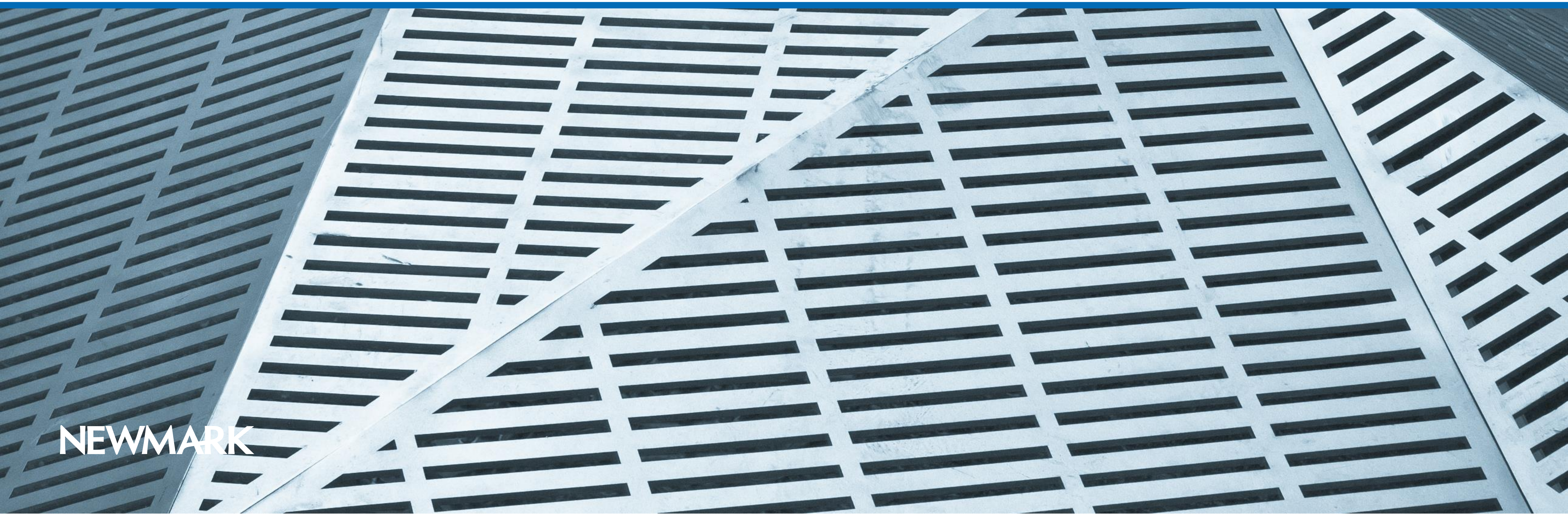
1Q23

The National Industrial Market: Conditions & Trends



NEWMARK

Market Observations

1. Tighter Lending Environment, Higher-Priced Debt Impacting the Industrial Market

- Retail spending remains resilient, yet a constricted credit environment exacerbated by recent high profile bank failures may adversely impact consumption.
- Banks continue to dominate industrial property finance in the first quarter of 2023 but are tightening lending standards across the board. The share of banks tightening standards for construction loans rose to nearly 70% in the first quarter of 2023.

2. Economic Challenges Persist but the Industrial Sector Remains on Long-Term Growth Trajectory

- U.S. GDP growth slowed in the first quarter of 2023 but stayed positive, a trend likely to reverse in the coming quarters as consensus signals an upcoming mild recession.
- Global supply chain transformation will buoy the market. Advanced manufacturing continues to expand domestically to meet long-term structural needs.

3. While Demand is Decelerating, Overall Market Fundamentals Remain Healthy

- Absorption in the first quarter of 2023 totaled 64.3 msf. This was the best first-quarter total on record compared to pre-pandemic history, but also a 40.4% decline from the fourth quarter of 2022, a larger drop than the typical 5% to 10% decrease from the fourth to the first quarter.
- The 664.4-million-square-foot construction pipeline trended downward for the second consecutive quarter upon record deliveries and sharply decelerating new starts.
- Annual rent growth posted its highest gain yet (21.1%), but forecast scenarios show decelerating, if still strong, rent growth throughout 2023.

4. Capital Markets Cooling Continues

- Sales volume in the first quarter of 2023 dropped nearly 55% year over year, but was right in line with pre-pandemic history, measuring 5.0% above volume in the first quarter of 2019.
- Industrial cap rates saw significant movement, increasing 70 basis points from the prior quarter. The cost of debt will continue to place upward pressure on cap rates over the course of 2023.
- Record industrial loan maturities (heavily concentrated in bank and securitized borrowings) are coming due between 2023 and 2024. However, among all property types, the industrial sector has the lowest share of at-risk securitized debt maturing over this timeframe.

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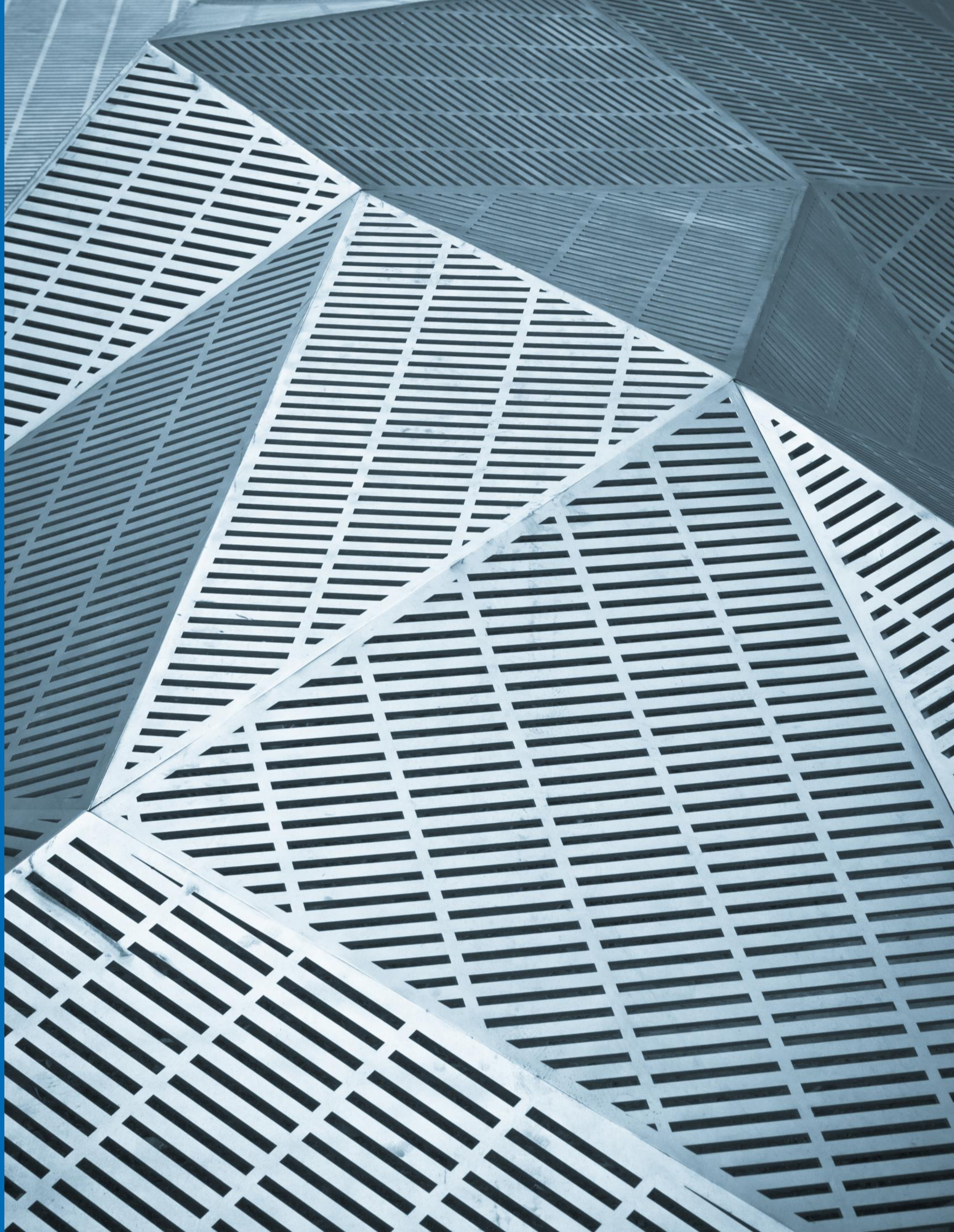
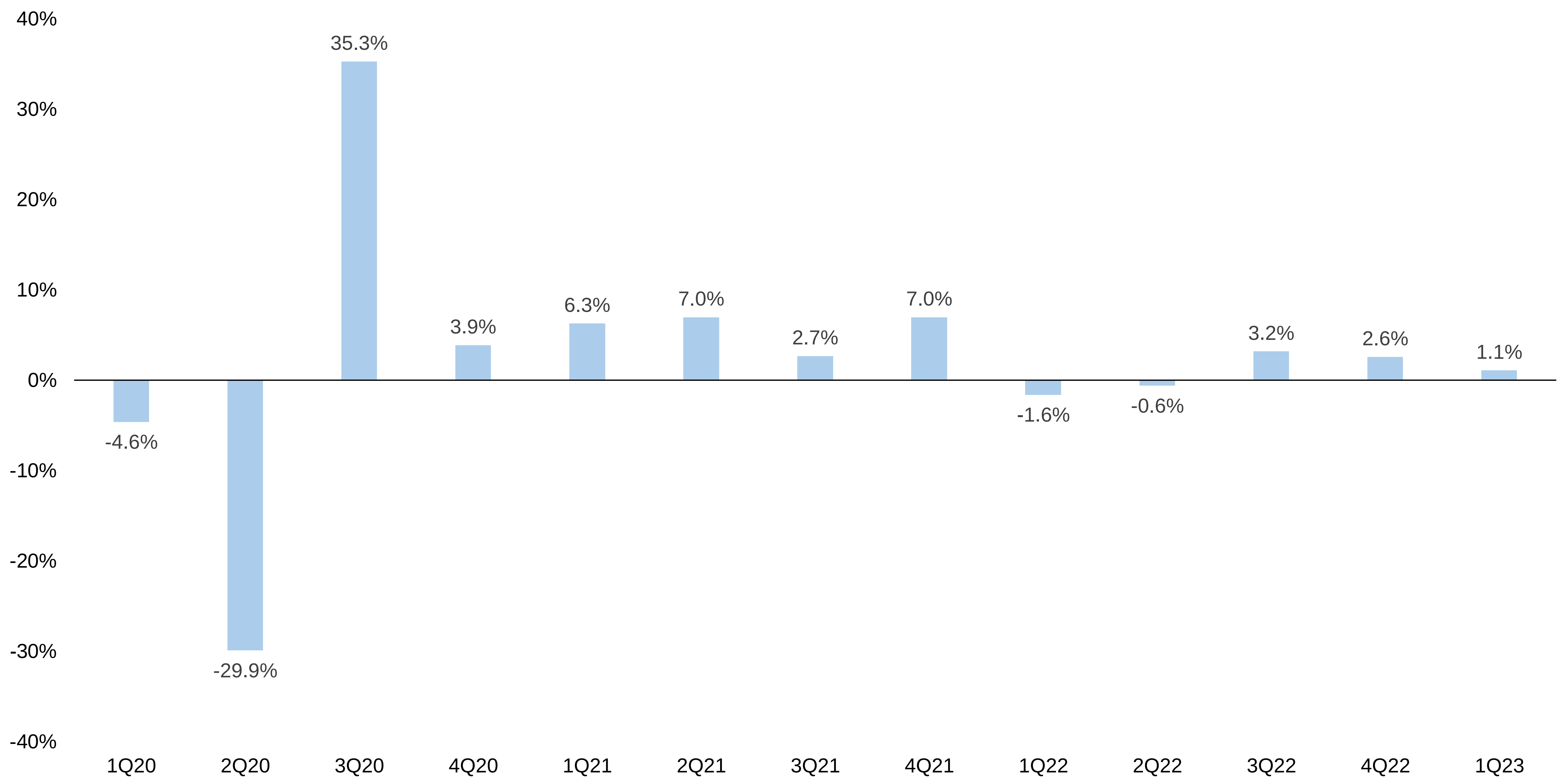
Demand Drivers



U.S. Economic Growth Slowed in the First Quarter of 2023

Economic growth as measured by GDP rose at an inflation- and seasonally-adjusted 1.1% annual rate amid persistently high inflation and rising interest rates, slipping from 2.6% growth in the fourth quarter of 2022. Consumption, a significant part of GDP and an integral driver of industrial demand, continues to remain strong if decelerating.

