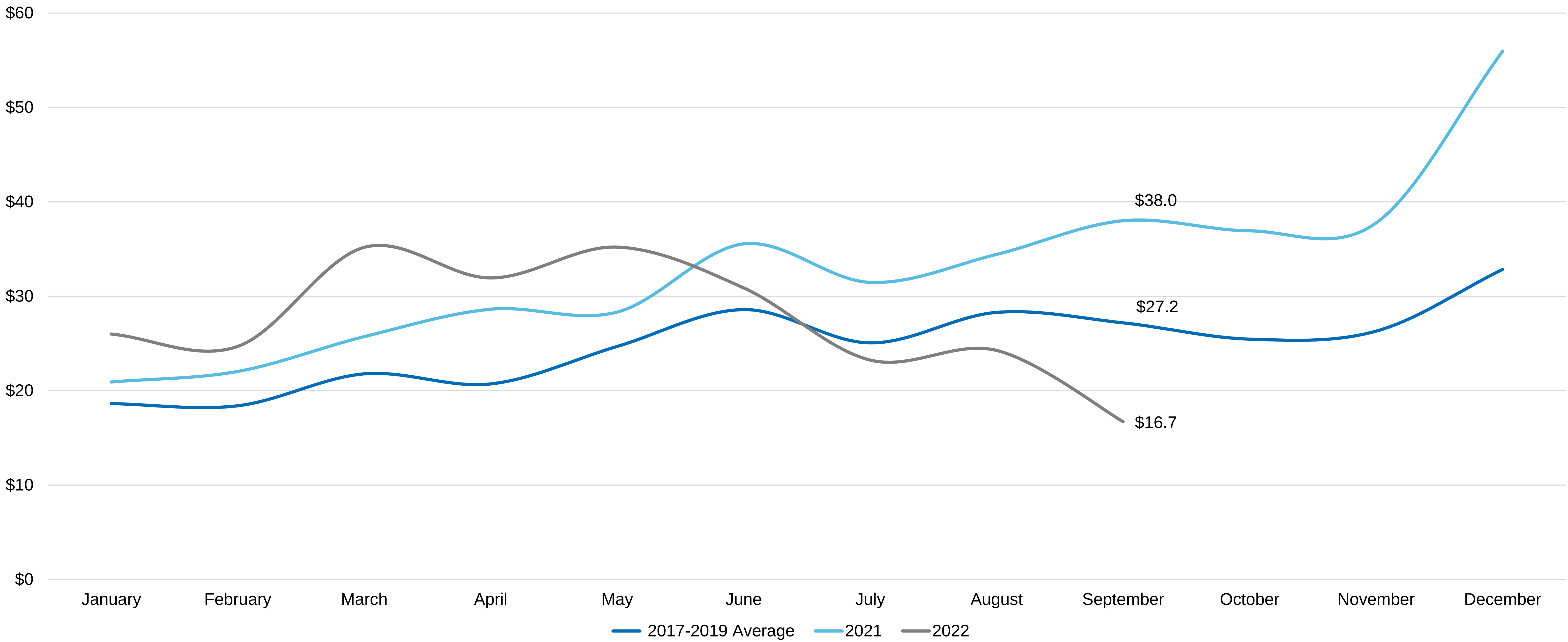


Source: Newmark Research, MSCI Real Capital Analytics

Origination Activity Has Decelerated Strongly Since May

Activity in September was down 52.5% since the May peak and off 62.9% compared to the first three quarters of 2021.

Monthly Debt Origination Volume in Billions

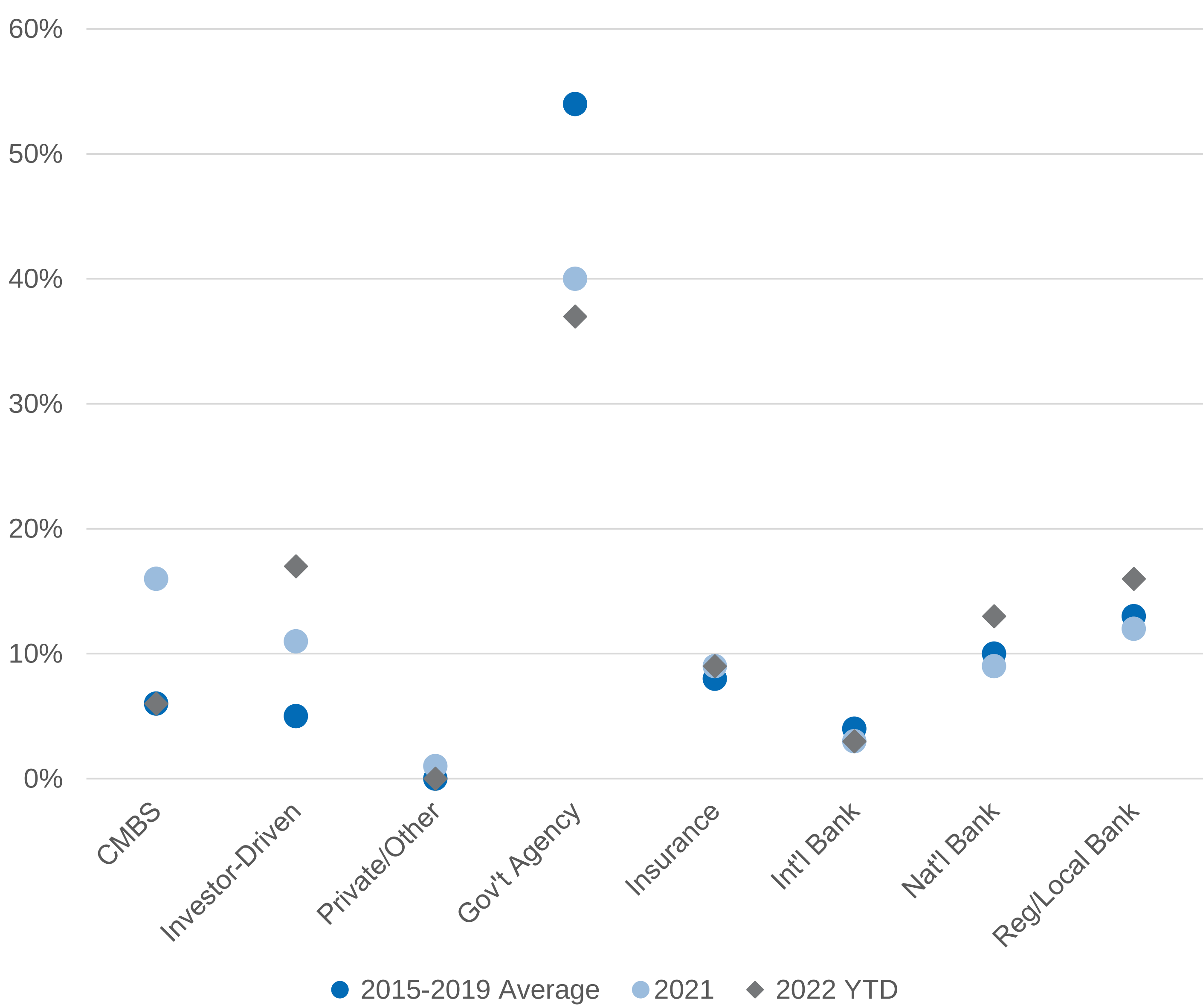


Source: Newmark Research, MSCI Real Capital Analytics

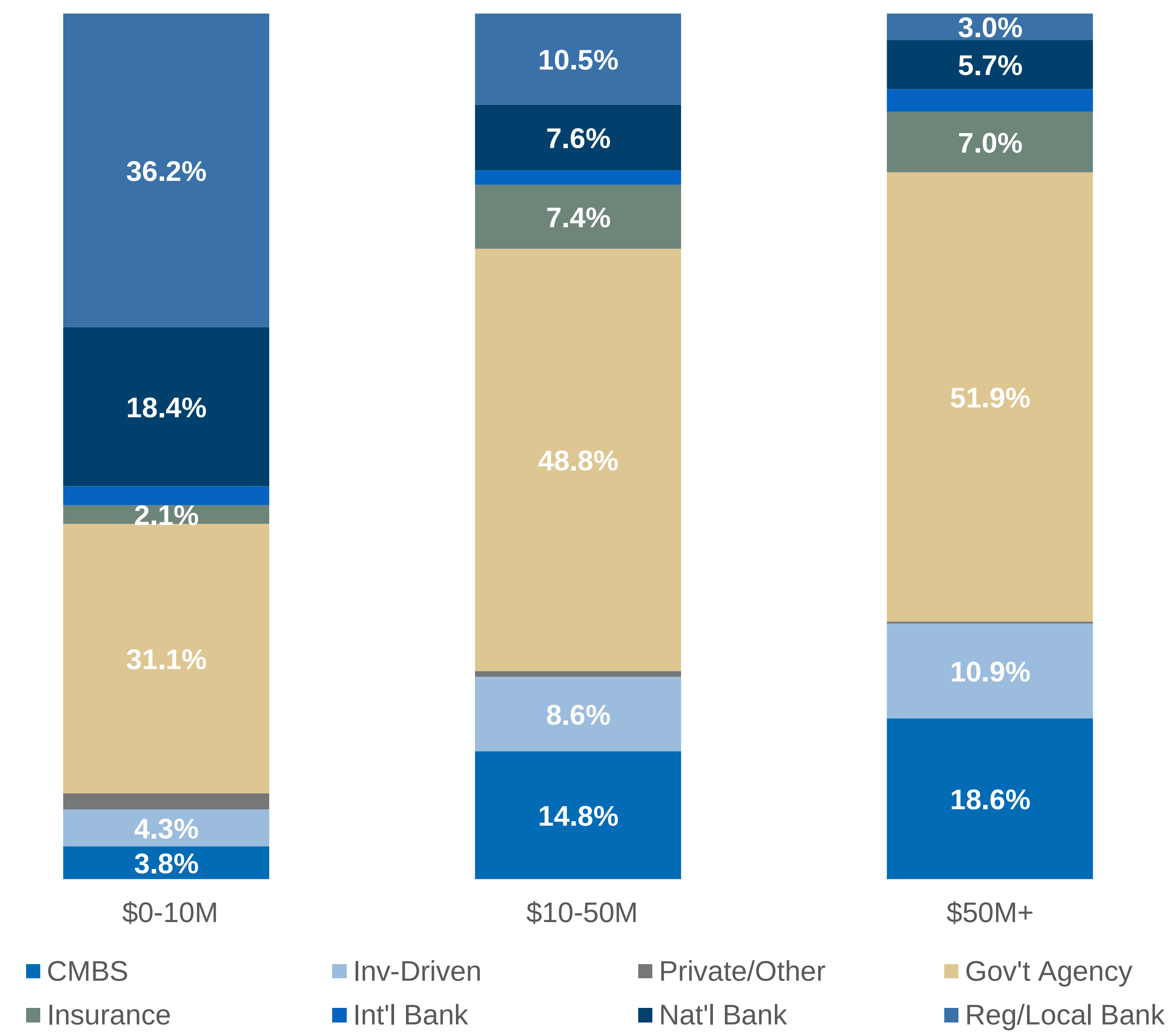
GSEs Dominate Lender Composition, Especially for Larger Deals

Investor-driven debt funds and banks have increased activity in 2022, compared with historic norms.

