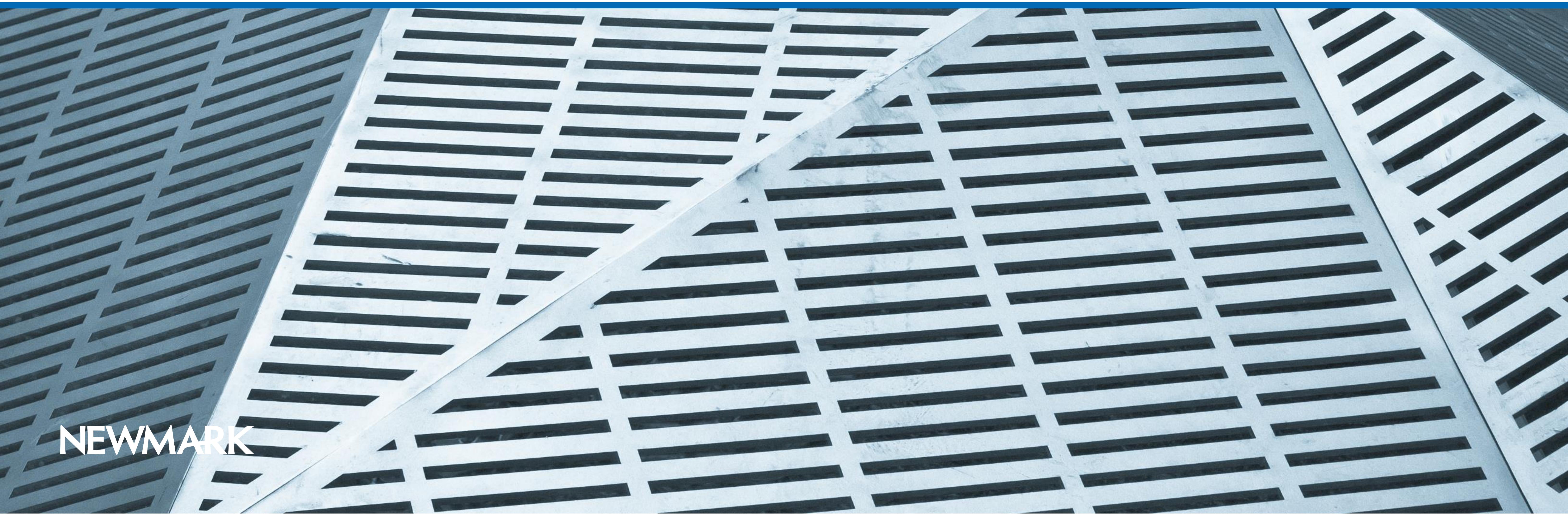
3Q23

The National Industrial Market: Conditions & Trends



Market Observations

Economic Conditions and Demand Drivers

- The pace of U.S. economic growth picked up in the third quarter of 2023, growing 4.9% due in part to strong consumer spending amid ongoing inflation and interest rate burdens. Key recession indicators persist in signaling a downturn, although every cycle is different. A soft landing is not out of the question.
- An increasingly constricted credit environment, elevated interest rates, and shifting consumer demand is causing a significant uptick in bankruptcies, which has contributed to some sublease space and vacancies in the industrial market.
- While many firms are pausing or slowing capital investments, advanced manufacturers are investing heavily in new construction. A snapshot of recent major investments reveals approximately $400 billion pledged, 210,000+ new jobs and a minimum of 250 MSF of new industrial projects to come between now and 2030.

Leasing Market Fundamentals

- Nationally, absorption measured 47.0 msf in the third quarter of 2023, demonstrating solid if muted demand. Secondary markets are absorbing an increasingly larger share of net absorption.
- Deliveries this quarter measured 140 msf, the second-highest quarterly volume on record. The construction pipeline has depleted substantially amid sharply decelerating new starts although at 537 msf, it is still 62% above 2019 measures.
- Asking and taking rents alike continue to grow at double-digit annual percentages, but quarterly growth is slowing substantially. Still-low vacancy is holding rates higher in many markets, but pricier, quality availabilities delivering in larger volumes are also impacting rent growth averages.

Capital Markets

- 3Q23 marked the fifth consecutive quarter of significant annualized declines in industrial capital markets volume, with users – a small slice of the pie - the only investor group to increase acquisitions year-over-year.
- Appetite for smaller deals (under $50M) is visible in markedly less decline in activity than larger deals (over $100M), as well as less of a reset in cap rates.
- Record industrial loan maturities (heavily concentrated in bank and securitized borrowings) are coming due. However, among all property types, the industrial sector has the lowest share of potentially troubled loans maturing over this timeframe. The larger challenge will come from debt service covenants where 38% of upcoming maturities have DSCR of 1.25x or less.

Outlook

- Economic uncertainty continues to exert pressure on consumers, developers, occupiers and investors. Demand for industrial space will likely remain resilient but muted going into 2024.
- Vacancy will increase further as record volumes of new construction deliver over the next four quarters. Supply – both in deliveries, and in development – will fall back to pre-pandemic levels by 2025, and possibly sooner, depending on how few projects kick off next quarter.

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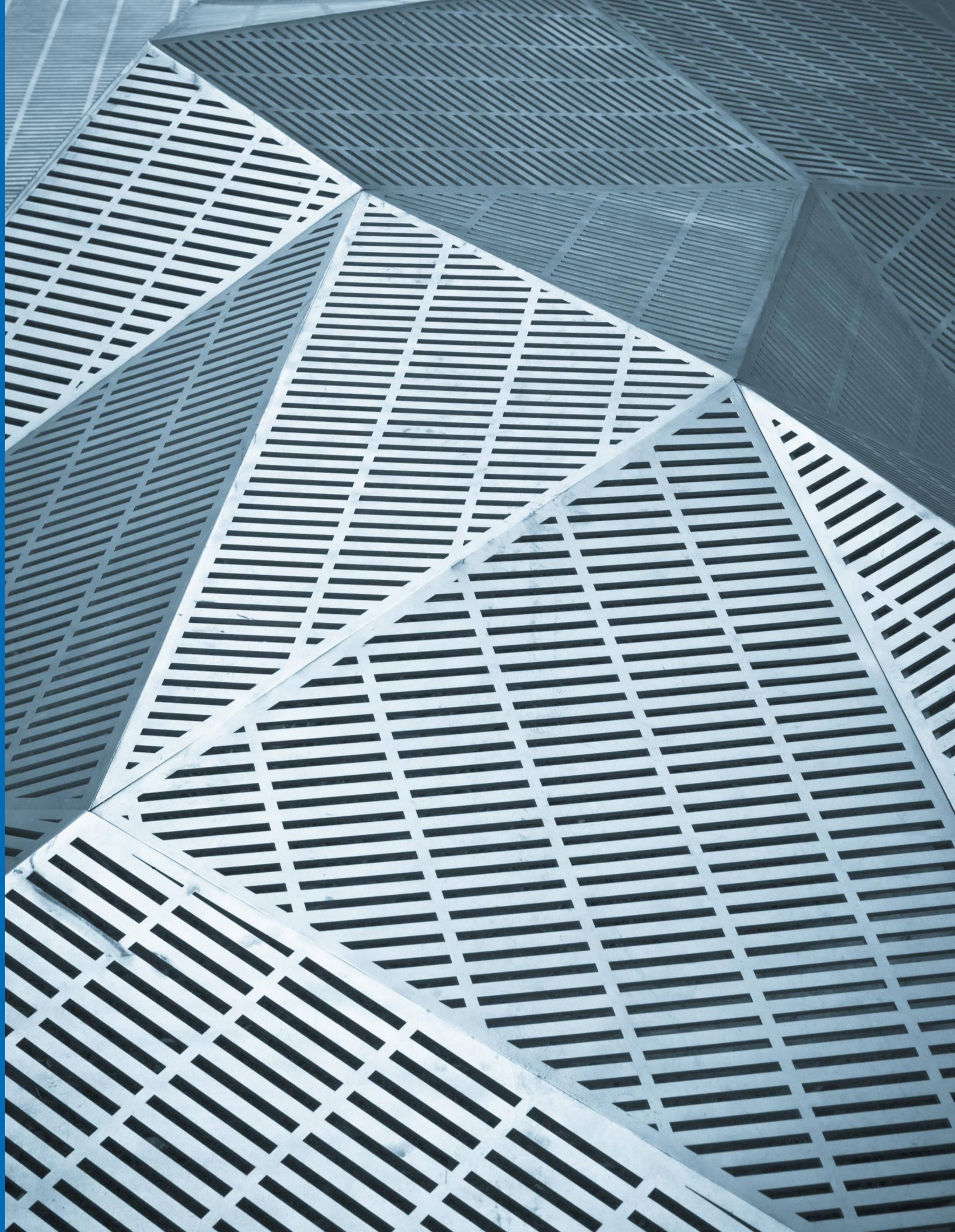
Economy and Demand Drivers



Outlook for Economic Conditions in 2024: Still Cloudy

The pace of U.S. economic growth picked up in 3Q23, growing 4.9% due in part to strong consumer spending amid persistent inflation concerns and elevated interest rates. Economic volatility and uncertainty manifests in key recession indicators although the country is still within historical ranges – and every cycle is different. A soft landing is not out of the question.

Two Key Recession Indicators and Range of Lag Since Initial Signal

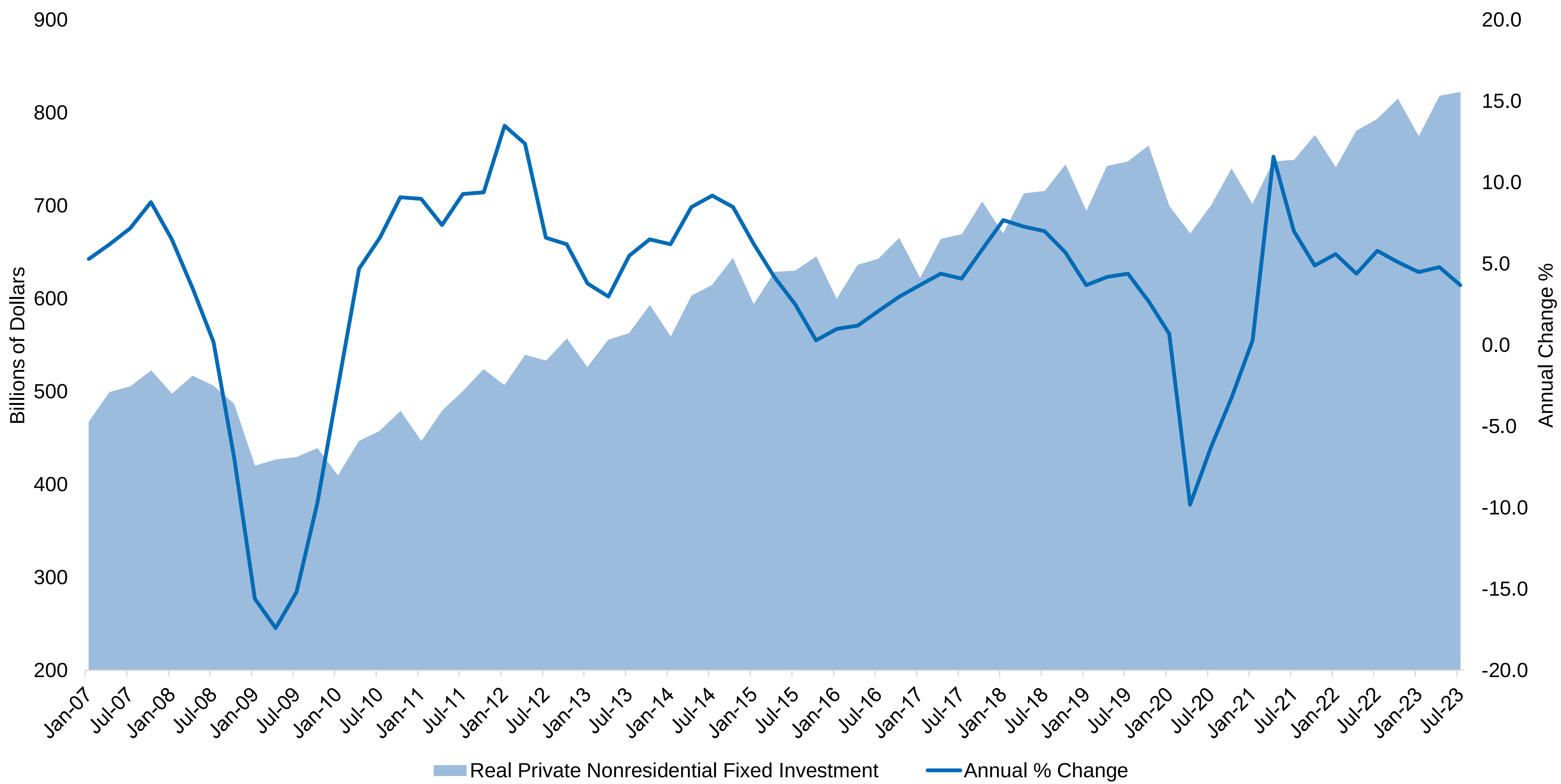
Recession Indicator	Range of Lags 1990, 2001 and 2007	Time Since Recession Signal, This Cycle
Yield Curves (10 Yr vs 2 Yr Treasury Yield Curve Inverted)	11-22 months	15 months (continuous since July 2022)
Conference Board Leading Economic Index	16-23 months	17 months (continuous since April 2022)

Source: Newmark Research, St. Louis Federal Reserve, The Conference Board

Private Capital Investment Slowing in Most Sectors

Higher interest rates, tight inventory management and lower profit margins are weighing on business investment. Soaring growth in fixed-asset capital expenditures coming out of the depths of the pandemic has trended downward since 2021, as has industrial market expansion. Real private investment in manufacturing construction (subsided by federal incentives) bucks the overall trend – suggesting capex in other fixed assets like equipment and durable goods may see recovery in some industry segments soon.

Real Private Nonresidential Fixed Investment and Annual Change

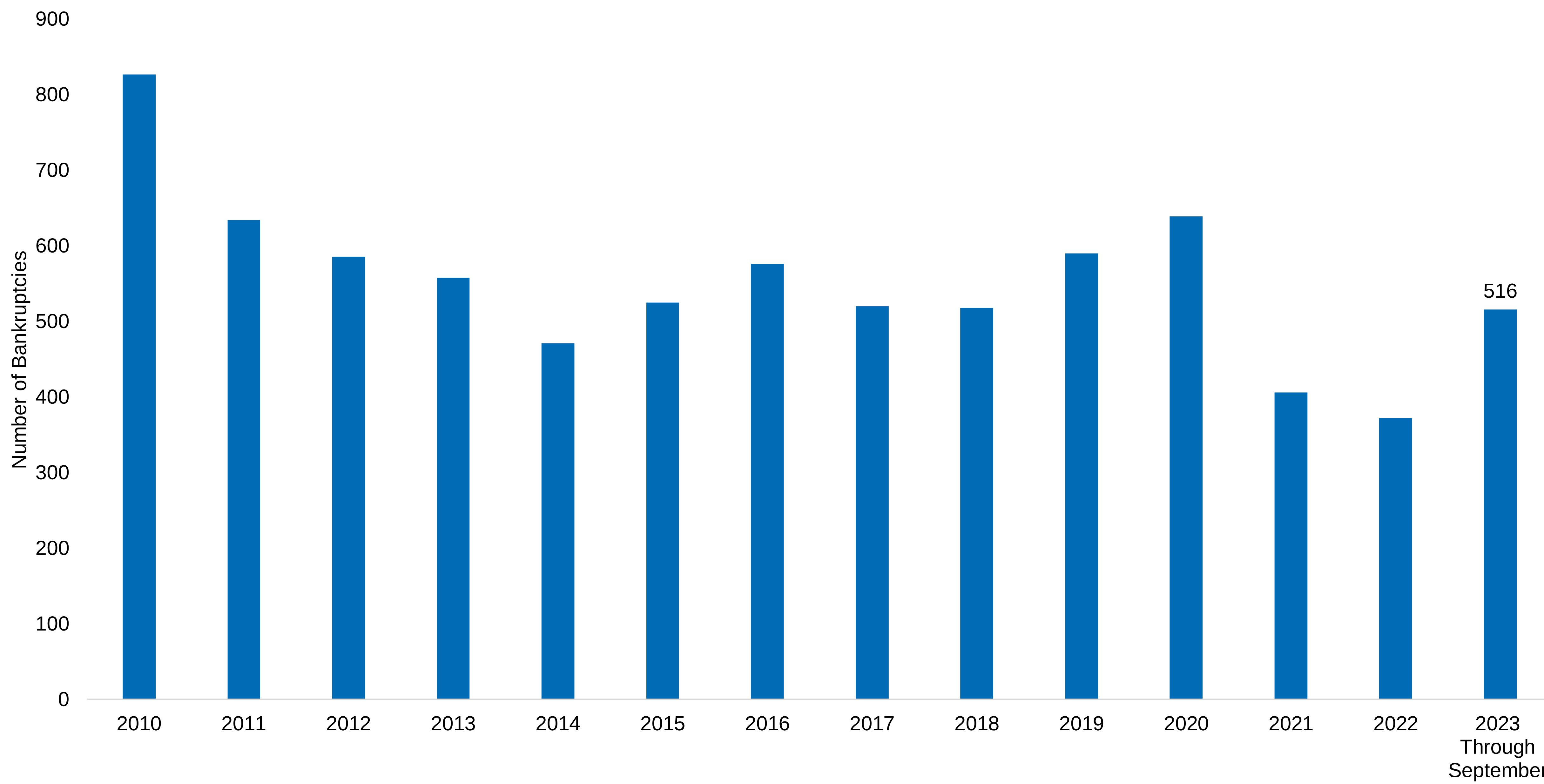


Source: St. Louis Federal Reserve, Chained 2017 Dollars, Not Seasonally Adjusted

U.S. Bankruptcy Filings Remain Elevated

Corporate bankruptcies have been increasing during 2023, with September registering the highest monthly volume year-to-date. The attendant industrial footprint has been seen as an opportunity in some cases (Yellow's truck terminals) or in other cases, has contributed to overall rising availabilities amid softer demand for second-generation space.

U.S. Bankruptcy Filings by Year

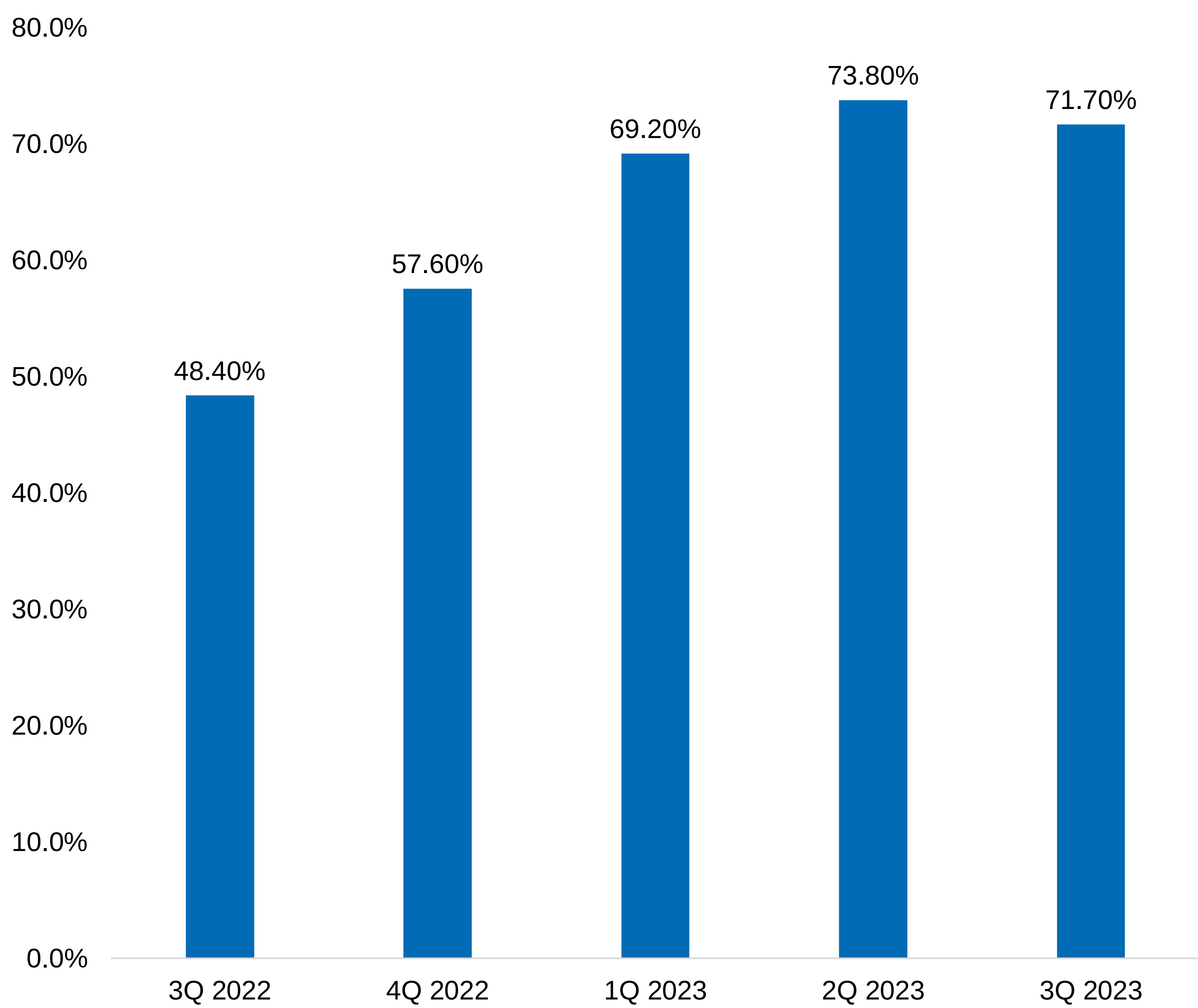


Source: Newmark Research, S&P Global

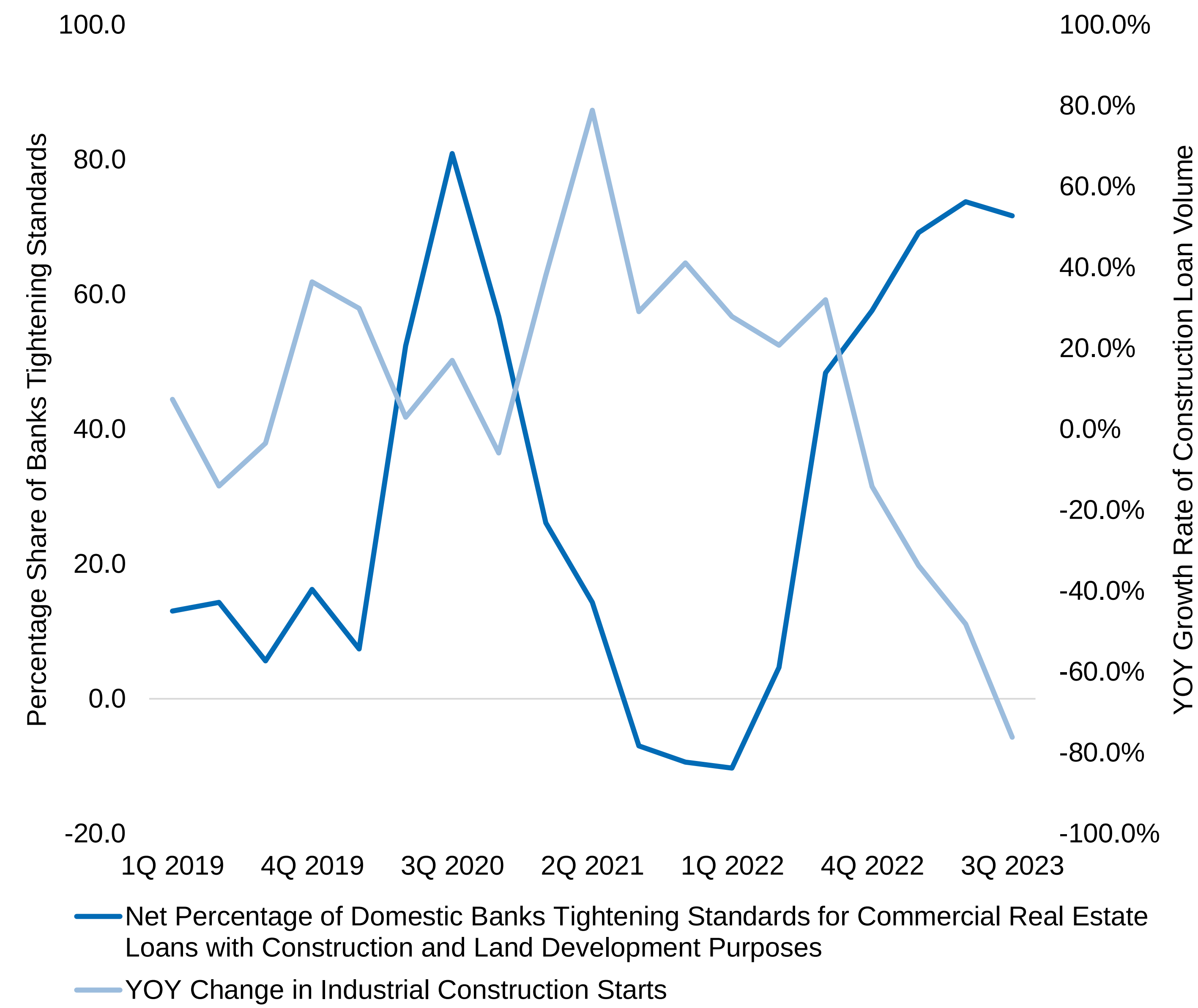
CRE Lending Standards Have Tightened the Most for Construction Loans

Domestic banks continue to tighten lending standards to reduce risk exposure in an uncertain financial landscape. Less credit available for developers is contributing to a slowdown in the industrial pipeline.