Real GDP, Annualized Percent Change

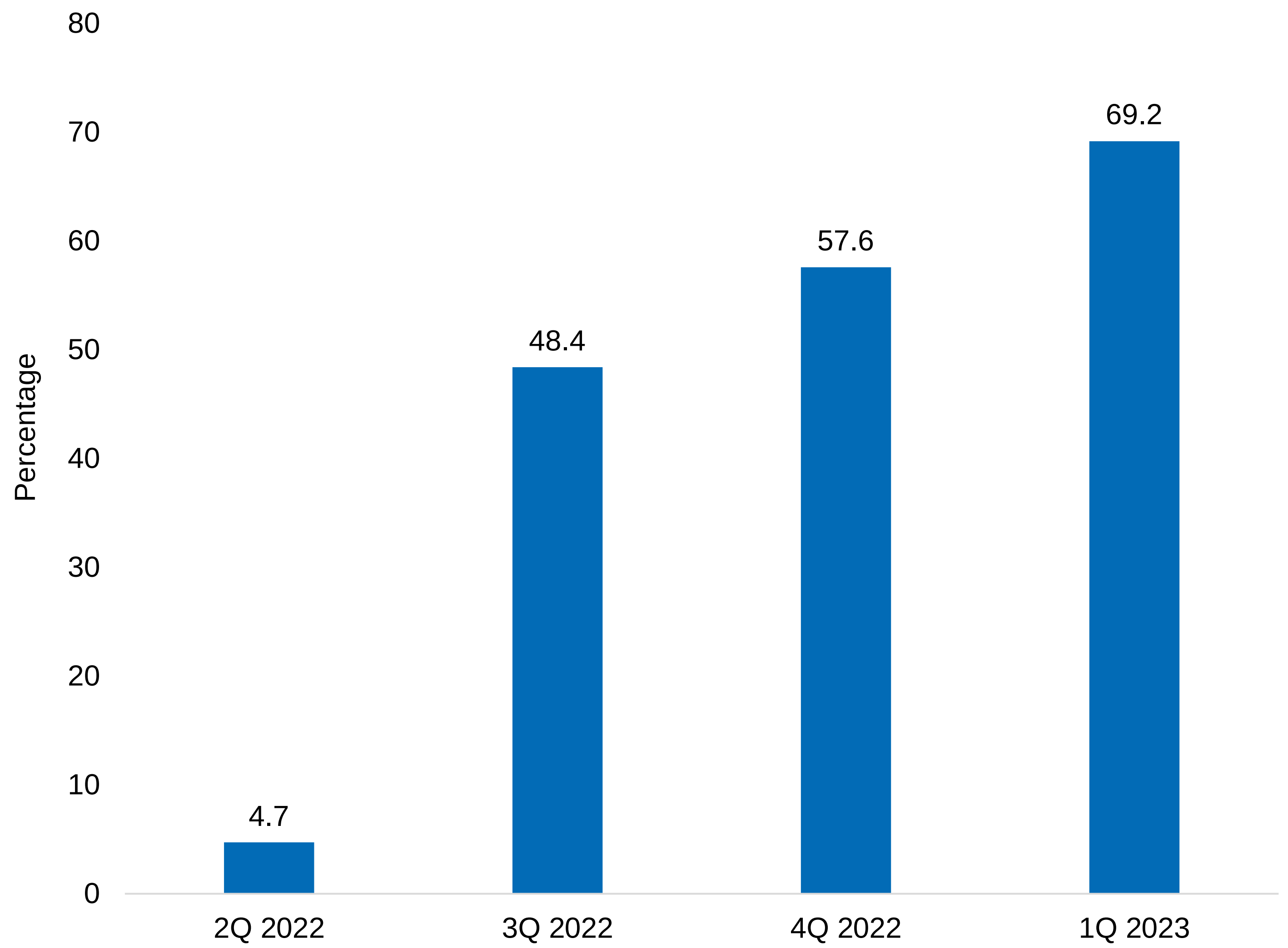


Source: Newmark Research, St. Louis Federal Bank

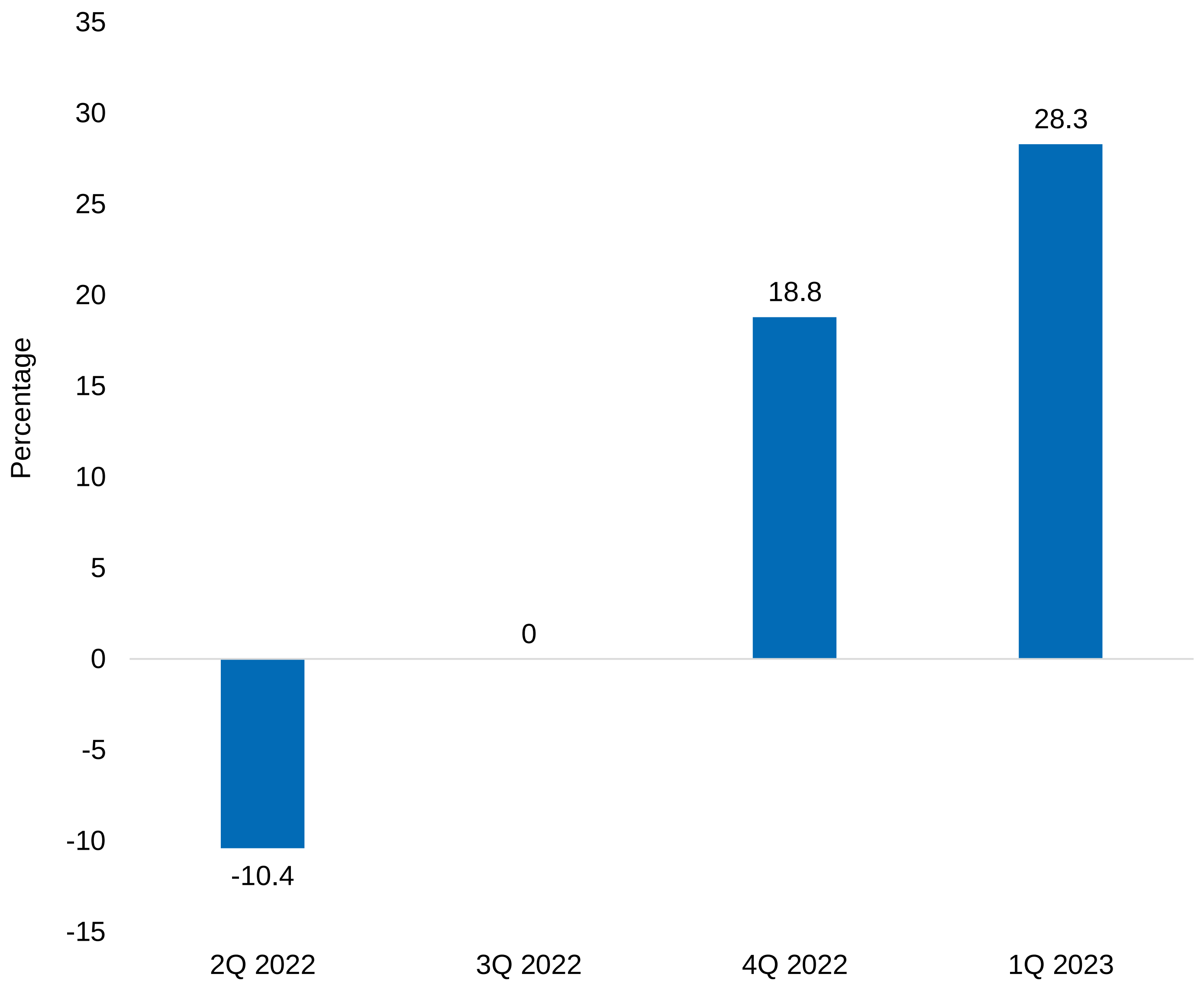
Tightening Lending Standards Will Reverberate throughout the Industrial Market

In the aftermath of numerous high-profile bank failures, the share of domestic banks that have tightened lending standards rose in the first quarter of 2023, which will impact consumer spending and industrial development.