By Year



By Deal Size

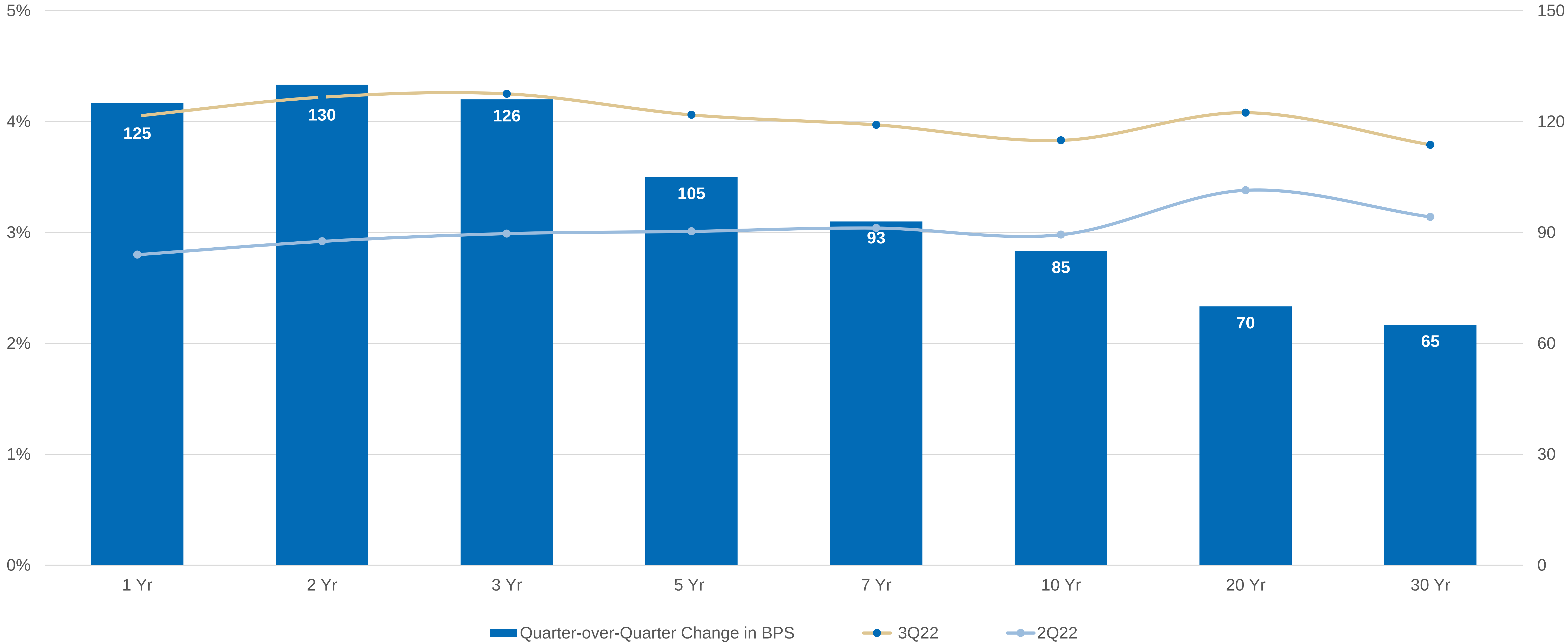


Source: Newmark Research, MSCI Real Capital Analytics

Material Impact Felt across All Durations, but Short-Term Rates Most Affected

Rates have increased across the board as the FOMC tries to combat inflation, but short-term rates have seen a more drastic quarter-over-quarter jump. One-year, two-year and three-year rates have all increased by 125 basis points or higher compared with rates in the second quarter of 2022, signifying short-term hesitation for borrowers. Though not as extreme, intermediate- and longer-duration yields have increased, as well, with the 30-year yield increasing by 65 basis points quarter-over-quarter.

Yield Curve

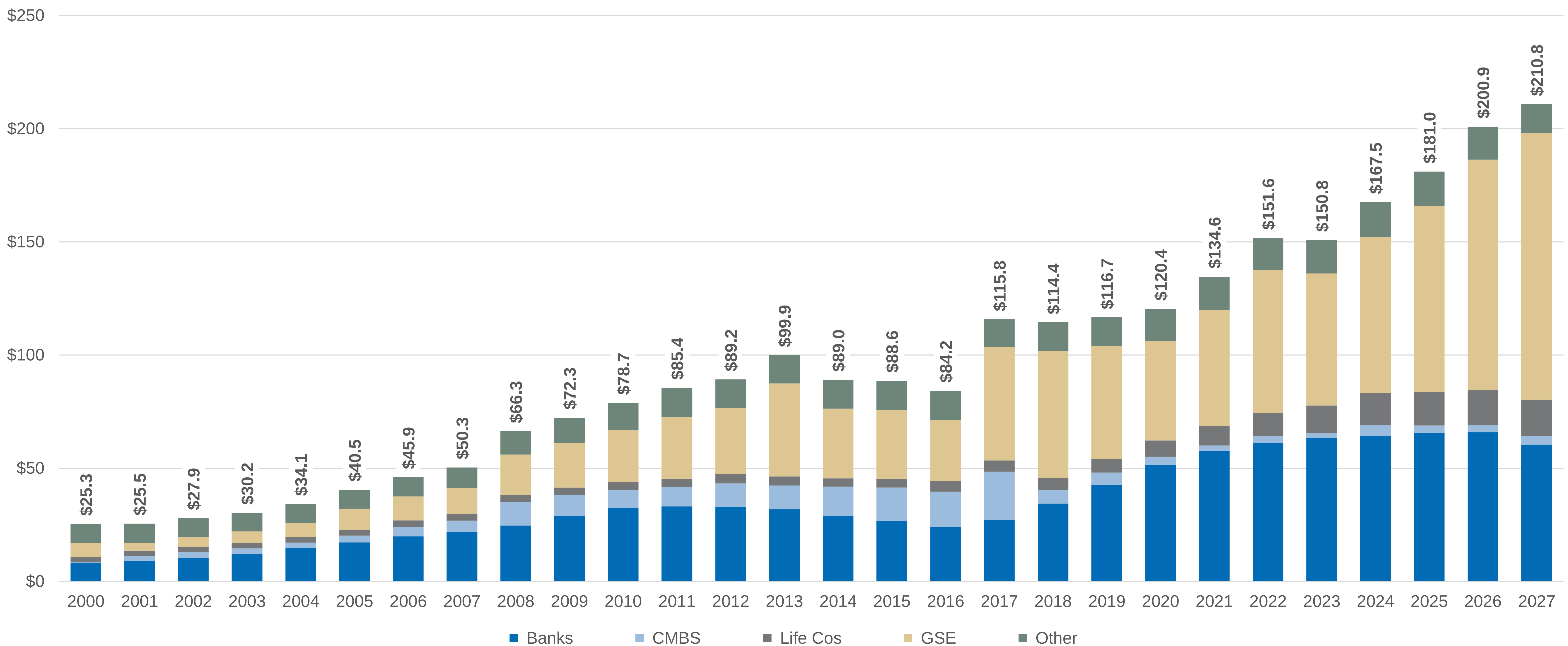


Source: Newmark Research, US Treasury

$150+ Billion Maturing in 2022; $1.0 Trillion by 2026

Despite short-term uncertainty, high levels of maturing debt should stimulate sales and debt markets for the foreseeable future.

Mortgage Maturities in Billions

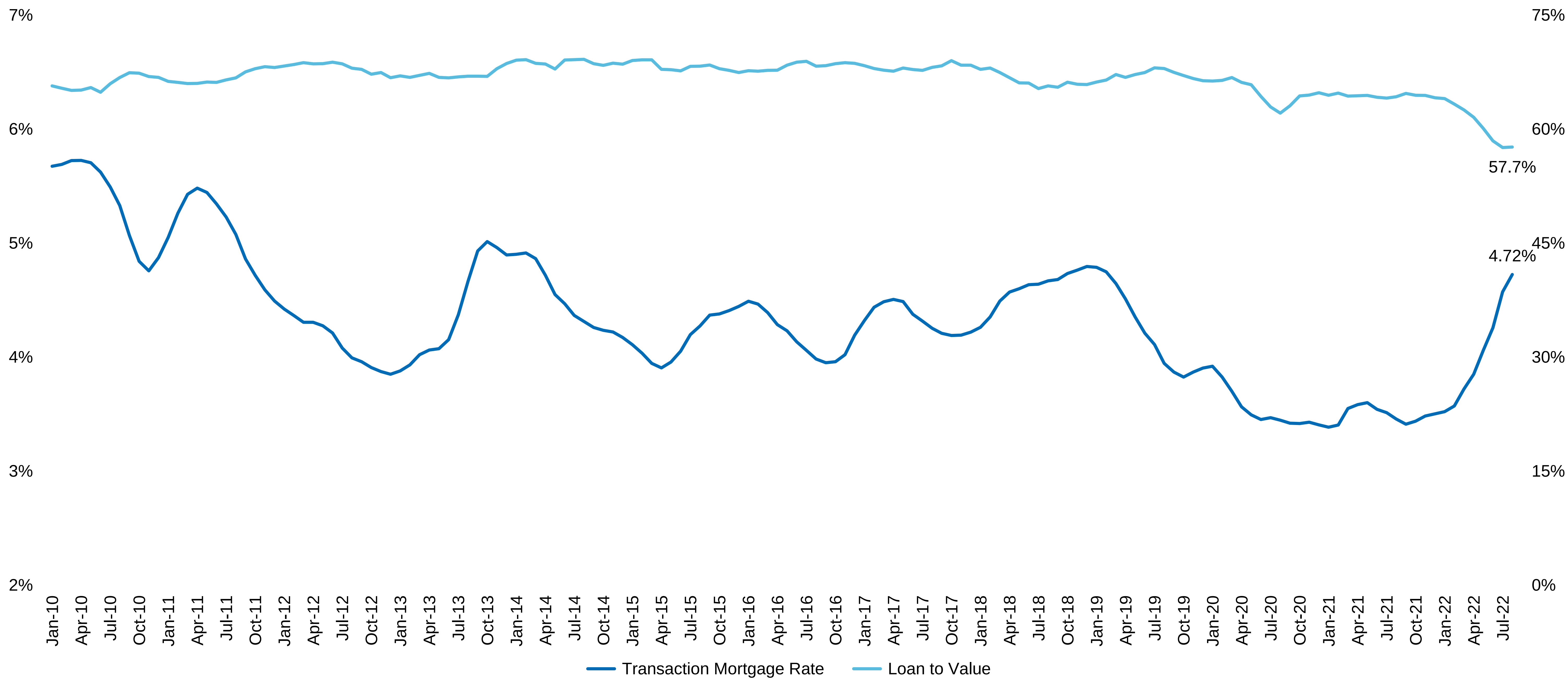


Source: Newmark Research, Trepp

As Mortgage Rates Increase, LTVs Have Begun to Shrink

According to Trepp, the cost of low-leverage multifamily debt is now 5.9%, pointing to further reductions in loan sizes.

Mortgage Rates vs. LTV

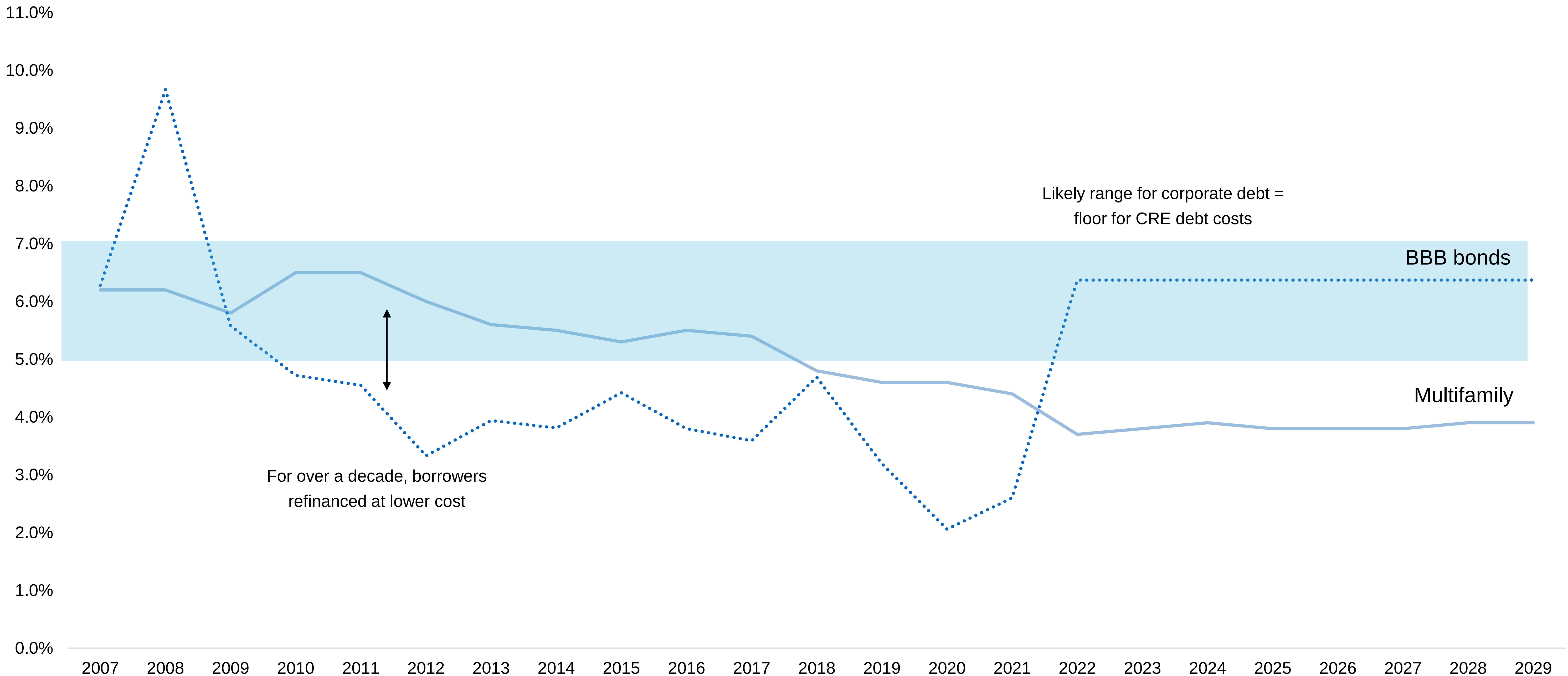


Source: Newmark Research, MSCI Real Capital Analytics

Borrowers Will Face Starkly Higher Costs as Loans Mature

While most borrowers have organically deleveraged through cashflow growth and increased asset values, they nonetheless will face starkly higher debt costs as loans mature. This will reduce future returns and is likely to result in investors refinancing to lower LTVs and, in some cases, foregoing leverage all together.