Net Share of Banks Tightening Standards for CRE Construction Loans



Tightening Lending Standards Vs New Industrial Construction Starts

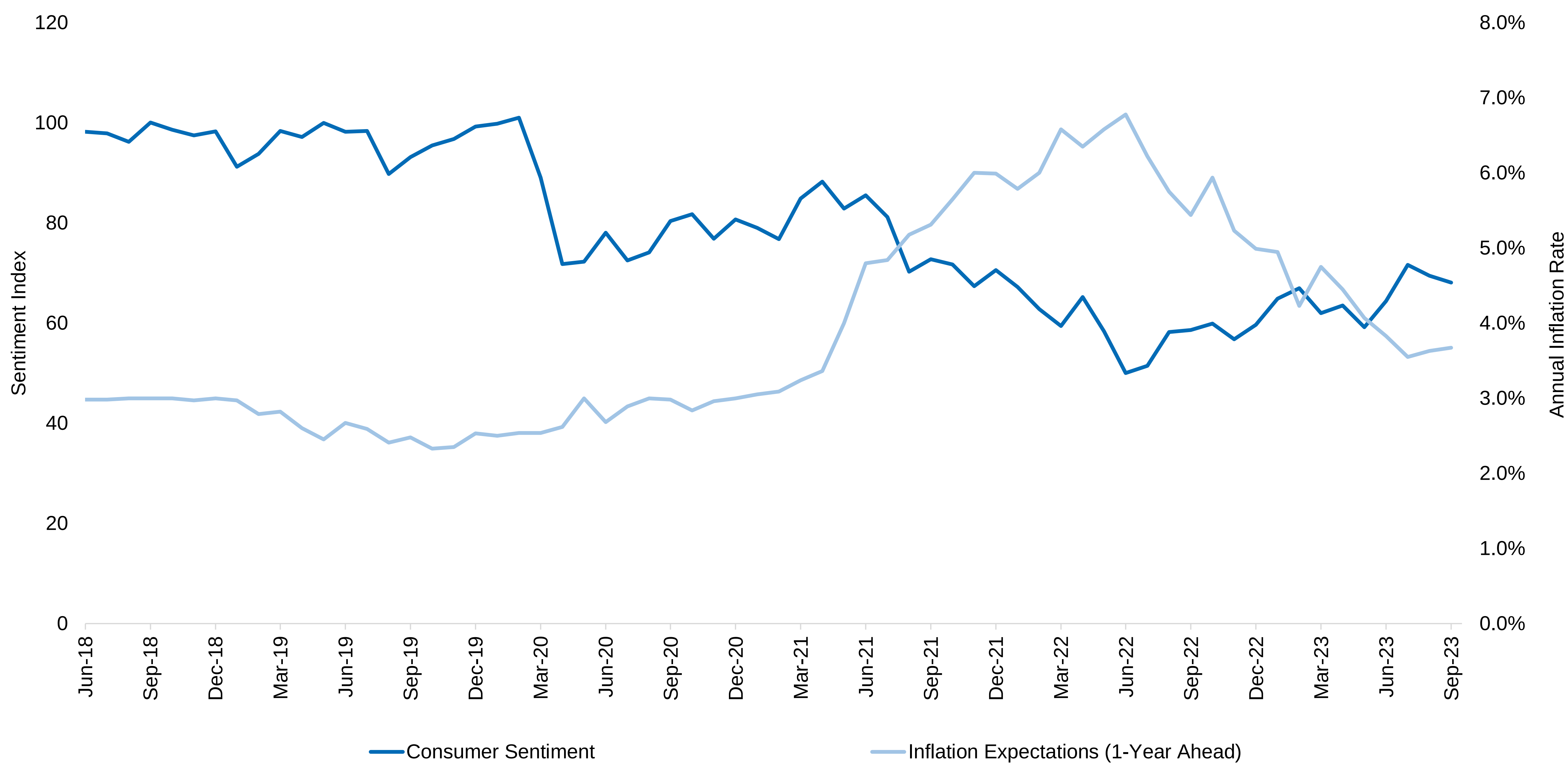


Source: Newmark Research, Board of Governors of the Federal Reserve

Consumer Opinion: Still Mixed

Stubborn inflation, resumption of student loan payments, and persistent economic uncertainty have left consumers feeling less confident about their financial standing demonstrated in recent sentiment measures and inflation expectations inflecting in the "wrong" direction.

Consumer Sentiment and Inflation Expectations

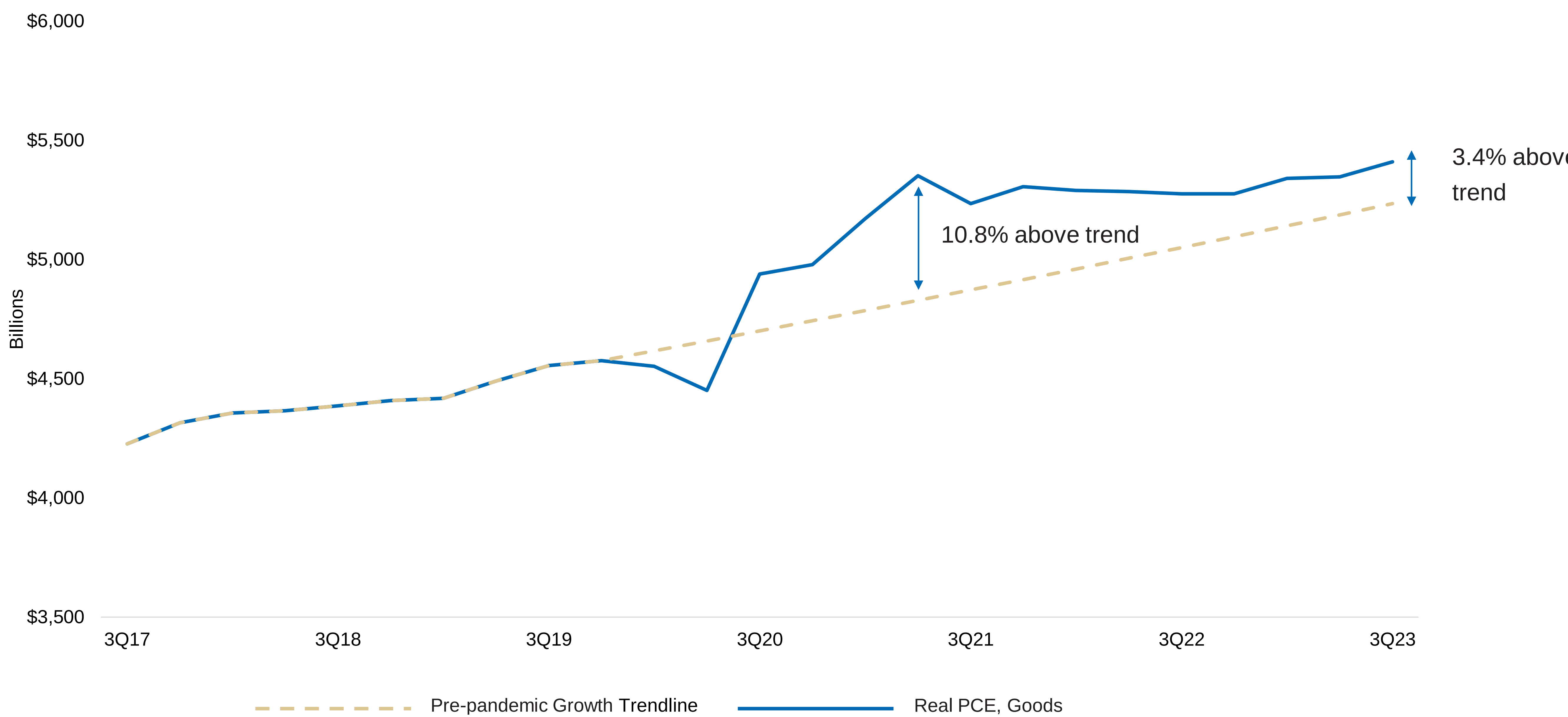


Source: Newmark Research, Federal Reserve of NY, University of Michigan

Spending on Goods Was More Resilient than Expected in 3Q23

Inflation-adjusted spending on goods, while on a decelerating trend since midyear 2021, remains above the pre-pandemic trendline, and increased by 1.2% from the second to the third quarter of 2023, helping to propel the third quarter's strong GDP growth.

Real Personal Consumption Expenditures, Goods

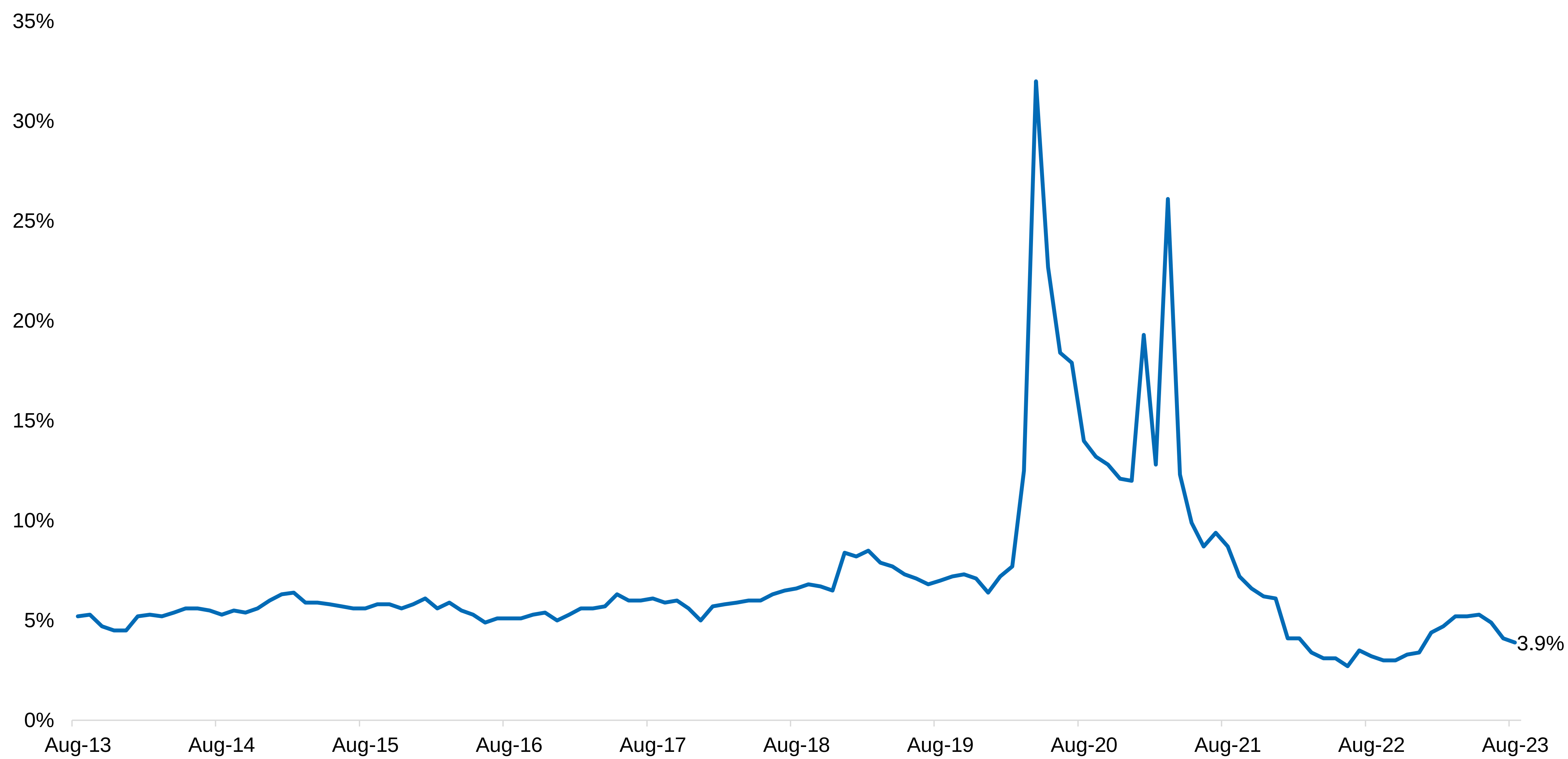


Source: St. Louis Federal Bank, Newmark Research

While Spending Was Up, Saving Was Down

Household incomes continue to grow, but are rising slower than consumer spending, resulting in dwindling savings. While consumers are saving more now than the 2.7% rate observed in June 2022, measures are well below the pre-pandemic 10-year average of 6.1%.

Personal Savings Rate

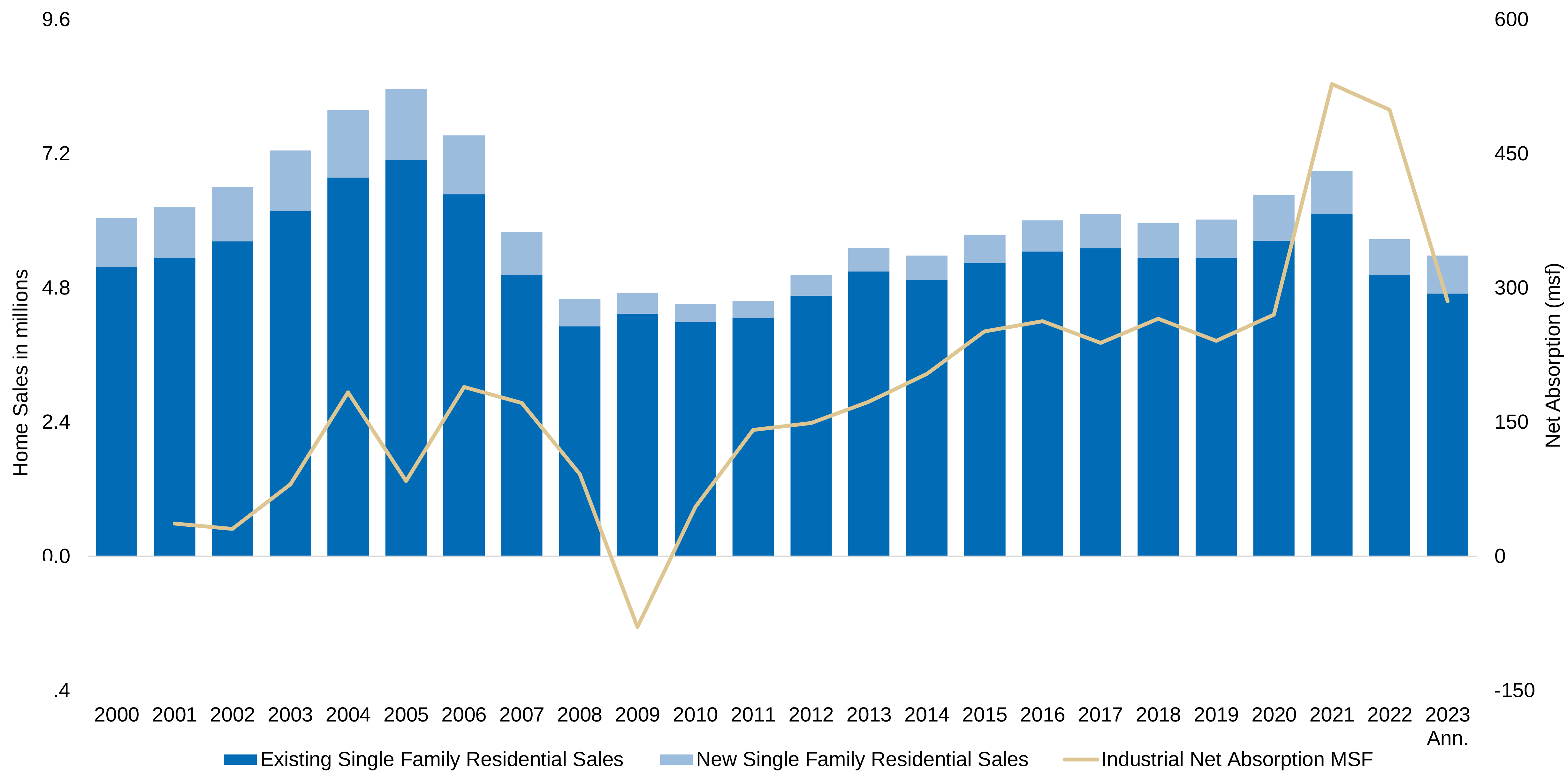


Source: St. Louis Federal Bank, Newmark Research

Home Sales Lowest in Over a Decade

Home sales drive a significant amount of goods consumption and thus, industrial demand. Sales have been slowing since a cyclical peak in 2021 because of 20-year-high mortgage rates, elevated home prices and a limited inventory of homes for sale and are likely to remain depressed until these conditions improve.

Single Family Residential Sales and Industrial Net Absorption[1]

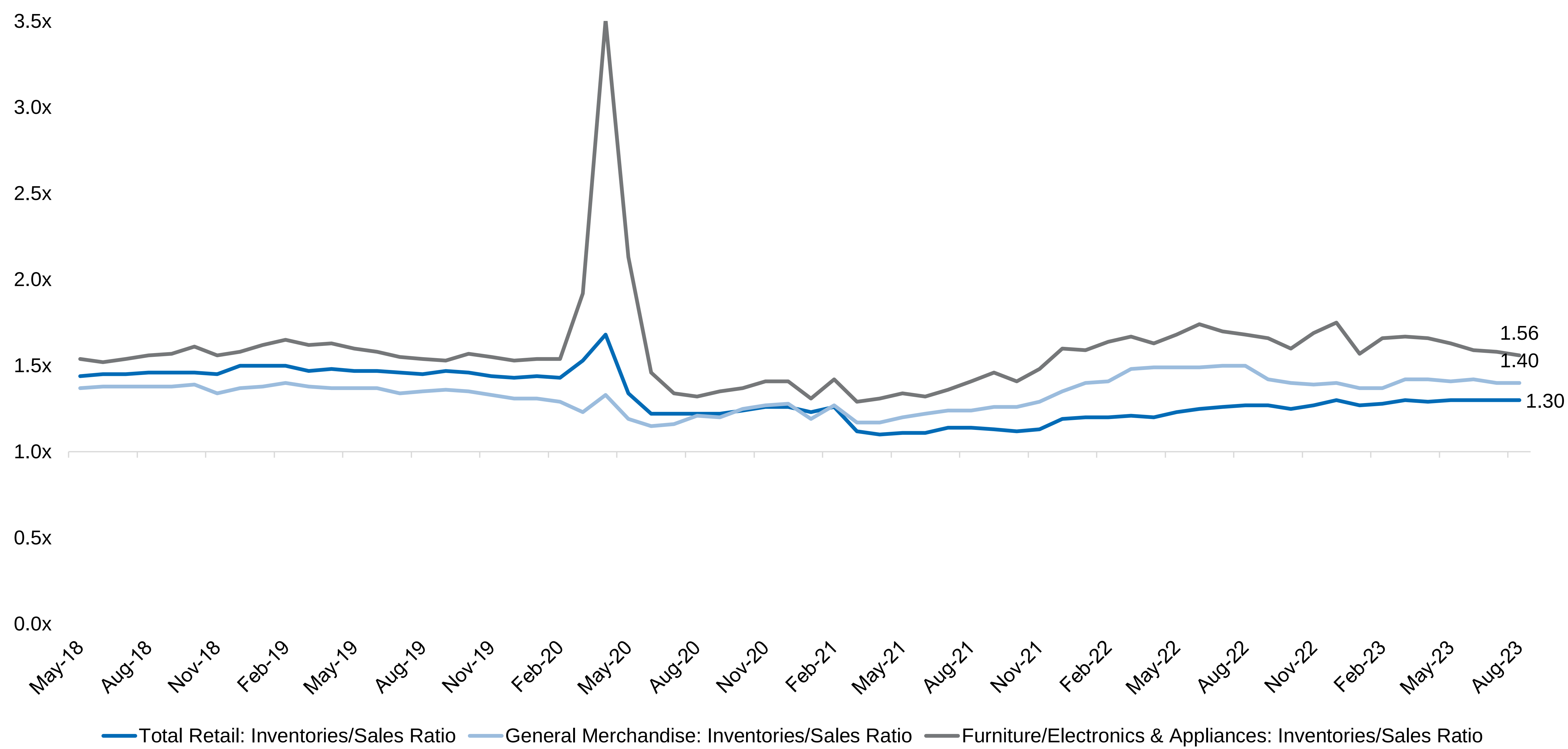


[1]Single Family Residential Sales not seasonally adjusted, 2023 annualized.
Source: Newmark Research, CoStar, St. Louis Federal Bank, National Association of Realtors, U.S. Census Bureau, October 2023.

Retailers Carefully Managing Inventories with Slower Sales Expected

The total retail inventories/sales ratio has remained flat throughout 2023 as modest increases in sales and inventories offset each other. Retailers have largely reported a return to normal turnover of stock, after some tumultuous years. In the longer-term outlook, manufacturers reshoring and nearshoring to the U.S. will be able to keep leaner inventories and turnover stock faster.

Inventories to Sales Ratio, Total Retail and Sector-Specific



Source: St. Louis Federal Bank, Newmark Research, ISM

More Sustainable Containerized Import Growth Expected

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Import Market Share Is Shifting from the West to the East

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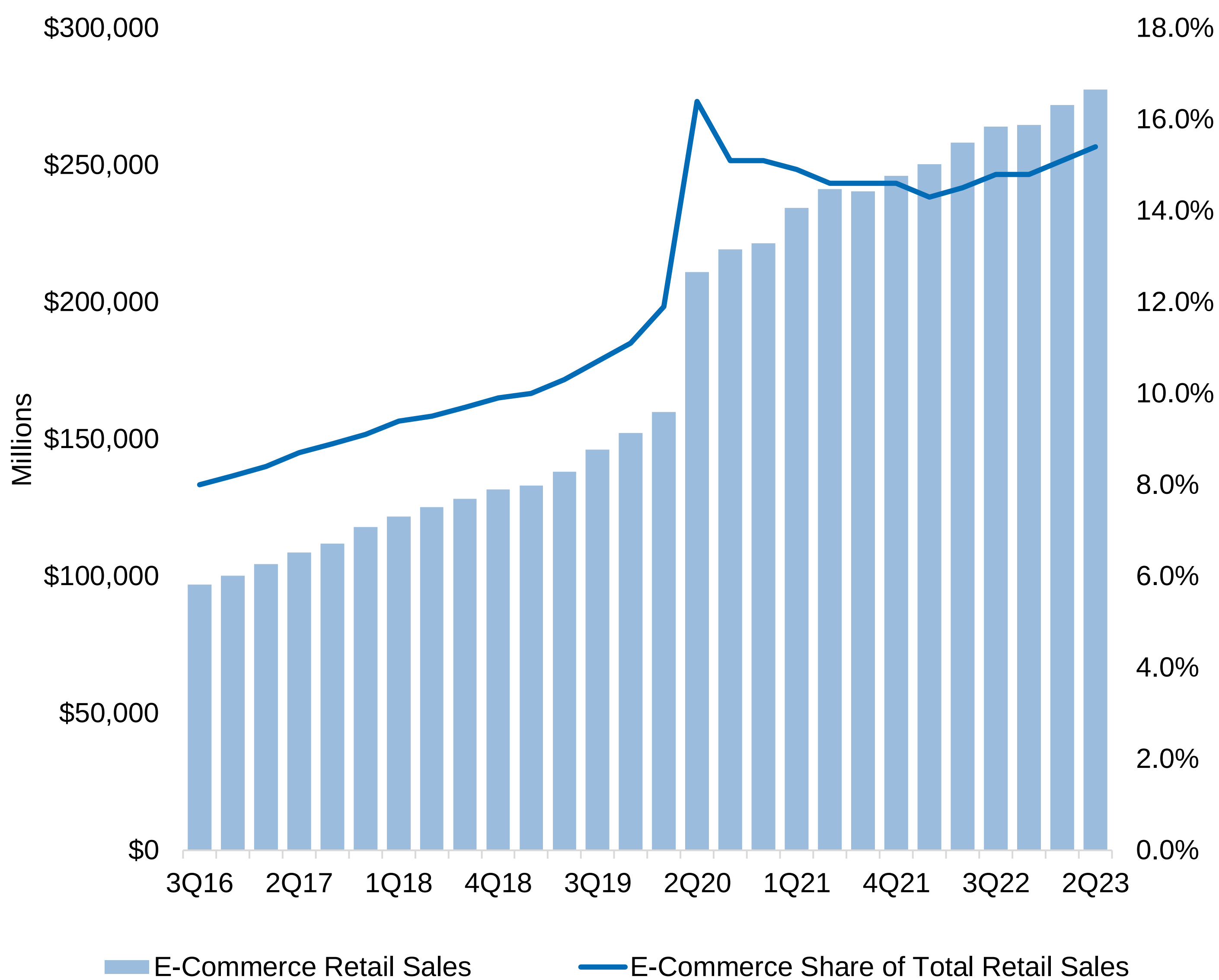
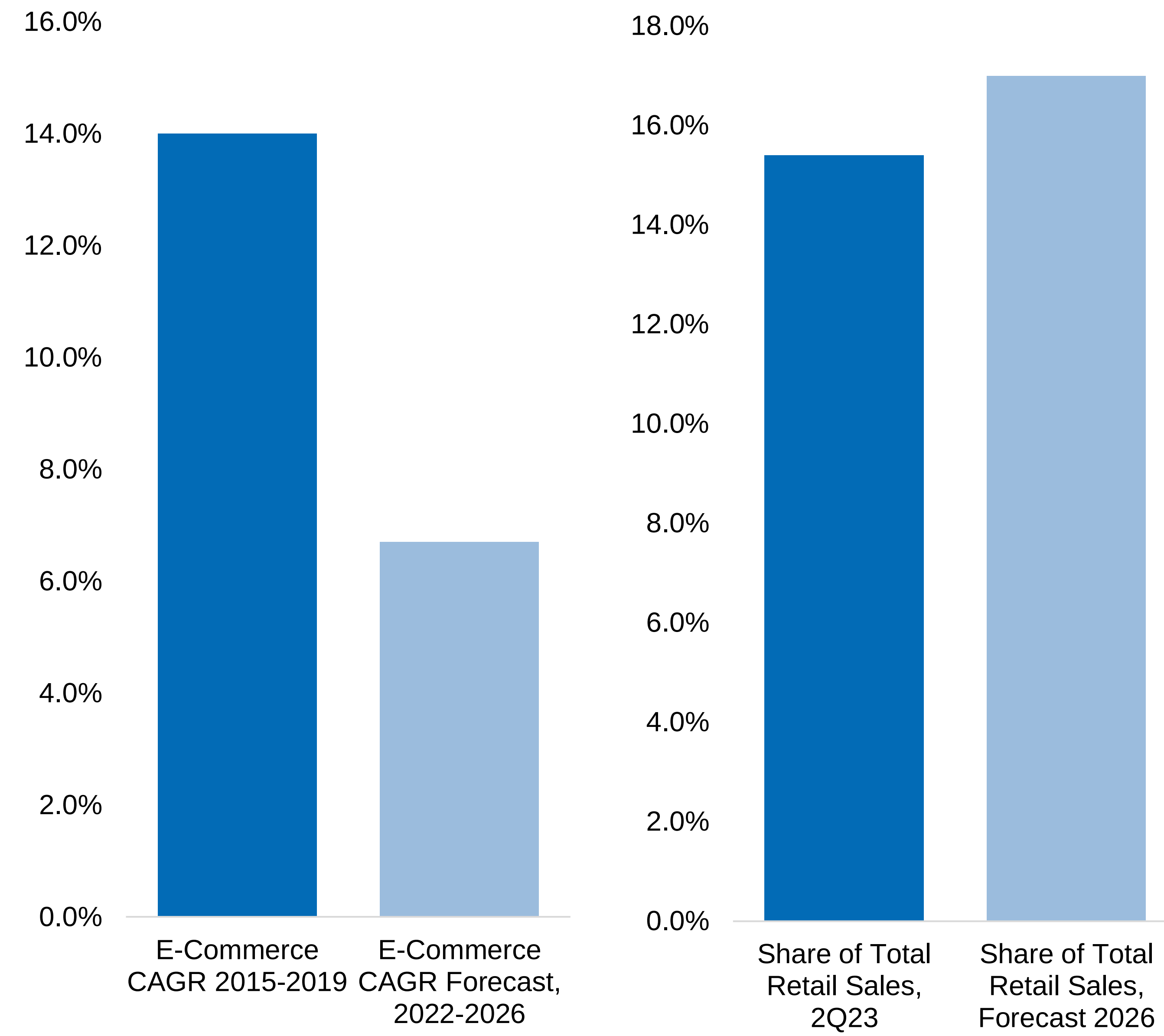
E-commerce Will Continue to Be a Secular Growth Engine (At Moderating Rates)

During the pandemic, e-commerce sales soared, growing in two years what pre-pandemic trends signaled would take four. Uncertainty around the “stickiness” of consumer behavior has cleared; as spending normalizes back to mixing in-store, online and omnichannel patterns, expectations for e-commerce sales and share of total retail expenditures have adjusted in turn. Even at lower annual rates than previously expected, e-commerce growth will drive industrial demand. An estimated 1.2 msf of logistics space is needed to support every additional $1.0 billion in e-commerce sales gains.