Net Share of Banks Tightening Standards for CRE Construction Loans



Net Share of Banks Tightening Standards for Credit Card Loans

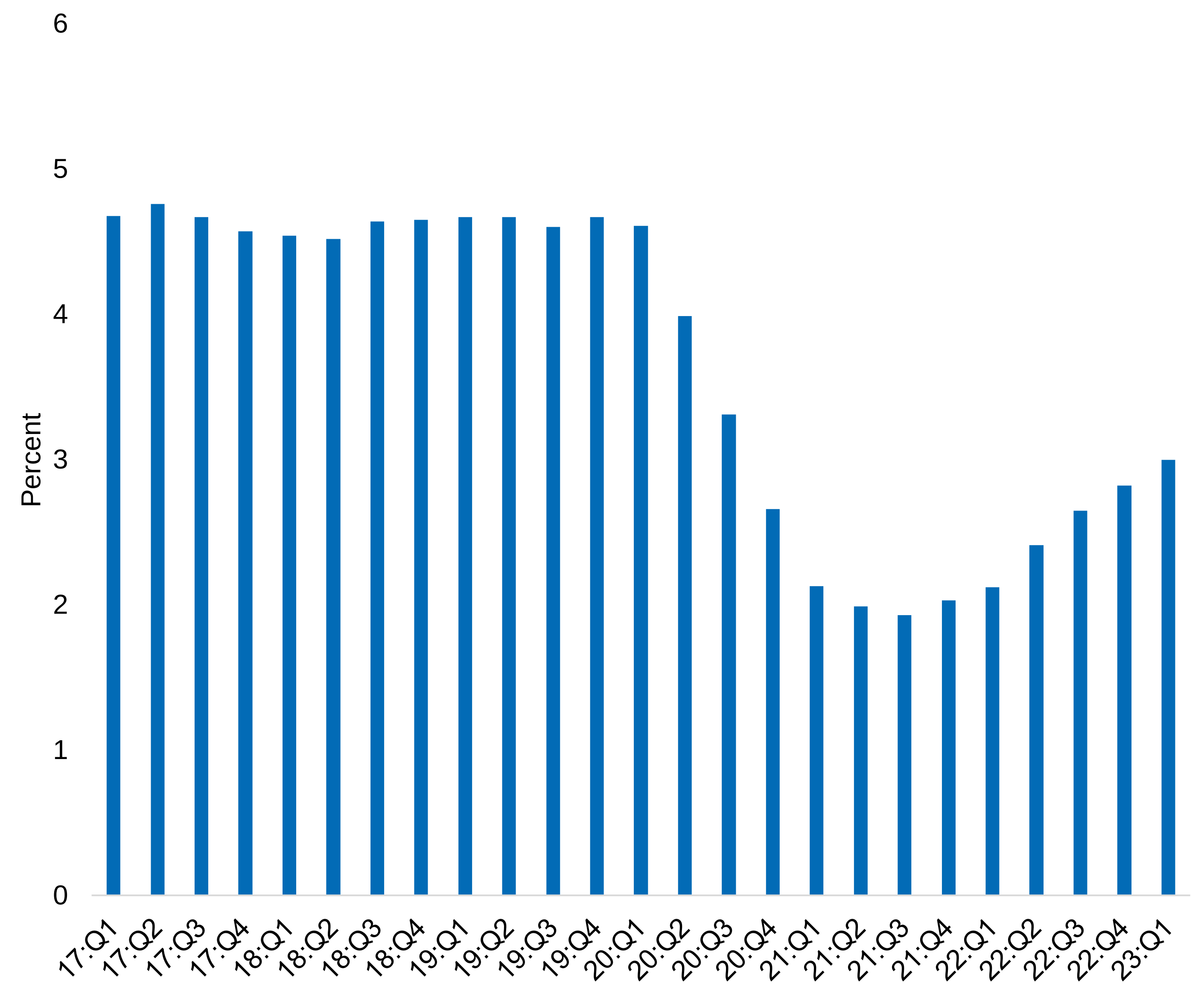


Source: Newmark Research, Board of Governors of the Federal Reserve

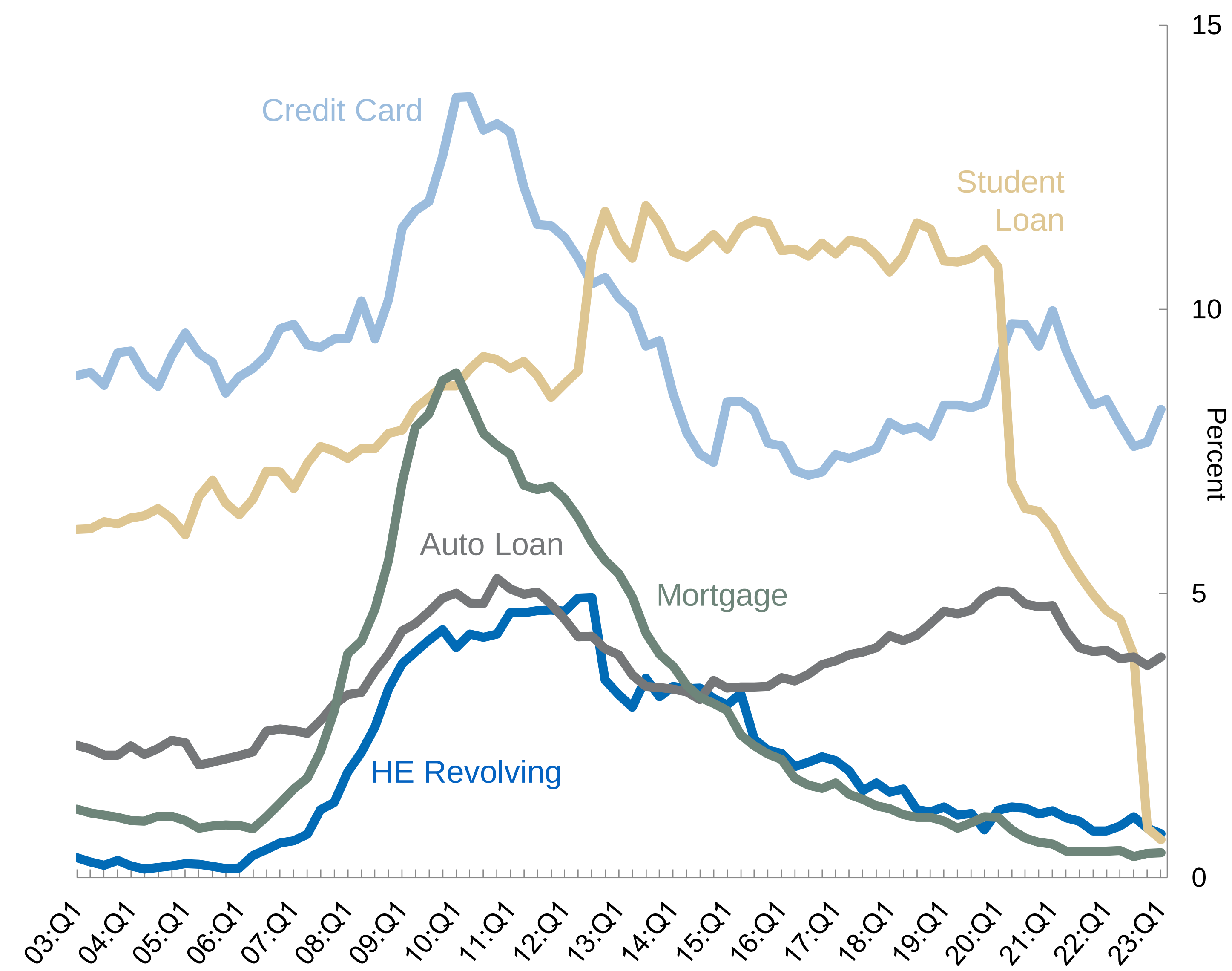
Consumer Loan Delinquencies Remain Low but Are Rising

In the first quarter of 2023, 3.0% of consumer debt newly transitioned into delinquency – a significantly lower share than pre-pandemic quarterly measures but nonetheless rising from recent lows in 2021. Younger Americans (18- to 29-year-olds) are seeing the fastest rise in delinquencies which is concerning given millions of student-loan borrowers are still experiencing a freeze on federal loan payments.

Share of Debt Newly Transitioning into Delinquency



Percent of Balance 90+ Days Delinquent by Loan Type

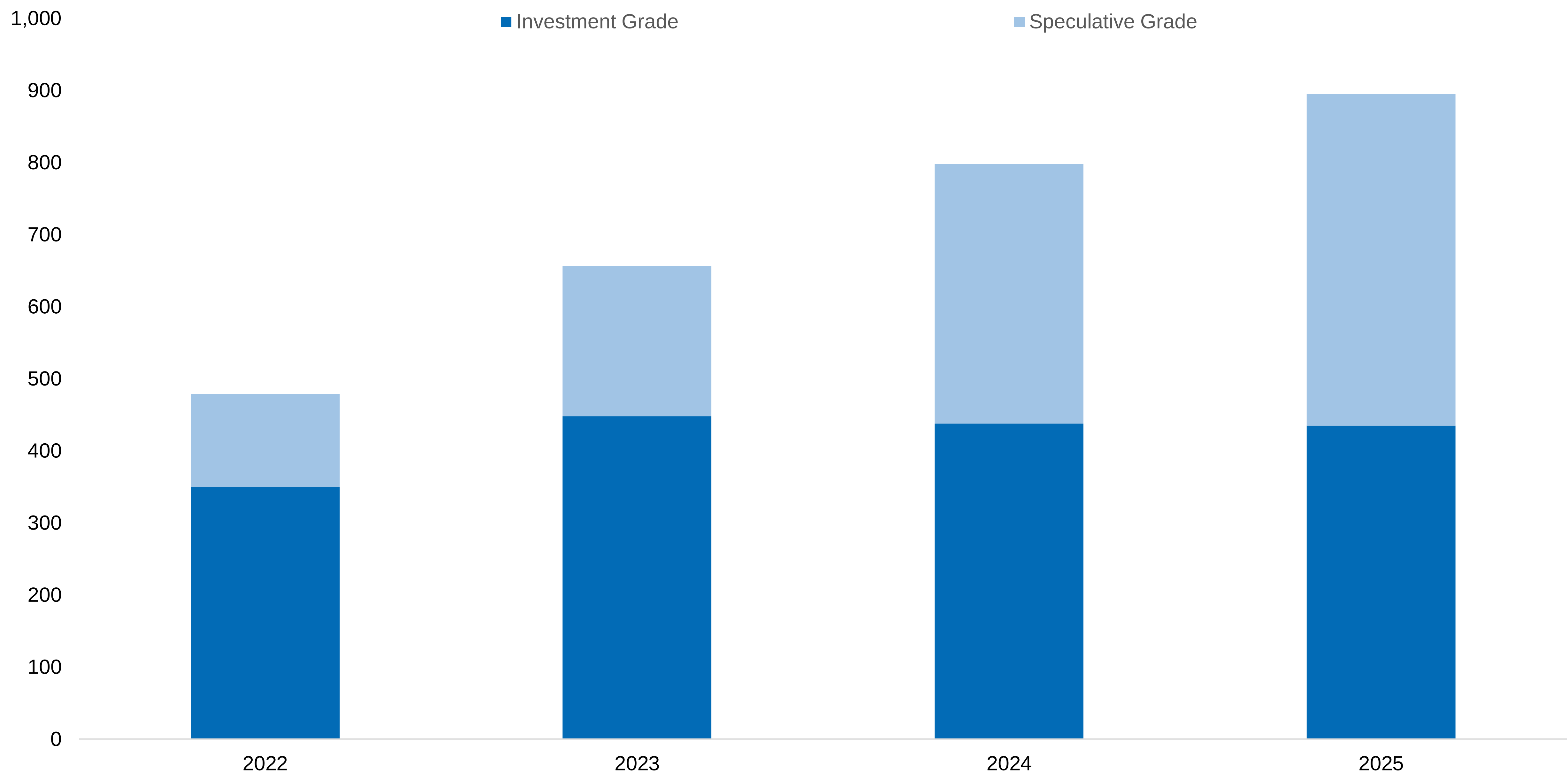


Source: Source: New York Fed Consumer Credit Panel/Equifax

Record Corporate Debt Maturities May Impact Industrial Demand

Maturing corporate debt may influence occupier and operating company priorities as some firms will focus on expending capital in avenues other than real estate. Large and well-capitalized firms are well positioned to gain from an expected increase in M&A activity starting in the latter half of 2023.

U.S. Nonfinancial Corporate Debt Maturities ($B)

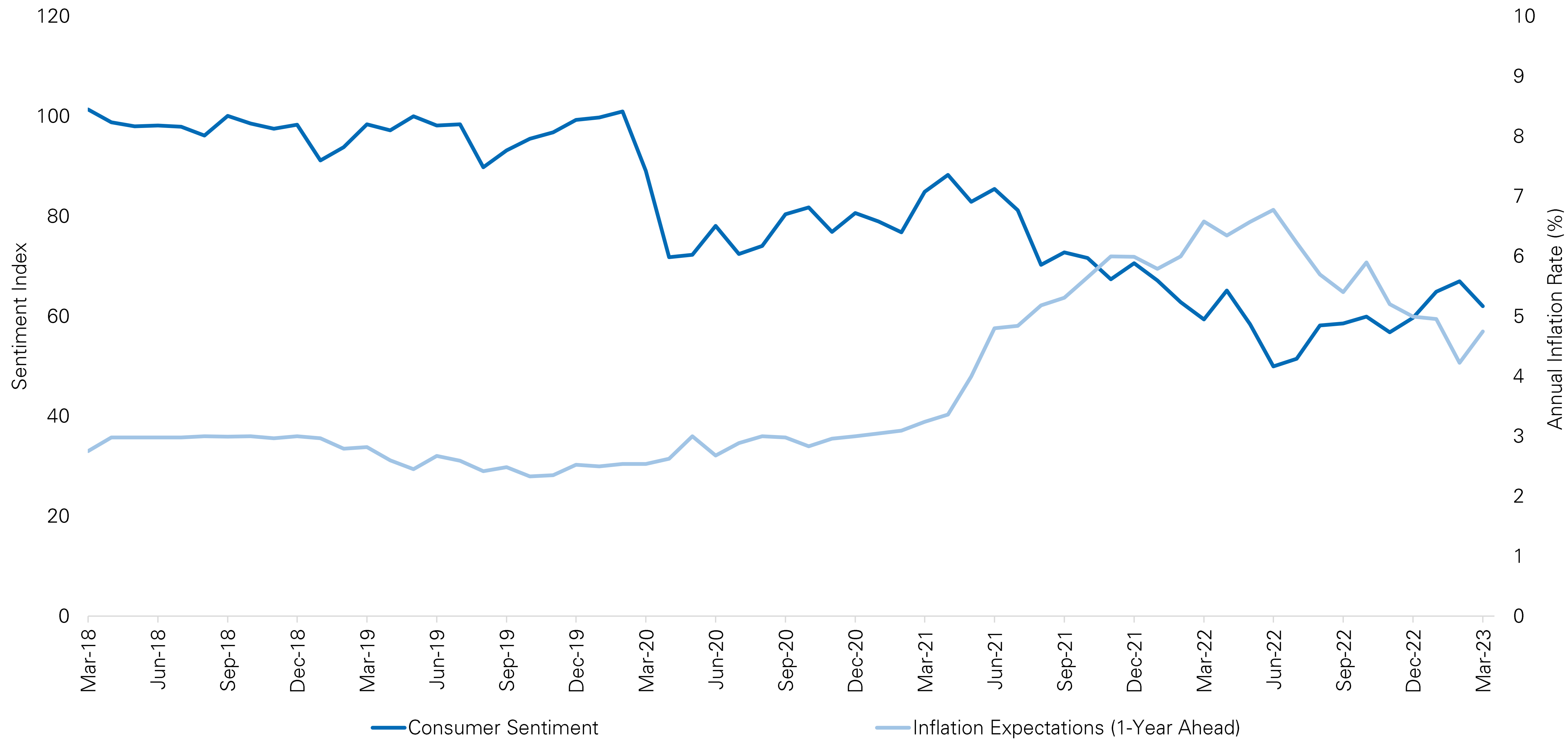


Source: Newmark Research, S&P Global, Morgan Stanley

Consumer Opinion Fluctuating but Still Trending in Positive Directions

Consumers demonstrated mixed feelings about the economy in the first three months of the year through sentiment and inflation expectations surveys. Consumer sentiment has haltingly lifted from its cyclical nadir in mid-2022 as expectations for future inflation moderated over the same period.