Weighted Average Interest Rate on Maturing Debt vs. Prevailing Bond Yields

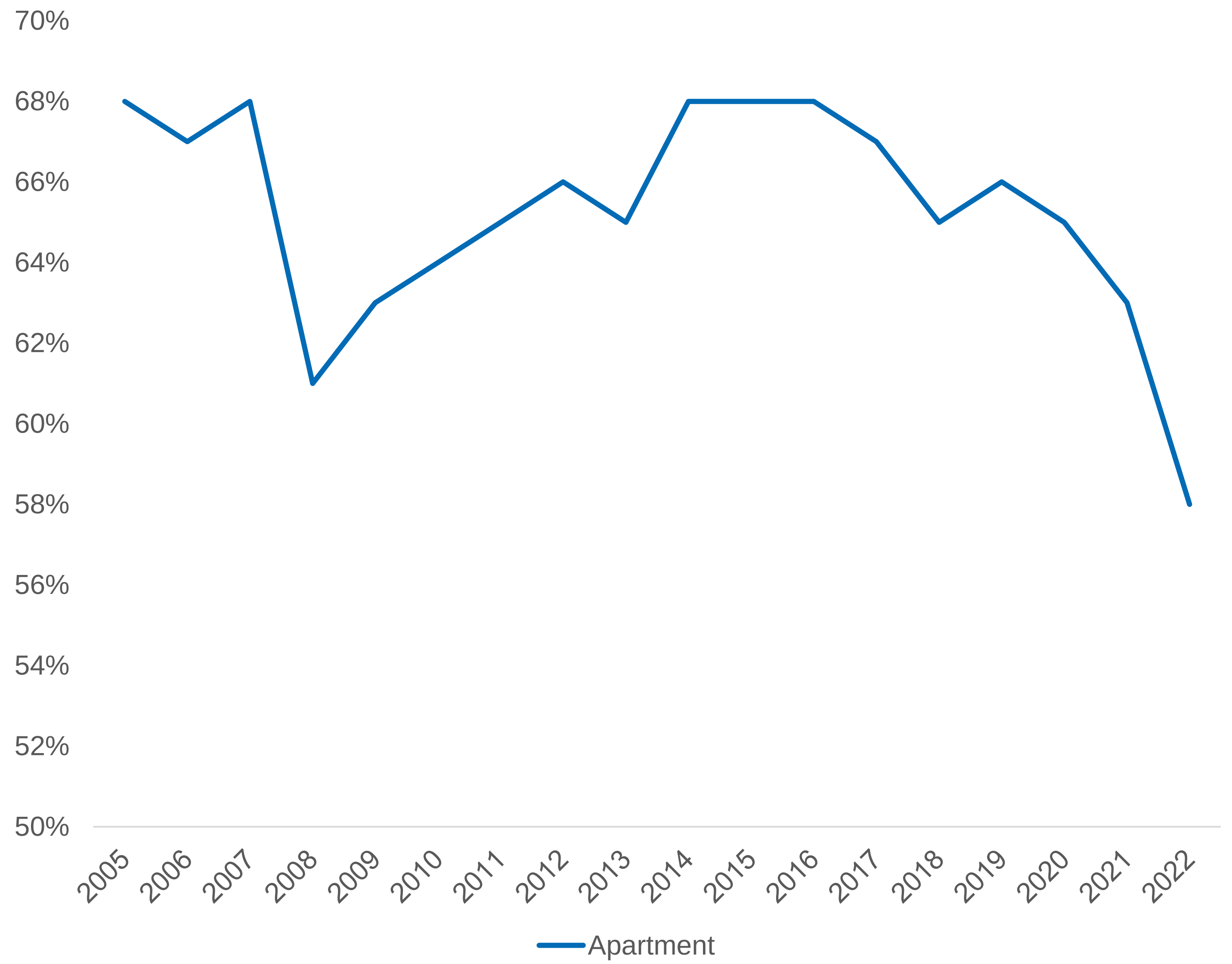


Source: RCA, ICE Data Indices, Newmark Research

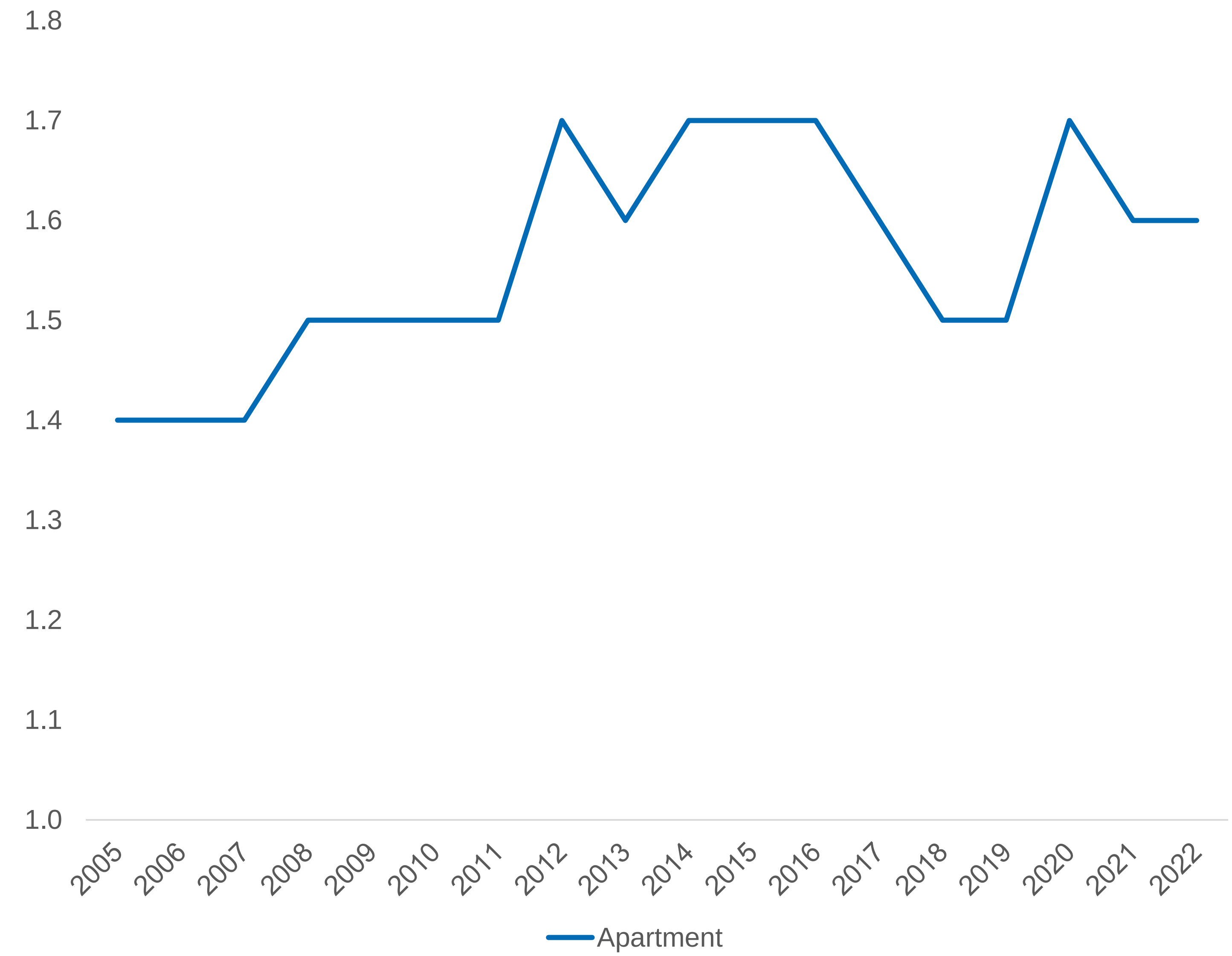
Conservative Underwriting Could Help Mitigate Distress

Since the GFC, investors have targeted higher debt sustainability.

Loan-to-Value Ratios Have Been Declining Since 2013



While Debt Service Coverage Ratios Have Risen (except for multifamily)

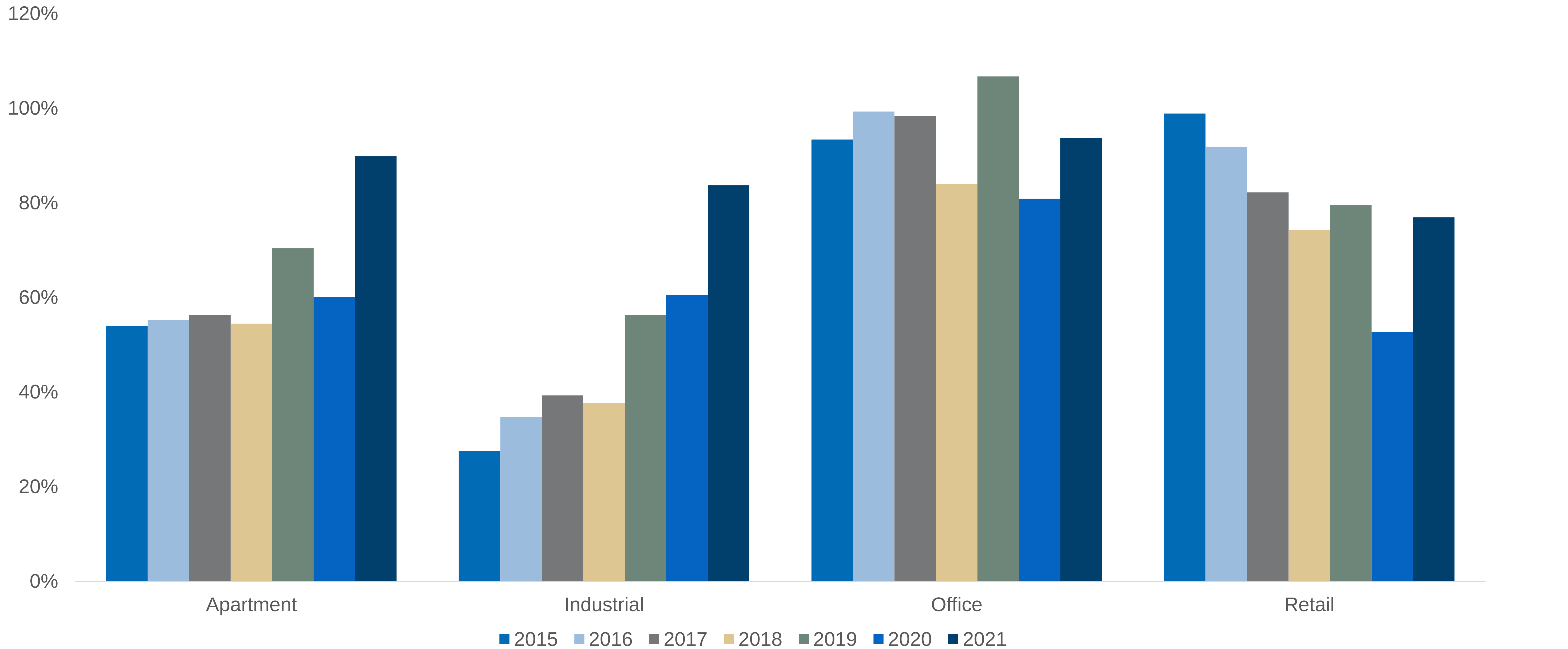


Source: Real Capital Analytics, Newmark Research

Falling Asset Values Means Some Loans are Underwater

Multifamily has experienced strong asset value appreciation (and cashflow growth) over the last seven years, notwithstanding the ongoing correction in values. The result is that, except for loans originated in 2021, mark-to-market LTVs are well-contained. The same cannot be said for many office and retail vintages.