E-commerce Sales and Share of Total Retail Sales



Historical and Forecasted E-commerce Growth and Penetration Rate

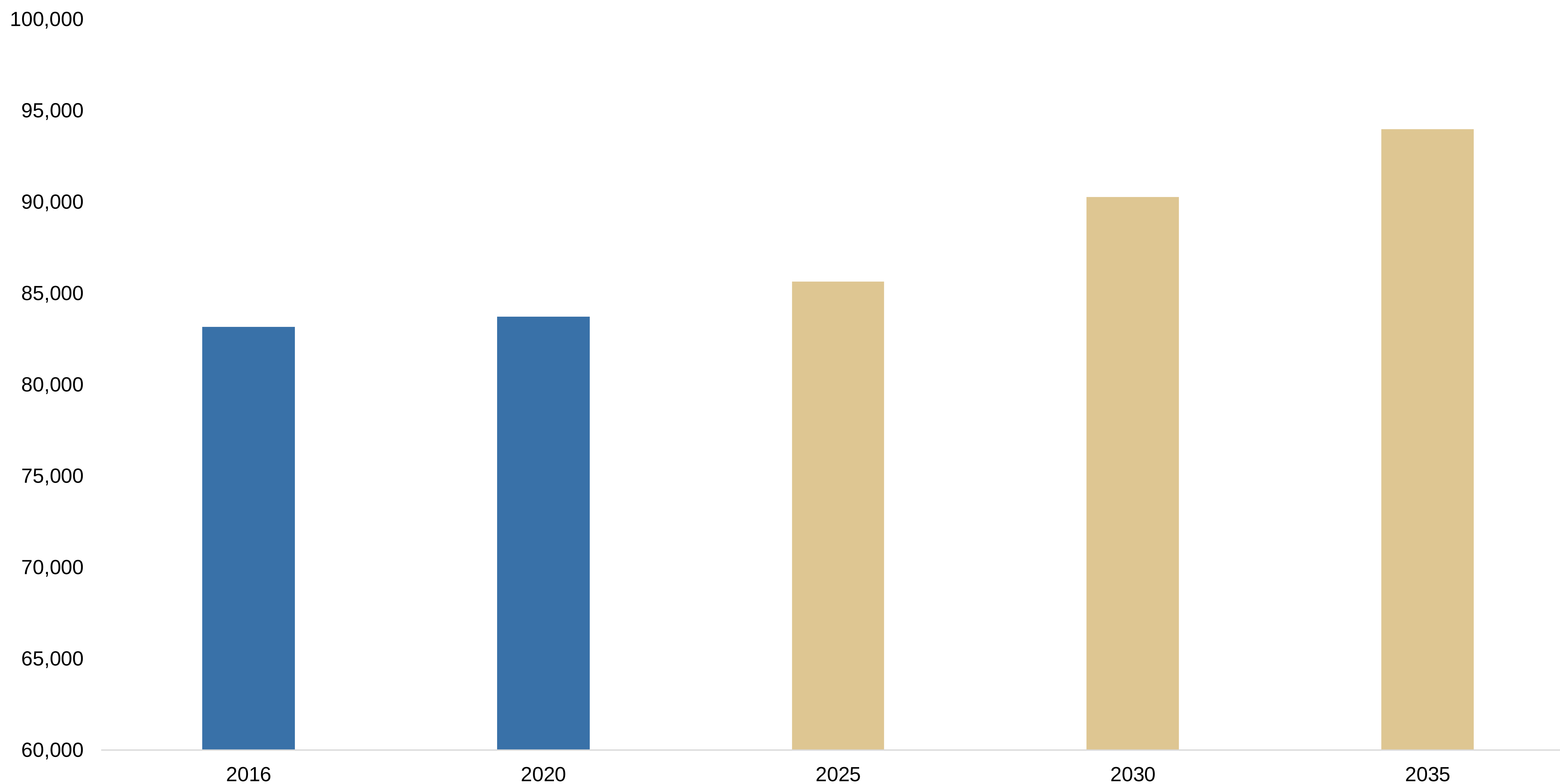


Source: U.S. Census Bureau, St. Louis Federal Bank, Green Street, Prologis, Emarketer.

Millennials, the Leading E-commerce-Using Cohort, Are Entering Top Spending Years

For consumers, spending power is at its highest between ages 35 and 54. Millennials, the largest generation in the U.S. workforce, will be fully aging into this cohort between now and 2035. Millennials are the leading generation of online shoppers, thus e-commerce spending (and the industrial real estate needed to support) will continue to be fueled by this group reaching their prime spending years.

U.S. Population and Projections, Age Cohort 35-54 (Thousands)



Source: Newmark Research, U.S. Census, Moody's Analytics, Statista

Ecommerce Fulfilment Expansion Necessary for Firms to Remain Competitive

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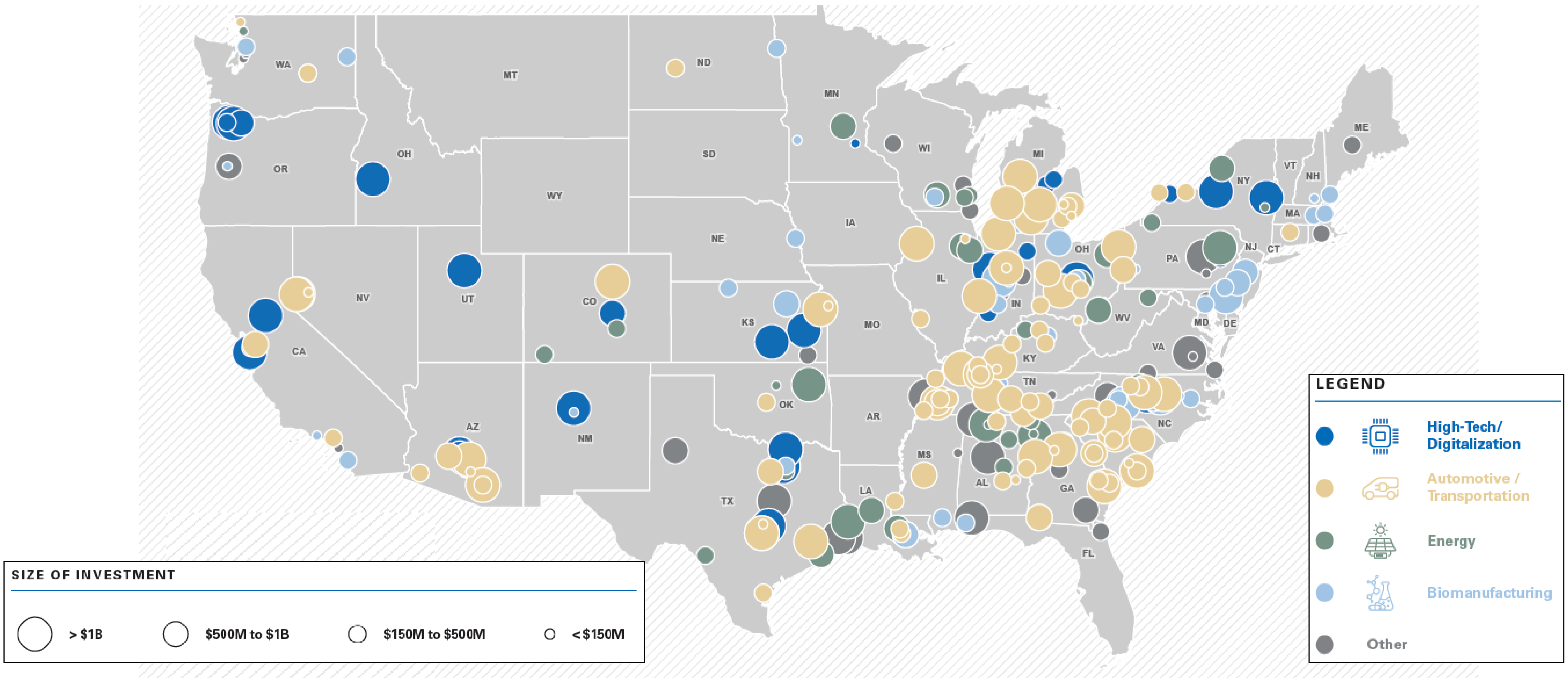
Monumental Growth in Domestic Manufacturing is Underway

A snapshot of initial manufacturing investments totaling a minimum of $100 million since 2020 reveals approximately $400 billion in investments pledged, 210,000+ new jobs and a minimum of 250 MSF of new industrial projects to come between now and 2030. Four key advanced manufacturing sectors are driving the greatest volumes of investment and development, capturing over 90% of the major investments pledged: High-tech/digitalization, Automotive/transportation; Energy; and Biomanufacturing.

U.S. Major Manufacturing Announcements, 2020-2023 YTD

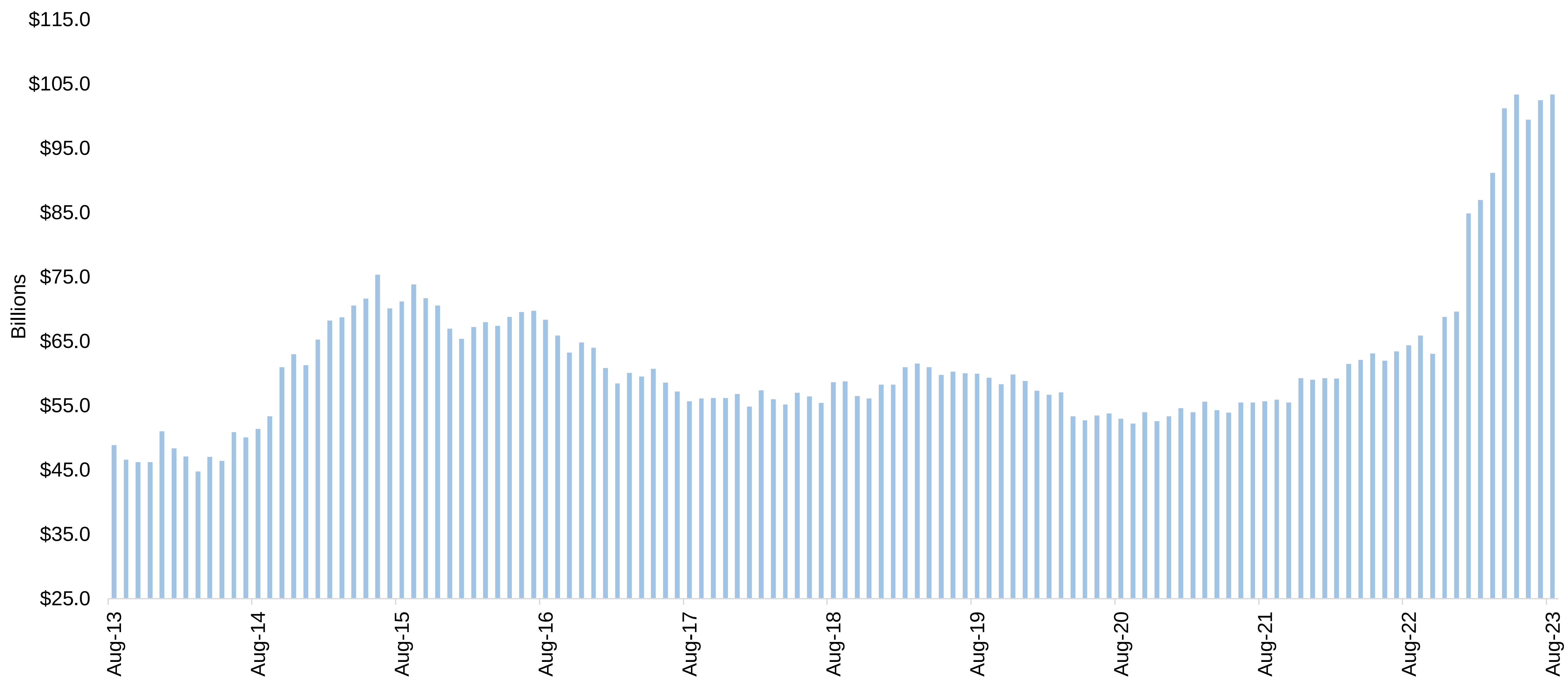


Note: Investments of at least $100 million. Investment dollars may include allocations to real estate and equipment, infrastructure, intellectual property, and other outlays.
Sources: Newmark Research, Newmark Global Strategy & Consulting, various press releases and articles

U.S. Manufacturing Construction Spending Has Accelerated to New Heights

While many companies are pausing or slowing capital investments as the economy decelerates, EV, batteries, chips, pharmaceutical and solar advanced manufacturers are investing heavily in new construction. Growth in these advanced manufacturing sectors is driven by recently passed legislation (Infrastructure and Investment Jobs Act, Inflation Reduction Act and CHIPS and Science Act), prompted by geopolitical and supply chain risk to these critical sectors.

Total Real Private Manufacturing Construction Spending

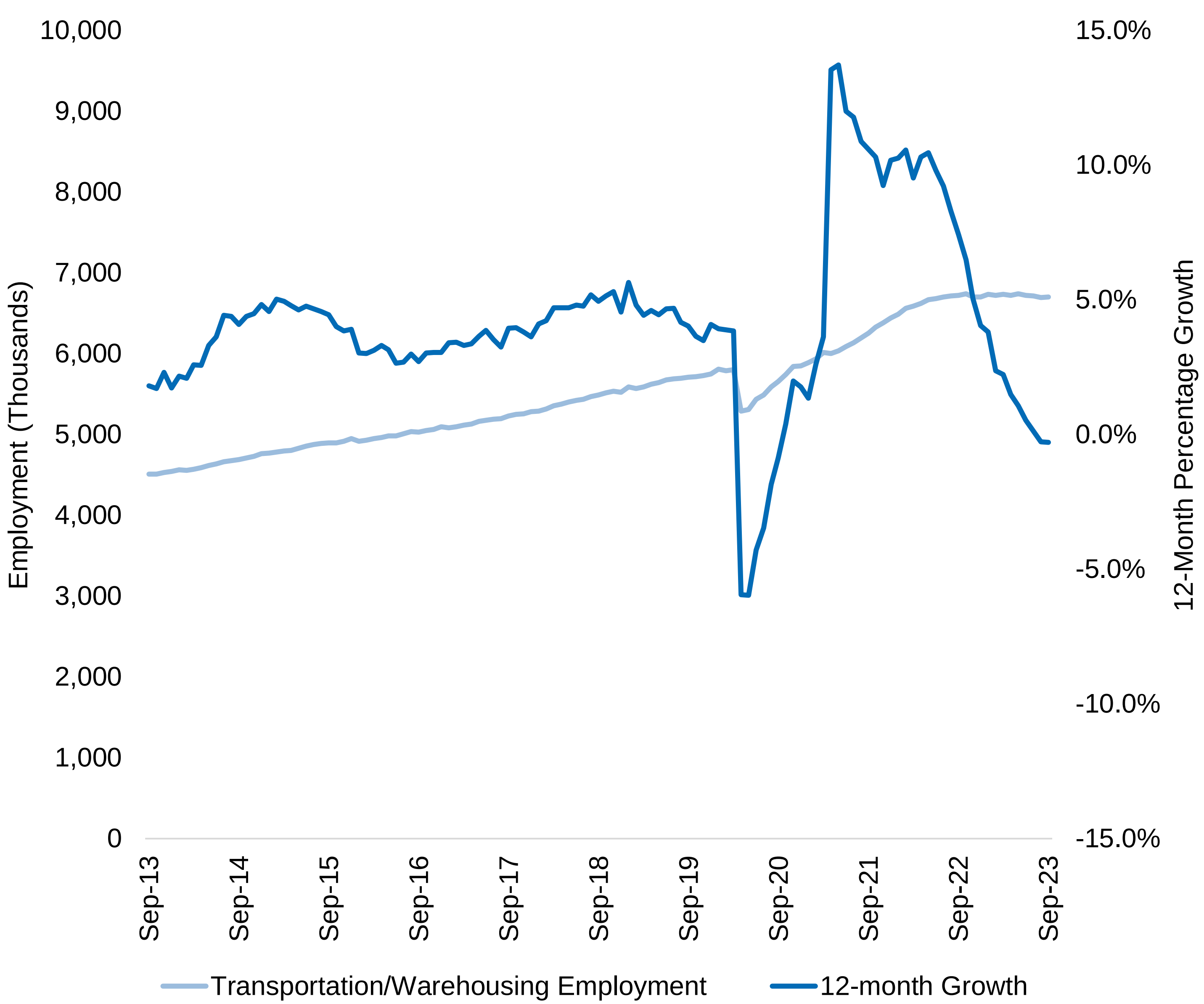


Source: Newmark Research, U.S. Census Bureau, FRED
Note: Seasonally adjusted annual rate deflated by New Industrial Construction PPI, chained to 06/2007.

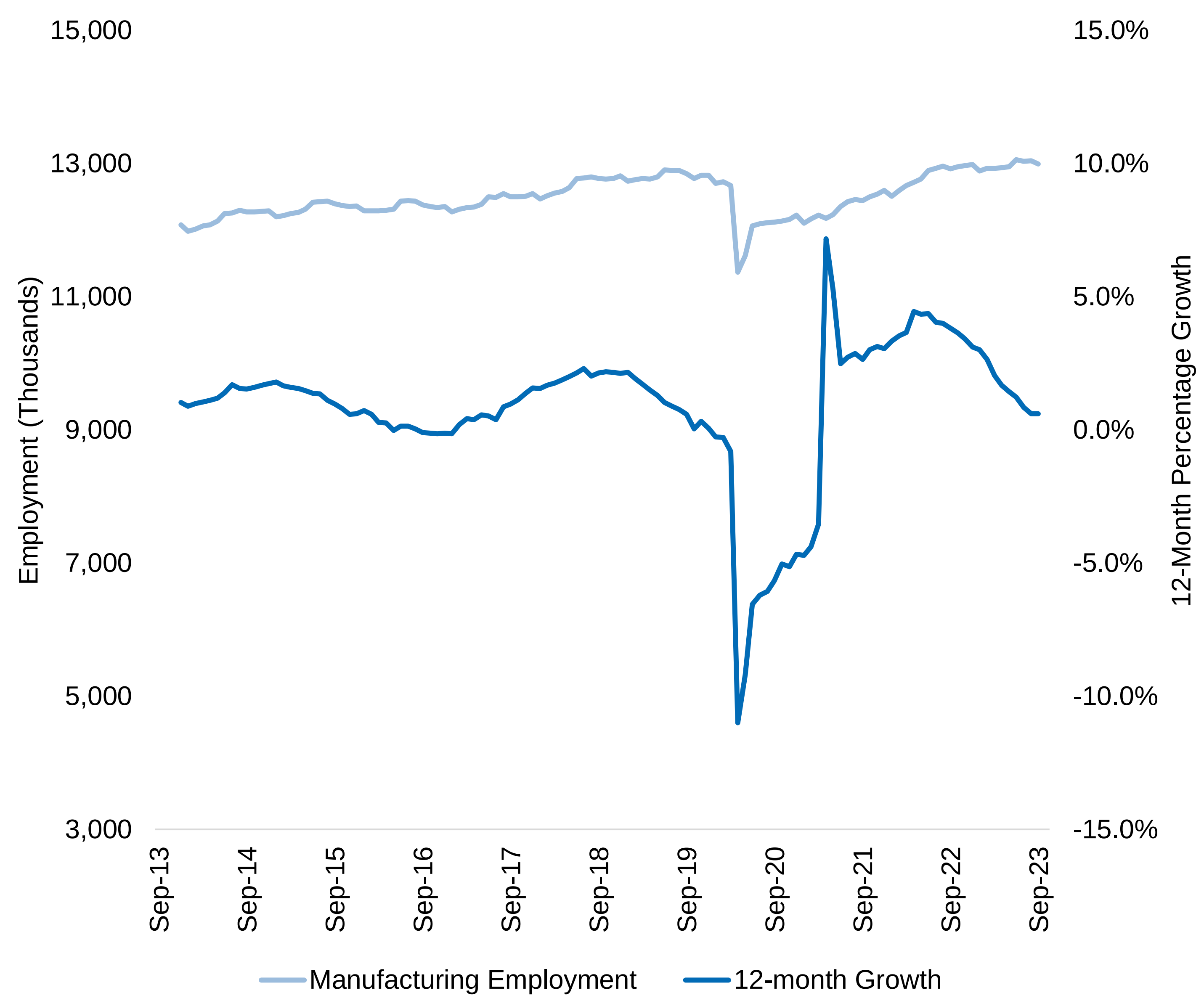
Industrial Staffing Remains High, If Flat

The transportation/warehousing and manufacturing sectors are responding to slowing goods spending by assessing occupancy and employment needs, visible in stagnating hiring trends. Logistics firms are taking a cautious approach to seasonal hiring with only a few exceptions, including a significant hiring push by Amazon.

Total Employment and 12-Month Growth Rate, Transportation/Warehousing



Total Employment and 12-Month Growth Rate, Manufacturing



Source: Newmark Research, U.S. BLS

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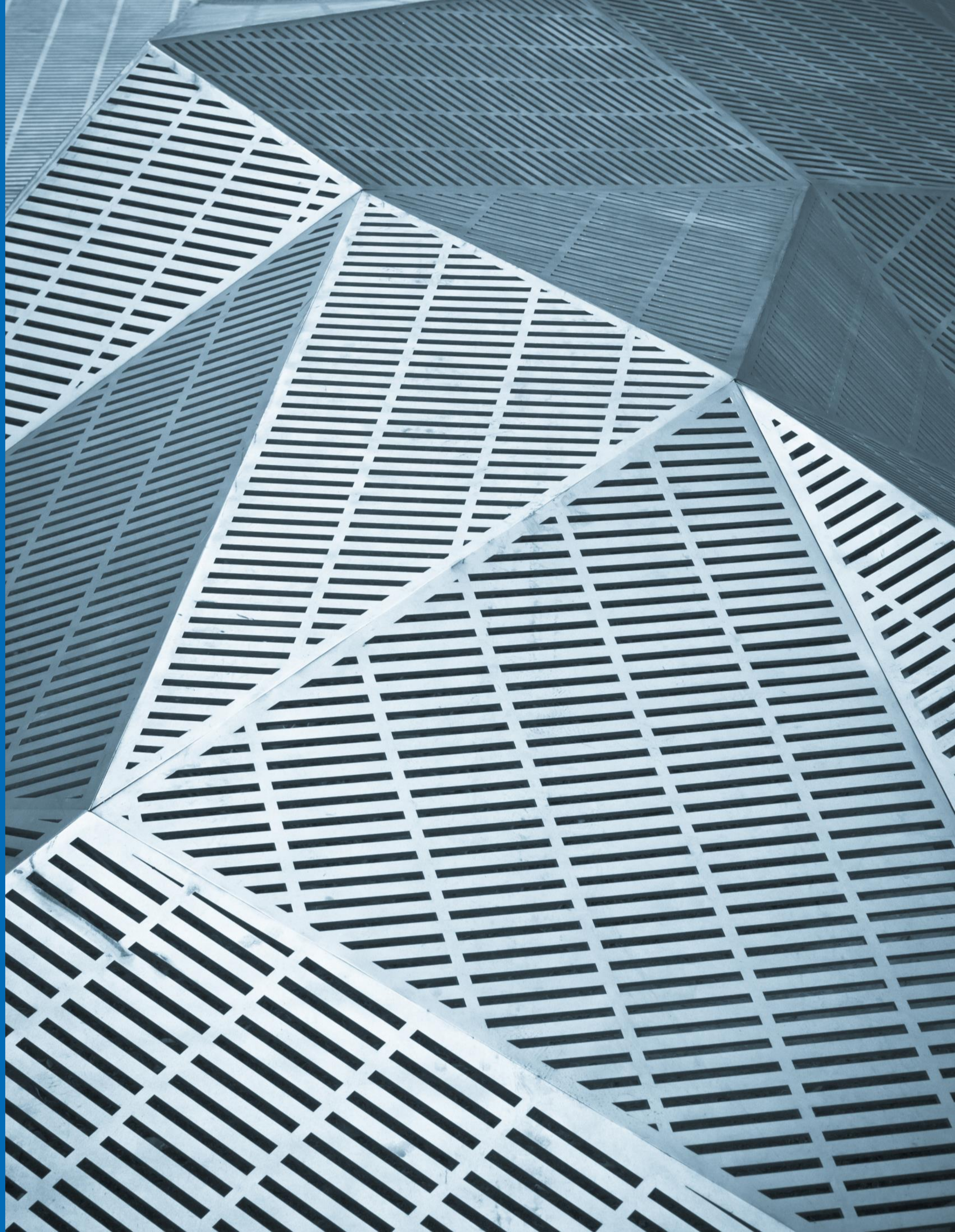
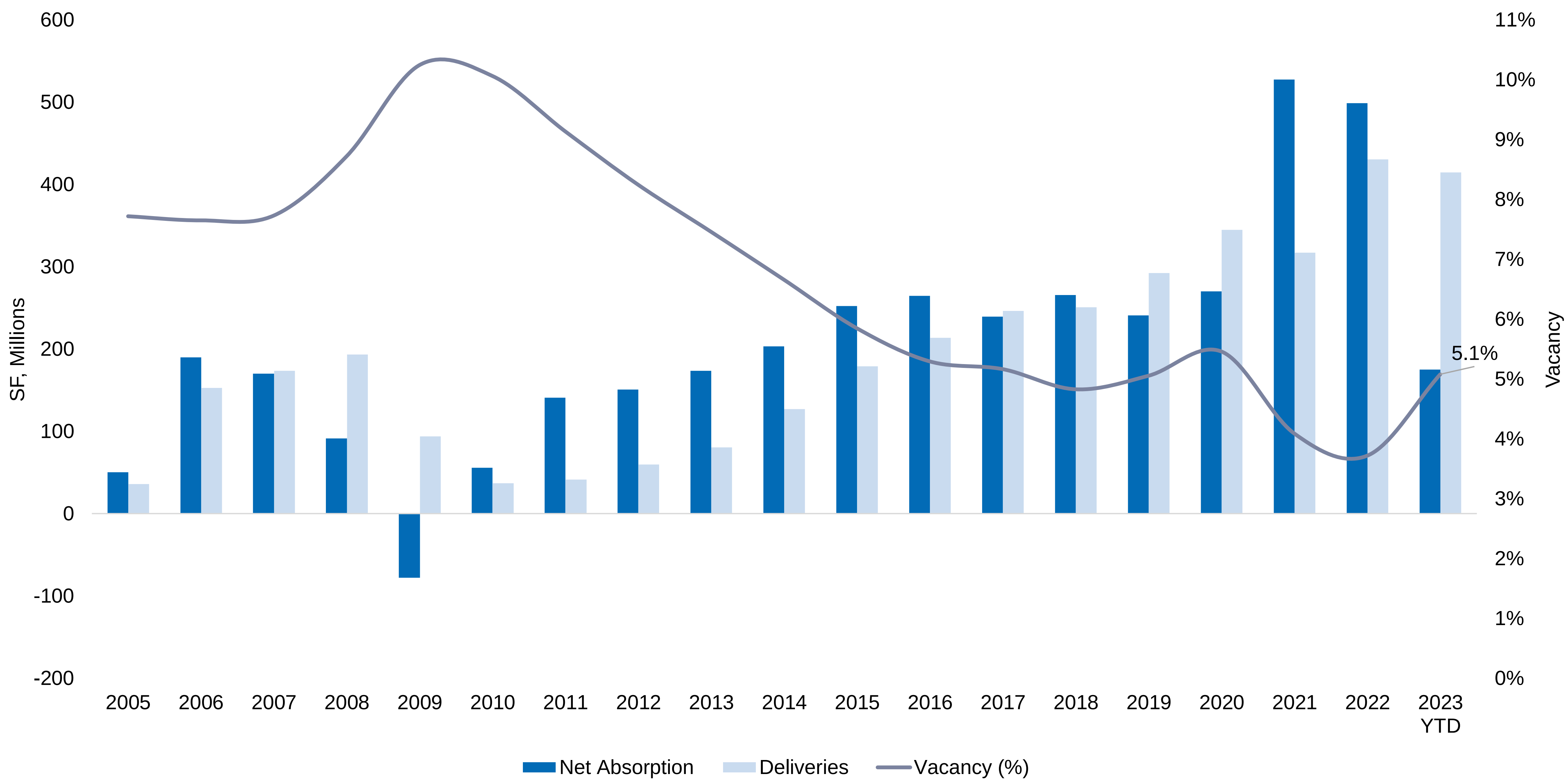
Leasing Market Fundamentals



Vacancy Remains Tight, but Will Continue to Loosen as Deliveries Outpace Absorption

During the past 12 months, the vacancy rate has increased from 3.6%, an all-time record low, to 5.1% as new deliveries outpaced absorption. Elevated volumes of completions expected to deliver for the next several quarters coupled with softer leasing demand will put upward pressure on the national vacancy rate, but it is not expected to come close to double-digit levels charted during the GFC.