Consumer Sentiment and Inflation Expectations

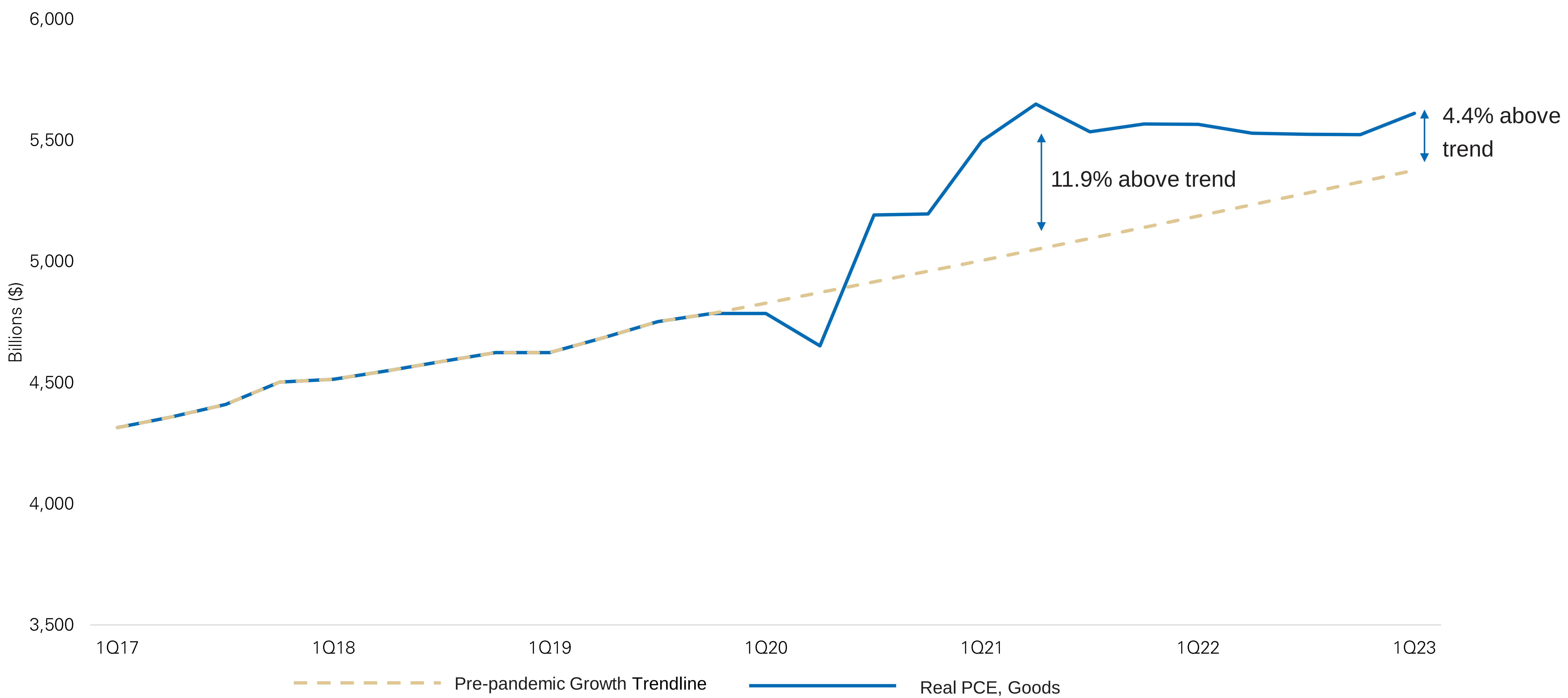


Source: Newmark Research, Federal Reserve of NY, University of Michigan

Primary Economic Driver of Industrial Demand Normalizing; Still Well Above Trend

Although consumer spending is decelerating from 2021 heights, inflation-adjusted spending on goods in the first quarter of 2023 increased by 0.8% on the heels of persistent wage gains.

Real Personal Consumption Expenditures, Goods

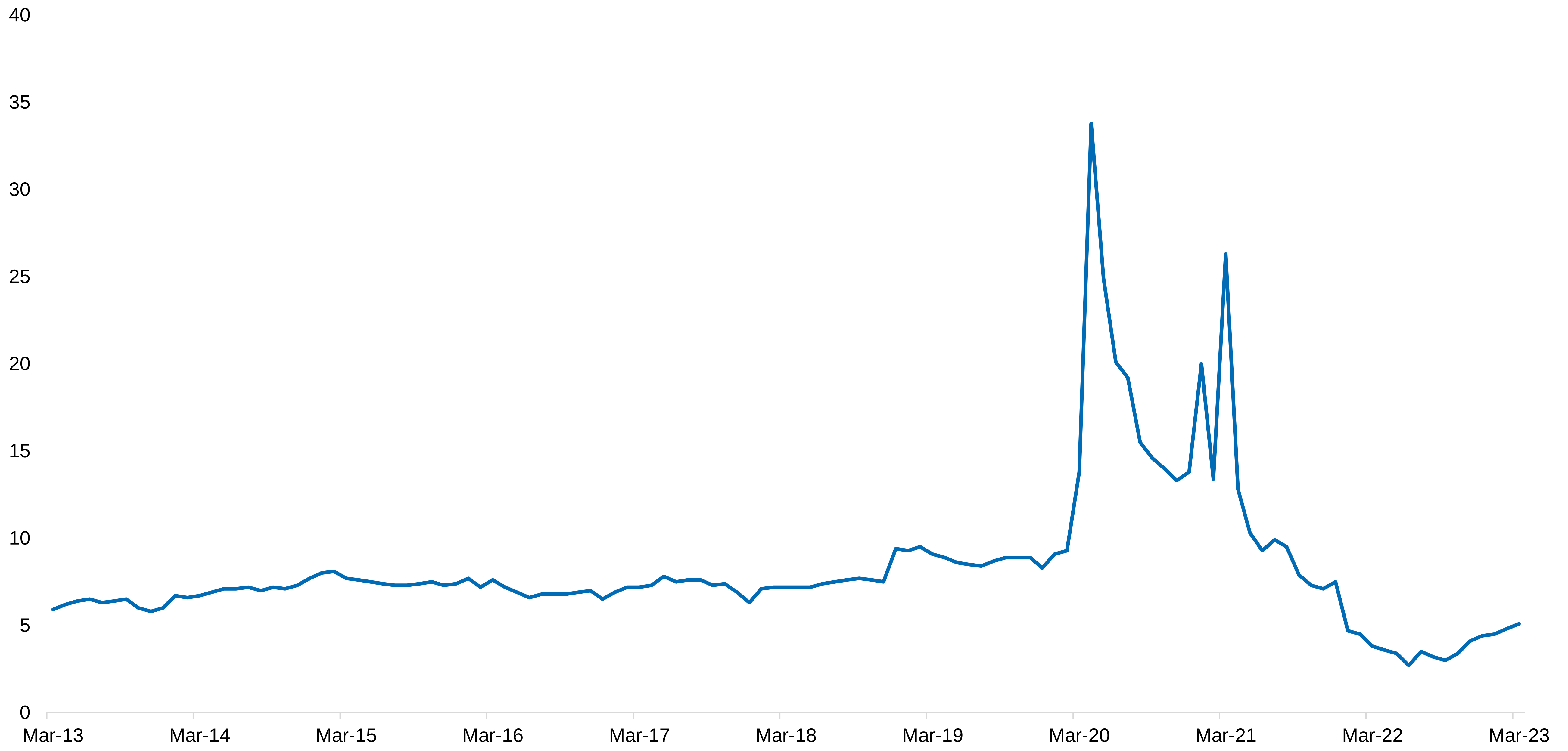


Source: St. Louis Federal Bank, Newmark Research

Consumer Savings Rate is Recovering as Inflation Gradually Lessens

The personal savings rate remains significantly under the long-term pre-pandemic average but at 5.1% in March 2023, it has steadily improved from mid-2022 measures when inflation was at its peak.

Personal Savings Percentage Rate

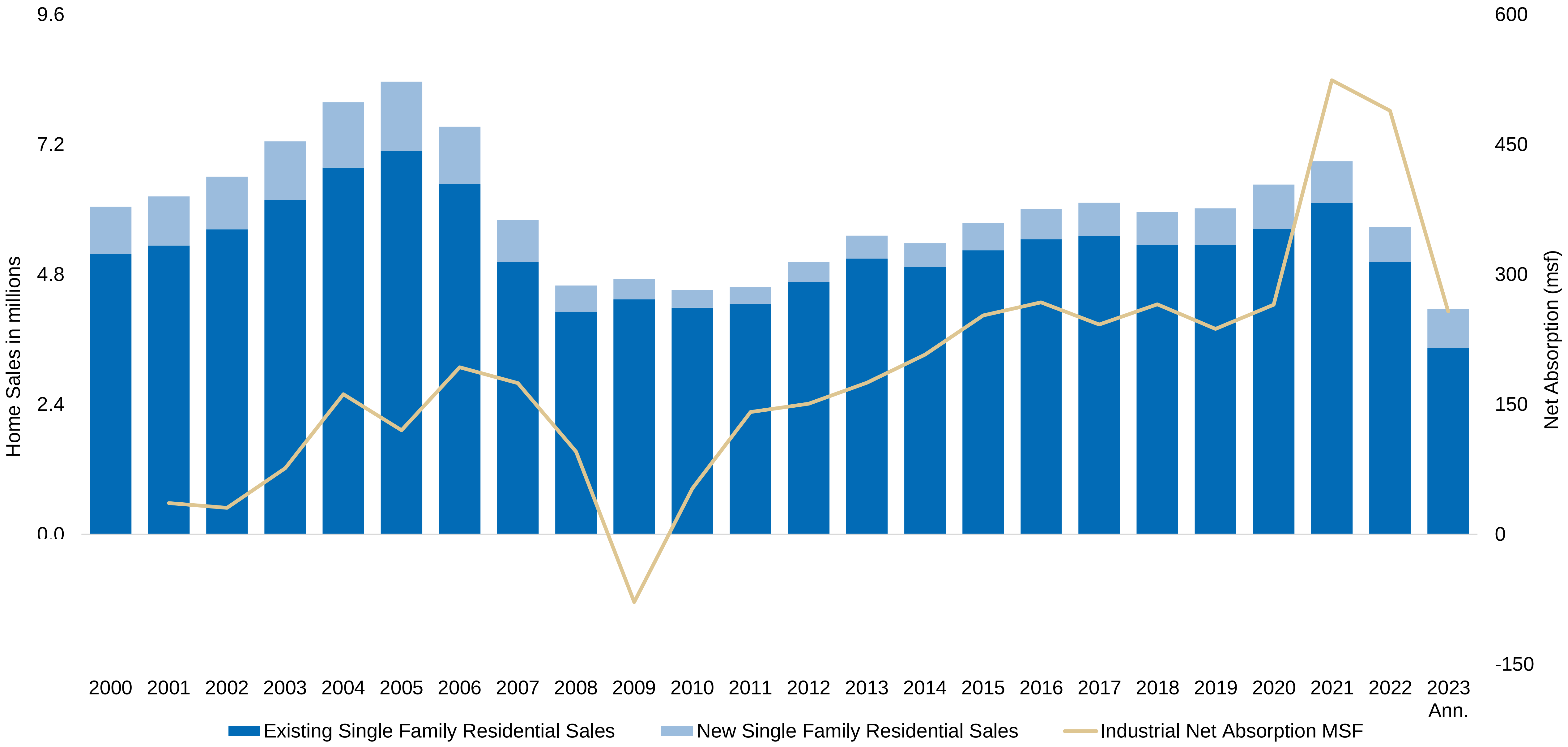


Source: St. Louis Federal Bank, Newmark Research

Home Sales Are Down amid Rising Interest Rates, but Show Signs of Improvement

Home sales drive a significant amount of goods consumption and, thus, industrial demand. January 2023 was the most recent low point for existing home sales at 231,000, with both February and March 2023 seeing rising existing home sales, 269,000 and 360,000, respectively. In another positive sign for the housing market, the 30-year fixed-rate mortgage average has remained around the mid-6.0% range, after topping out at 7.1% in the second week of November 2022.

Single Family Residential Sales and Industrial Net Absorption[1]



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

Growth in Supply Chain Costs is Easing (Unevenly)

Supply chain costs contribute to inflation; with their easing, less inflationary pressure will be felt across the economy. As freight volumes have downshifted, so have shipping costs. On the other hand, fixed and variable facilities costs such as rent and labor are still growing at rates above the Federal Reserve's target for inflation, but the rate of growth is slowing.

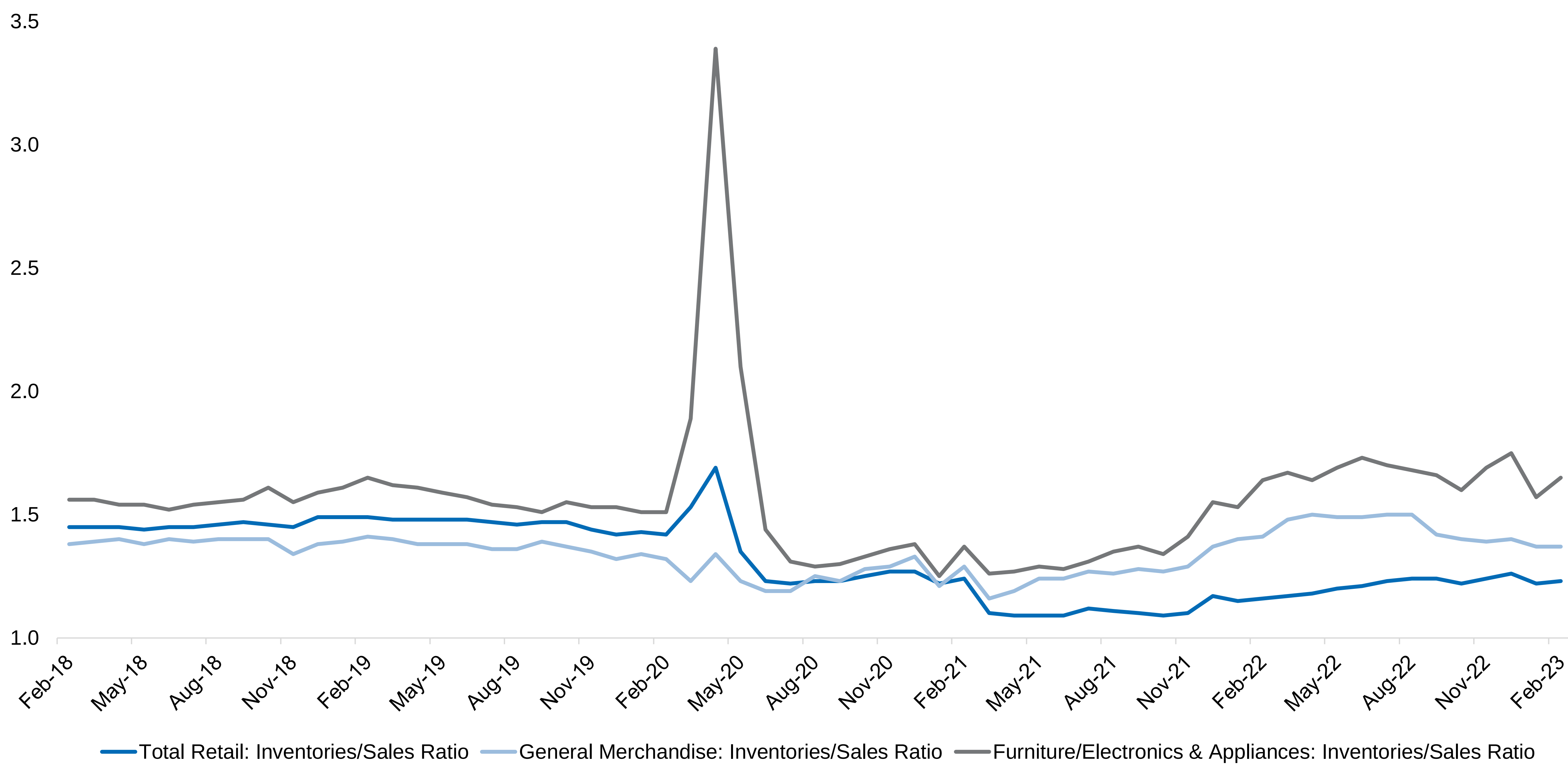
Key Supply Chain Costs: Selected Line Items and Year-Over-Year Change

Source: Freightos, FRED, Newmark Research. *Spot Rates from East Asia to West Coast of US.