Mark-to-Market* Loan-to-Value Ratio by Year Debt Originated



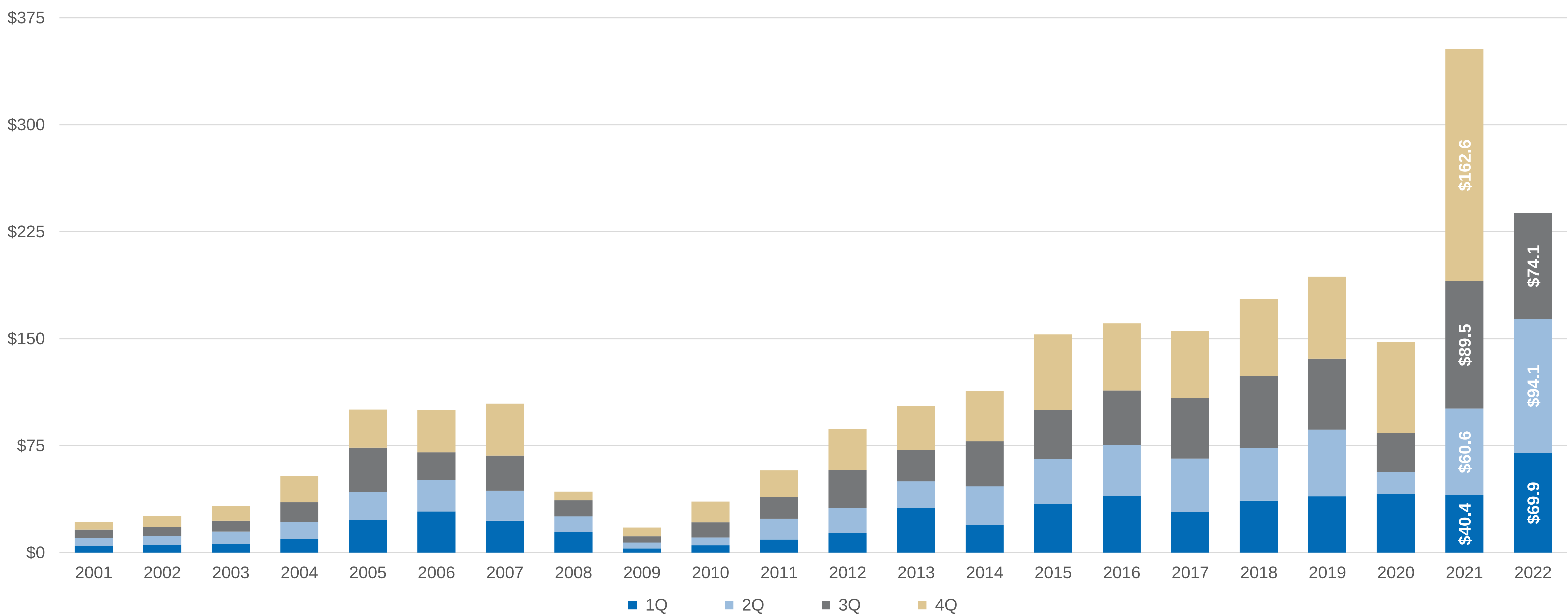
Source: RCA, NAREIT, S&P Capital IQ, Newmark Research

*We take the average LTV in a given year and then increase the value of the denominator by the cumulative price return of the corresponding NAREIT property sector index since the year the loan was originated. For example, apartment loans made in 2005 had an average LTV of 68%. We would then increase the denominator by the cumulative REIT price return from 2006-2022 YTD.

Sales Volume Declines 17% Year-over-Year as Market Braces for Muted Fourth Quarter

While sales volume in the third quarter of 2022 declined 17.2% year-over-year, volume year-to-date rose to $238.0 billion, a 25.0% increase compared with the first three quarters in 2021. Meanwhile, quarter-over-quarter transaction activity declined 21.3%, with volumes in the fourth quarter of 2022 anticipated to be well below the record set in the fourth quarter of 2021 of $162.6 billion.

Investment Sales Volume in Billions

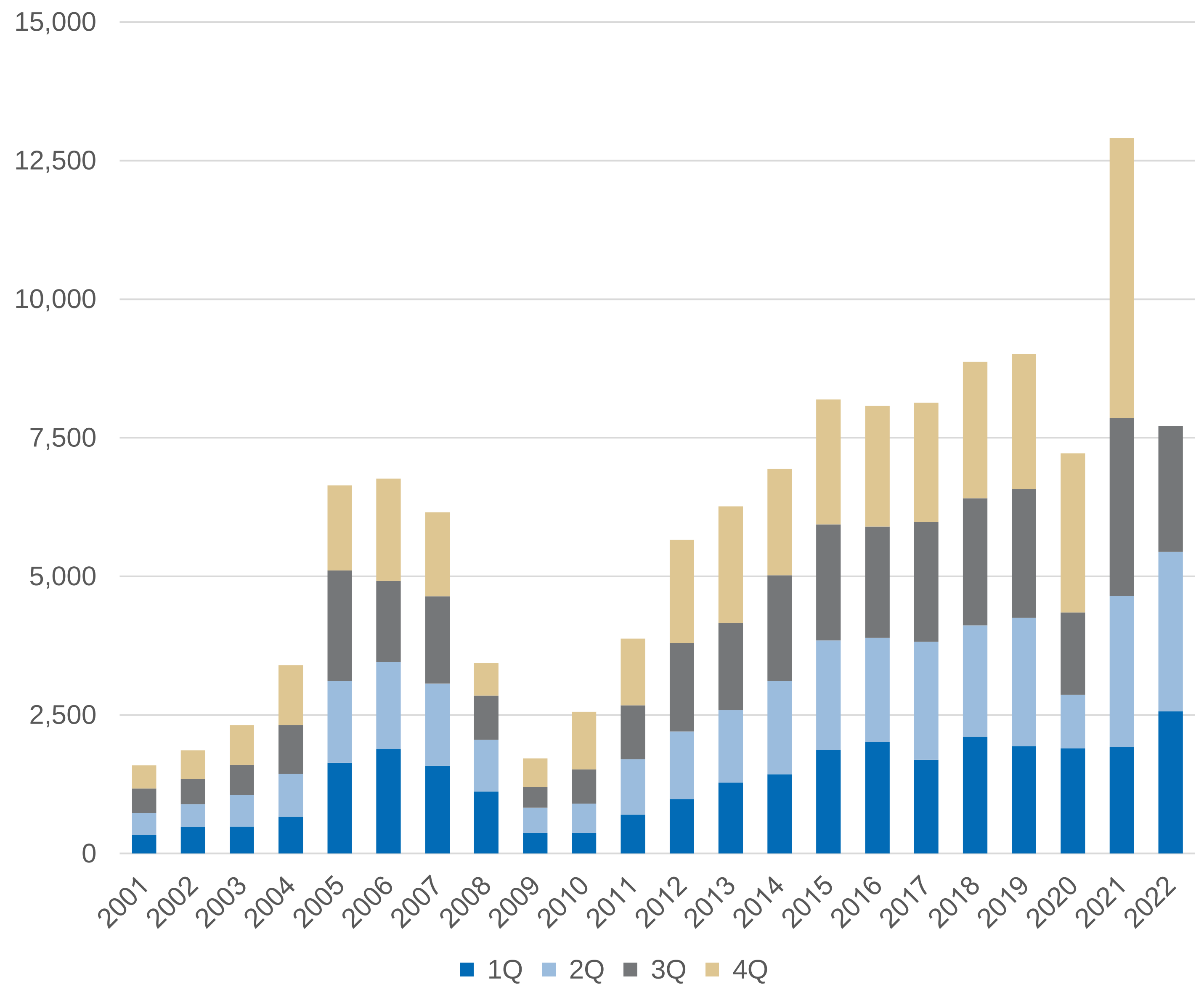


Source: Newmark Research, MSCI Real Capital Analytics

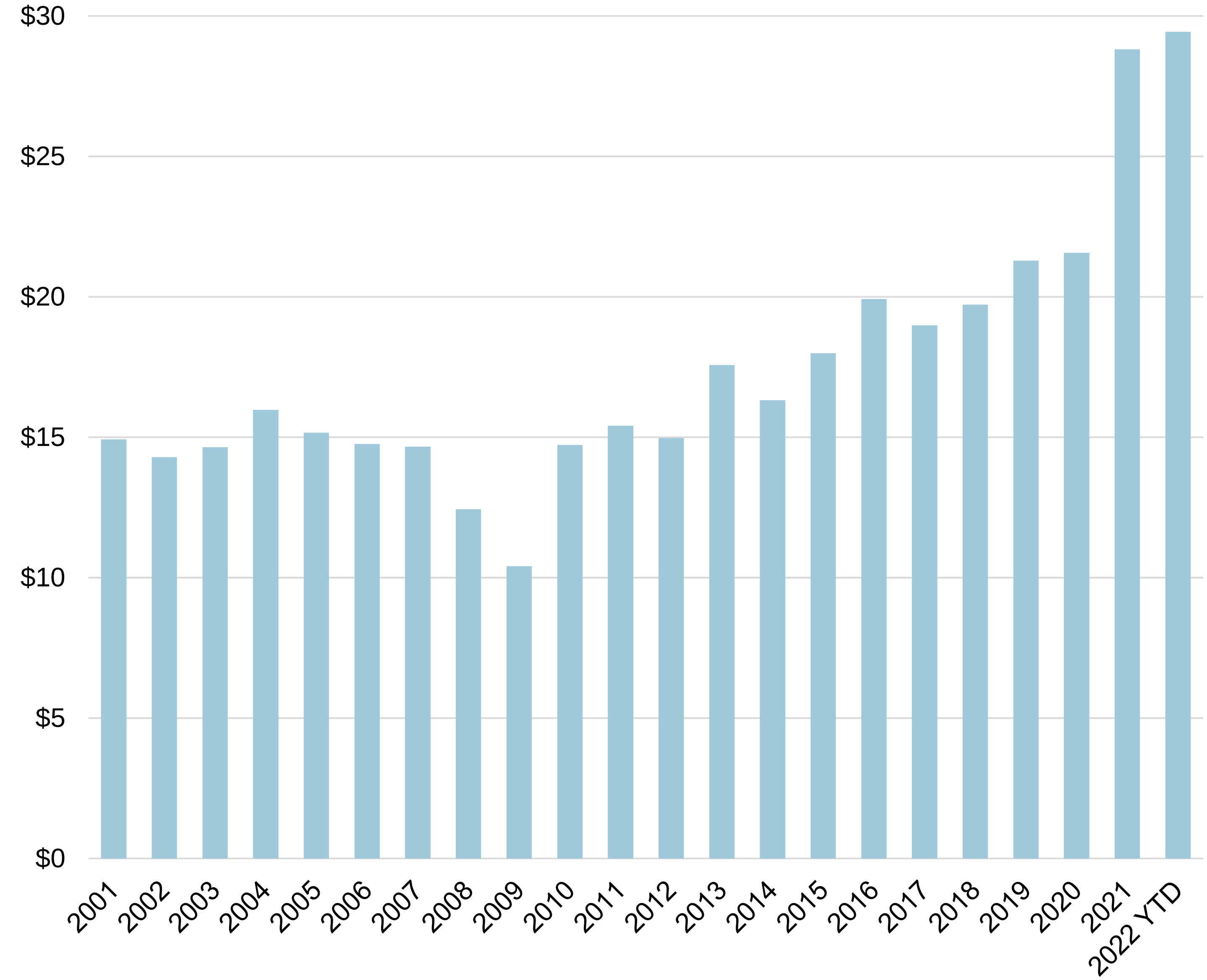
Transactions near 2021 Levels as Average Deal Size Continues to Climb

While overall sales volume declined 1.8% compared with the first three quarters of 2021, average deal size has continued to increase, reaching nearly $30 million per trade in 2022, up 36.4% since 2020.

Number of Properties



Average Deal Size (Dollars in Millions)

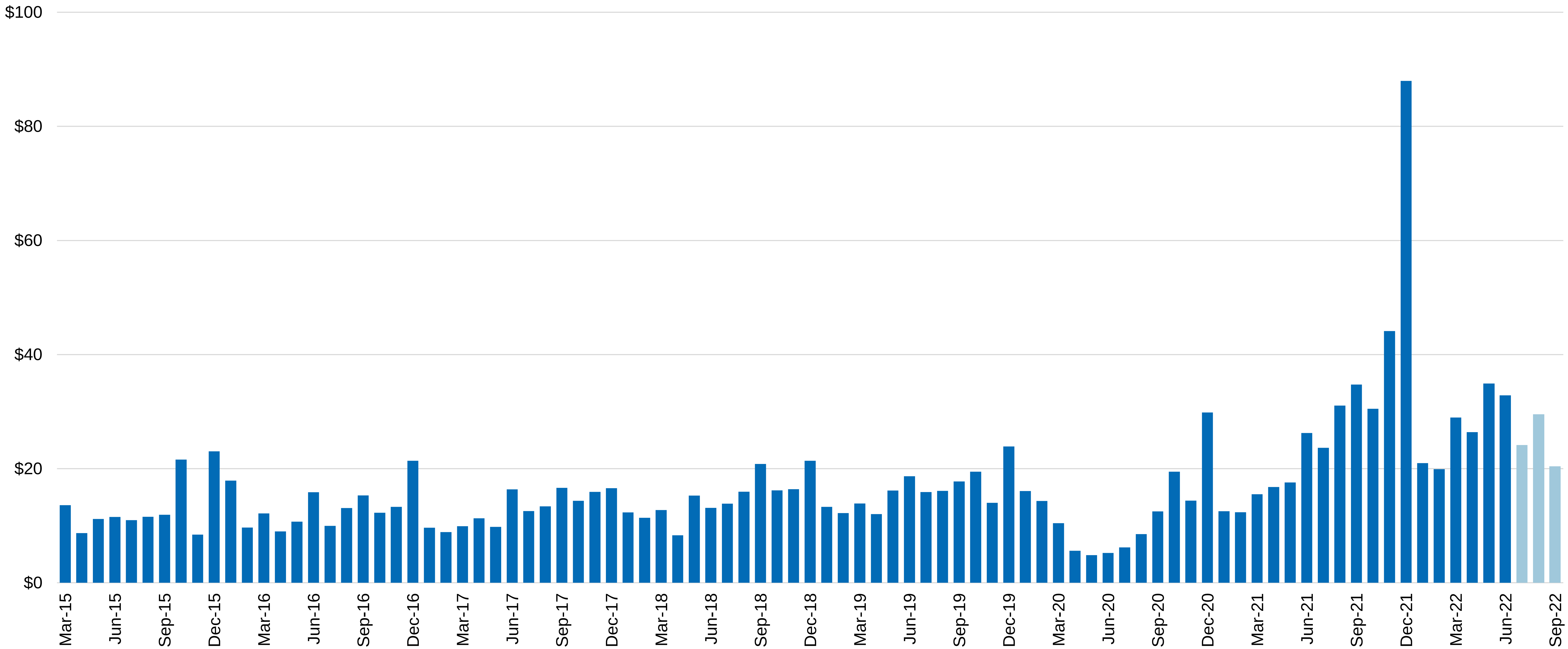


Source: Newmark Research, MSCI Real Capital Analytics

Monthly Volumes Slowed in the Third Quarter, Though above Long-Term Average

Average monthly sales volume in the third quarter of 2022 remained above the long-term average of $17.0 billion, but volume in July, August and September averaged $24.7 billion, representing a decline of 26.0% based on the 12-month average.