U.S. Industrial Deliveries, Net Absorption, and Vacancy

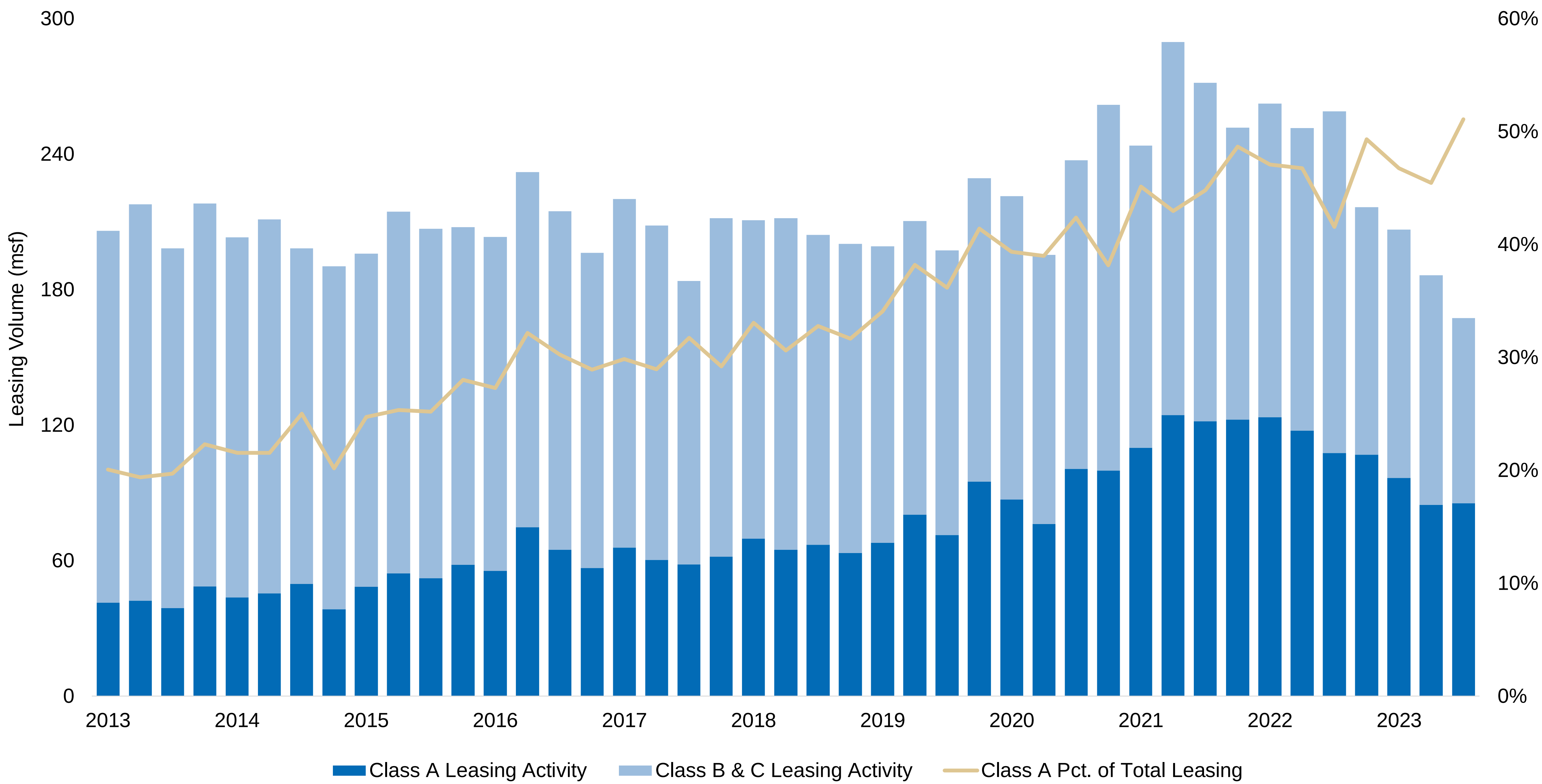


Source: Newmark Research, October 2023.

Amid Overall Softer Leasing, Pursuit of Quality Space Increases with Opportunity

After two years of acute market abnormality, industrial leasing has successively decelerated every quarter since mid-2022, falling below pre-pandemic norms in the third quarter of 2023 with approximately 167 msf of leasing volume totaled. With greater volumes of modern, efficient space now becoming available to tenants, flight-to-quality is demonstrated in the share of Class A leasing reaching a new height of over 50%.

U.S. Industrial Leasing Activity by Class



Source: CoStar, Newmark Research. Quarterly leasing volume data compiled October 2023. Class A is defined as 21st century build, 100,000+ square feet with clear heights that accommodate today's modern occupiers.

Buildings under 300,000 SF Account for the Largest Share of Leasing Volume

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Industrial Leasing Trends by Sector

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United States Industrial Demand Rankings

Quarterly net absorption measured 46.8 msf, a solid volume but approximately 15 msf less than 2019's quarterly average. Over the coming quarters, preleased construction deliveries will continue to contribute positively to quarterly net absorption, although pressures from tenants facing credit loss and right-sizing occupiers subletting or giving space to landlords will detract. Net absorption is likely to be muted, but positive, going into 2024.

Net Absorption: Top 10 Markets

Market	2023 YTD Net Absorption (msf)
Dallas	25.1
Chicago	15.9
Houston	15.6
Phoenix	14.8
Penn. I-81/78 Corridor	11.2
Indianapolis	9.0
Savannah, GA	7.6
Charlotte	6.8
Greenville, SC	6.4
Detroit	6.0
United States	**175.3**

Demand Growth: Top 10 Markets

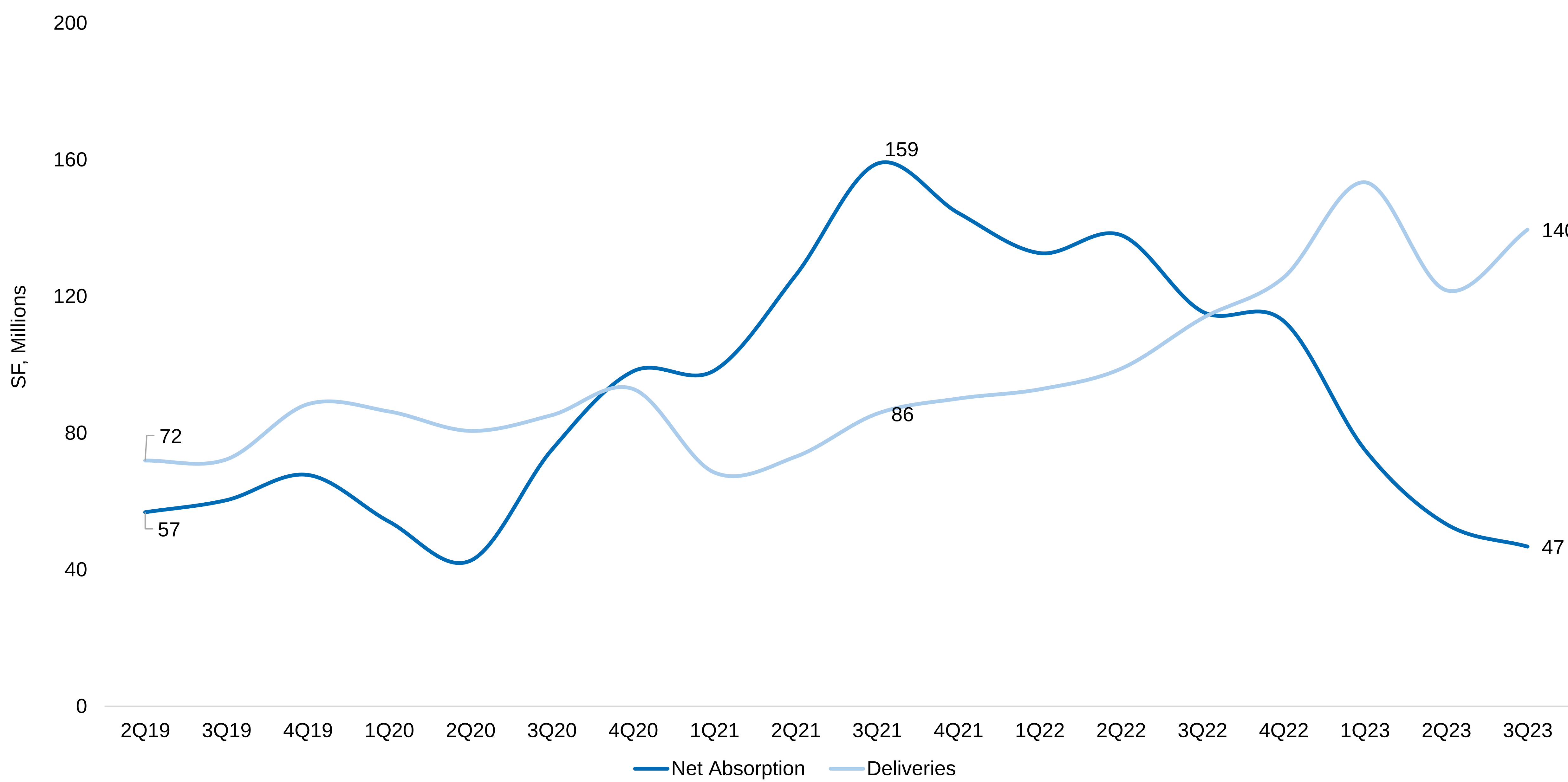
Market	2023 YTD Net Absorption (% of Inventory)
Savannah, GA	6.4%
Phoenix	3.9%
Las Vegas	2.9%
Austin	2.5%
Greenville, SC	2.5%
Penn. I-81/78 Corridor	2.4%
Dallas	2.3%
Indianapolis	2.2%
Houston	2.1%
Orlando	2.1%
United States	**1.0%**

Source: Newmark Research, October 2023.

Supply and Demand Gap Will Remain Wide through the Next 12 Months

Deliveries outstripped net absorption by approximately 93 msf in the third quarter of 2023, and the gap between the two metrics is expected to remain large over the coming quarters as a historically high pipeline delivers. As fewer projects break ground, these two metrics will come back into balance in 2025.

National Industrial Supply vs. Demand

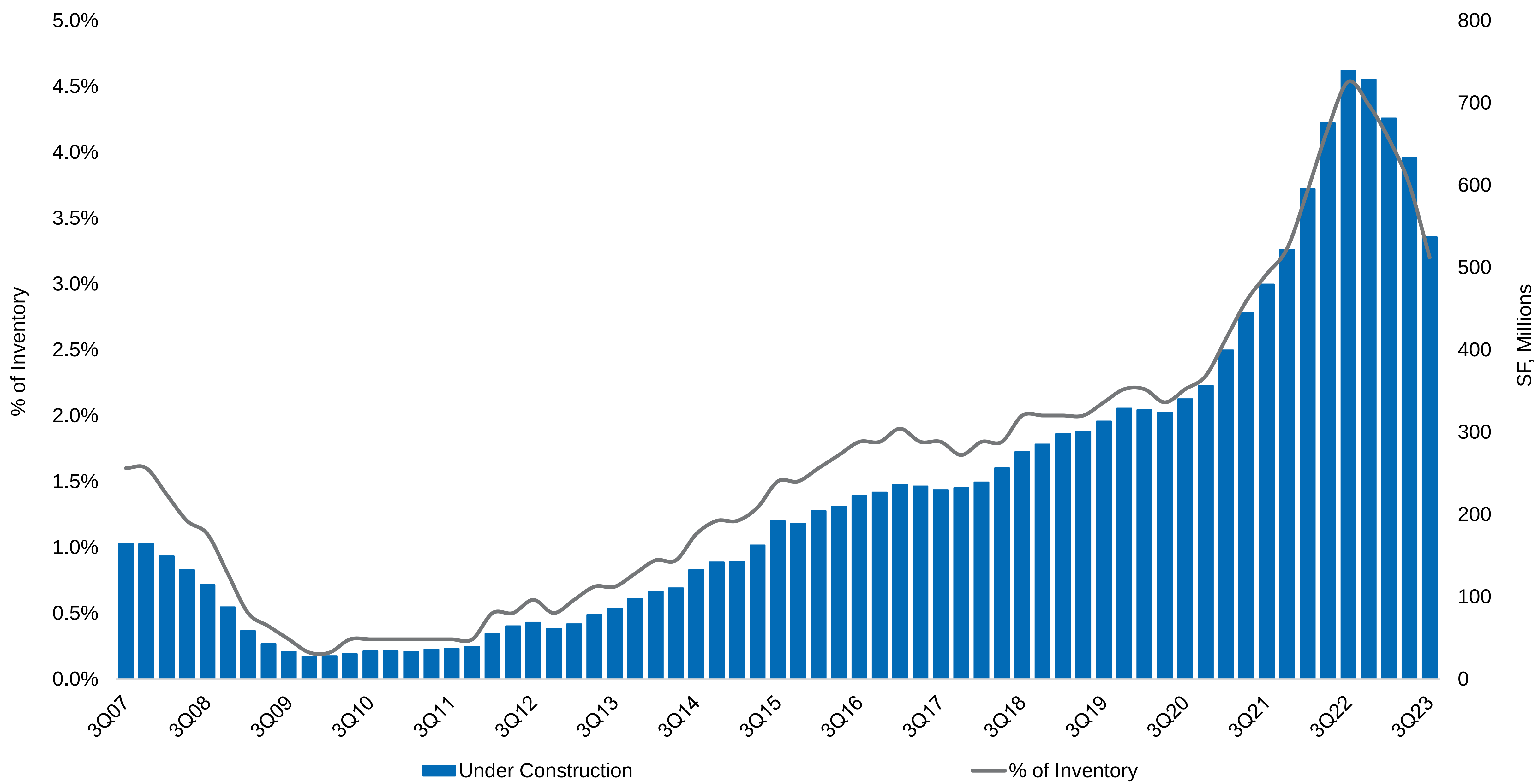


Source: Newmark Research, October 2023

Industrial Supply Pipeline Still High, But Sharply Declining

The construction pipeline, totaling 537 msf in the third quarter of 2023, is down approximately 200.0 msf from the third quarter of 2022 when it reached its peak. This current volume is still over 60% higher than the pipeline measured at year-end 2019 but will be increasingly depleting over the next four quarters as fewer and fewer projects enter the pipeline to backfill.

U.S. Industrial Under Construction and % of Inventory

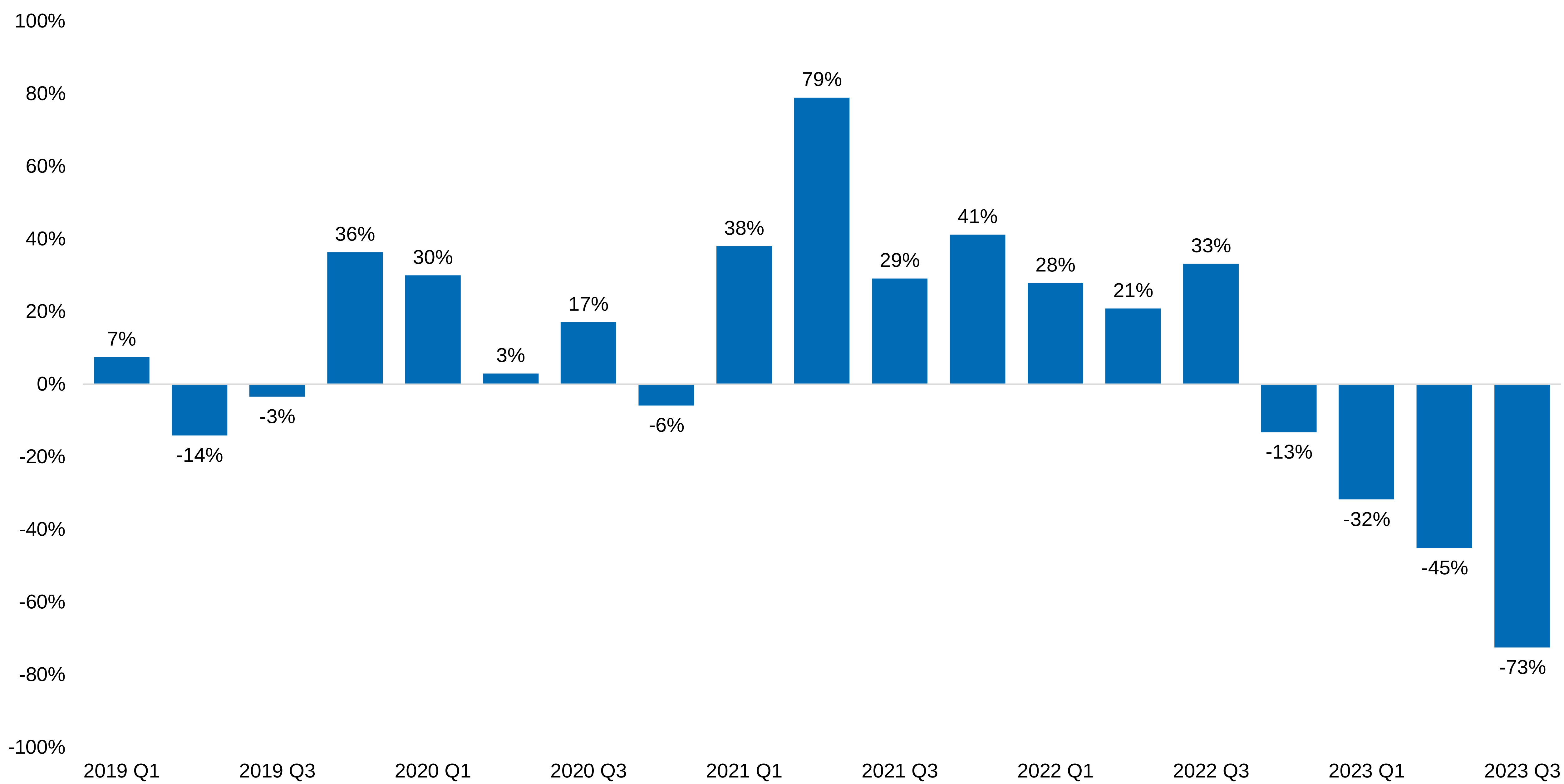


Source: Newmark Research, October 2023

New Industrial Construction Starts Are Down 73% Year over Year

Construction starts in the third quarter of 2023 measured less than 55 MSF - the quietest quarter for commencements since 2015. One year ago, the largest volume of new industrial starts ever, 193 MSF, was recorded. Rapid tightening of lending standards and shifting market fundamentals in the ensuing 12 months have driven the precipitous drop-off.

Construction Starts, Year Over Year Percentage Change



Source: Newmark Research, CoStar

National Industrial Deliveries Will Reach Pre-Pandemic Levels by 2025

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Spec Development Still Comprises Majority of Pipeline, but the Balance is Shifting

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Warehouse Construction Most Concentrated in Big-Box Product – For Now

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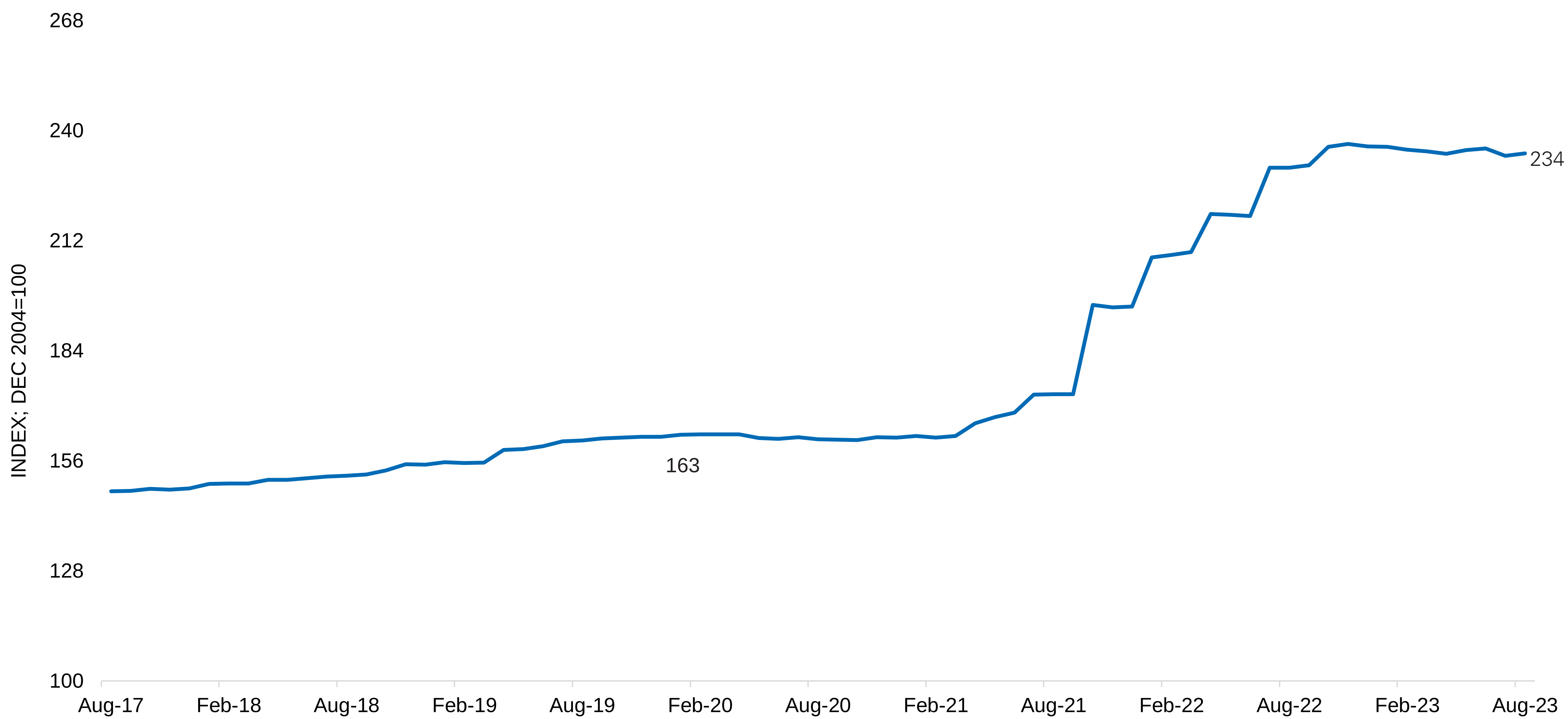
Warehouse Construction Costs Have Plateaued

Construction-input costs have not yet meaningfully come down from the skyrocketing journey upward between 2021 and 2022.

Producer Price Index: New Warehouse Building Construction

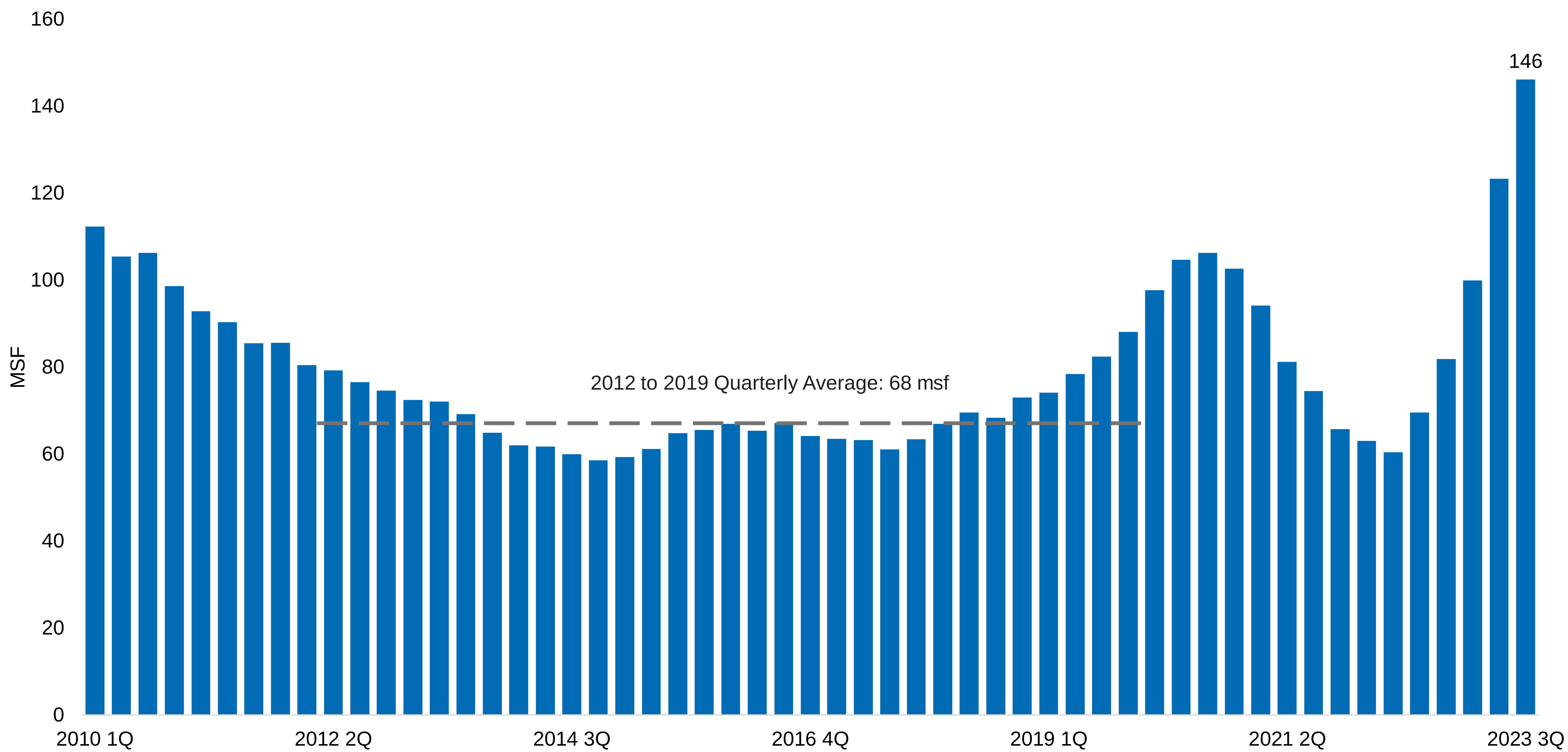


Source: Newmark Research, St. Louis Federal Bank, RSMeans

Industrial Sublease Availability: Historically High, Small in Context

The rate at which subleases were added to the market has accelerated substantially over the past year, culminating in an all time high of 146 msf on the market during the third quarter of 2023. While impactful on a local market and submarket basis, nationally this volume is only around 11% of total availability.

Available Industrial Sublease Volume



Source: Newmark Research

Sublease Space Weighs More Heavily on Some Markets (and Submarkets) than Others

United States Industrial Vacancy Rankings

The national vacancy rate increased to 5.1% in the third quarter of 2023, up from its all-time low of 3.6% charted one year ago and approaching the 10 year historical average of 5.6%. Mirroring the national trend, nearly all industrial markets experienced increased vacancy as new construction delivers and demand moderates.