Retail Inventories Are Normalizing

Excess inventories plagued retailers for much of 2022, but companies are managing inventory exposure better in 2023 thus far, visible in normalizing inventories to sales ratios. A frequent refrain on retailer earnings calls throughout the first quarter of 2023 was an expected return to historical norms for inventory levels in 2024. Some companies engaged in reshoring manufacturing to the U.S. will be able to keep leaner inventories on hand due to being able to replenish stock faster than before.

Inventories to Sales Ratio, Total Retail and Sector-Specific

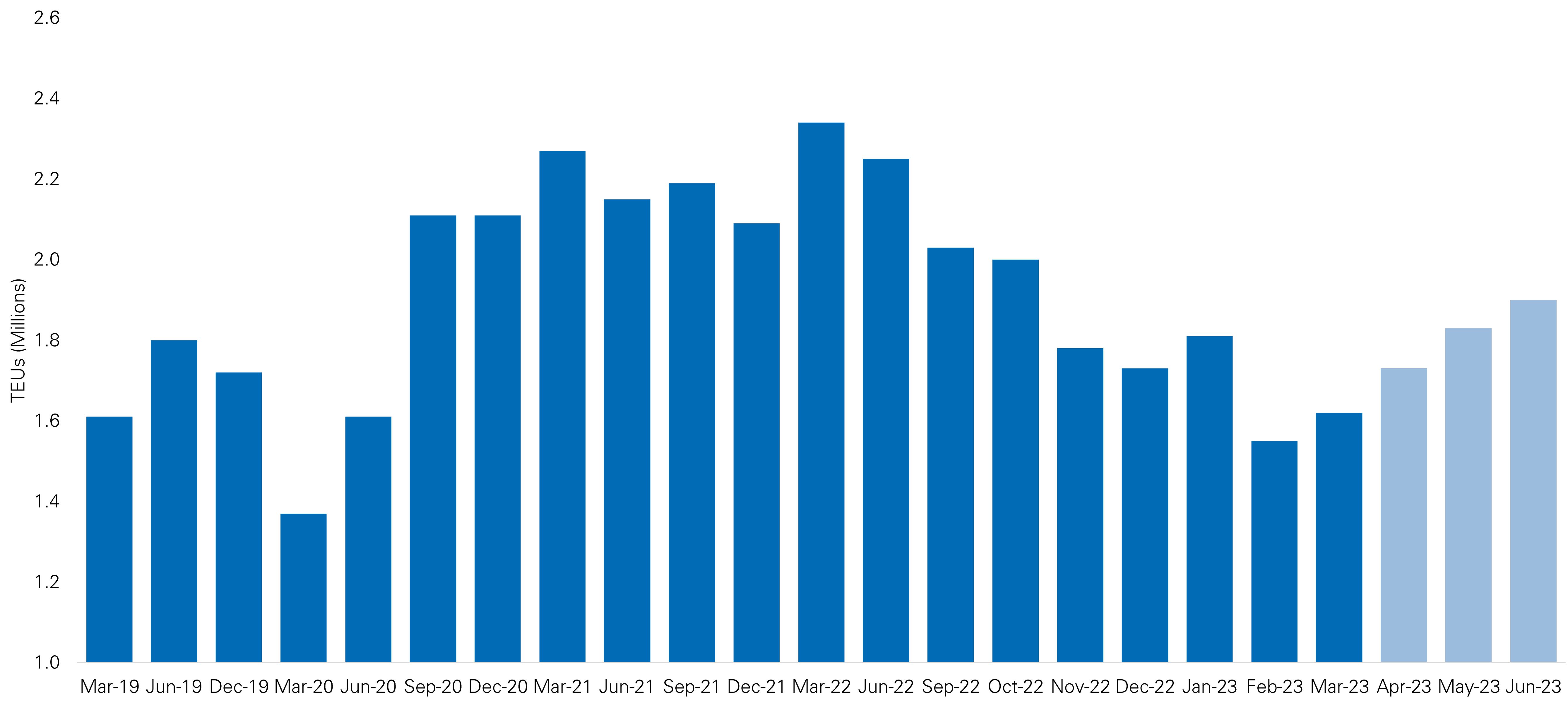


Source: St. Louis Federal Bank, Newmark Research, ISM

Containerized Imports to Resume More Sustainable Growth Pattern

Retail imports are rebounding from a nearly three-year low in February 2023 but are forecast to remain below last year's levels.

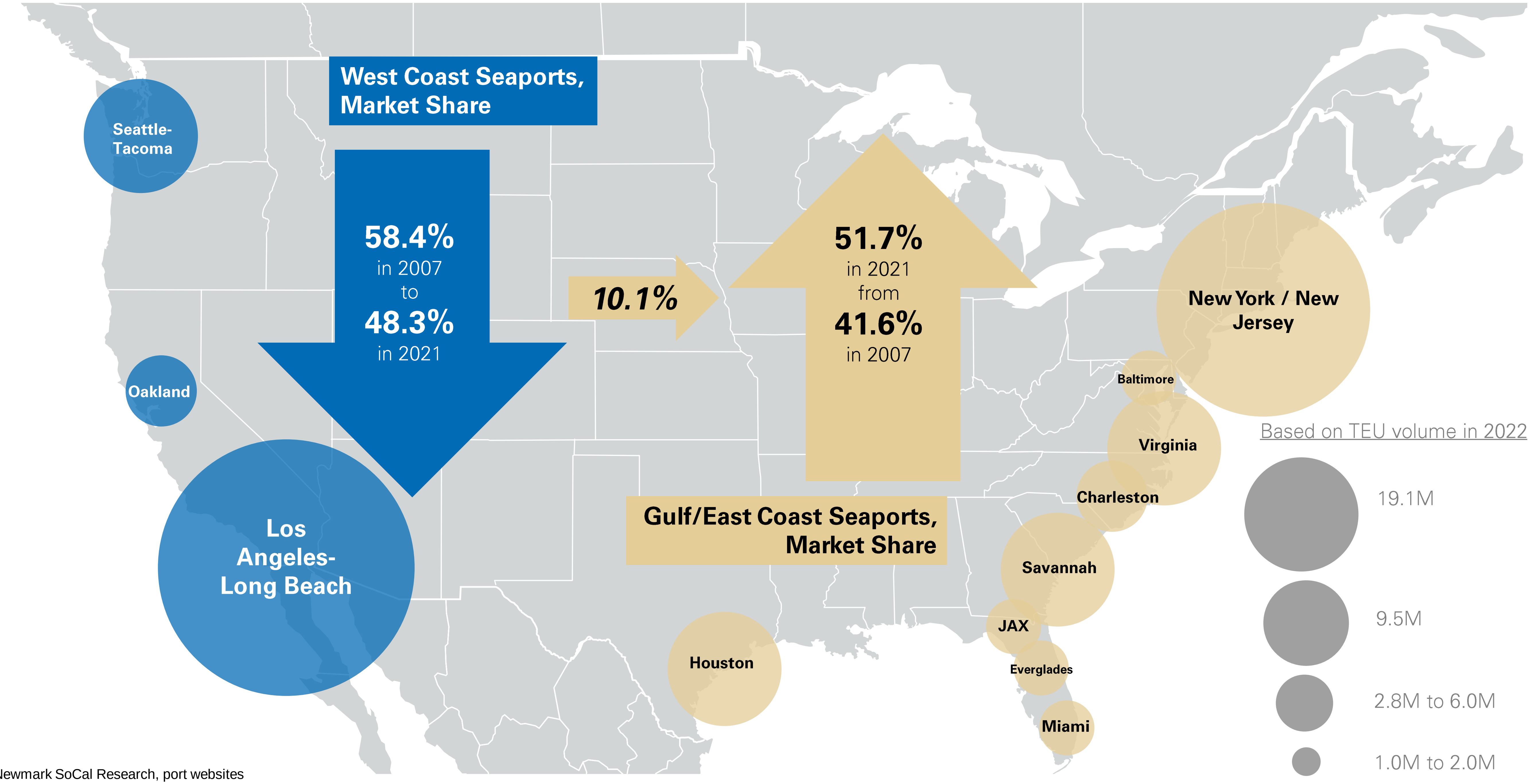
Global Port Tracker: U.S. Retail Imports



Source: National Retail Federation, Newmark Research

Import Market Share Is Shifting from the West to the East

U.S. Gulf and Eastern seaports have steadily gained market share from the West Coast seaports thanks to the investment in accommodating larger container vessels and other supportive infrastructure. Additionally, some global supply chains are moving from China toward friendlier South Asian countries, which align with East Coast sea routes for cost and speed to delivery considerations.