Monthly Sales Volume in Billions

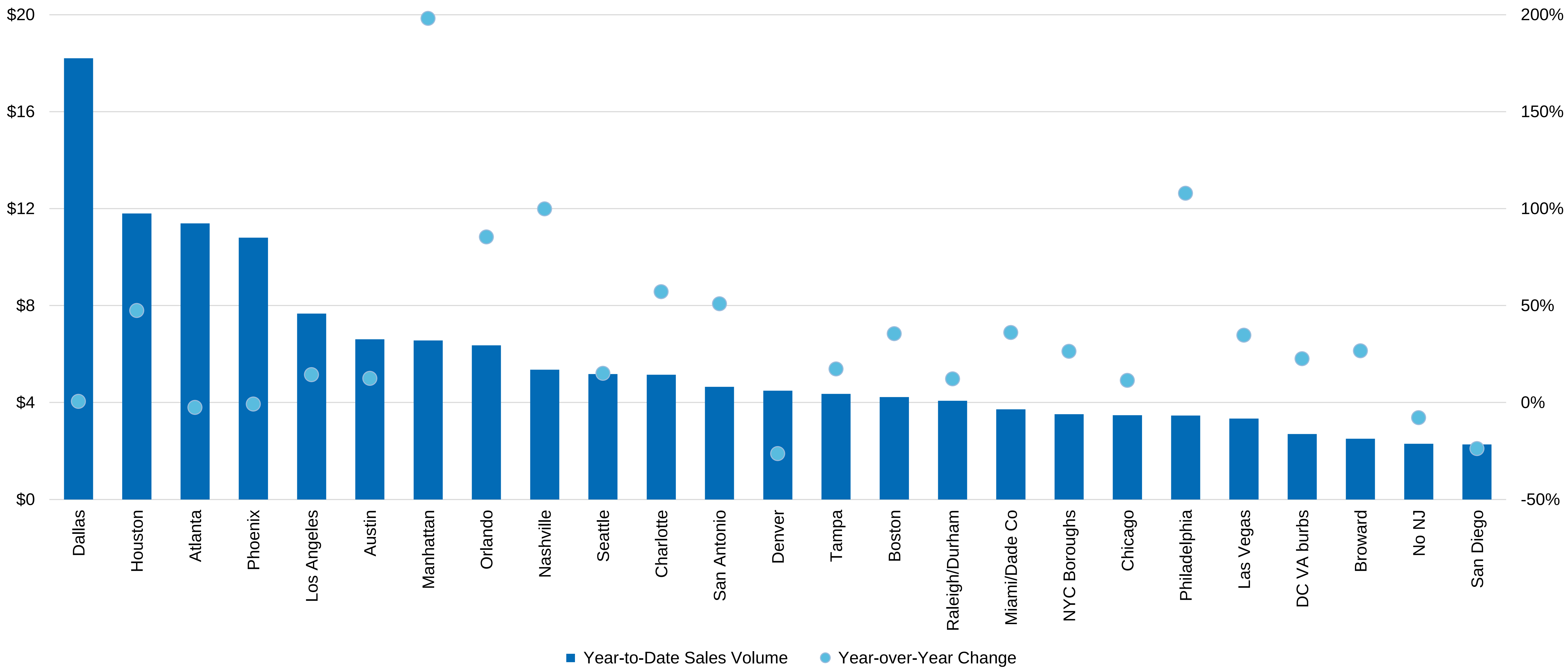


Source: Newmark Research, MSCI Real Capital Analytics

Capital Continues to Pour into Sun Belt; Resurgence in Major East Coast Markets

Investors have continued the trend of favoring Sun Belt markets, as Dallas, Houston, Atlanta and Phoenix received the highest share of capital over the trailing 12 months, accounting for nearly 22% of all year-to-date volume. East Coast markets, like New York and Philadelphia, saw a resurgence in investment activity, with capital flow increasing by 198.1% and 107.9% respectively, as investors return to these markets.

Monthly Sales Volume in Billions

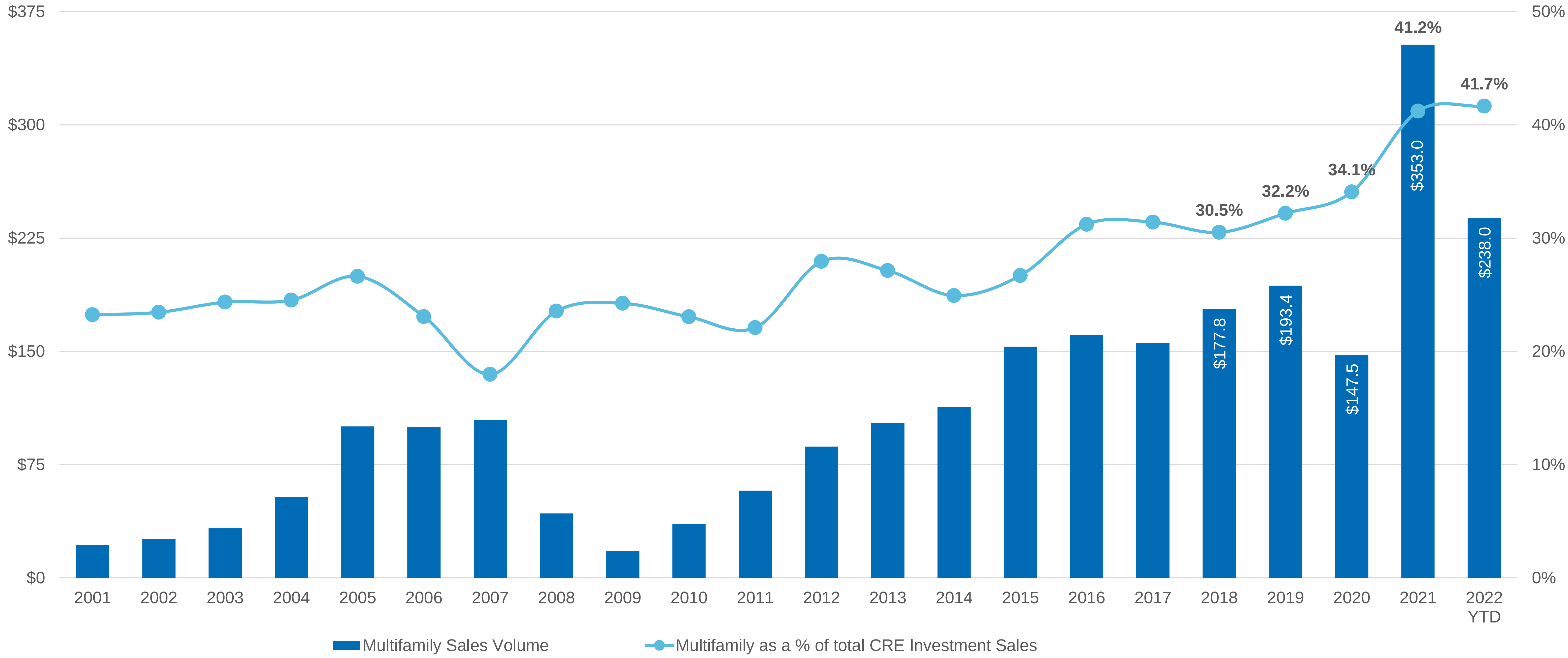


Source: Newmark Research, MSCI Real Capital Analytics

Multifamily Extends Dominance as Top Destination for Capital

Investor appetite from global capital sources continues to rise as year-to-date volume accounts for 41.7% of all US commercial real estate transactions.