Lowest Vacancy: Top 10 Markets

Market	3Q23 Vacancy
Los Angeles	2.1%
Las Vegas	2.8%
Orange County, CA	2.8%
Portland	3.0%
Detroit	3.2%
Miami	3.4%
Sacramento	3.4%
Milwaukee	3.4%
New Jersey Northern	3.5%
Minneapolis	3.8%
United States	**5.1%**

Most Minimal Changes in Vacancy 3Q22 to 3Q23: Top 10 Markets

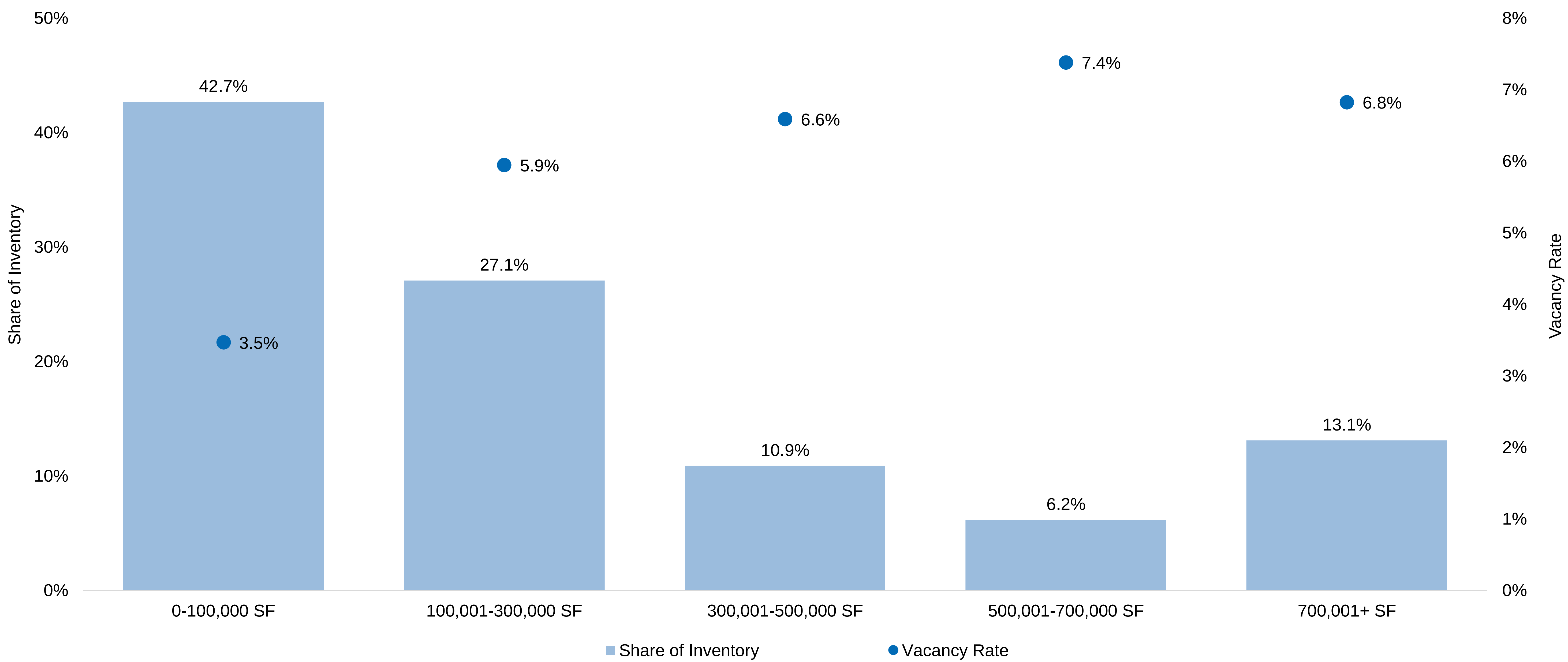
Market	3Q22-3Q23 Vacancy Change (BPS)
Detroit	-50
Silicon Valley	-4
Portland	-1
Phoenix	7
Miami	12
Kansas City	27
Chicago	40
Oakland/East Bay	46
Milwaukee	46
Minneapolis	48
United States	**146**

Source: Newmark Research, October 2023

Buildings under 100,000 SF Have the Lowest Vacancy of Any Size Segment

Vacancy remains below 9.0% for 50 industrial markets tracked by Newmark in the third quarter of 2023. The 0- to 100,000-square-foot building tranche is the largest in terms of share of inventory and lowest in vacancy and contains a significant portion of the industrial buildings built before 2000. This segment is growing the slowest, as most industrial developers are building for larger warehouse and distribution users, requiring more space for efficient operations.

3Q23 Industrial Vacancy Rate by Building Size

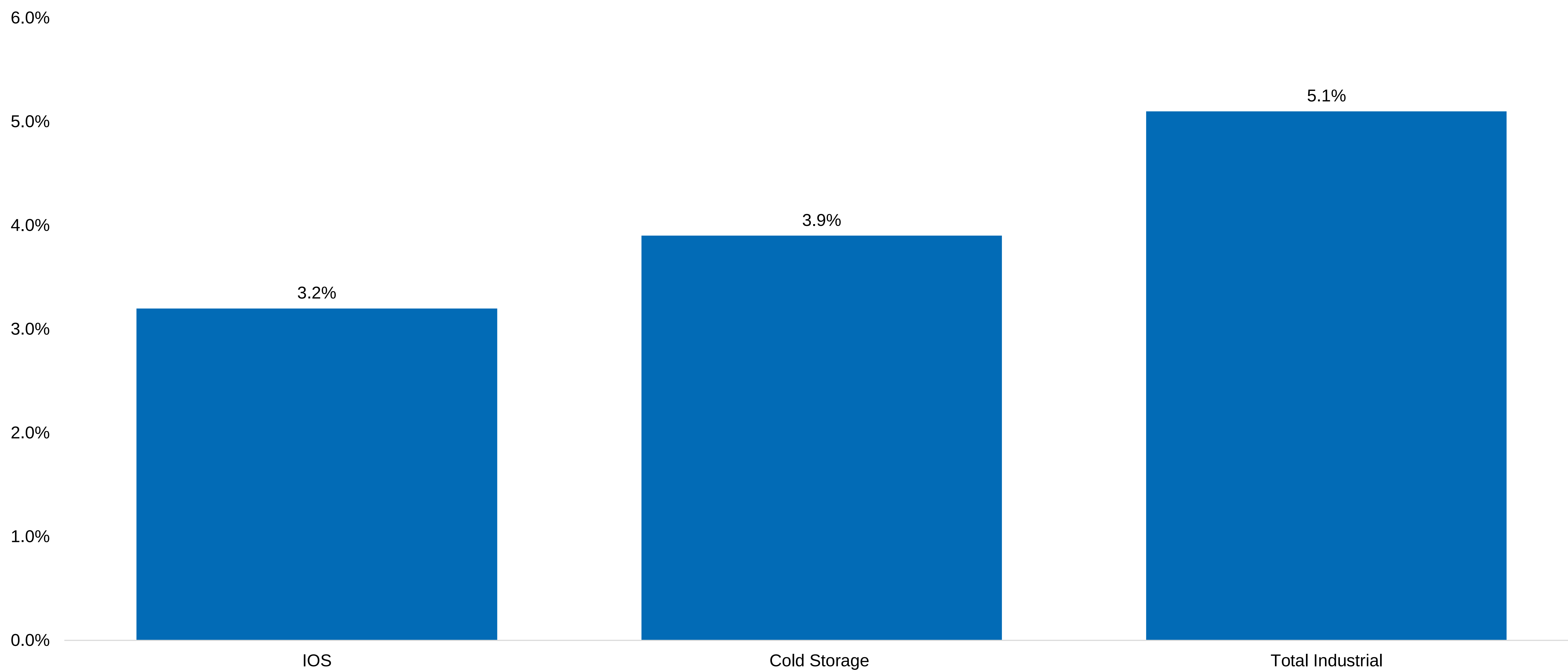


Source: CoStar, Newmark Research

Vacancy is Lowest in Alternative Industrial Sectors

Fundamentals in niche industrial sectors such as industrial outdoor storage (IOS) and temperature-controlled warehousing/distribution are tighter than the overall industrial average, owing to limited supply with high barriers to new development, coupled with consistent demand.

3Q23 National Vacancy Rate (%), Select Alternatives and Total Industrial



Source: Newmark Research, CoStar, October 2023.

Secondary and Less Expensive Markets Absorb Larger Share of Demand

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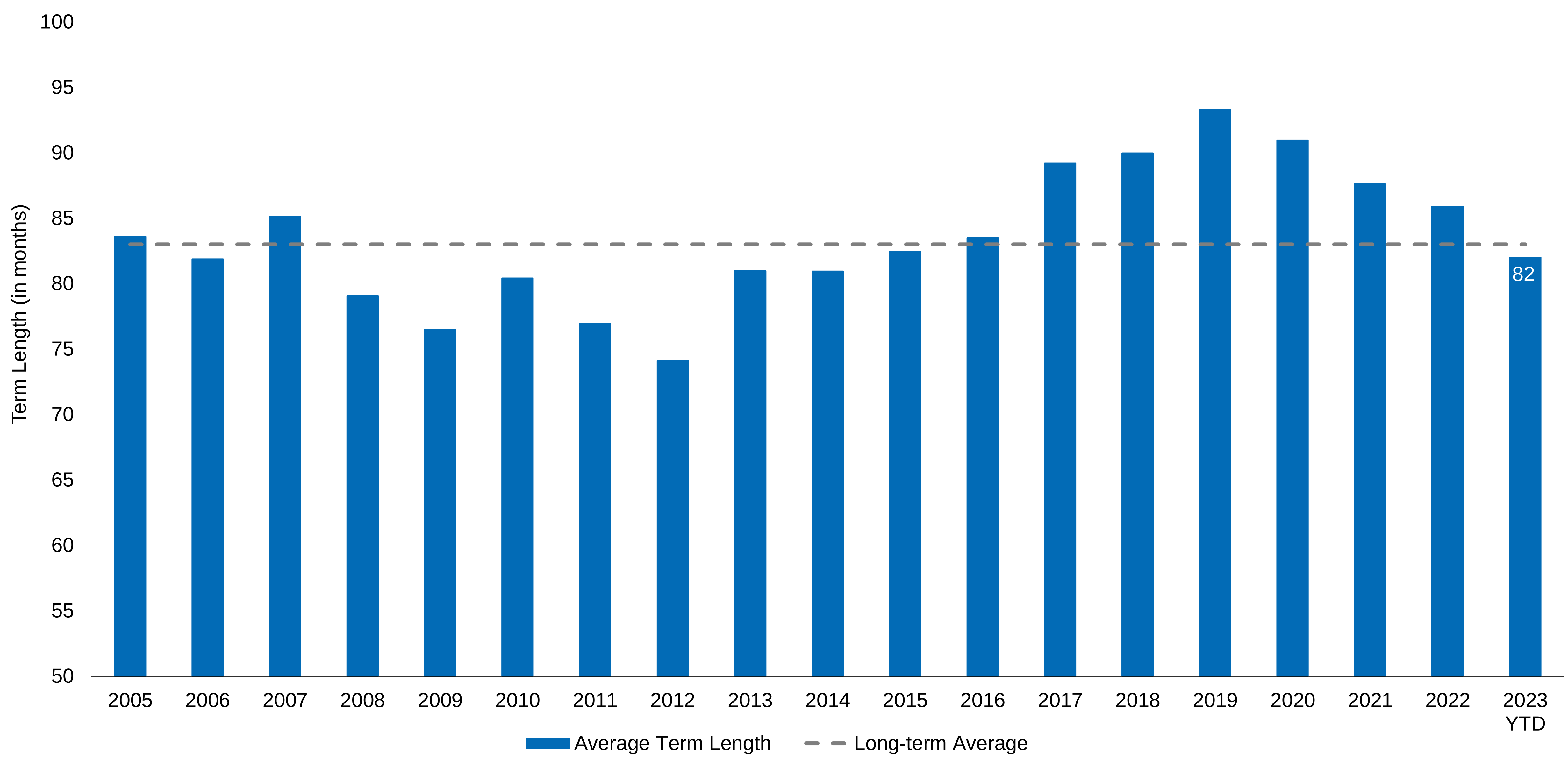
Average Weighted Lease Terms Are Declining

The has two implications: a) Tenants are exercising more caution (e.g., why commit to a long-term lease if rents are anticipated to soften?) and b) Landlords are more willing to work with tenant needs than they were one year ago; a time when rents were on the upswing.

National Industrial Average Weighted Term Length for Leases 100,000 +

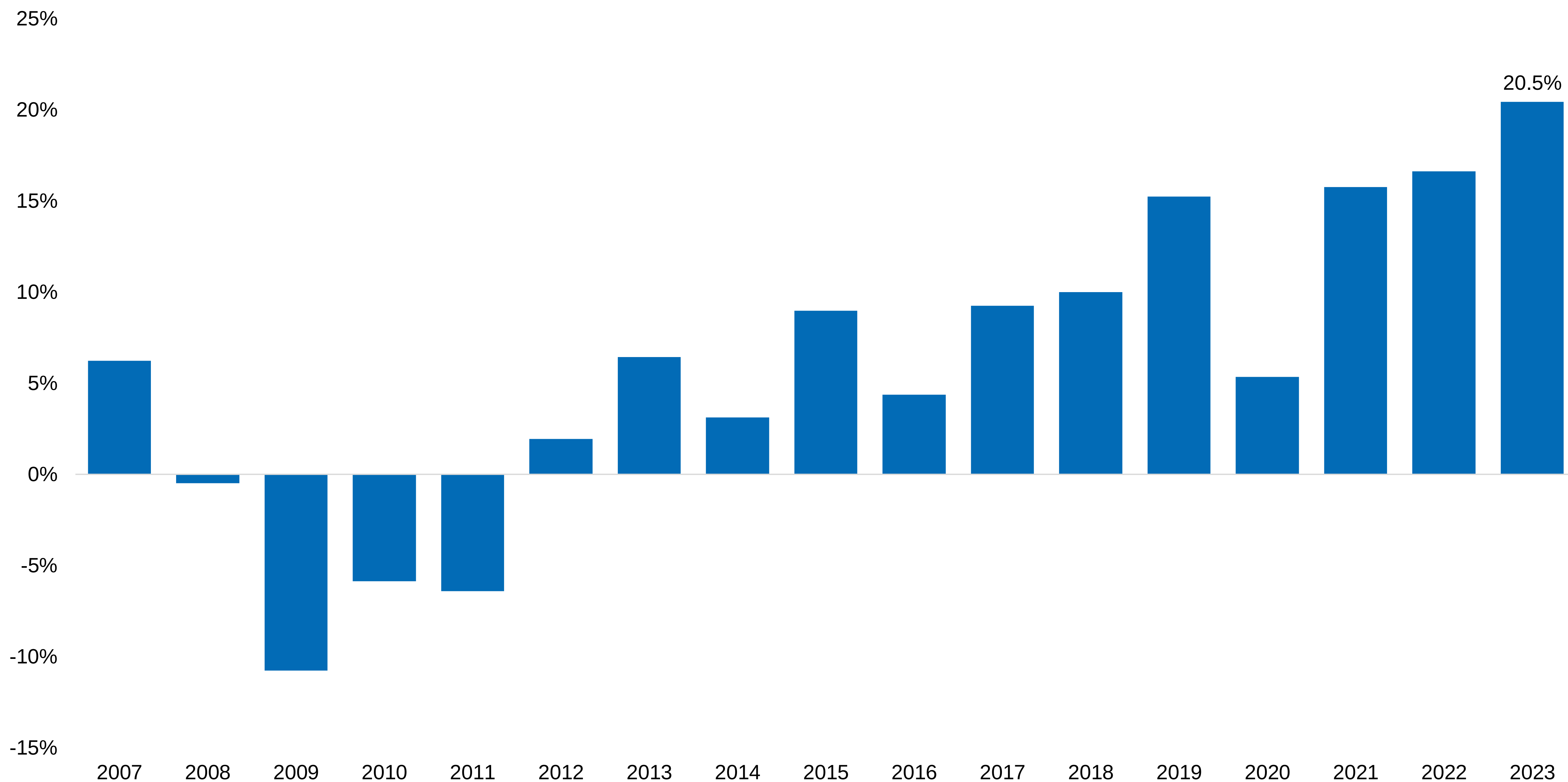


Source: Newmark Research, October 2023.
Note: Includes leases with 24+ month terms and excludes flex.

Record-Pace Industrial Asking Rent Growth Continues

Industrial average asking rents grew by 20.5% year-over-year in the third quarter of 2023. While rent growth is remaining sticky in many markets, higher-priced quality space coming online in larger quantities is increasingly contributing to higher asking rent growth averages.

Year-Over-Year Industrial Asking Rent Growth

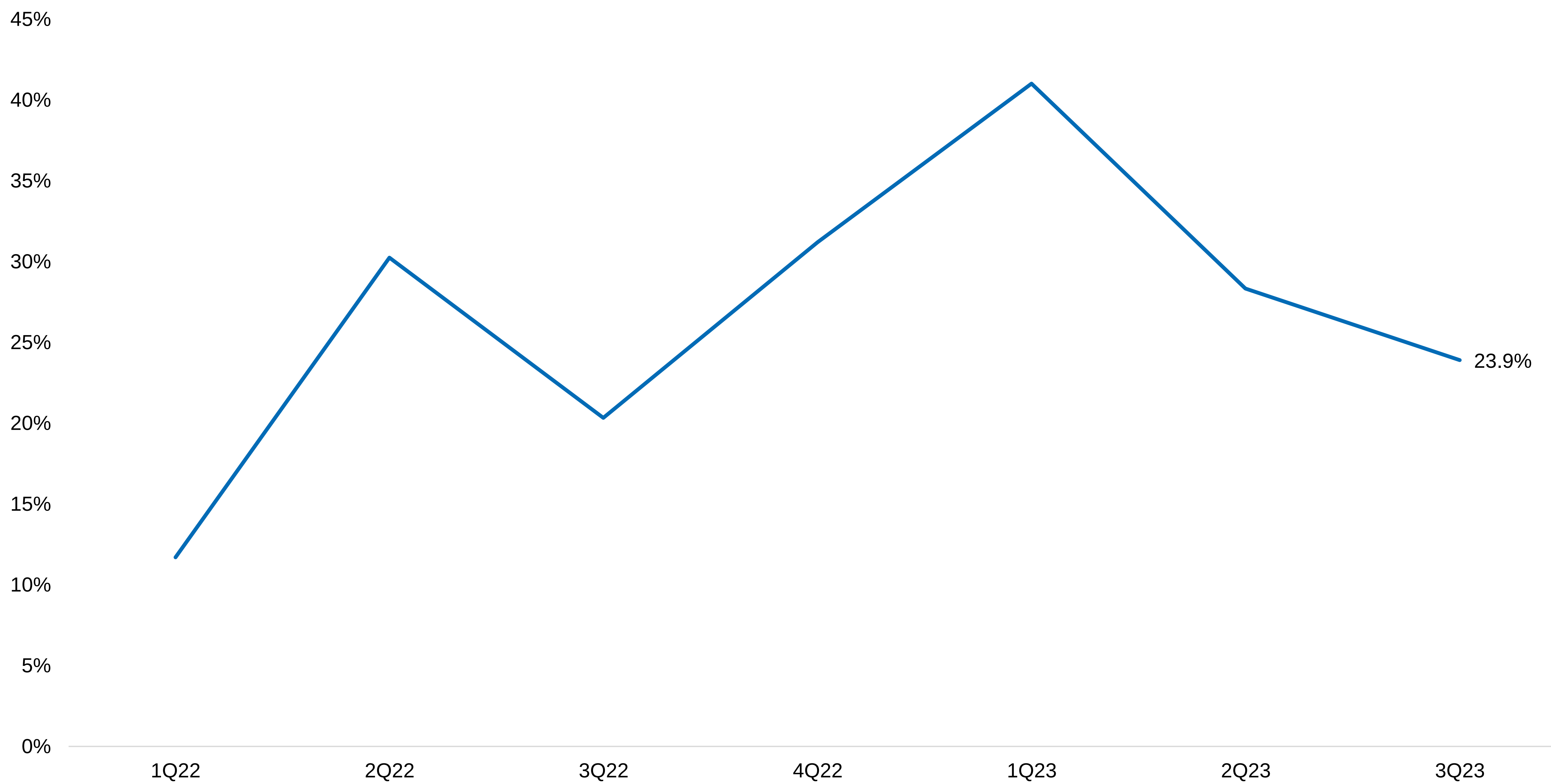


Source: Newmark Research, October 2023.

Slowing Yet Sticky: Annual Contract Rent Growth Also Remains in Double Digits

The average U.S. industrial contract rent for new industrial leases was $12.72/SF in the third quarter of 2023, nearly 24% higher than one year ago. This is a deceleration from the 28.3% annual growth realized last quarter; indeed, quarter-over-quarter, average contract rents actually fell by a couple cents/SF. While markets with the most vertiginous recent run-up in rents may see modest rent depreciation in some segments, overall annual contract rent growth will likely settle into the mid- to high-single digits by year-end.

Year-Over-Year Industrial Taking Rent Growth



Source: Newmark Research, October 2023. Direct new leases of at least 24 months and 30,000 SF, exclusive of flex.

United States Industrial Asking Rent Rankings

Industrial markets across the U.S. are still realizing annual asking rent growth with only a handful seeing flat or modestly lower average asking rents in 3Q23 compared to 3Q22. The shift over the past year in top rent-growth rankings from California markets to, now, burgeoning inland distribution hubs and alternative port markets, reflects increasing occupier cost-consciousness and growing volumes of higher-priced space delivering in these regions.

Highest Asking Rent: Top 10 Markets

Market	3Q23
Silicon Valley*	$28.62
Los Angeles	$21.13
Orange County, CA	$19.73
Inland Empire, CA	$18.04
Long Island	$17.59
Oakland/East Bay	$17.40
San Diego	$16.71
Boston	$15.69
New Jersey Northern	$15.60
Miami	$14.93
United States	**$11.66**

Largest Asking Rent Growth: Top 10 Markets

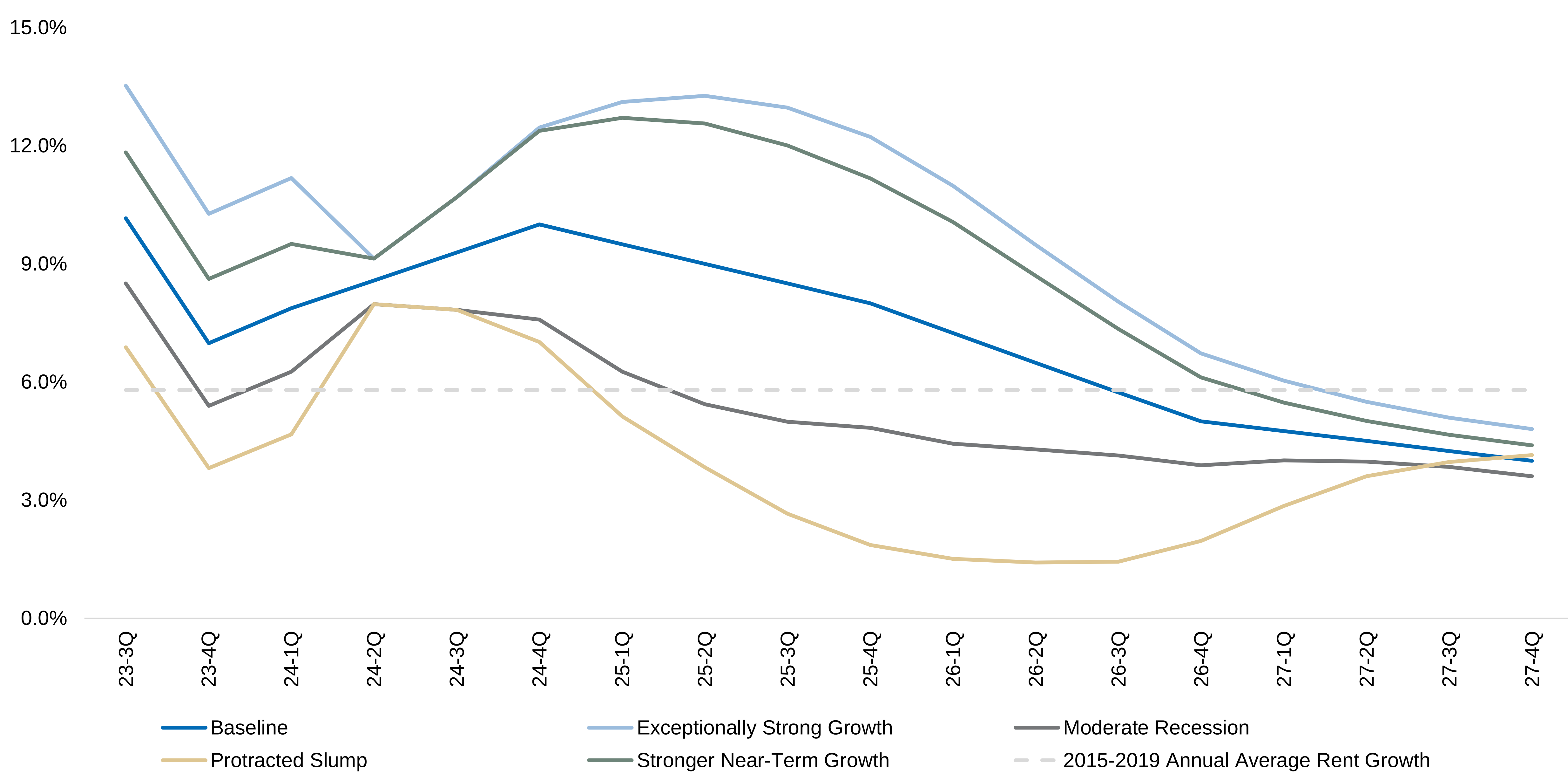
Market	3Q22-3Q23 Pct. Change
Indianapolis	34.1%
Baltimore	24.8%
Savannah, GA	24.2%
Miami	22.6%
Charlotte	22.1%
Broward County, FL	21.3%
Jacksonville	20.8%
Nashville	17.5%
Greenville, SC	16.6%
Minneapolis	16.2%
United States	**20.5%**

Source: Newmark Research, October 2023.
*Note: An outsized share of the Silicon Valley industrial market is R&D space which contributes to the relatively high overall asking rent.

Green Street Industrial Asking Rent Forecast

The U.S. industrial market faces in a period of uncertainty and unpredictability as economic headwinds and demand dynamics cloud rent forecasting. Under all scenarios, annual rent growth remains positive, and the baseline scenario doesn't drop below the pre-pandemic five-year annual asking rent growth average of 5.8% until 2026.