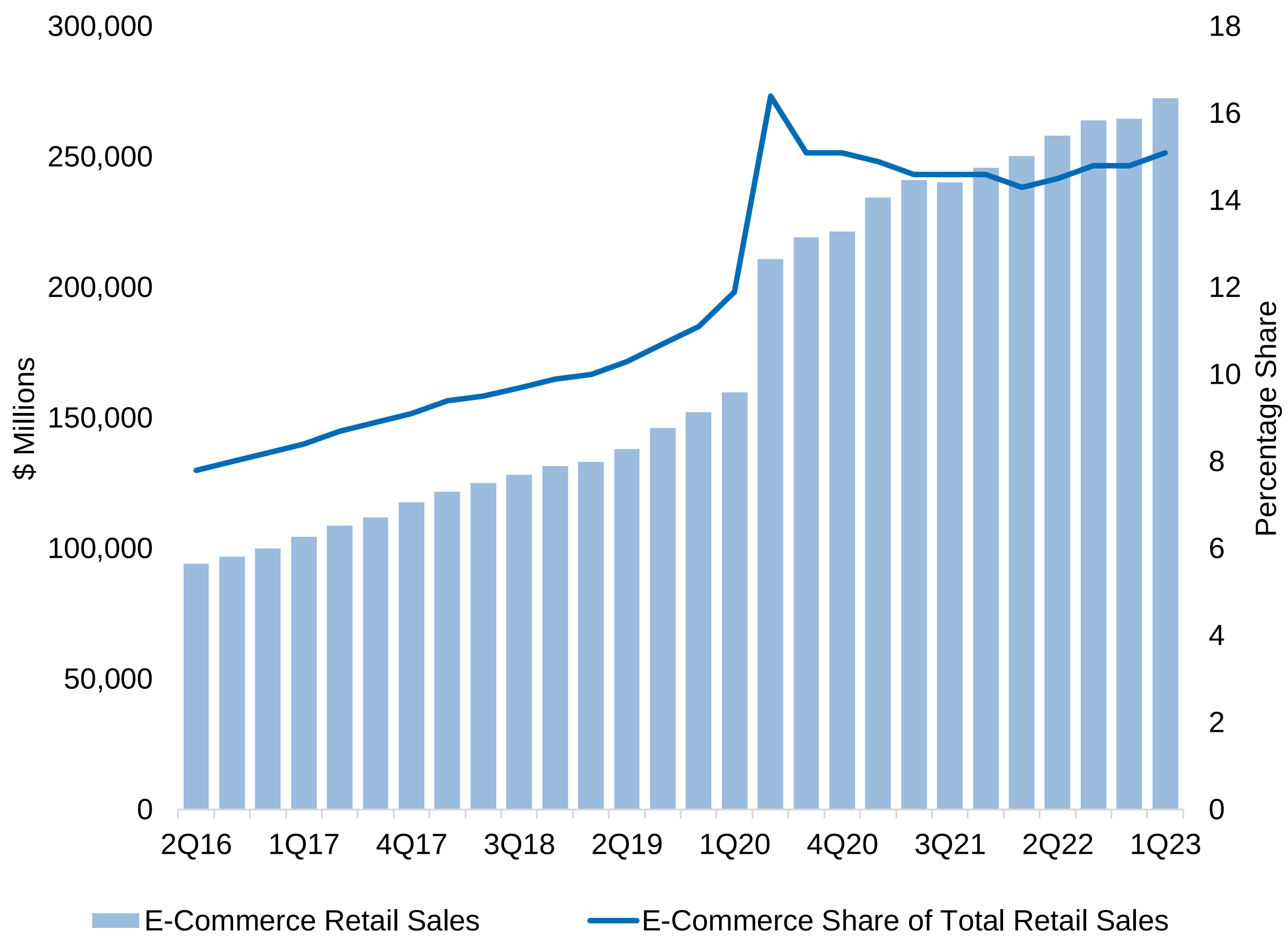


Source: Newmark SoCal Research, port websites

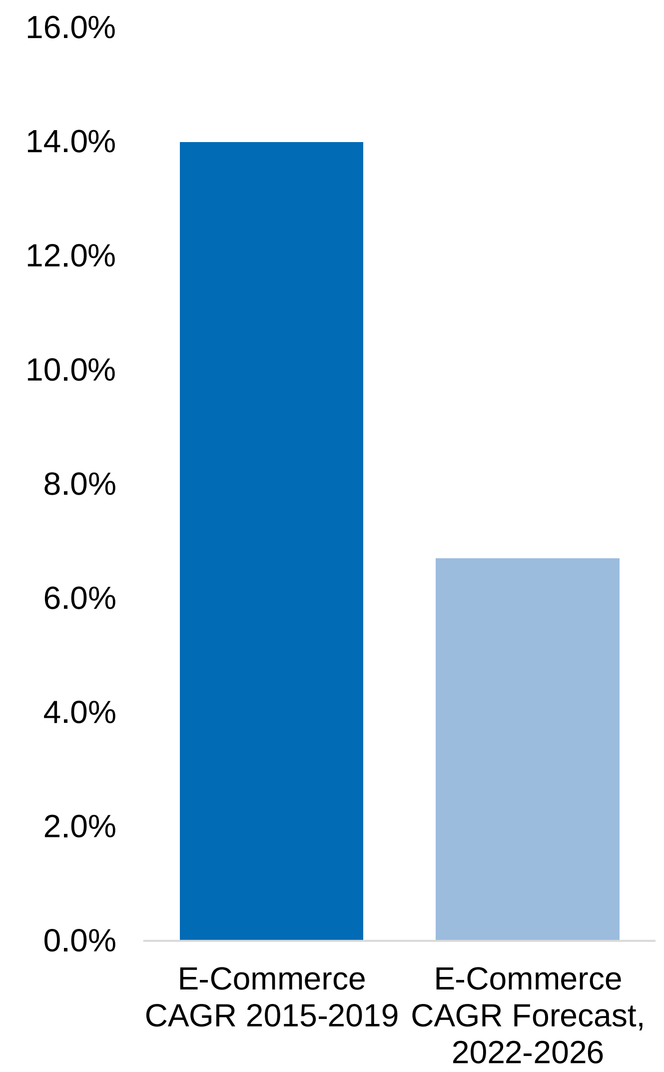
E-commerce Will Continue to Be a Secular Growth Engine (At Moderating Rates)

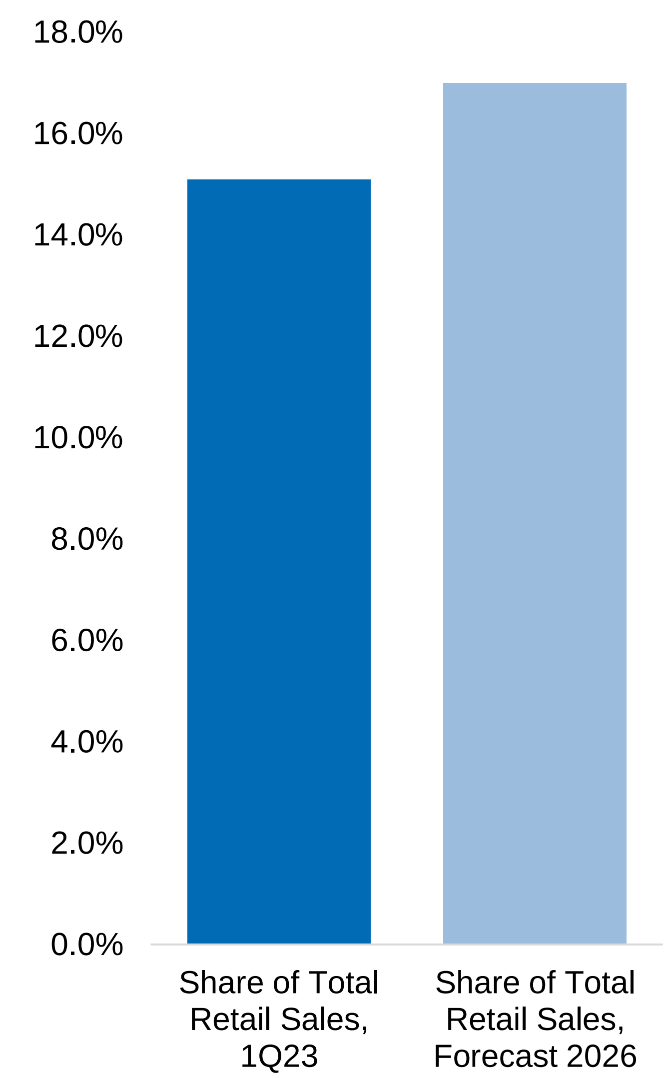
During the pandemic, e-commerce sales soared, growing in two years what pre-pandemic trends signaled would take four. Uncertainty around the “stickiness” of consumer behavior has cleared; as spending normalizes back to mixing in-store, online and omnichannel patterns, expectations for e-commerce sales 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



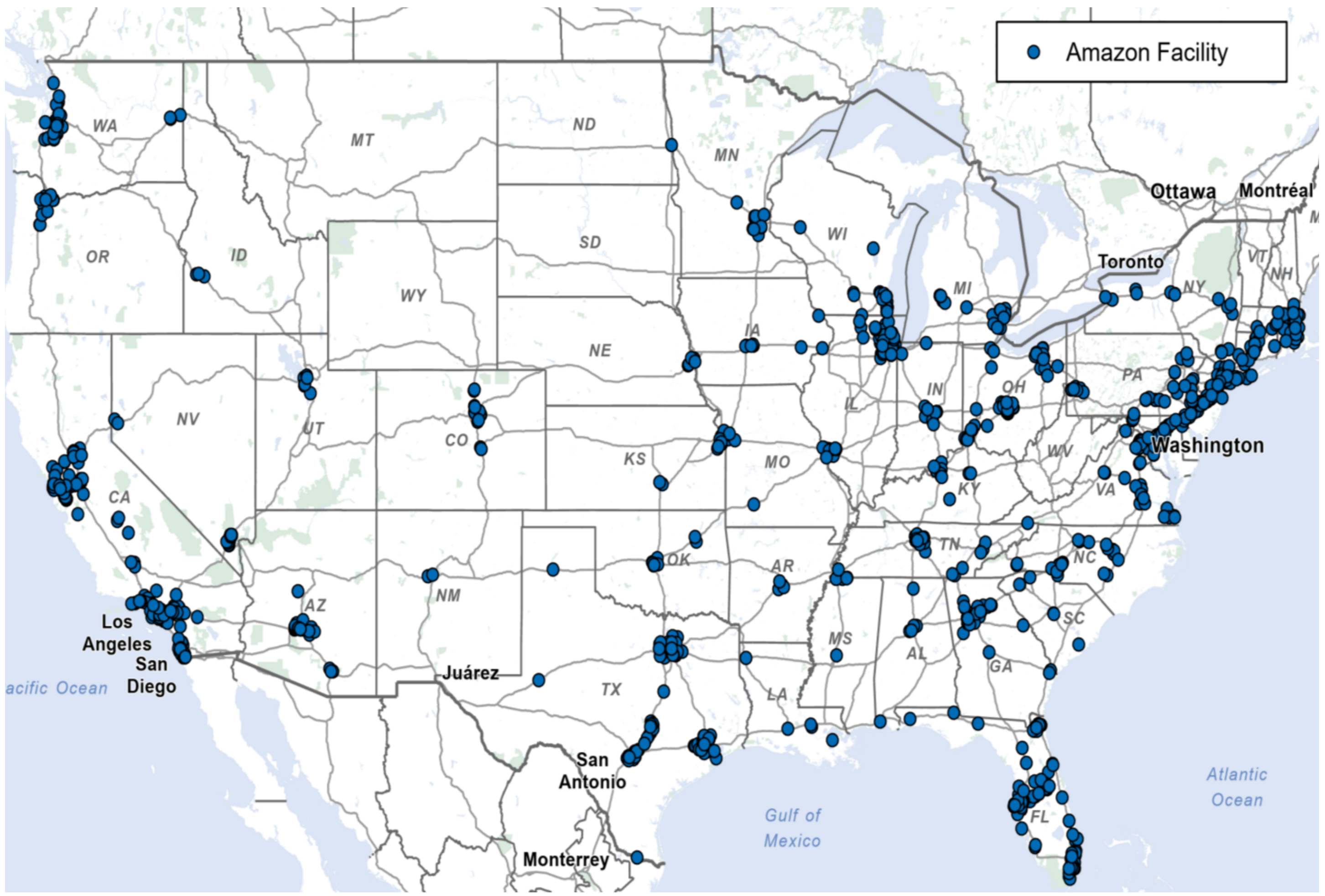


Source: U.S. Census Bureau, St. Louis Federal Bank, Green Street, Prologis, Emarketer.

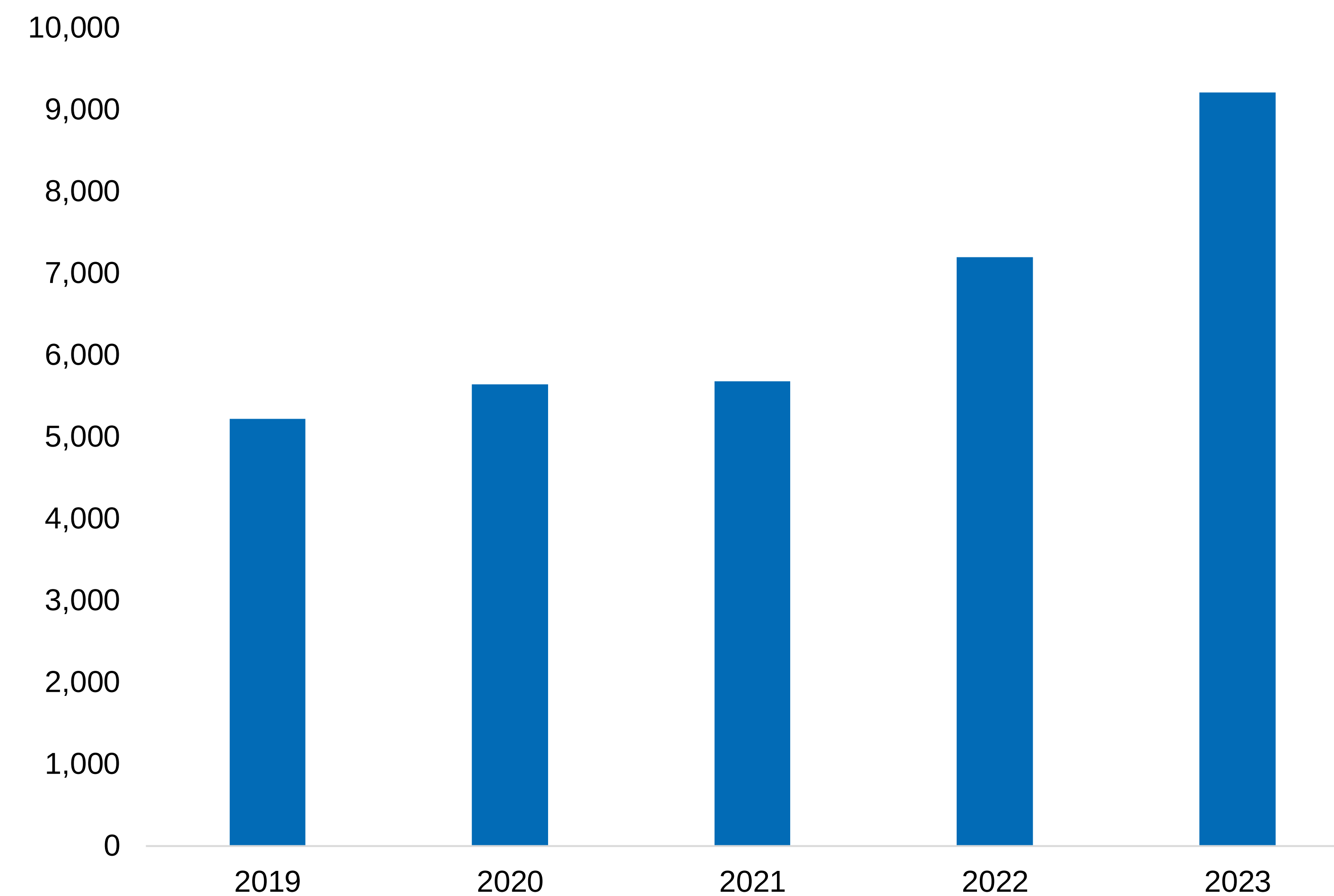
Retailers Will Continue to Invest in E-commerce Fulfilment to Remain Competitive

Amazon's fulfilment network leads the nation, with approximately 95.0% of the country's population accessible within two hours of an Amazon facility. Retailers will continue expanding footprints to remain competitive. The nation's largest retailer, Walmart, continues to allocate more capital into supply chain and less into new retail stores or remodels.