Allocation to Multifamily

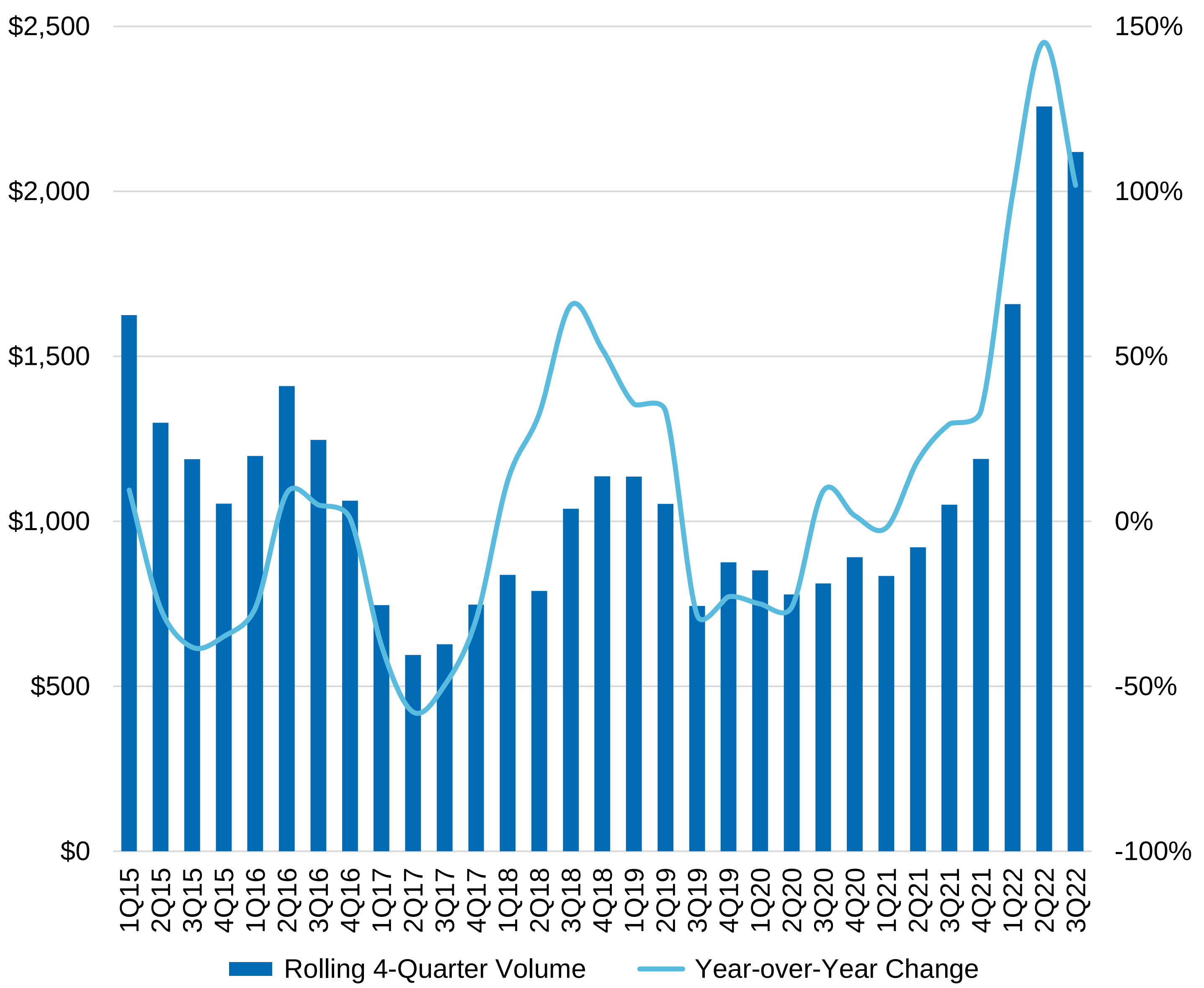


Source: Newmark Research, MSCI Real Capital Analytics

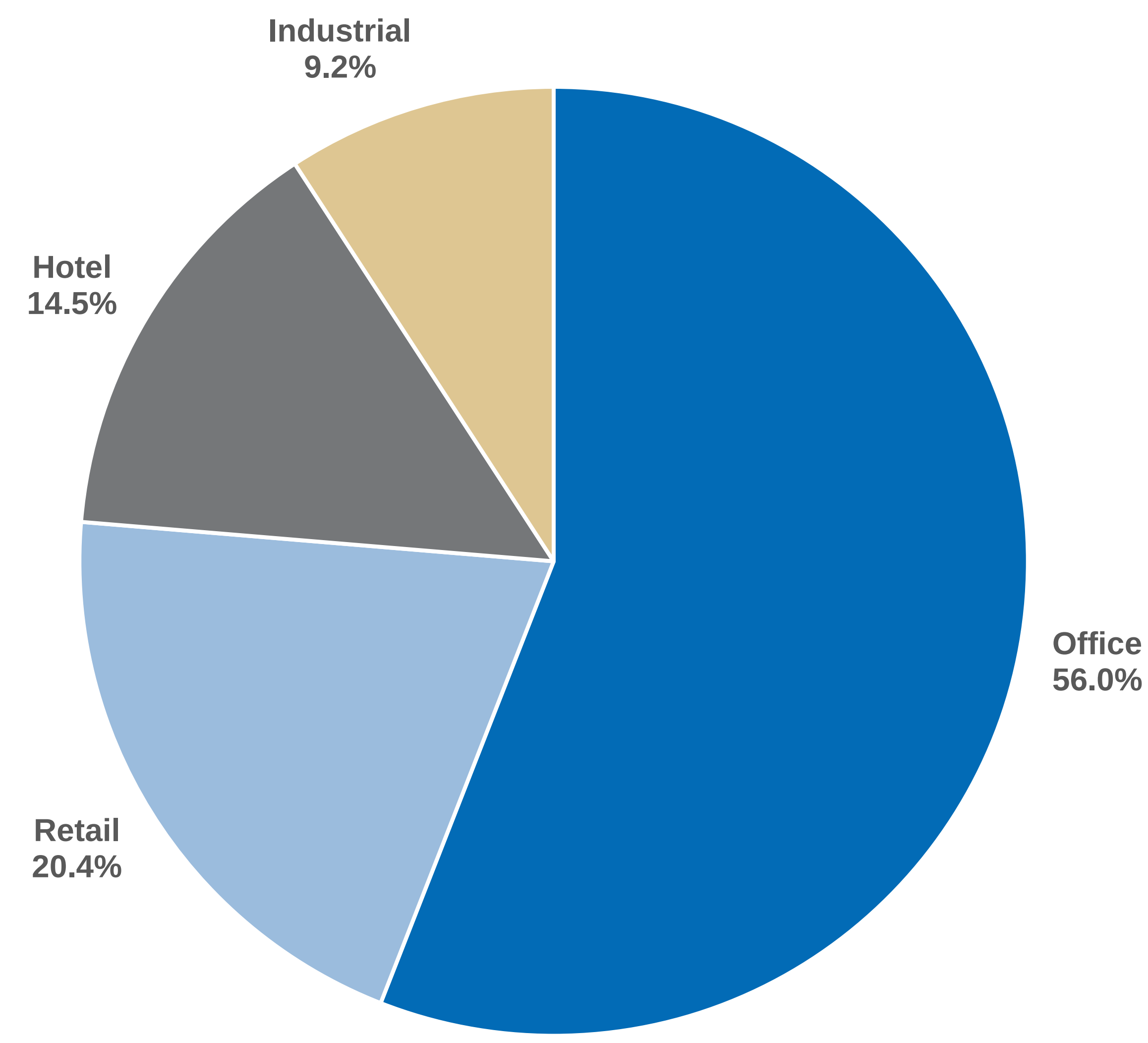
Still in Early Innings but Sales for Commercial Conversions to Multifamily Rise

In the past 12 months, 81 commercial properties have been sold with the intention of converting to multifamily, with investment sales volume surging 101.8% year-over-year. In most markets, multifamily remains the highest and best use for commercial properties paving the way for future conversions. Markets with high levels of office vacancy, especially among older assets, transacted in 2022:1875 Connecticut Ave. NW in Washington, DC, a 460,000-square-foot office property, which sold for $175.0 million; and 55 Broad St. in New York, a 425,000-square-foot office sold for $180.0 million.

Sales Volume (Dollars in Millions)



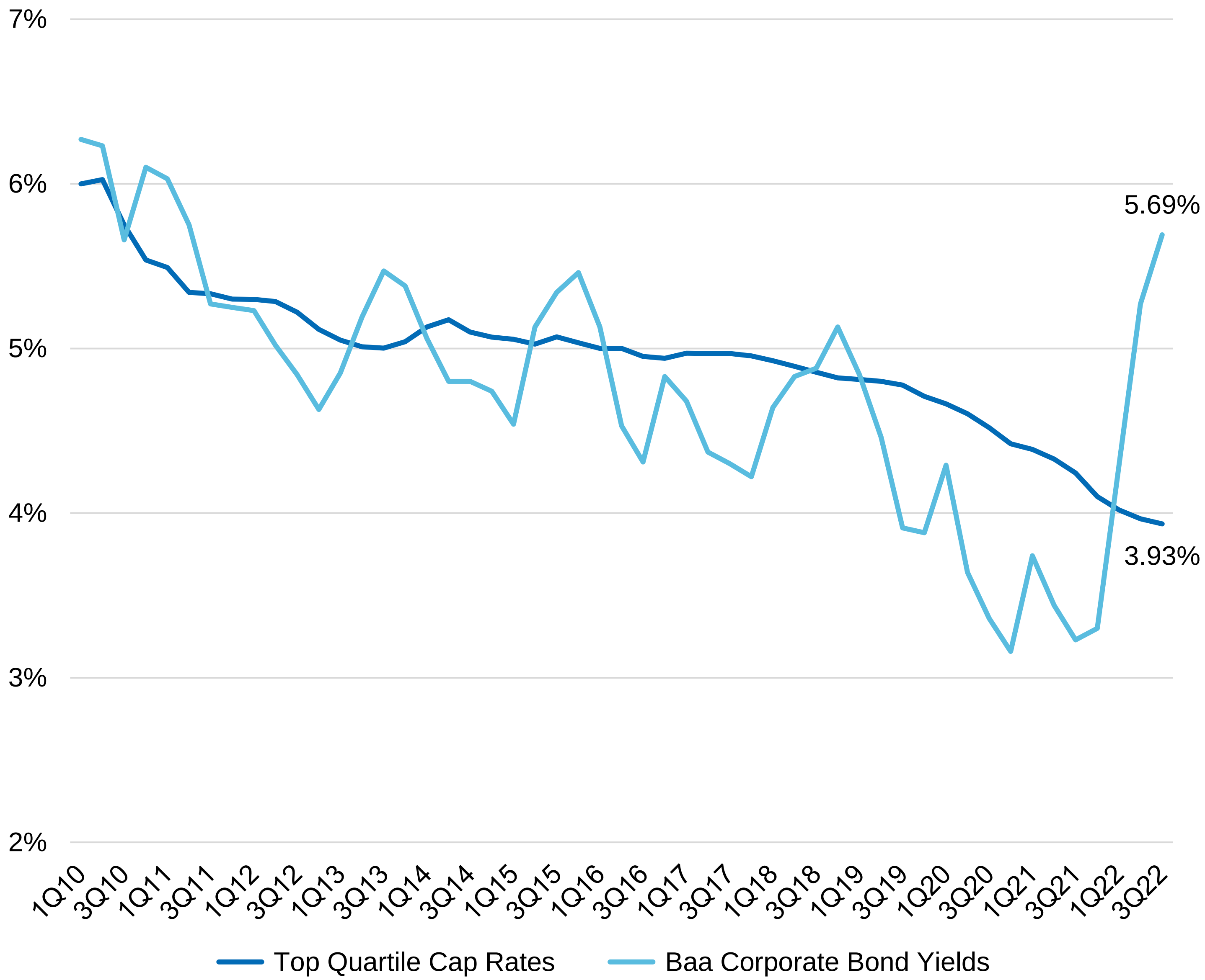
By Property Type (2022 YTD)



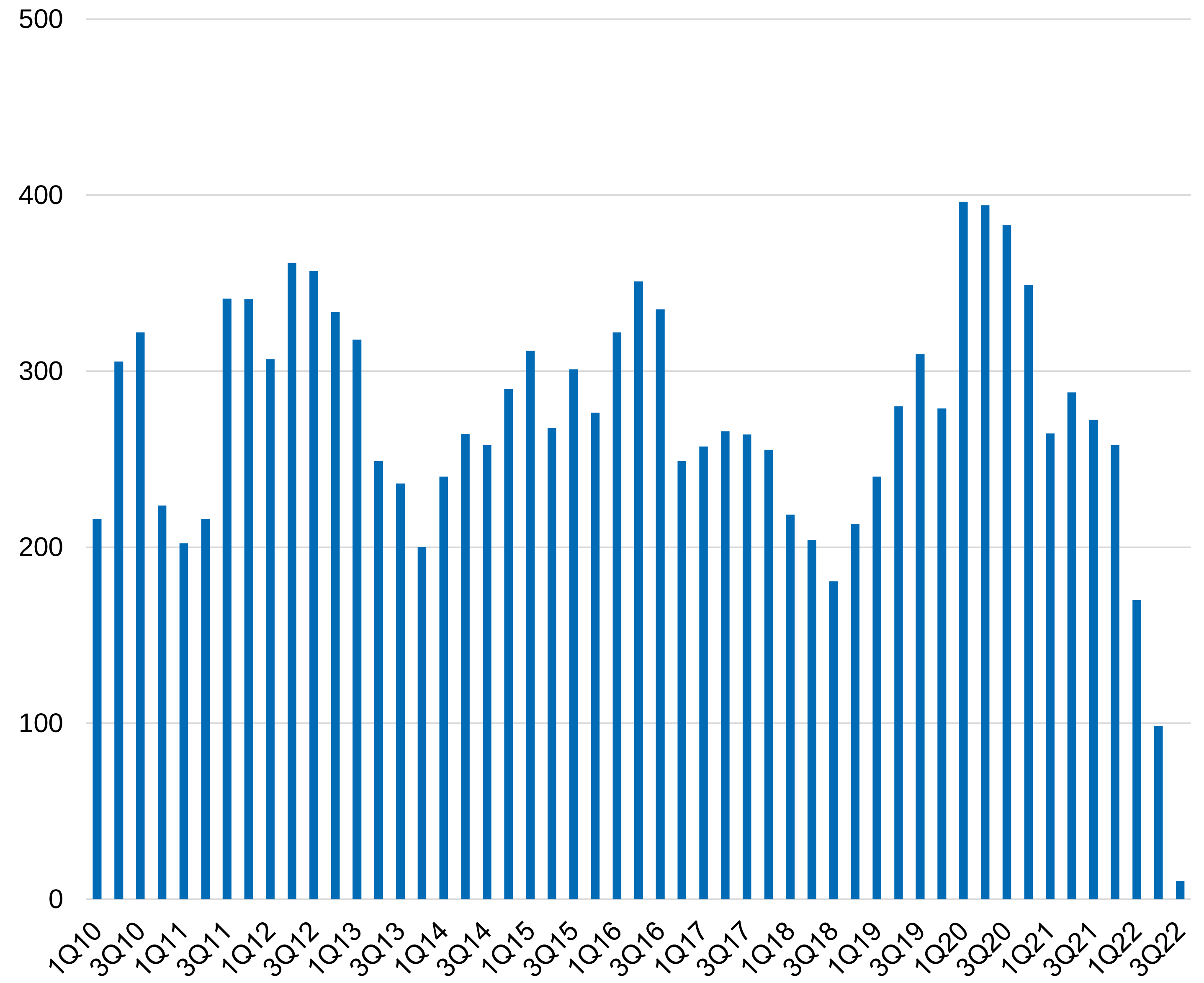
Source: Newmark Research, MSCI Real Capital Analytics

Transactional Cap Rates Still Well below Industry Proxy; Spread Continues to Tumble