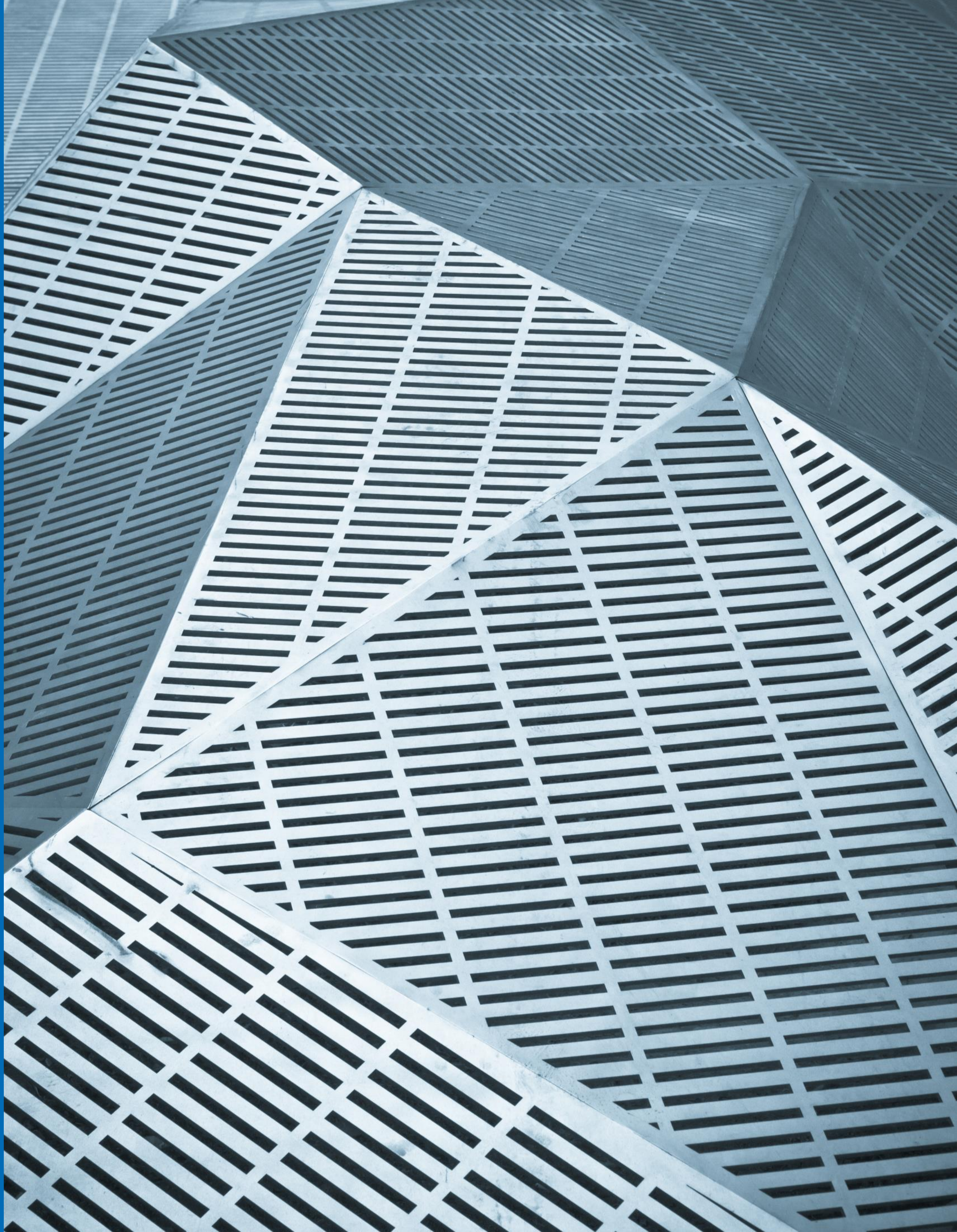
Green Street's Top 50 Industrial Markets: Annual Rent Growth Forecasts



Source: Newmark Research, Green Street, October 2023.

3Q23

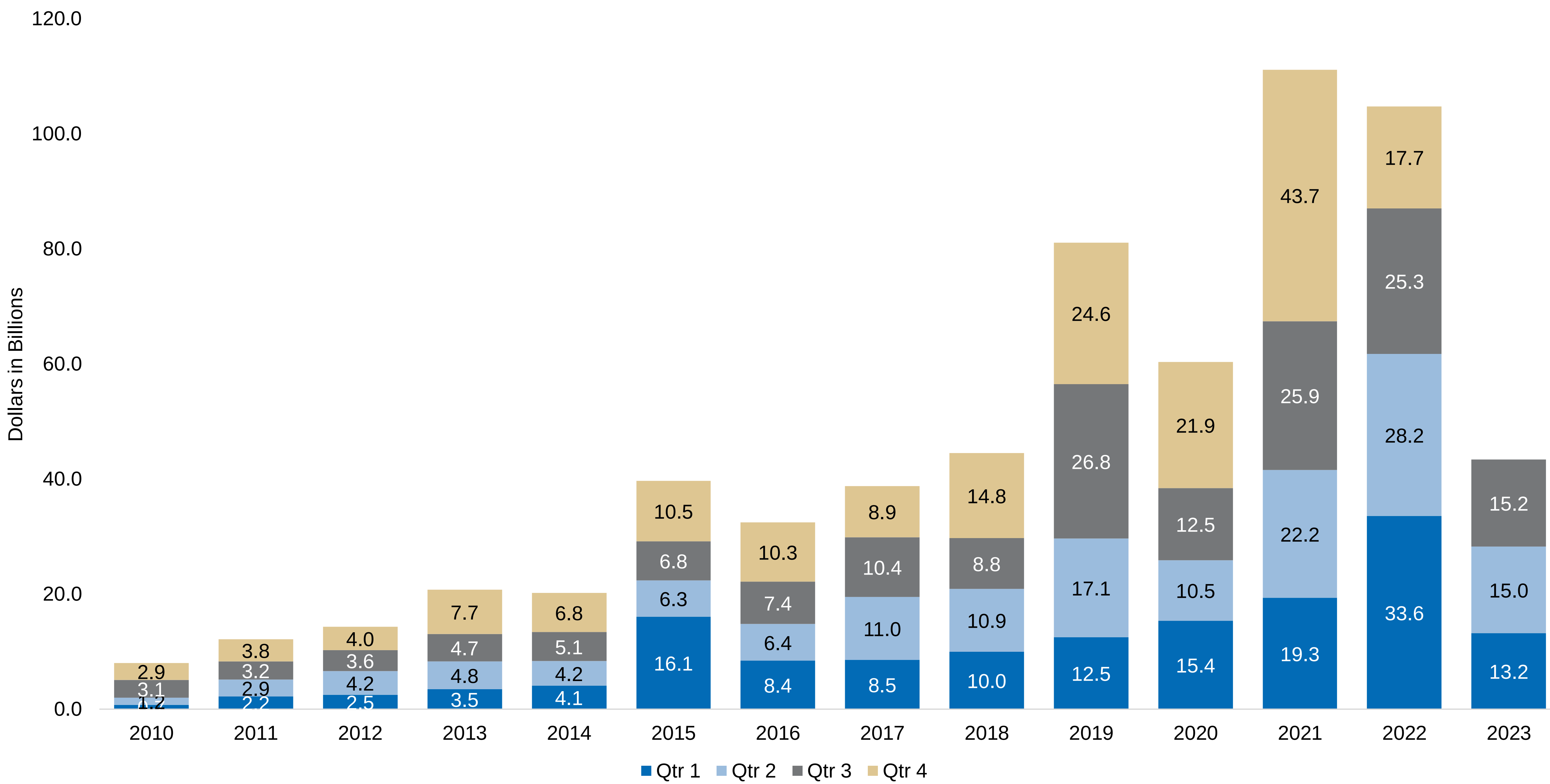
Capital Markets



Industrial Debt Originations Down 50% Year-Over-Year in Year through Q3

While these figures are based on still preliminary data, the overall message is confirmed by other sources. For example, the Mortgage Bankers Association shows industrial originations down 57% YoY through the third quarter. That said, year-over-year comparisons are bound to be difficult given the tremendous deal activity in the 2021 to 2022 period. While deal activity falls short of 2019 as well, originations are running ahead of prior years. As with leasing, this looks more like a return to pre-bubble activity levels.

Industrial Debt Origination Volume*

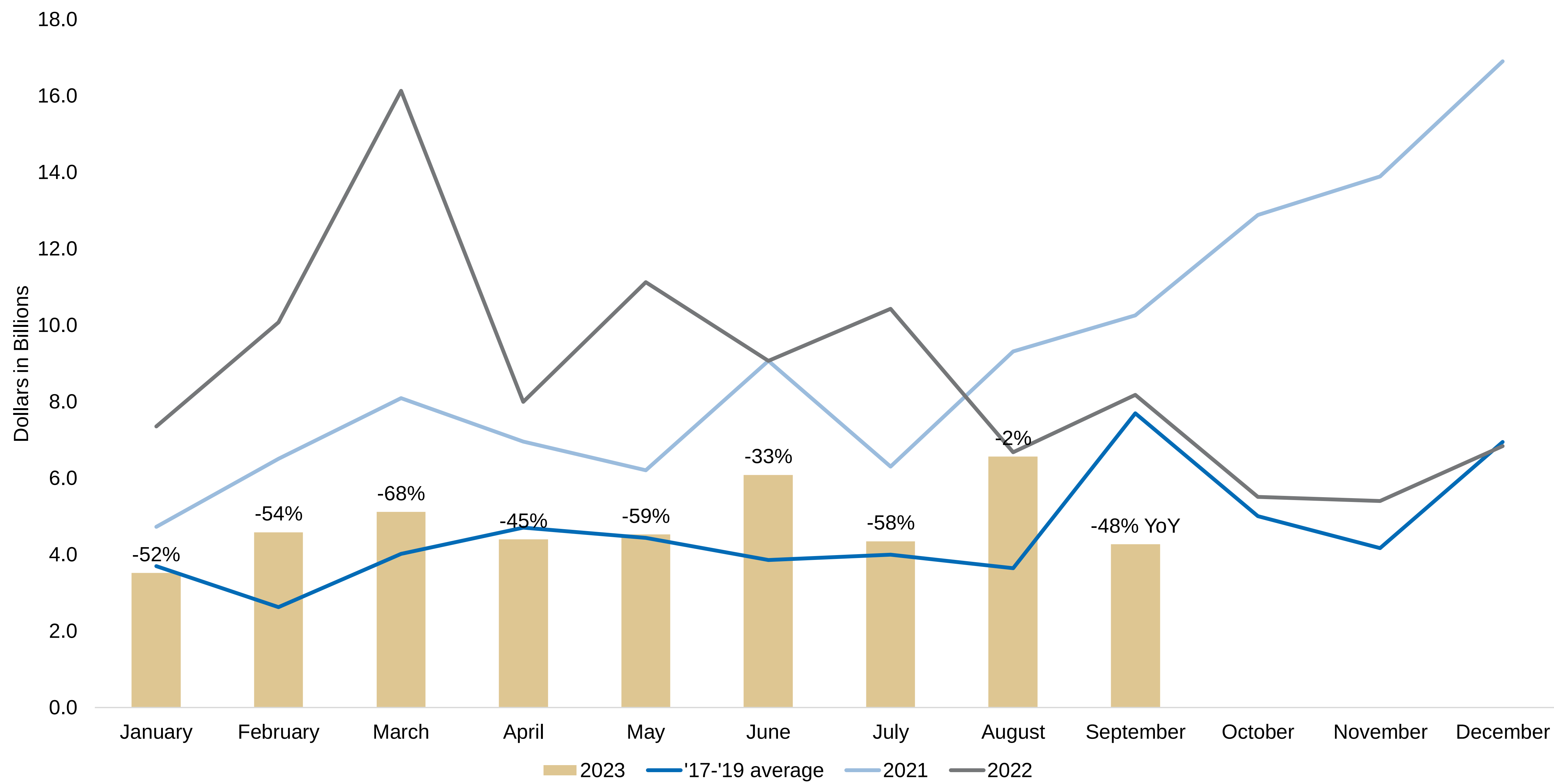


Source: RCA, Newmark Research as of 10/24/2023
* Preliminary data. Excludes construction finance. Data is based preliminary loan sums, which are subject to future revision – potentially significant.

Originations Down Sharply YoY, But Remain Above Pre-Pandemic Levels

Originations exploded during the liquidity bubble of H2 2021 to H1 2022. Rising interest rates brought those ambitions back to earth. By the end of 2022, originations had converged with pre-pandemic levels (hardly a quiet time for industrial). In 2023, while originations have been consistently down from 2022, they have exceeded the pre-pandemic pace in most months so far this year. Indeed, first and second quarter originations were 28% and 15% above 2017 to 2019 levels while Q3 is down just 1% with still preliminary data.

Monthly Industrial Debt Originations Volume*

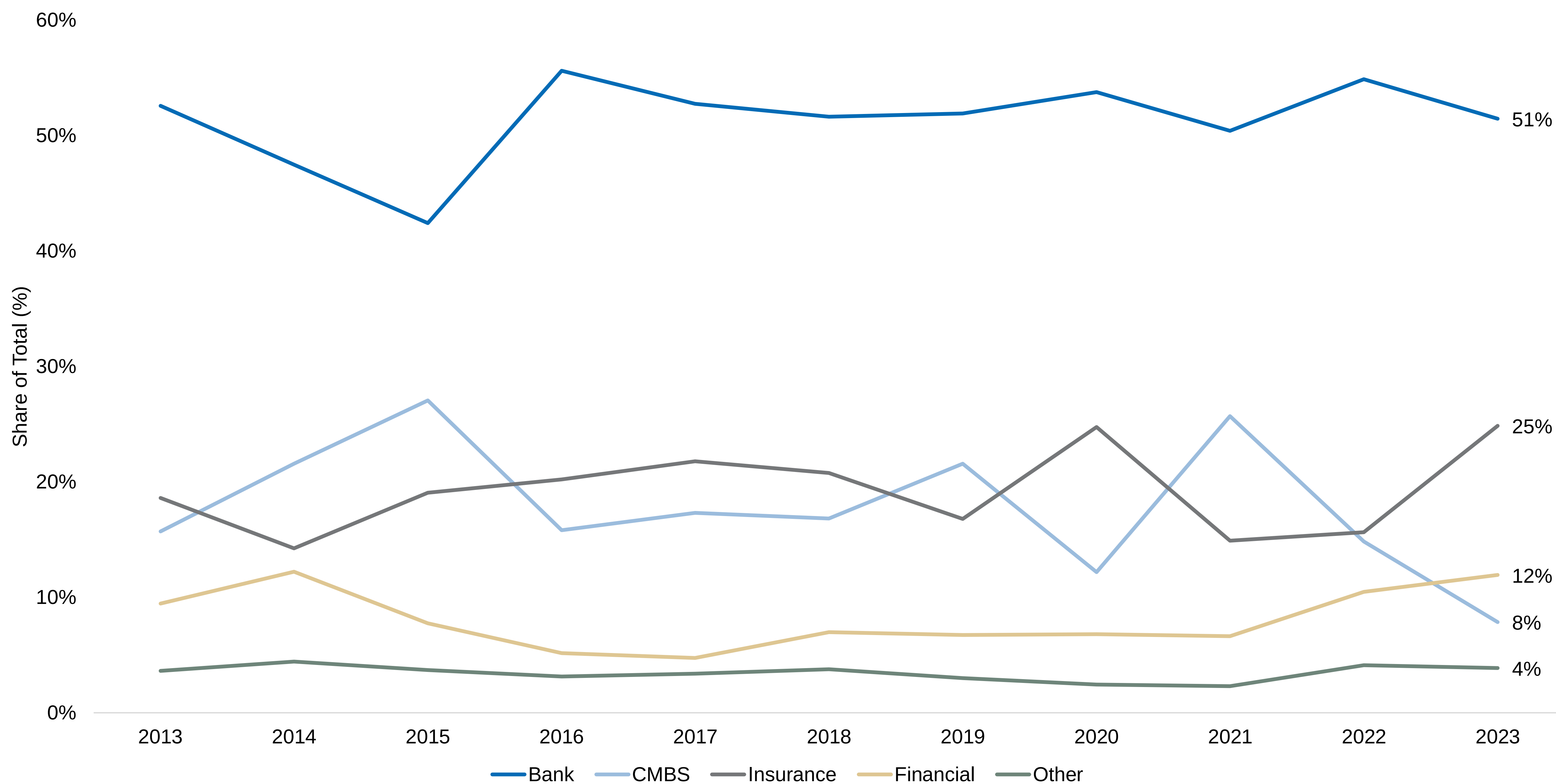


Source: RCA, Newmark Research as of 10/24/2023
* Preliminary data. Excludes construction finance. Data is based preliminary loan sums, which are subject to future revision – potentially significant.

Industrial Borrowers Heavily Dependent on Bank Finance

Banks continued to dominate industrial property finance in the first three quarters of 2023. Securitized debt finance by contrast has fallen sharply from its recent peak in 2021 amid a depressed issuance market. On the other hand, insurance lending have picked up share in 2023, particularly in the third quarter. There are also signs of debt funds shifting allocations to industrial. This is consistent with anecdotes coming in from the markets.

Origination Share by Lender Group

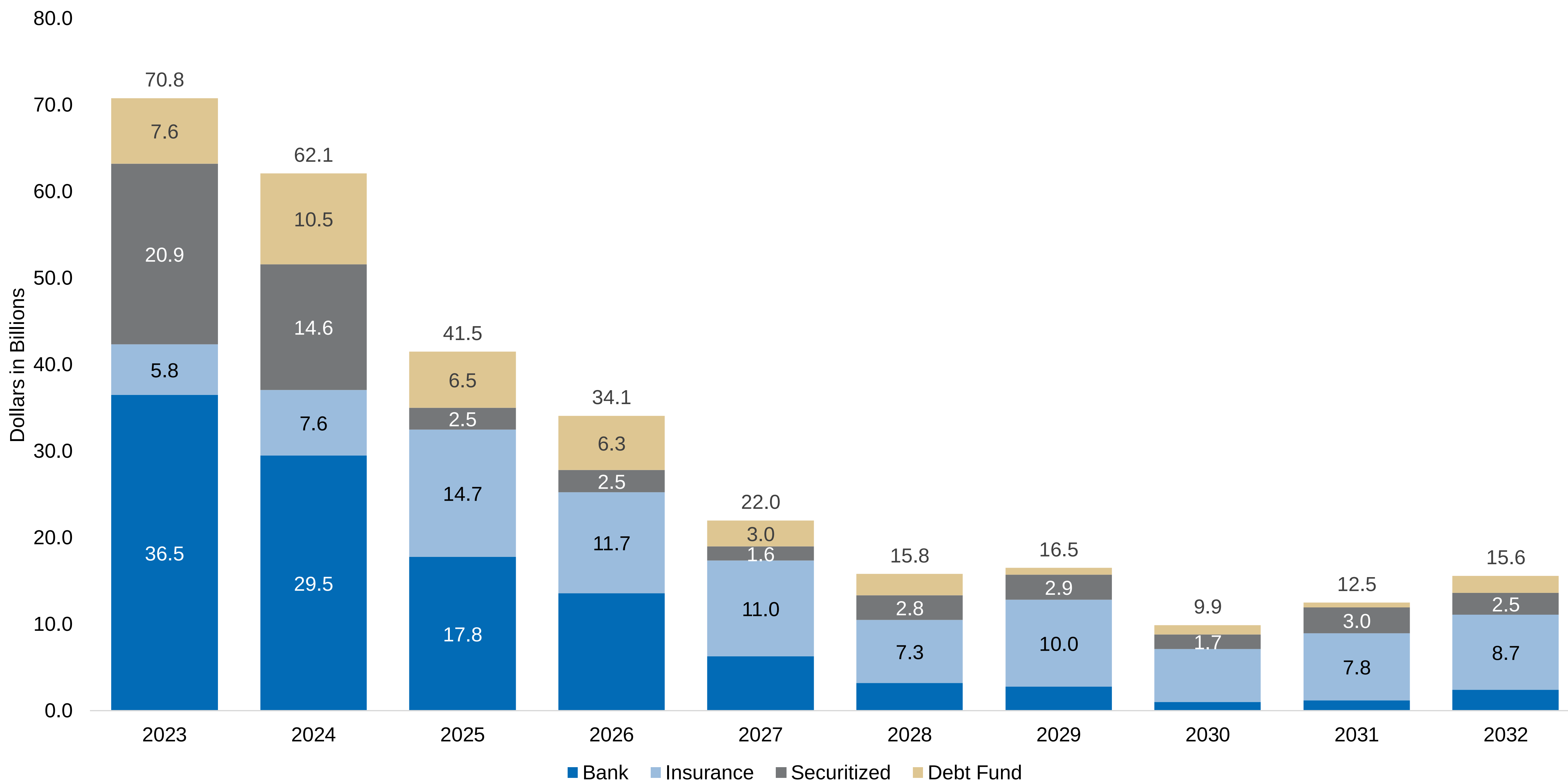


Source: RCA, Newmark Research as of 10/24/2023
*Excludes construction finance. Data is based preliminary loan sums, which are subject to future revision – potentially significant.

Elevated Industrial Maturities in 2023-2024

Upcoming debt maturities are heavily concentrated in bank and securitized borrowings. In contrast, insurance loans are concentrated in the middle of the decade. Debt funds have become active in the space. While debt funds have become more active in the industrial funding market, their share of upcoming maturities is lower than for the office and multifamily markets.

Industrial Loan Maturities by Lender Group

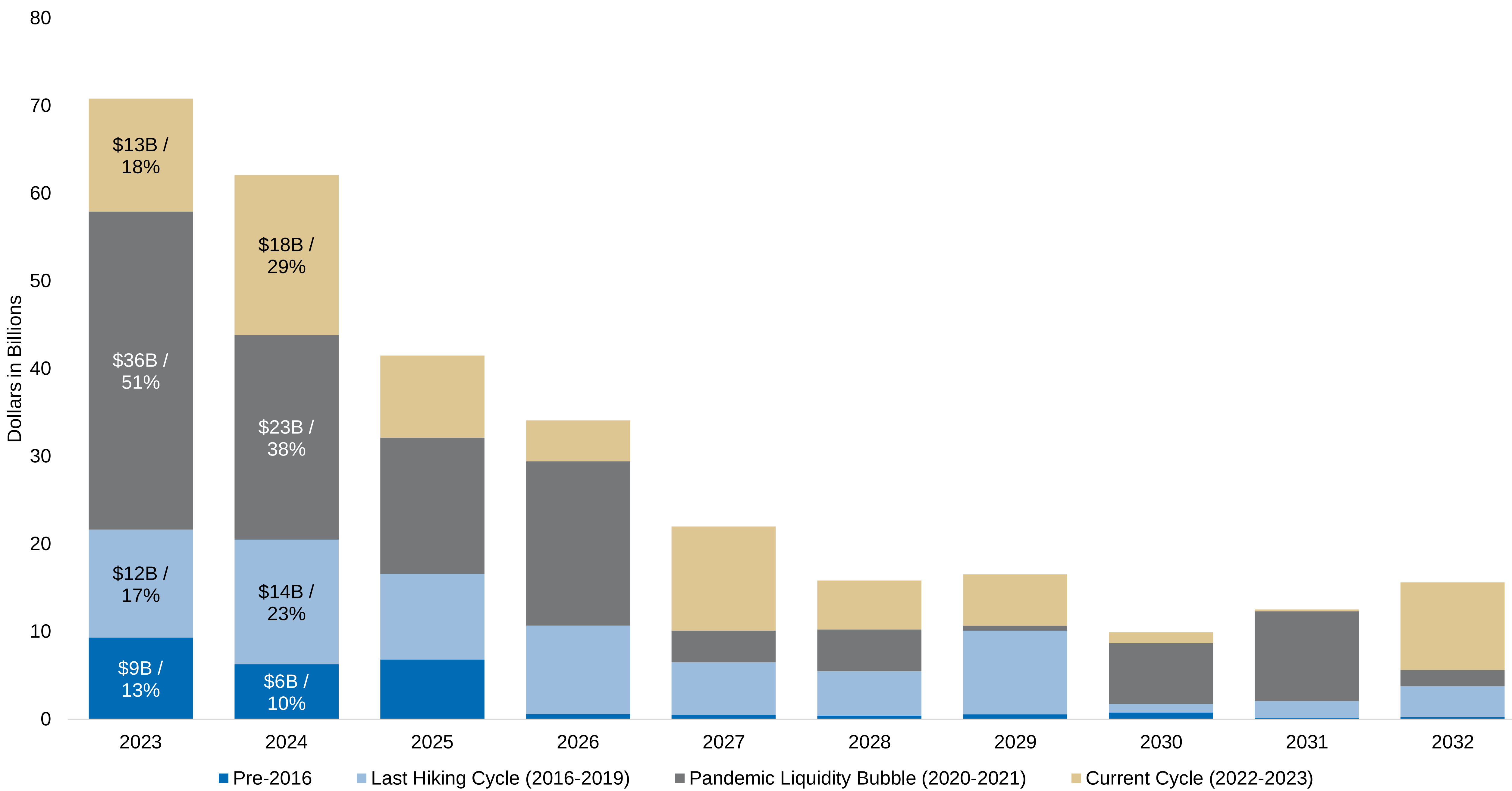


Source: MBA, Trepp, RCA, Newmark Research as of 10/24/2023

Maturing Loans Originated At Peak Prices, Record Low Cost of Capital

66% of the debt maturing in the 2023-2025 period was originated after in 2020 or later. This means most of this debt was originated at record low cap rates and interest rates.

Industrial Loan Maturities by Origination Period

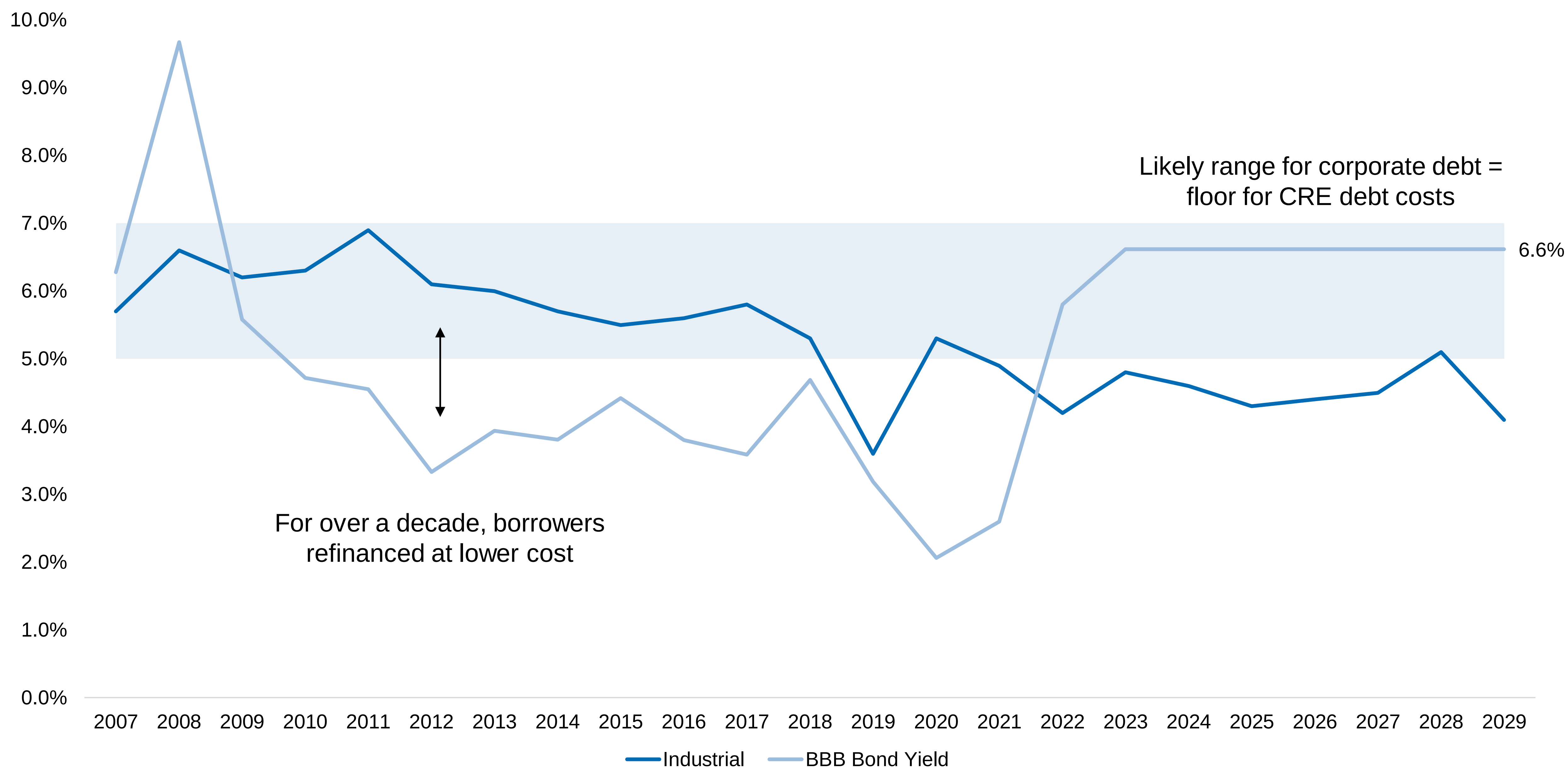


Source: MBA,Trepp, RCA, Newmark Research as of 10/24/2023

Maturing Loans Face Significantly Higher Costs, Driving Payment Stress

Following the recent surge in long-term rates, corporate bonds yields are now at the top of our estimated range while spreads are still close to long-term averages. CRE debt costs will be driven higher still. Maturing fixed rate CRE debt faces a much higher burden on refinance. In some cases, organic deleveraging will have made it possible for higher interest expenses to be absorbed, but where values have been stable or declining, sponsors will need to inject equity or else face the prospect of default.