Amazon's Fulfilment Network, 2022



Annual U.S. Walmart Capital Expenditures on Supply Chain ($, Millions)

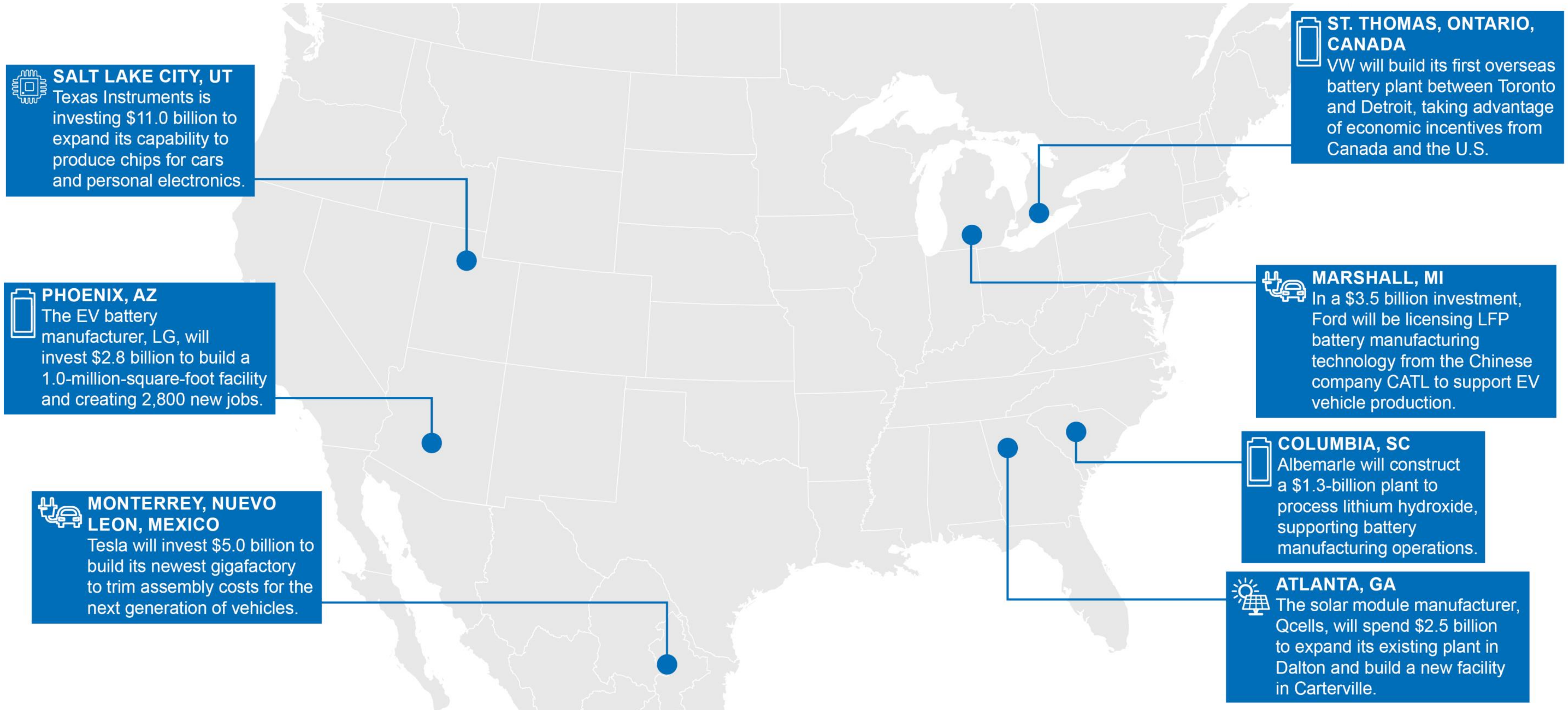


Source: Newmark Research, MWPVL, CoStar, Walmart, Wall Street Journal
Note: Supply chain investments include customer facing initiatives and technology. Annual spending for fiscal years ending Jan 31.

Recent Legislation Boosting Large Capital Investment for Advanced Manufacturers

Supply chain disruption, geopolitical risk and recently-passed legislation are prompting an increase in investment manufacturing in and nearer to the U.S. The Infrastructure Investment and Jobs Act, CHIPS and Science Act and Inflation Reduction Act are supercharging manufacturing in the burgeoning semiconductor, solar panel, electric vehicle, and EV battery sectors. Markets with existing manufacturing and supply chain ecosystems with large tracts of infrastructure-connected land and ample labor are benefitting.

Select New Manufacturing Announcements

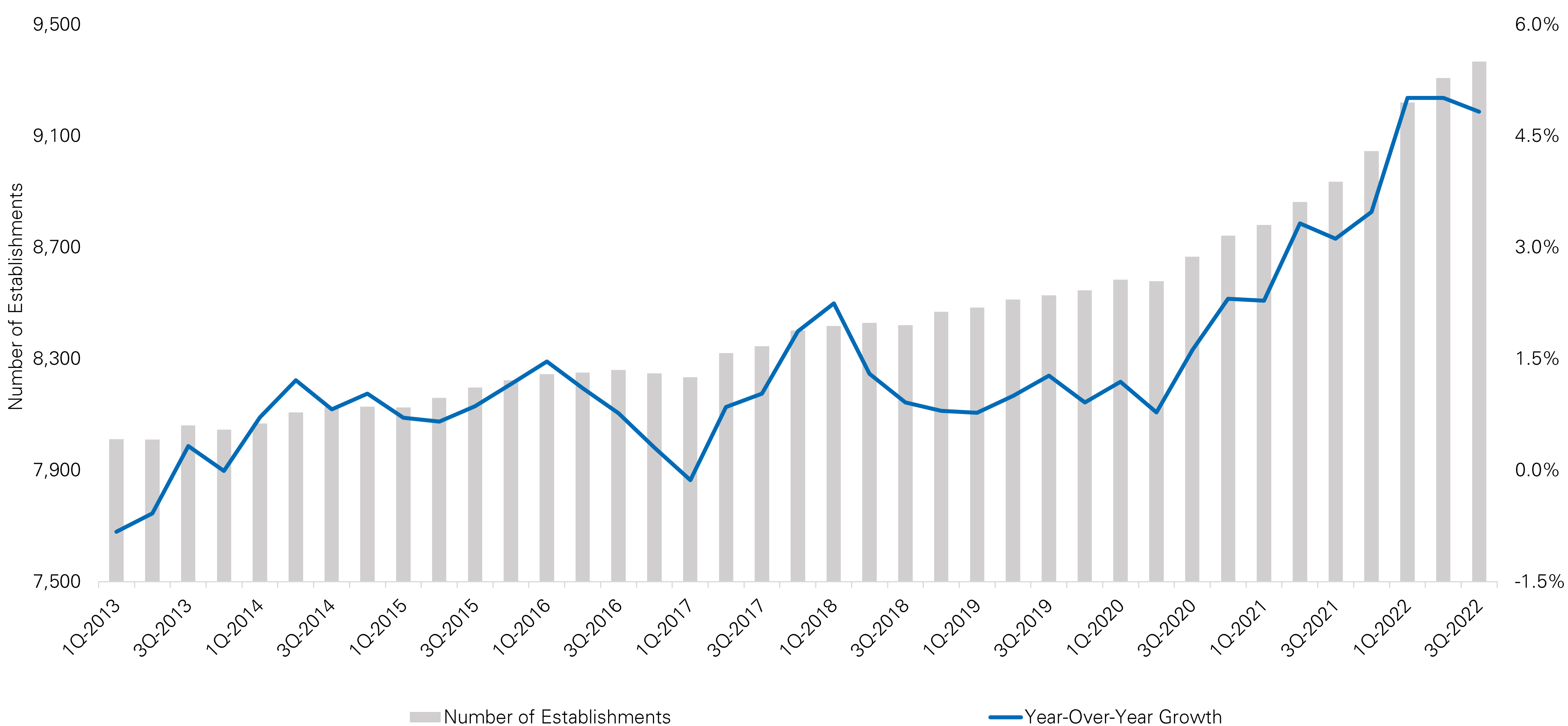


Source: Newmark Research, May 2023.

U.S. Manufacturing for EVs and EV Batteries Charging Ahead

Many vehicle manufacturers with operations already in the U.S. are siting near existing facilities or are eyeing certain existing combustion engine facilities for EV production to take advantage of existing supply chains and labor. EV battery manufacturers are synergistically siting near EV manufacturing operations to maximize production efficiency. Mexico and Canada are also experiencing increased investment in EV and EV battery manufacturing, thanks in part to tax credits offered to consumers from the Investment Reduction Act.

Number of Motor Vehicle, Motor Vehicle Body & Trailer and Motor Vehicle Parts Plants

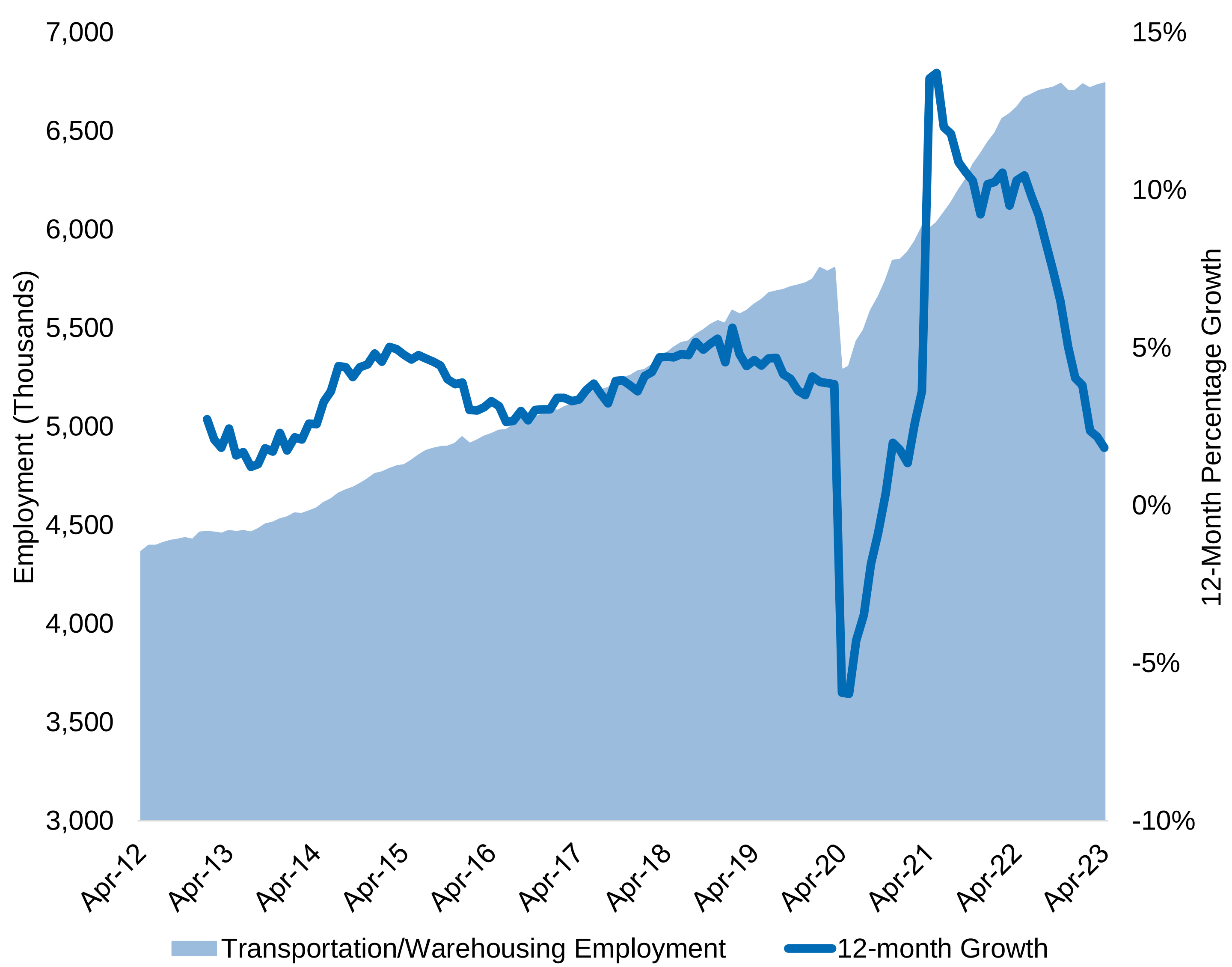


Source: Newmark Research, U.S. BLS, May 2023.