Transactional Cap Rates VS. Baa Corporate Bond Yield



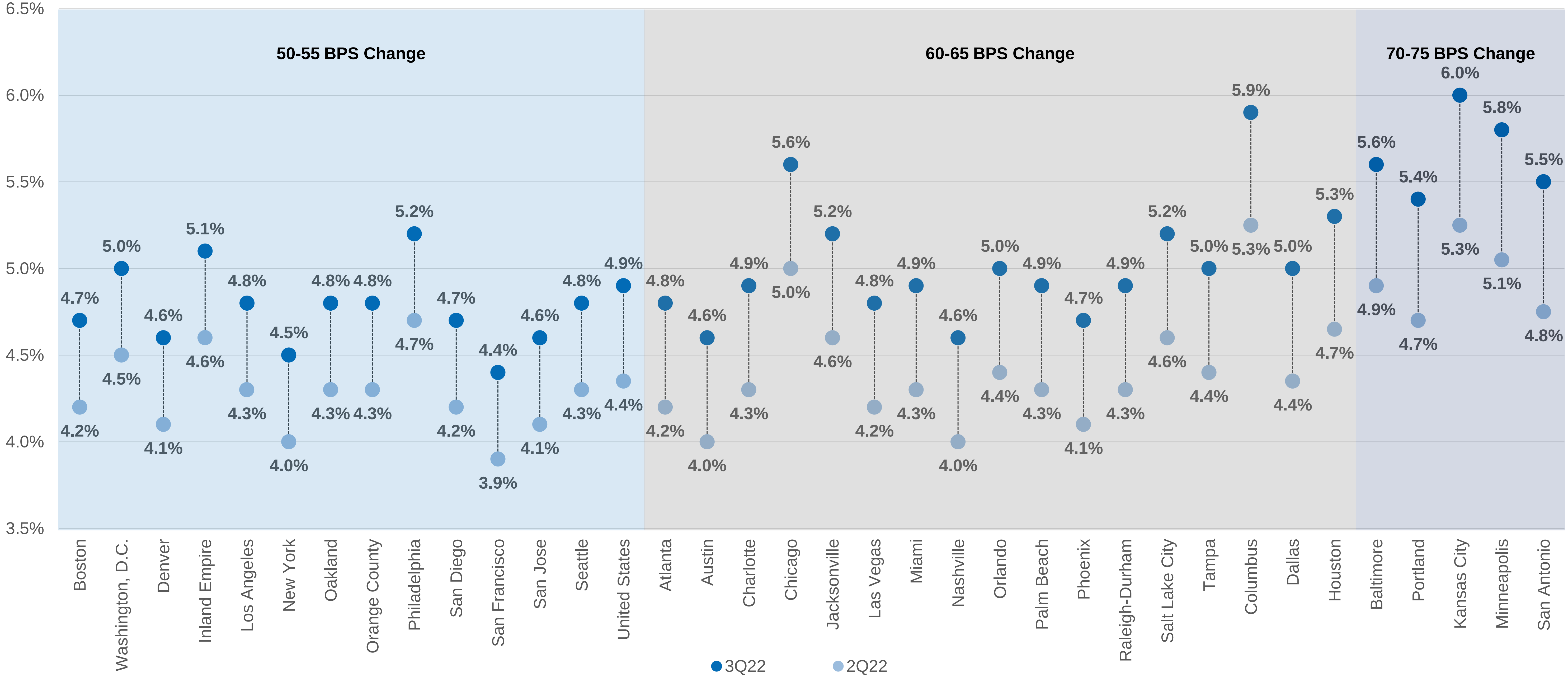
Yield Spread (10 Year Treasury vs. Top Quartile Transactional Cap Rates)



Source: Newmark Research, MSCI Real Capital Analytics, Federal Reserve Bank of St. Louis

While Transactions Lag, Nominal Cap Rate Expansion Underway

Nominal Cap Rates by Market

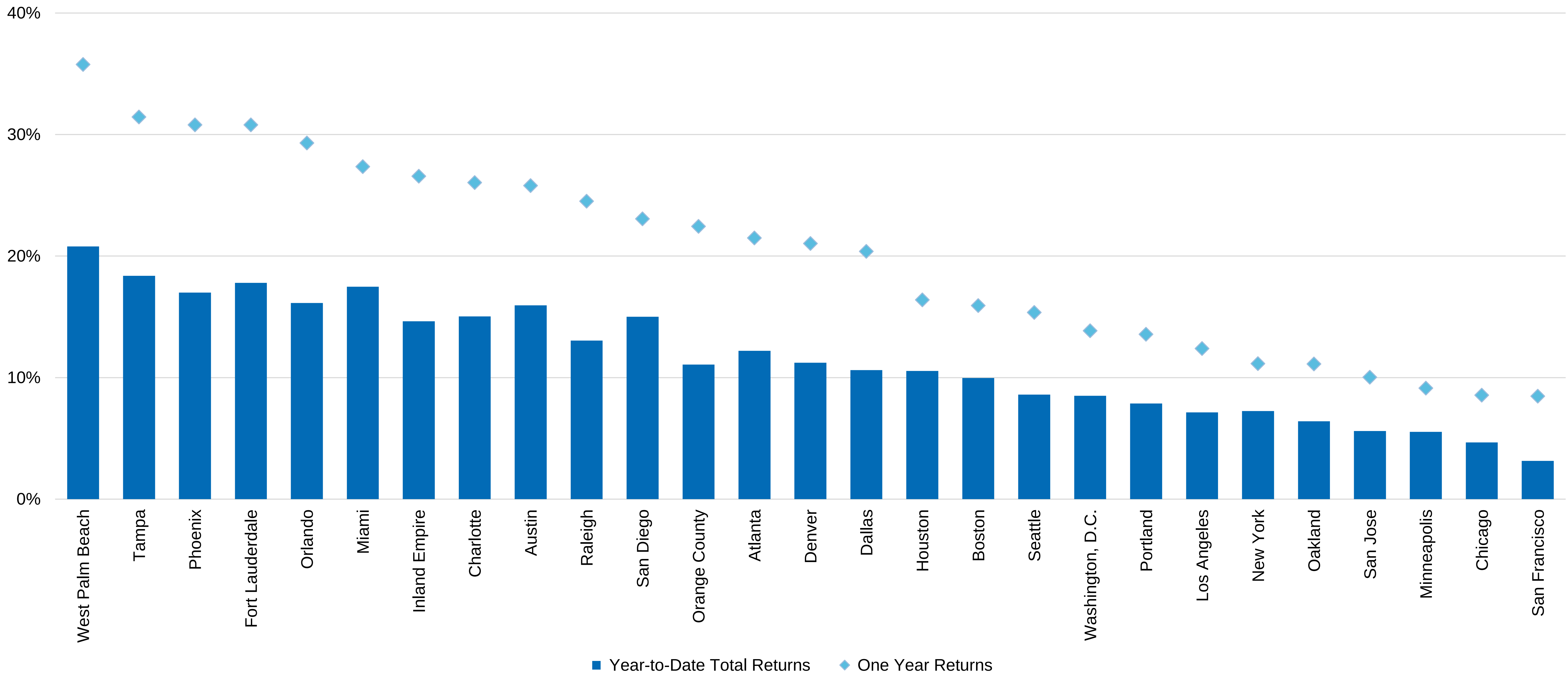


Source: Newmark Research, Green Street Advisors

Returns in the Sun Belt Remain Robust, Phoenix Slows and Major Markets Still Lag

Sun Belt markets led the pack on both a year-to-date and one-year basis.

NCREIF Total Returns by Market

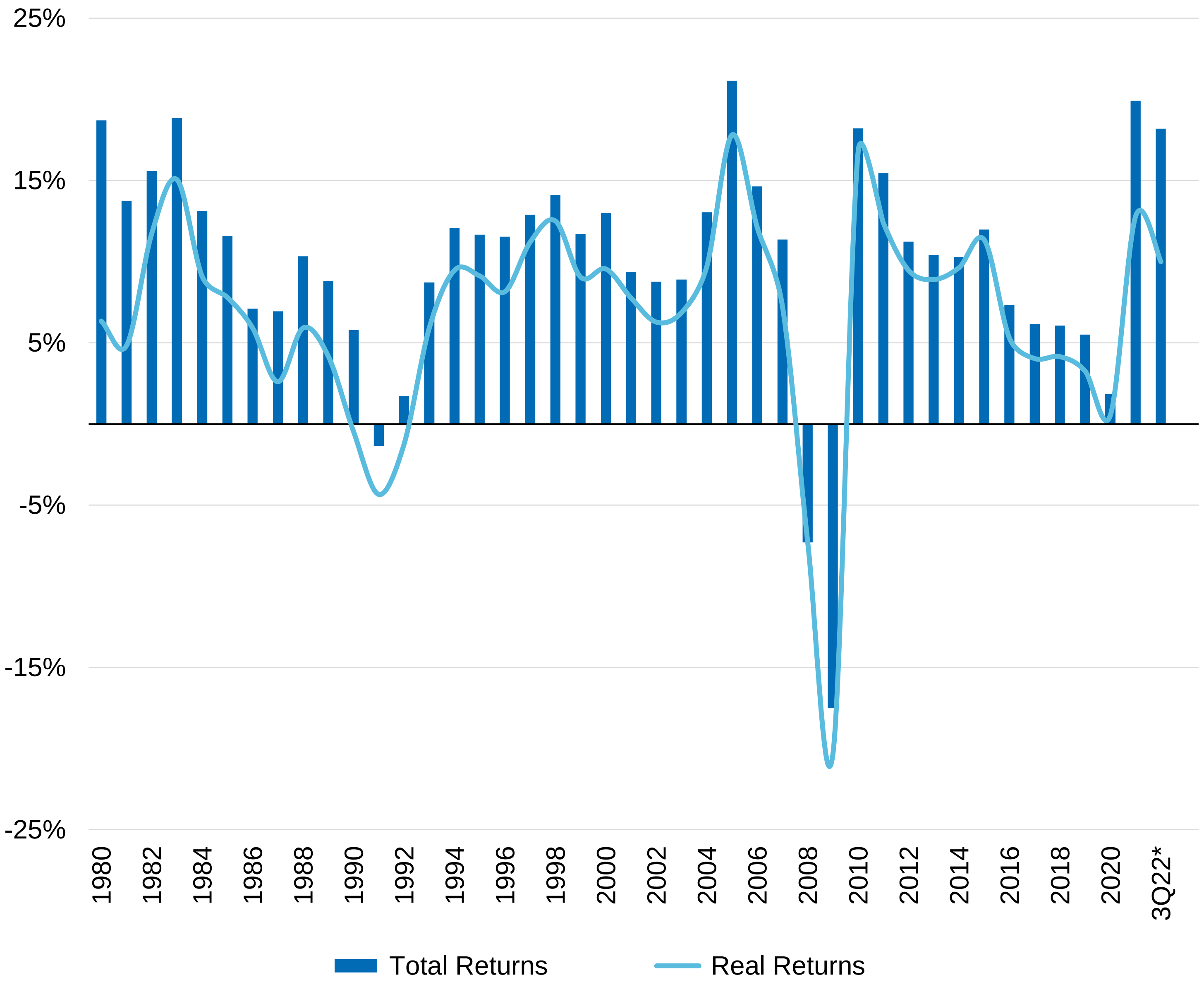


Source: Newmark Research, NCREIF

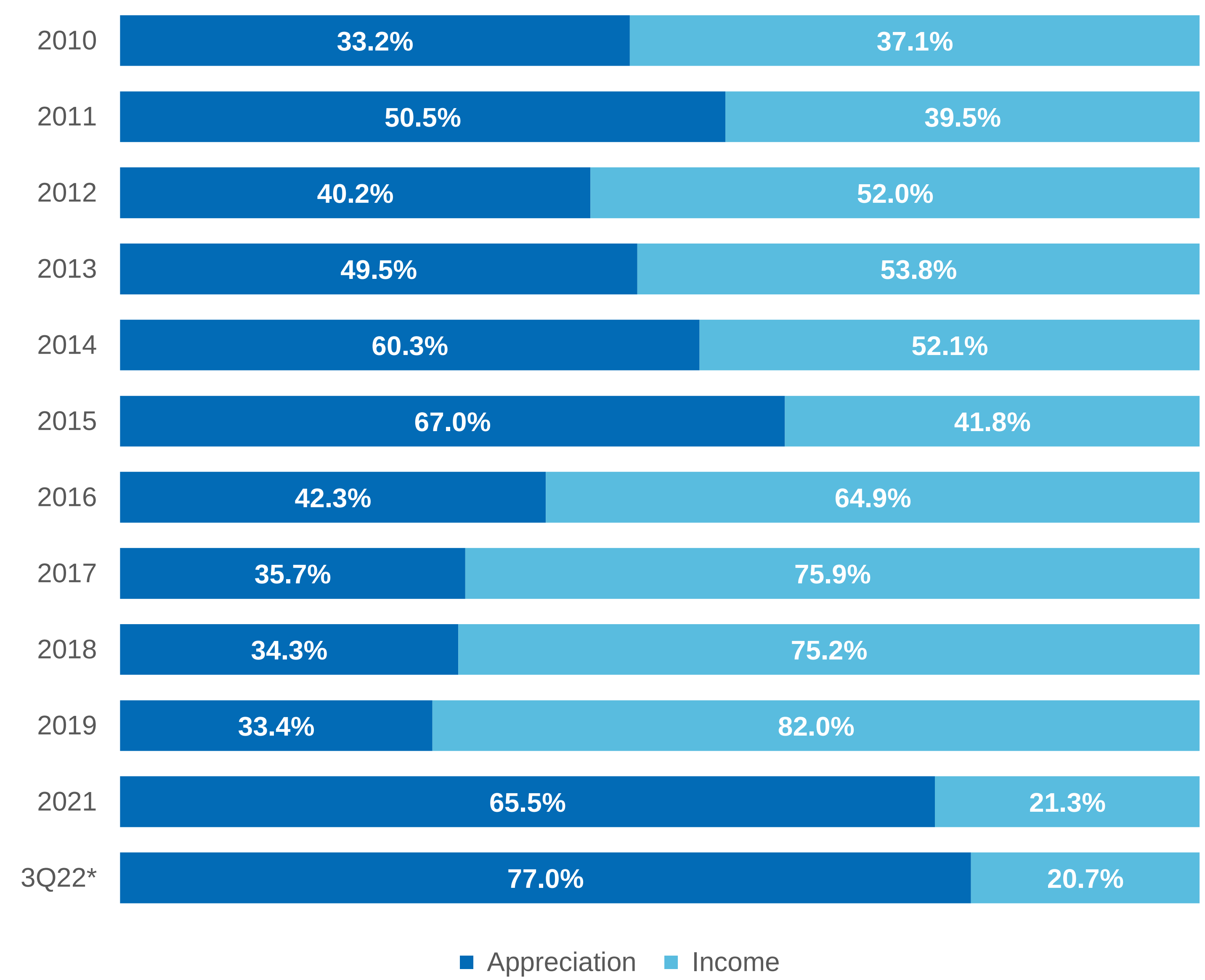
Real Returns Durable; Reversion to the Mean Anticipated for Appreciation Component

Total returns decelerated sharply in the third quarter of 2022, totaling just 1.2%, compared with 3.85% in the second quarter of 2022 and 5.33% in the first quarter of 2022.