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

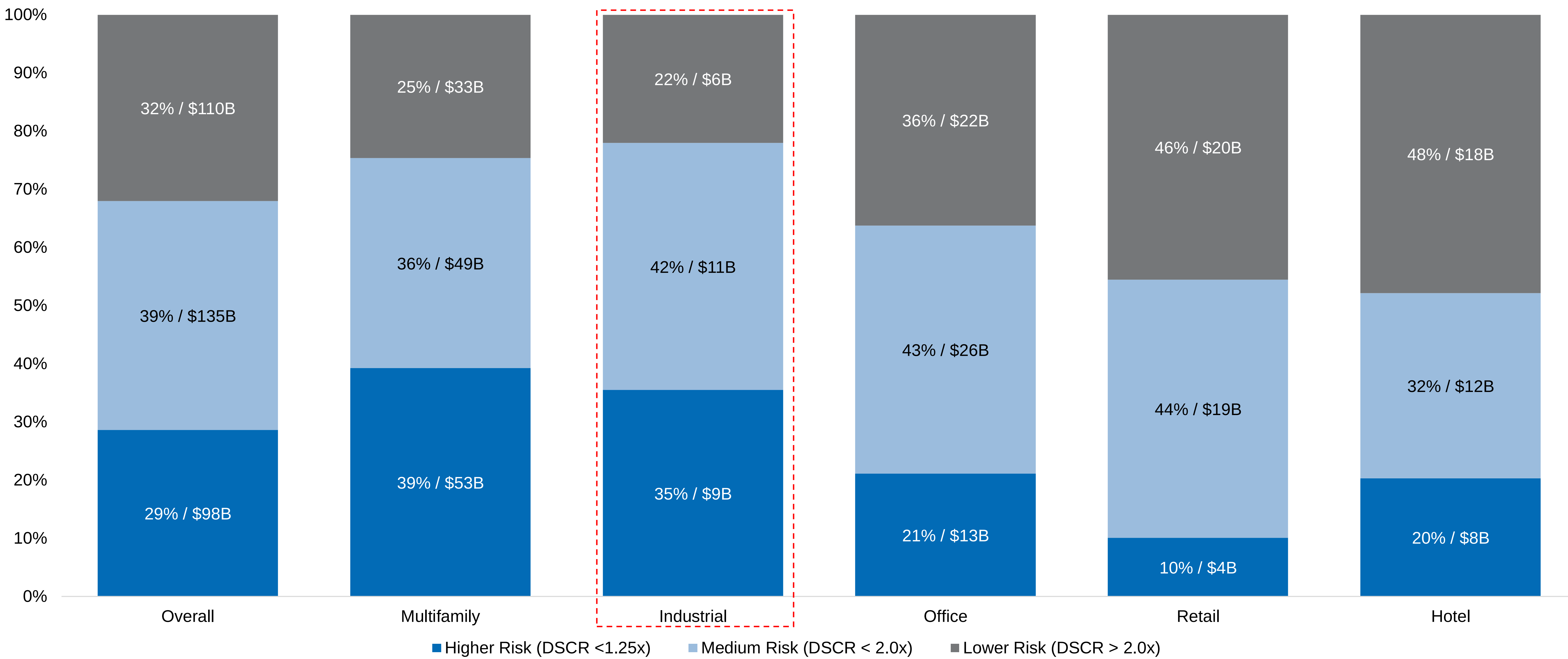


Source: RCA, ICE Data Indices, Newmark Research as of 10/24/2023

Most Loans Will Be Able to Absorb Higher Interest Costs – But Many Will Not

Even property types with strong operating fundamentals could face challenges covering new, higher interest costs. Floating rate loans on transitional product – a significant portion originated by debt funds and securitized in CRE CLO – are particularly fraught. This is largely responsible for the high portion of at-risk loans in the multifamily and industrial sectors. The securitized markets are not an isolated problem: banks engaged in a great deal of this newly risky lending. New bank regs give them a pass on underwater loans but not DSCR's.

DSCR Profile of Securitized CRE Debt Maturing between 2023 and 2025



Source: Trepp, Newmark Research as of 10/26/2023

Debt Service Risk Will Rise Dramatically as Fixed Rate Loans Face Market Rates

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Continuing Mark-to-Market Opportunity a Strong Tailwind for Investors

Strong Price Appreciation Helps Protect Against Industrial Distress

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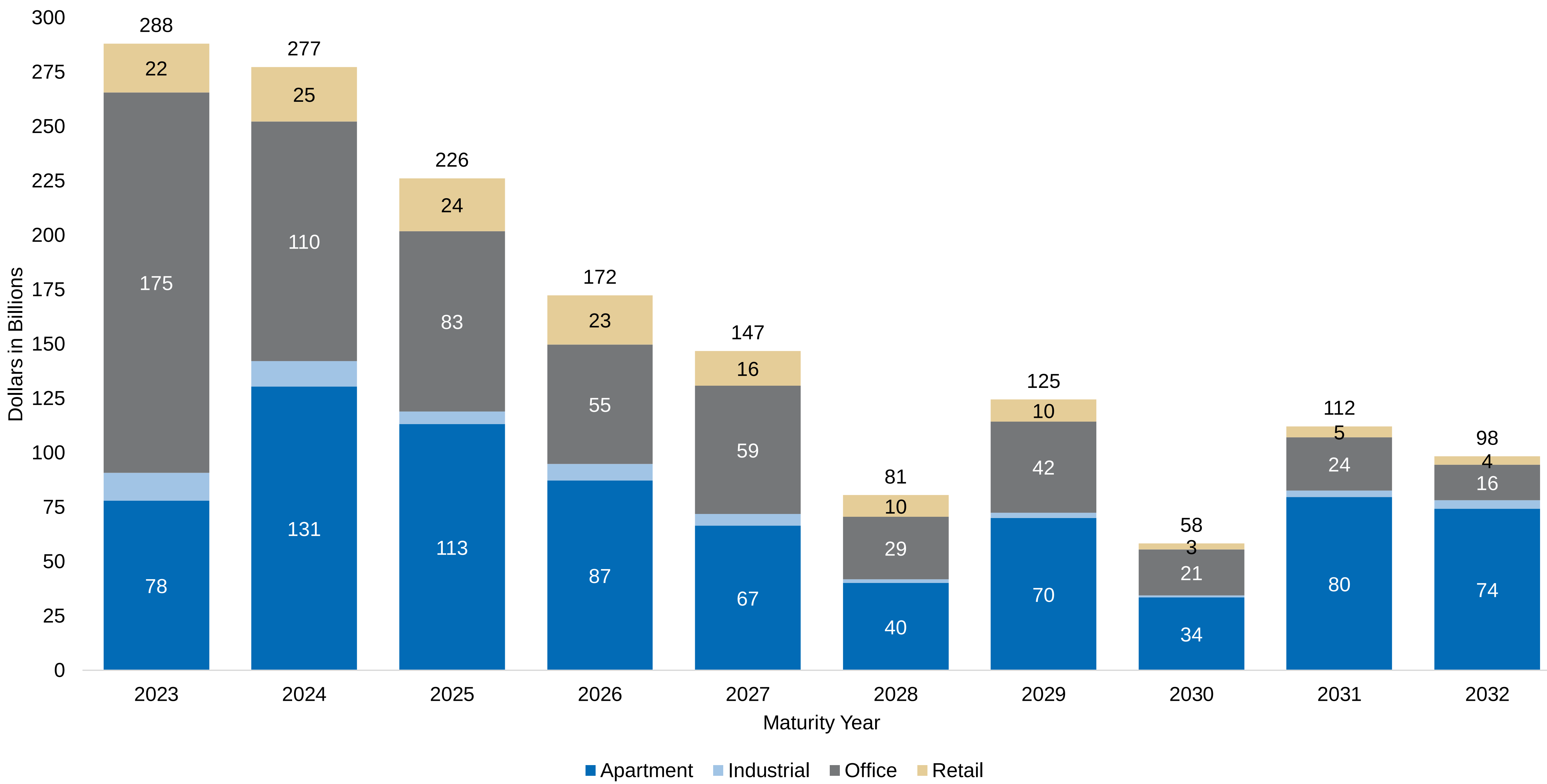
$1.6T of Outstanding CRE Debt is Potentially Troubled, But Only $55B is Industrial

Combining our analysis of mark-to-market LTVs with the structure of debt maturities, we estimate the volume of debt that currently is potentially troubled*. Office and multifamily loans constitute the vast majority of potentially troubled loans, particularly in the 2023-2025 period. The high office volume results from most loans being underwater. The distribution of LTV's for multifamily are more favorable overall, but the greater size of the multifamily market and the concentration of lending during the recent liquidity bubble drive high nominal exposure.

Potentially Troubled Loans by Maturity Year*

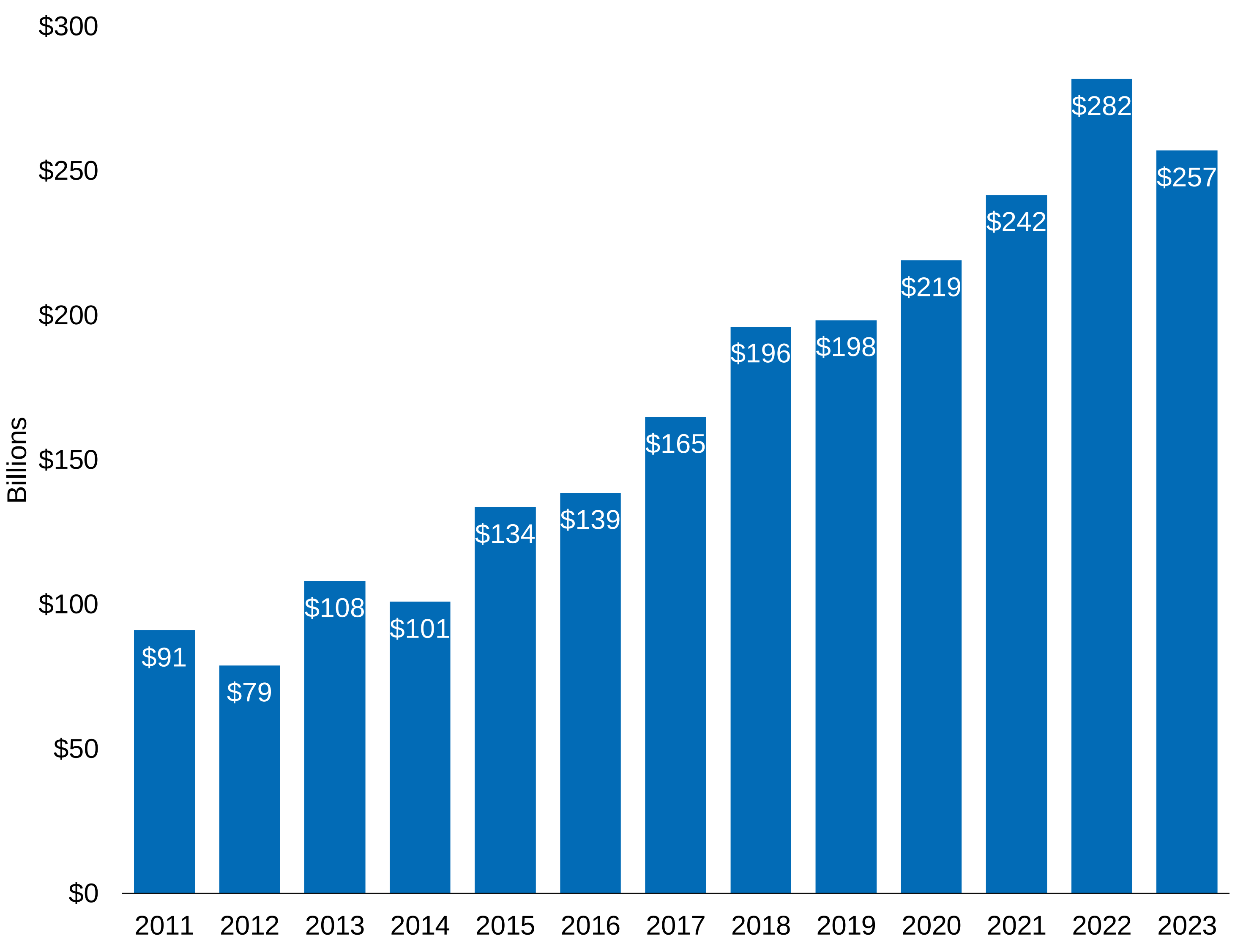


Source: Green Street, NCREIF, RCA, Trepp, MBA, Newmark Research as of 11/7/2023
*Loans with an estimated senior debt LTV of 80% or greater are potentially troubled. The loans are marked-to-market using an average of cumulative changes in the Dow Jones REIT sector price indices, REIT sector enterprise value indices and Green Street sector CPPI.

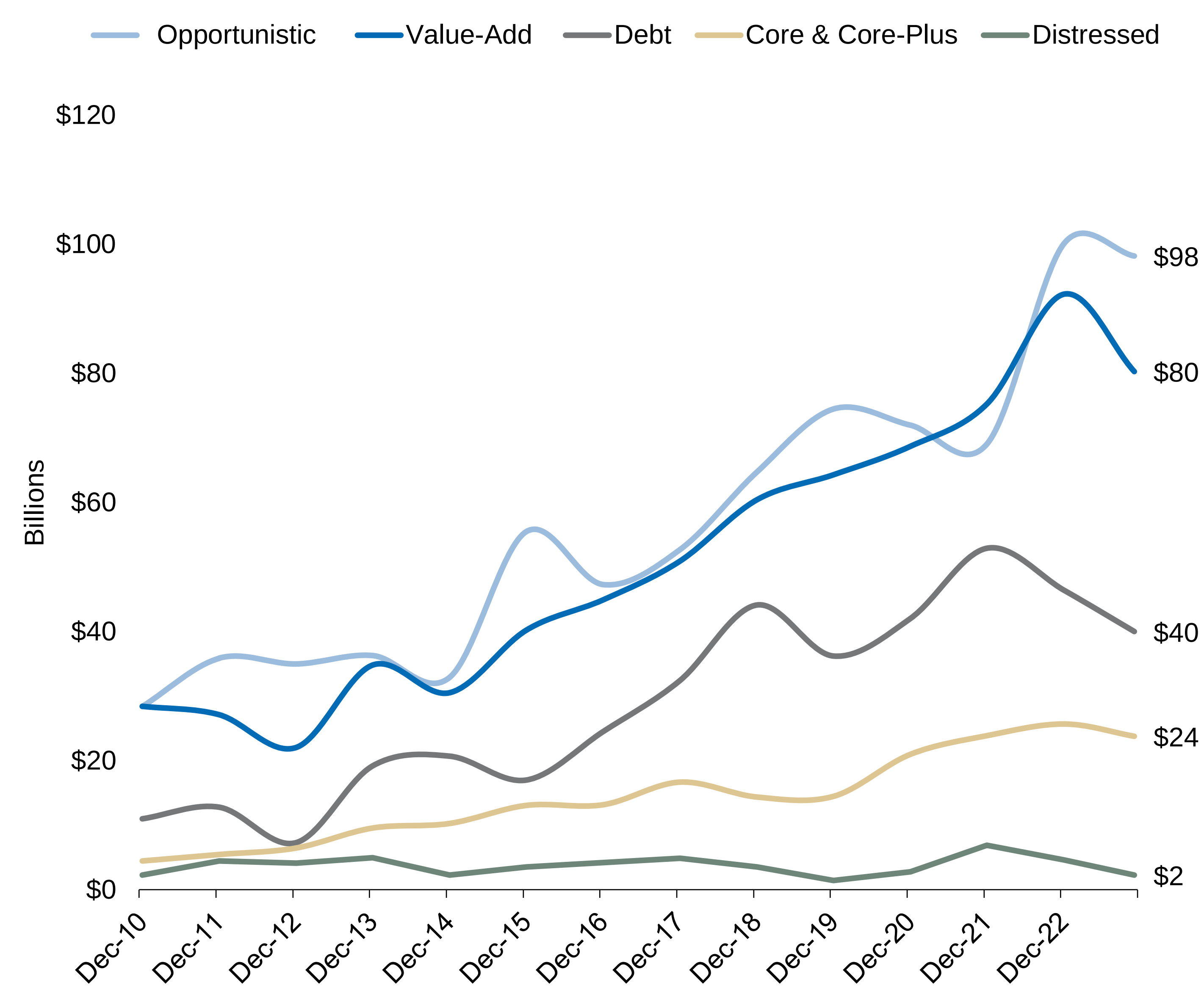
Private Equity Dry Powder Has Declined, But Still Elevated Overall

Dry powder at closed-end funds has declined 9% since the start of the year. However, this is mostly due to revisions to previous estimates rather than negative developments in Q3. The revised picture shows that debt fund dry powder continues to moderate while both value-add and opportunistic funds continue to have above trend levels of dry powder, despite a sharp decline for the former since year-end 2022.

Dry Powder – Closed-End Funds



Dry Powder by Strategy*



Source: Newmark Research, Preqin as of 11/8/2023
*Not shown: Fund of funds, co-investments, and secondaries strategies

Ample Capital for Industrial Investment, Recapitalization

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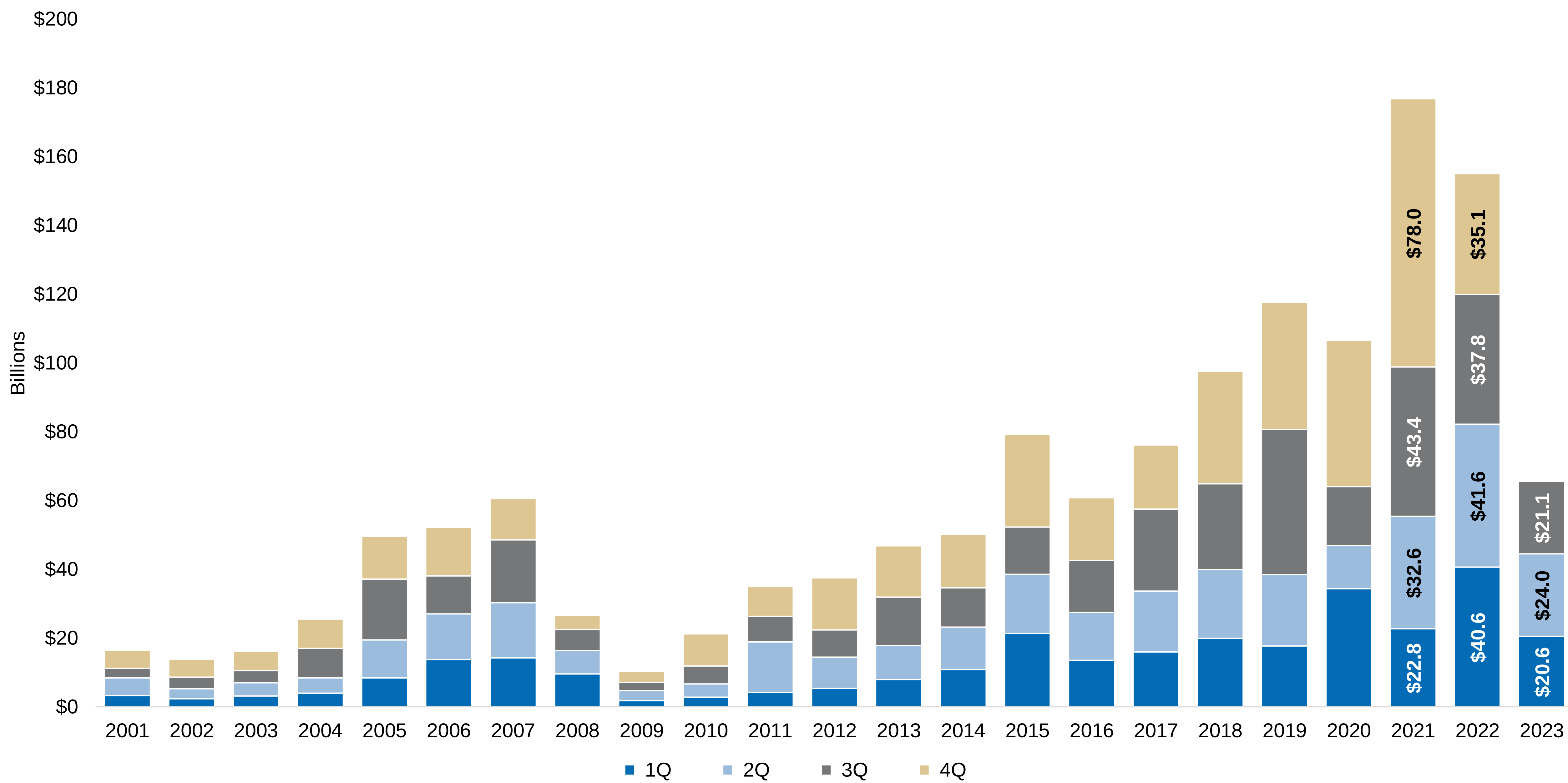
Annual Sales Volume Shaping Up to Be on Par With 2017-18 Levels

Third-quarter sales volume measured $21.1 billion, a 44% decrease year-over-year and the fifth consecutive quarter of significant annualized declines. Historically, fourth quarters have most often been the strongest quarters of any given year; an expected uplift in volume during the final quarter of 2023 will bring annual totals to 2017-2018 levels.

Investment Sales Volume

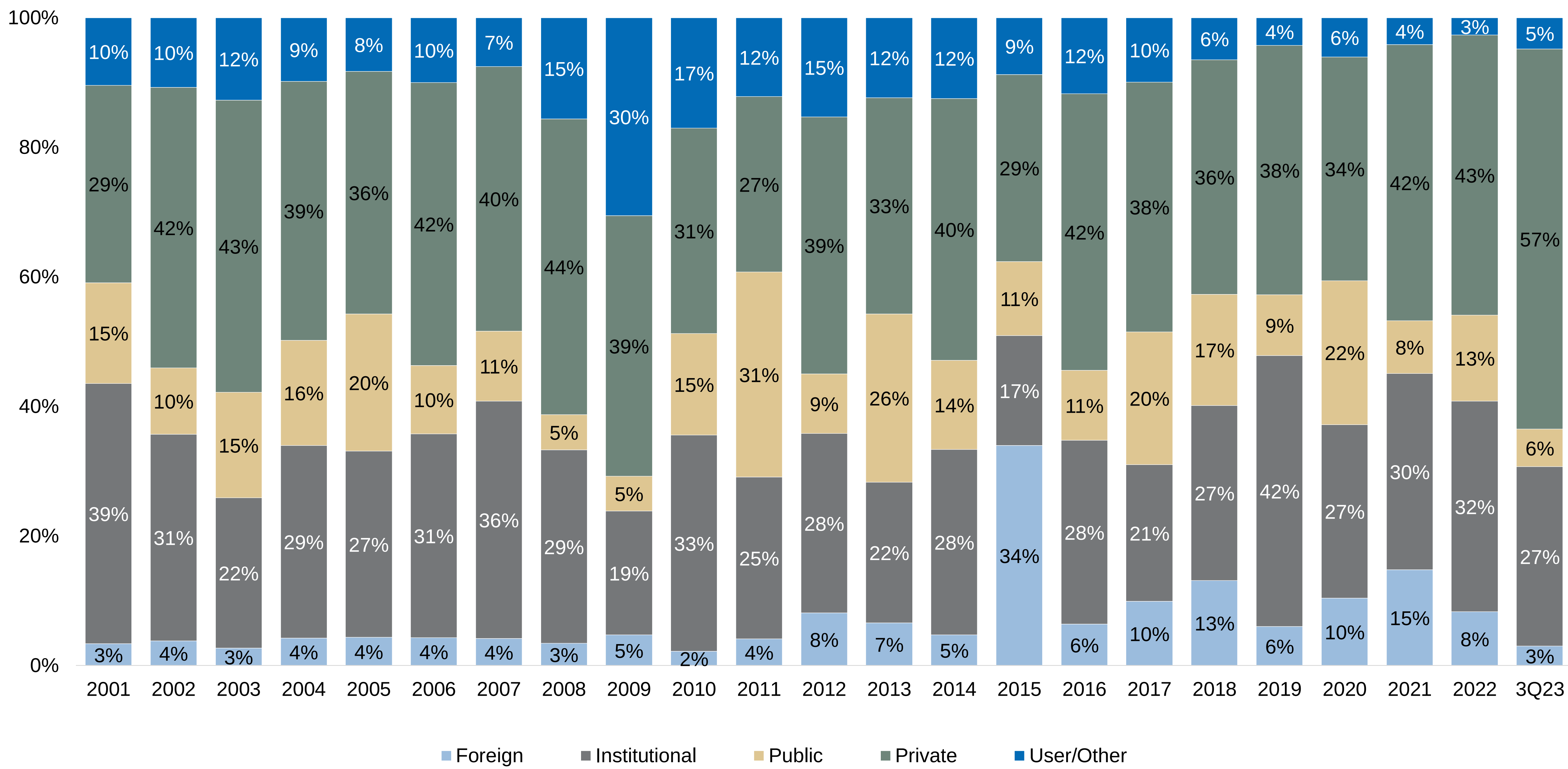


Source: Newmark Research, MSCI Real Capital Analytics

Private Buyers Accounting for Increasingly Larger Share of Volume

Across the ecosystem of investor profiles, only users acquired more in 3Q23 than in 3Q22, as attractive opportunities for site acquisitions increase. Private capital expanded market share the most, accounting for a record 57% of total acquisitions.

Composition of Industrial Buyers

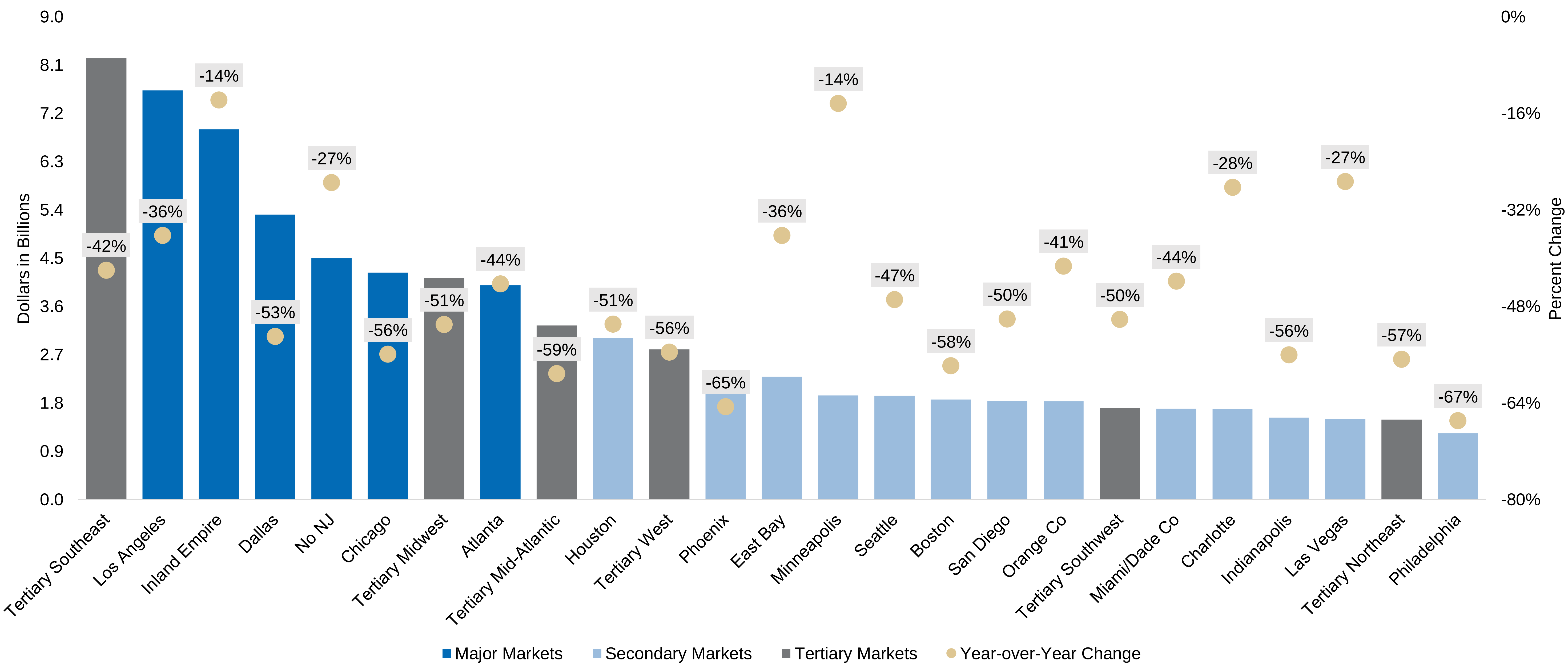


Source: Newmark Research, MSCI Real Capital Analytics

Volumes Down Universally; Primary Markets See Less Decline

None of the top 25 markets experienced positive sales volume growth year-over-year, with primary markets demonstrating the most resilience with an average 38% drop-off compared to secondary and tertiary markets experiencing an average 45% and 52% decline, respectively. With the significant amount of investment in mega manufacturing projects throughout the Midwest, Mid-Atlantic and Southeast most prominently, tertiary markets with less existing exposure to institutional ownership may draw increasing interest as projects kick off.

Top 25 Industrial Markets by 12-Month Rolling Sales Volume, 3Q23

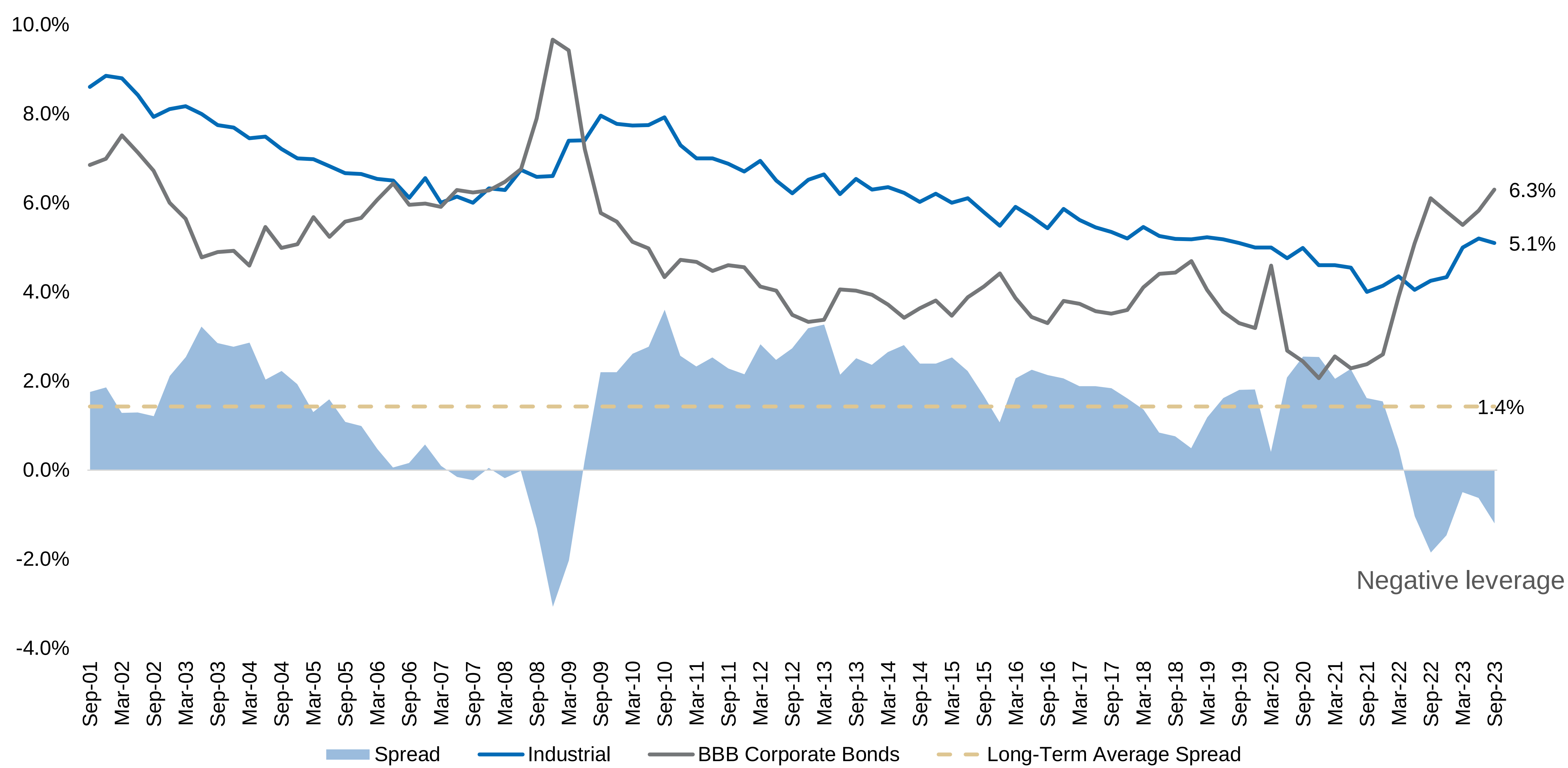


Source: Newmark Research, MSCI Real Capital Analytics

Cap Rate Optics At Odds with Cost of Debt

Industrial transaction cap rates have increased 80 basis points from the end of 2022. Further increases stalled in the third quarter even though the market is still far from equilibrium. The long-term average spread is 1.4% and it is -1.2% today. Cap rates can be misleading in an environment where persistent negative leverage is keeping buyer pools thin and primarily focused on a limited supply of properties. Further increases witnessed in REIT-implied cap rates during third quarter signal more adjustment in the private markets to come.

Top Quartile Transaction Cap Rate*

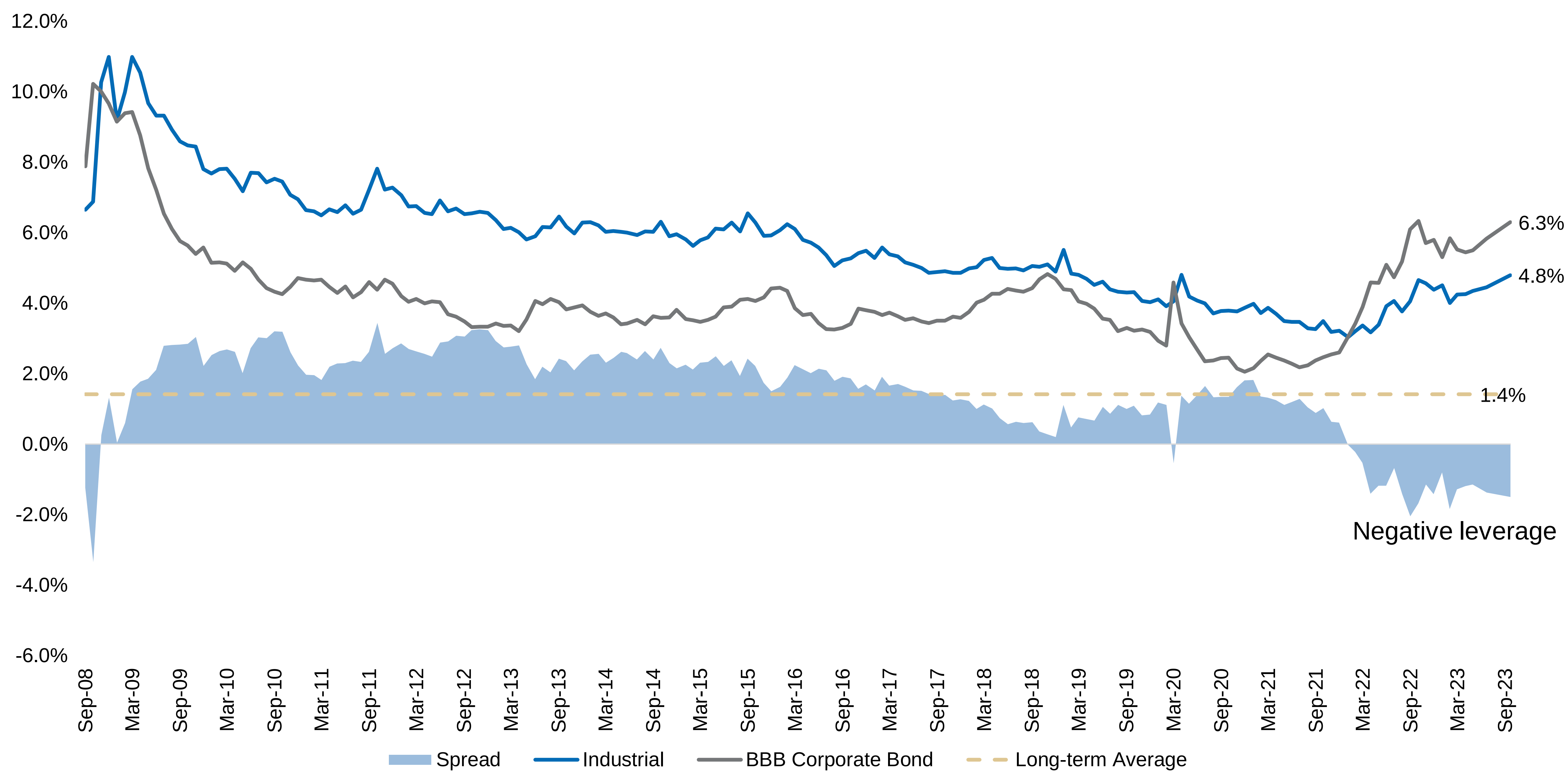


Source: Real Capital Analytics, Federal Reserve Bank of St. Louis, Moody's as of 11/7/2023
*Quarterly

Adjustment Process Continues in the Public Markets

Public and private markets alike have been in a state of negative leverage for over a year, with public markets quicker to react and range-bound longer. Buyers are tending to underwrite achieving positive leverage within two to three years, anticipating (hoping for) falling debt costs in the future. Uncertainty around the future cost of debt persists.

REIT-Implied Nominal Cap Rate



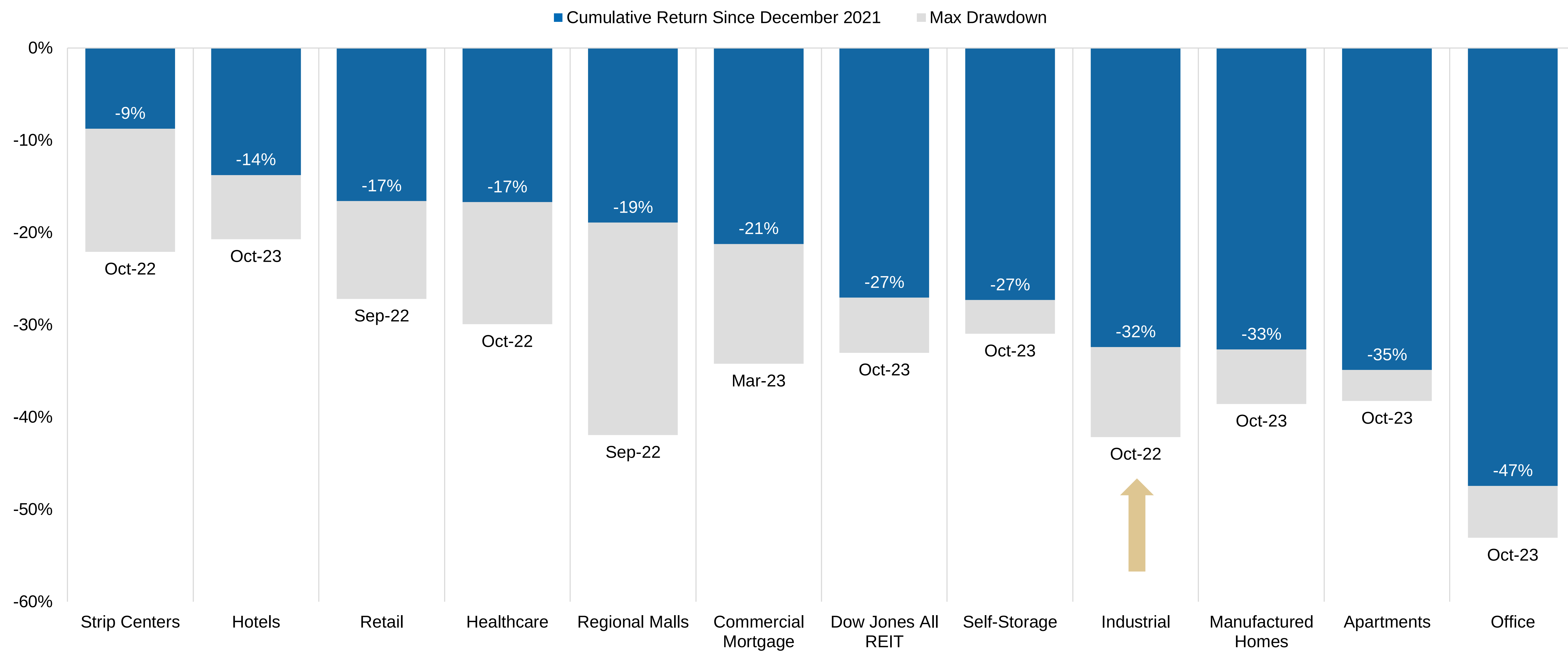
Source: Green Street, FRED, Nareit, Newmark Research as of 11/7/2023

Bigger Isn't Necessarily Better – Larger Deals See Larger Drop-Off

REITs Have Fallen across Sectors since the Start of the Hiking Cycle

REITs rebounded in the first half of 2023 but stumbled again the third quarter as most sectors set or retest post-2021 lows. On net, REITs have returned -2.7% in the year to date led by healthcare (+6.6%), commercial mortgage REITs (+4.7%) and hotels (+1.9%). Office and apartment REITs are both the worst performing sectors cumulatively but also set new record lows in October. Industrial REITs are flat year-to-date supported by continued cash flow growth. This, however, is set against unsustainable implied cap rates and AFFO yields.

Dow Jones REIT Index Total Returns

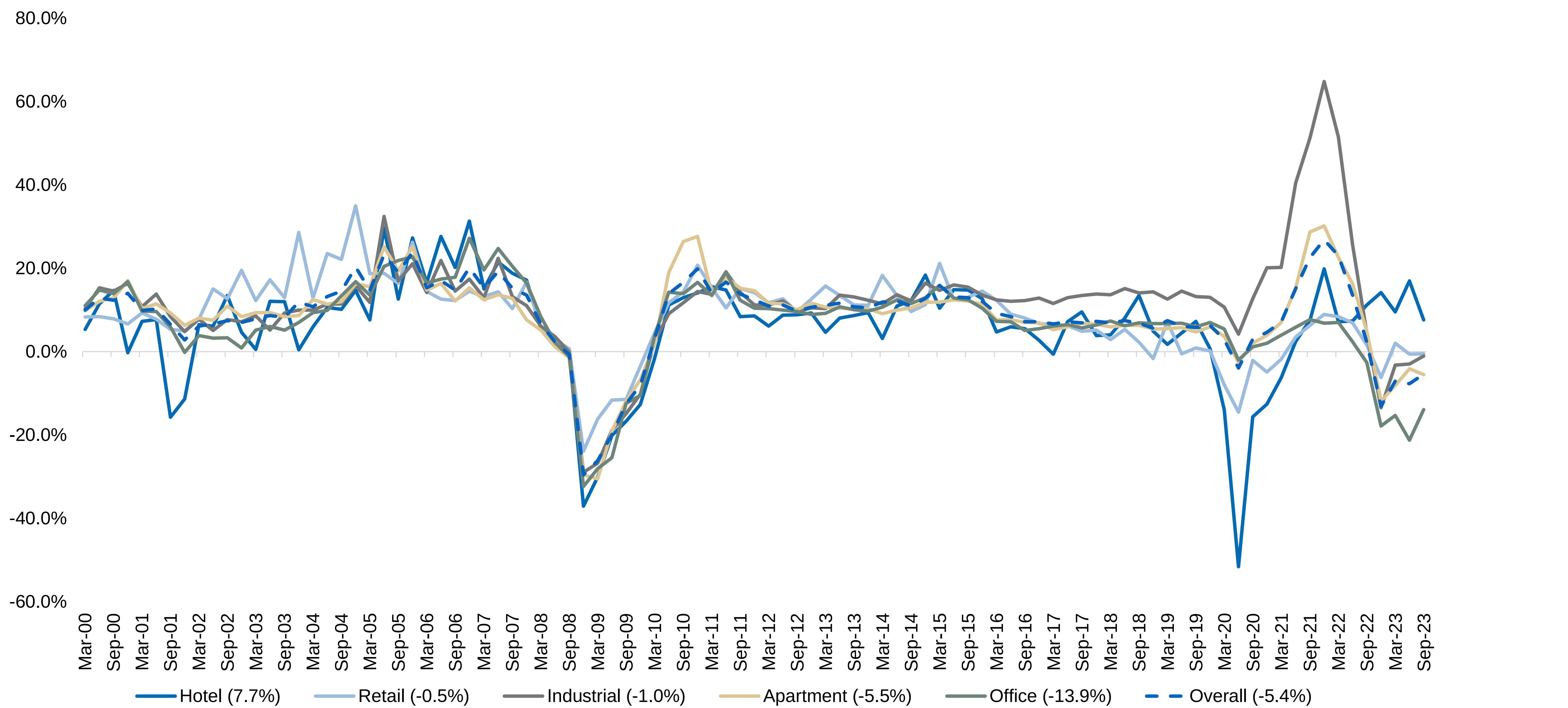


Source: Dow Jones, Moody's, Newmark Research as of 11/8/2023

Private Market Core Properties Returned -5.4% Annualized in 3Q23

All major property types (with the notable exception of hotels) generated negative returns in the third quarter. Office continues to be a clear outlier to the downside as returns continued to decelerate and seem to be on a path to match the depths of the GFC. Apartment and industrial returns were negative though far more modestly. Retail decelerated into negative territory but continues to outperform. Keep in mind that appraisal-based returns are especially unreliable in illiquid periods like the current one.

NCREIF National Property Index Quarterly Annualized Total Return

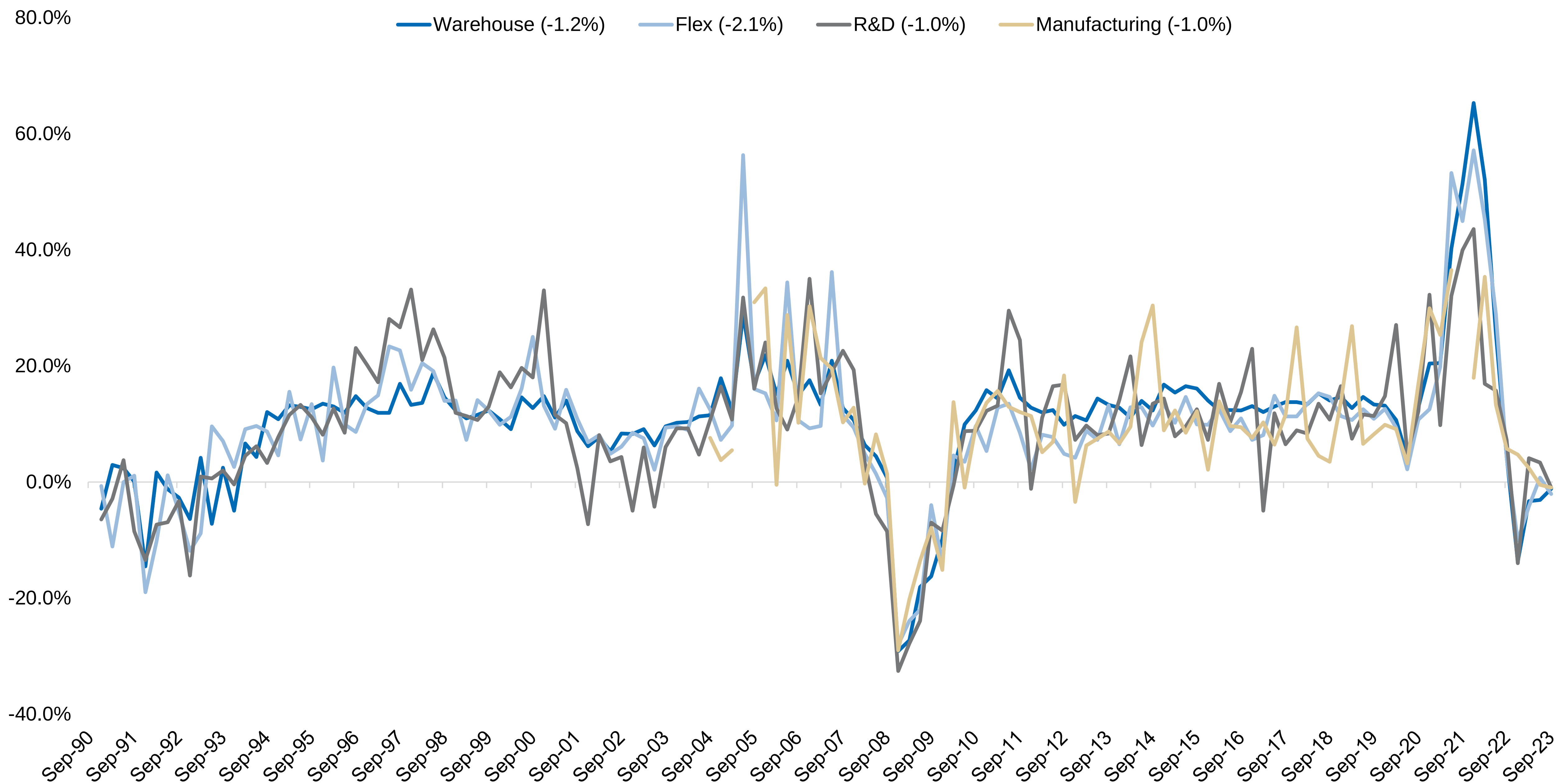


Source: NCREIF, Newmark Research as of 11/8/2023

NCREIF Industrial Returns Decelerated in Q3, Led by R&D and Flex

Warehouse – by far the largest segment – returns remained negative, contracting at a 1.2% annualized pace. This represents a modest acceleration from the prior quarter (-3.1%) but significantly better than the sharp contraction in Q4 2022 (-13.7% annualized). Nonetheless, warehouse properties have returned 80% cumulatively since 1Q20 according to NCREIF.

NCREIF Quarterly Annualized Total Return

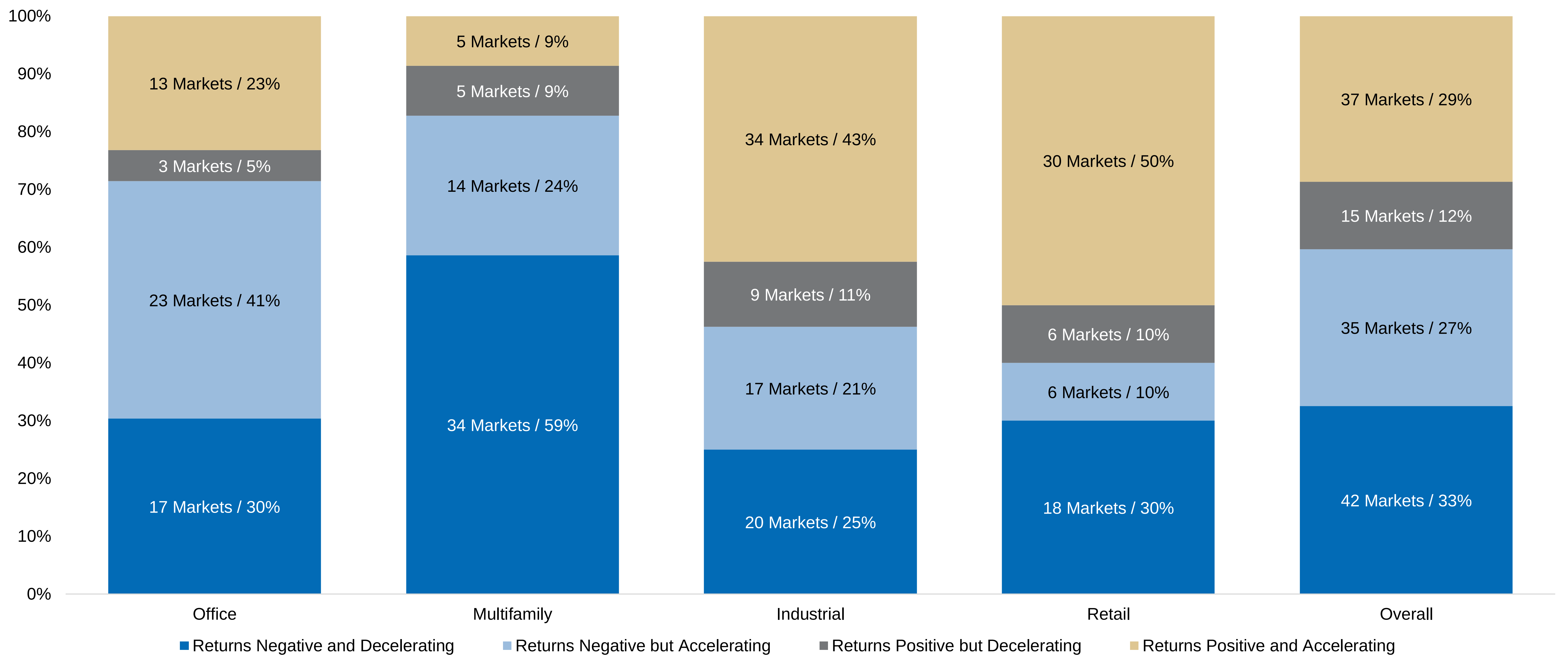


Source: NCREIF, Newmark Research as of 11/8/2023

NCREIF Returns Negative in 60% of Markets, but Variation by Property Type

Returns were negative across large majorities of office and multifamily metro markets, continuing the pattern from last quarter. Last quarter, most negative return office markets were decelerating while the converse was true for negative return multifamily markets. In 3Q23, this is reversed. Industrial and retail property returns were positive in most markets in the third quarter, and among these, mostly accelerating. The share of positive/accelerating increased for both sectors but most pronouncedly for retail, going from 26% in Q2 to 50% in Q3.

Breakdown of NCREIF CBSA Total Returns: 3Q 2023



Source: NCREIF, Newmark Research as of 11/8/2023

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Newmark has implemented a proprietary database and our tracking methodology has been revised. With this expansion and refinement in our data, there may be adjustments in historical statistics including availability, asking rents, absorption and effective rents. Newmark Research Reports are available at nmrk.com/insights.

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