United States Total Returns



Appreciation and Income As A Percentage of Total Return



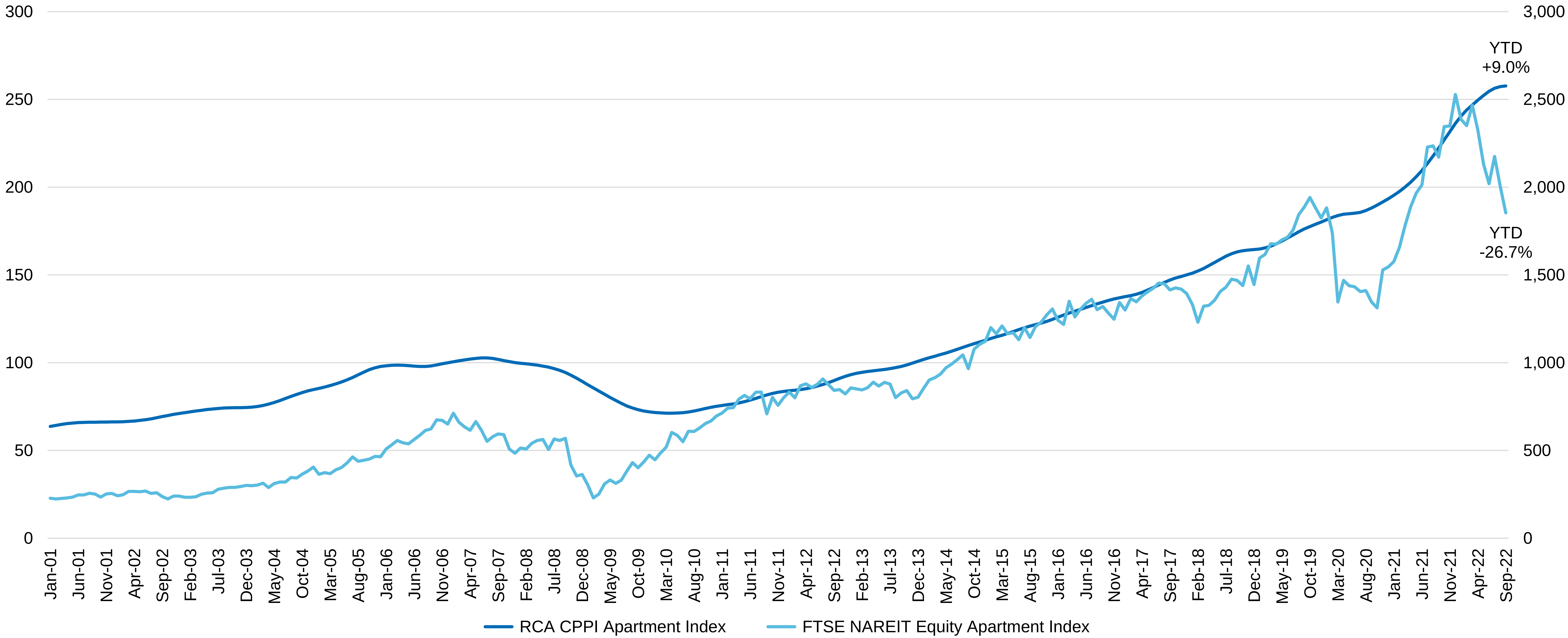
Source: Newmark Research, NCREIF

** Annualized returns*

Private Real Estate Returns Outpacing Public Markets

Volatility, paired with rate increases, has negatively impacted equities, leading to 26.7% year-to-date for apartment REITs.

RCA CPPI Apartment Index vs. FTSE NAREIT Equity Apartment Index

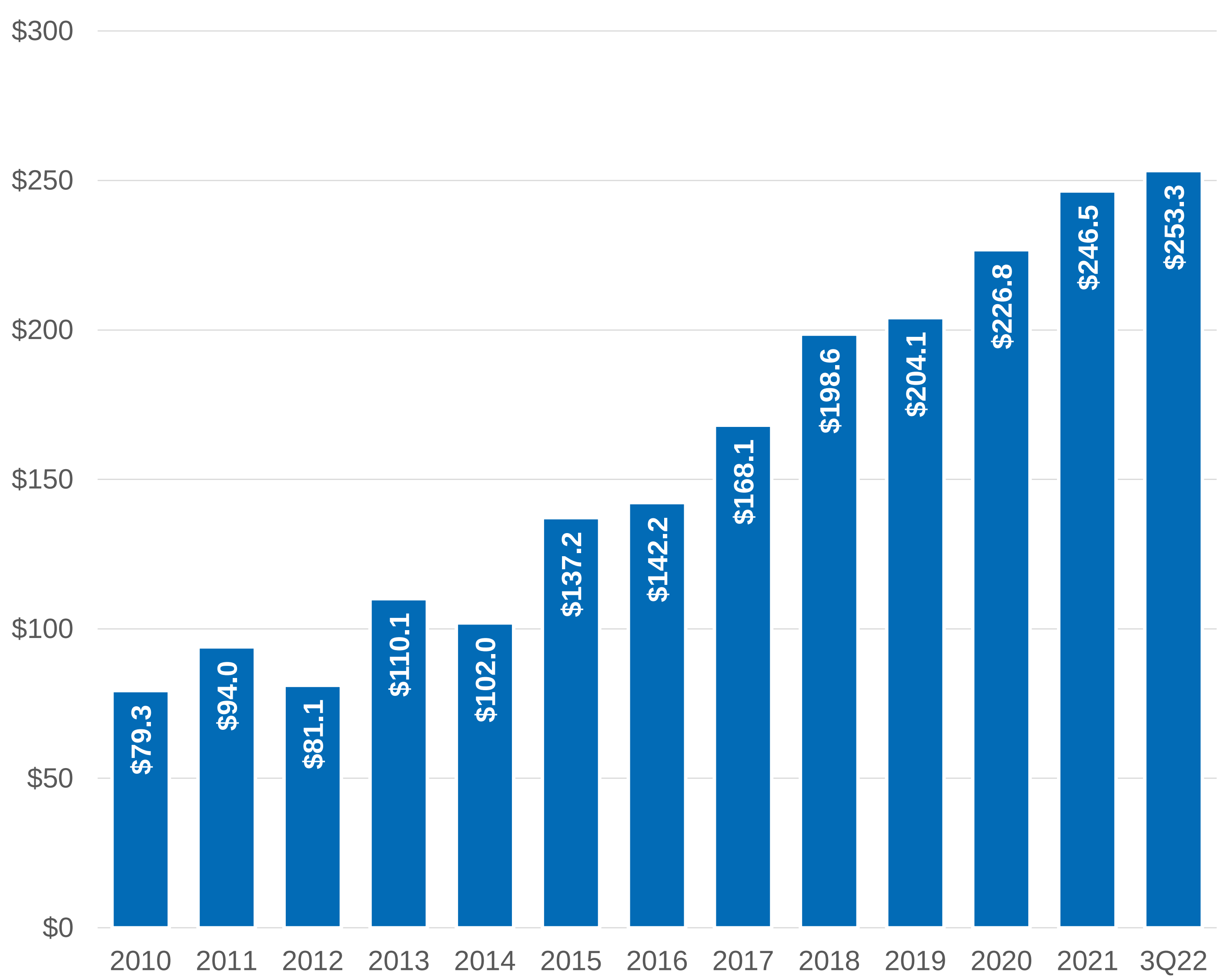


Source: Newmark Research, MSCI Real Capital Analytics, NAREIT

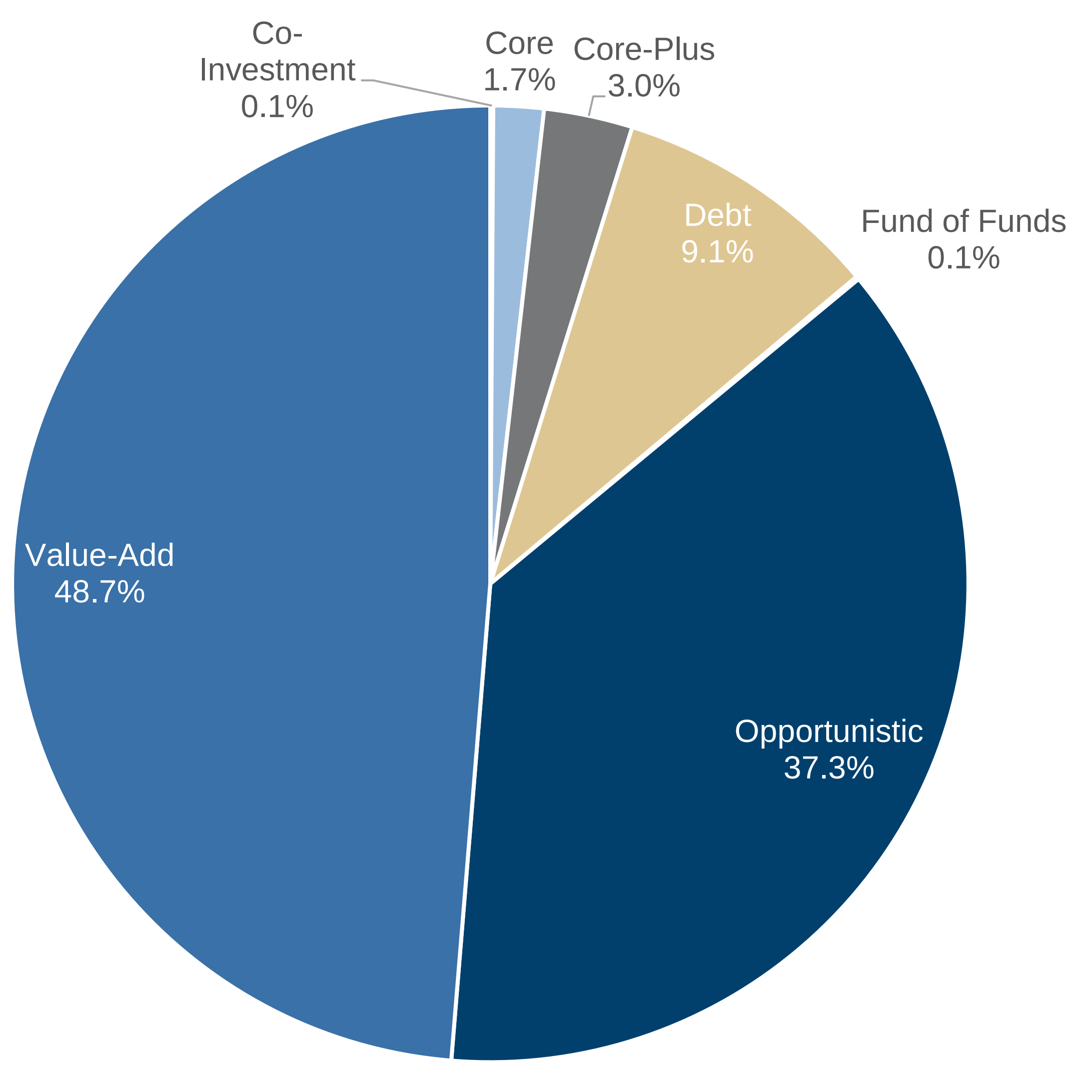
Record Levels of Capital, Value-Add and Opportunistic the Most Preferred Strategies

Slowing deal flow may cause groups with dry powder to seek out credit opportunities and other forms of deploying capital.

Dry Powder (All Property Types, North America)



Allocation by Residential Strategy (2022 Vintage)



Source: Newmark Research, Preqin

For more information:

David Bitner
Executive Managing Director
Global Head of Research
david.bitner@nmrk.com

Jonathan Mazur
Executive Managing Director
National Research
jonathan.mazur@nmrk.com

Mike Wolfson
Managing Director
Multifamily Capital Markets Research
mike.wolfson@nmrk.com

Sean Marmora
Senior Research Analyst
Capital Markets Research, Multifamily
sean.marmora@nmrk.com

New York Headquarters
125 Park Ave.
New York, NY 10017
t 212-372-2000

nmrk.com

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