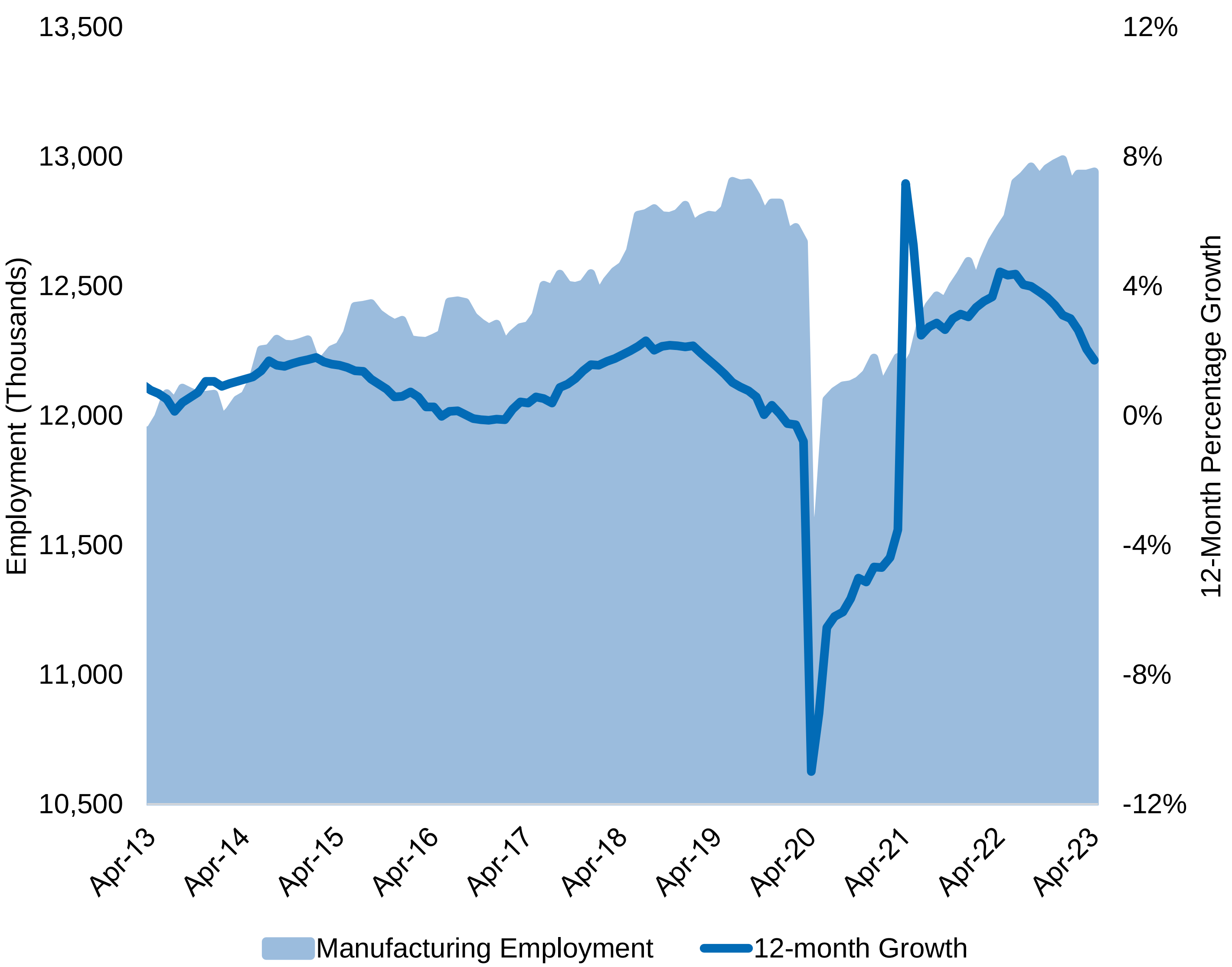
Industrial Employment Strong but Not Immune to Softening Conditions

Transportation, warehousing and manufacturing firms are reacting to the economic climate and a shift in demand by adjusting labor needs; however, competition for labor is still a challenge in many markets and a critical component of site selection, particularly for the wave of advanced manufacturers expanding domestically.

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

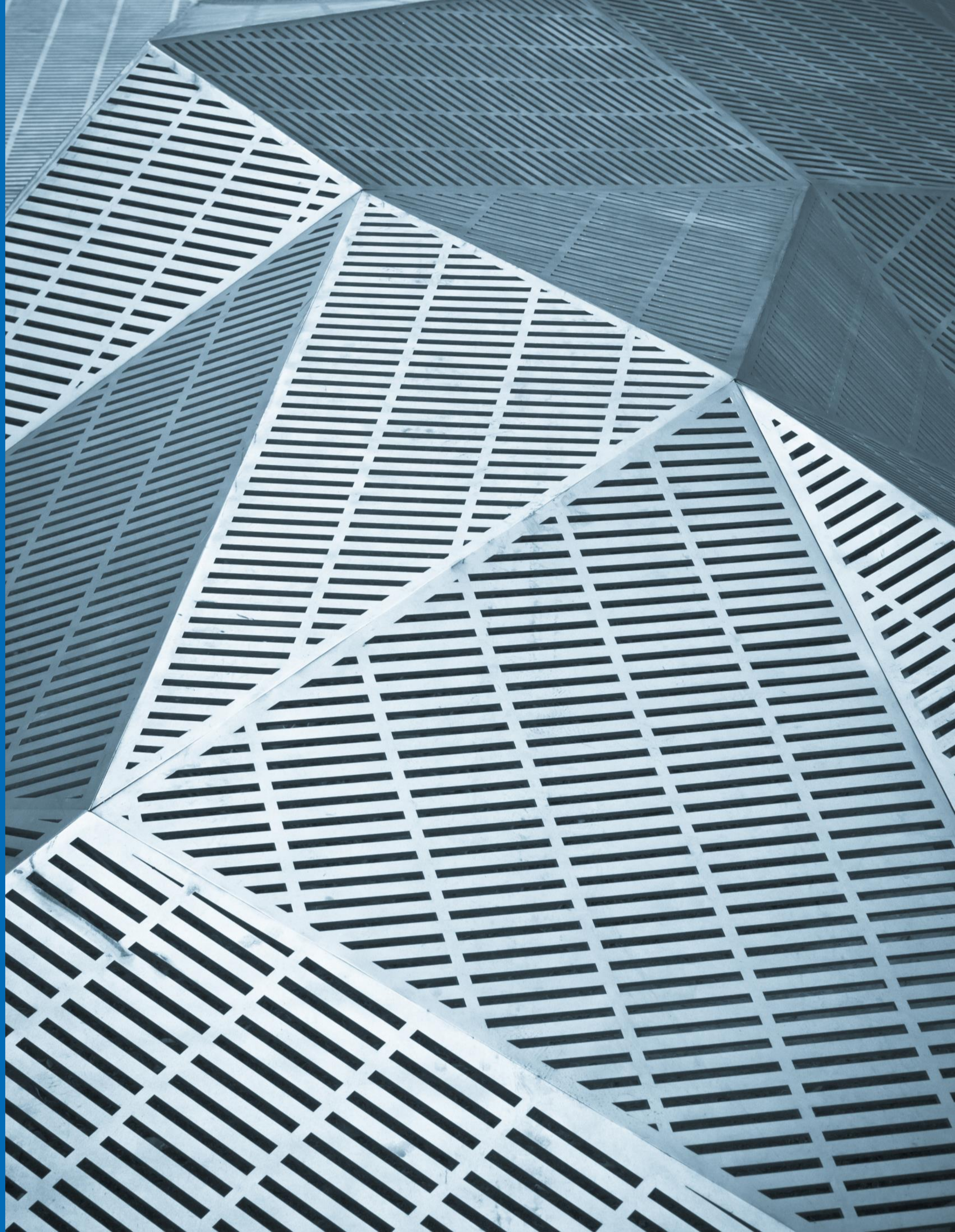


Total Employment and 12-Month Growth Rate, Manufacturing



Source: Bureau of Labor Statistics, Newmark Research

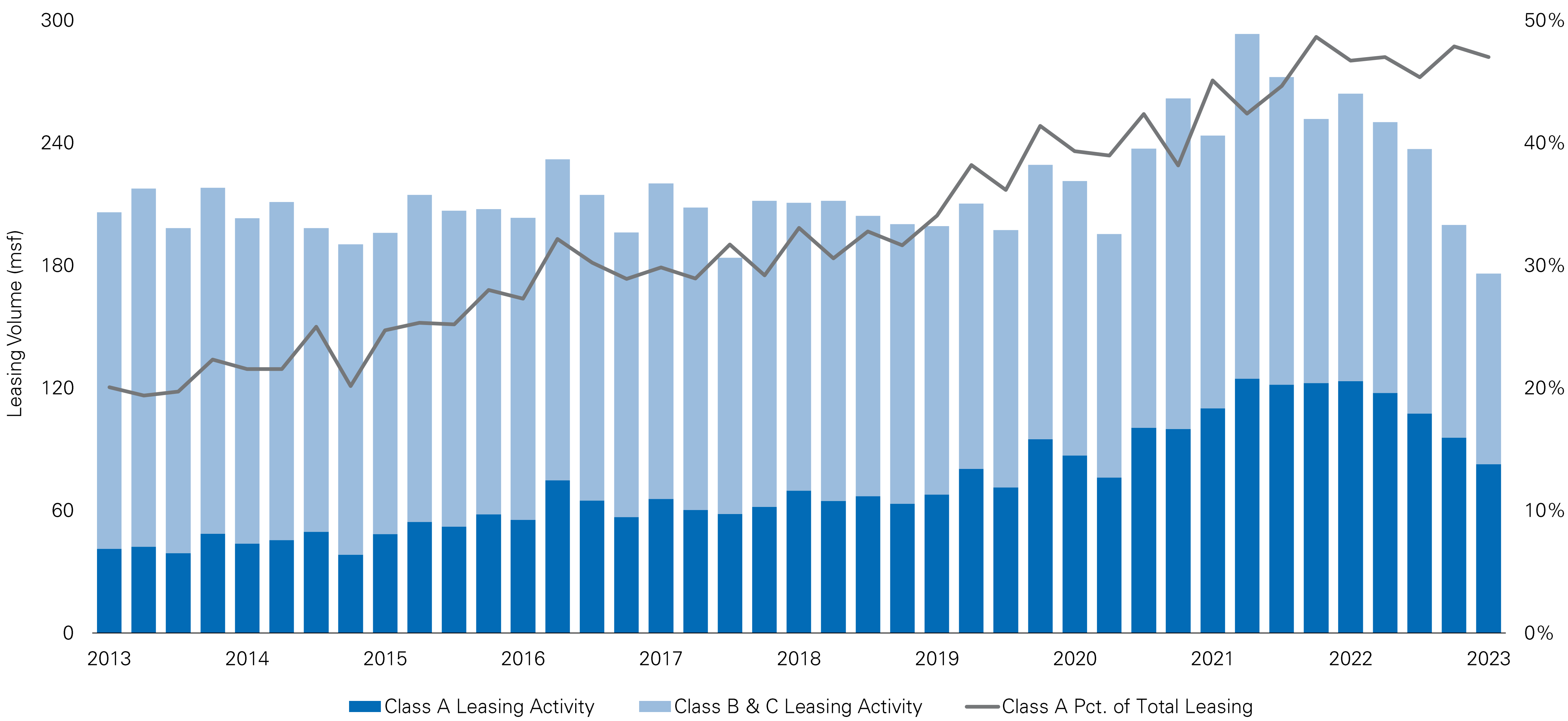
Leasing Market



Industrial Leasing Activity Decelerates; Still Higher Than Pre-Pandemic Years

Leasing activity continued to decelerate in the first quarter of 2023, down 12.0% quarter over quarter. It is important to note that Class A leasing activity this quarter, 82.8 msf, is still well above the three-year pre-pandemic quarterly average of 70.6 msf. Class A leasing activity comprised 47.0% of overall activity in the first quarter of 2023, down from a recent high of 48.7%. Amid challenging economic conditions, some cost-conscious occupiers are more likely to consider Class B/C space in the short term. During the Great Recession, Class A leasing decelerated or remained flat for three years before the long-term upward trend continued.

Industrial Leasing Activity by Class

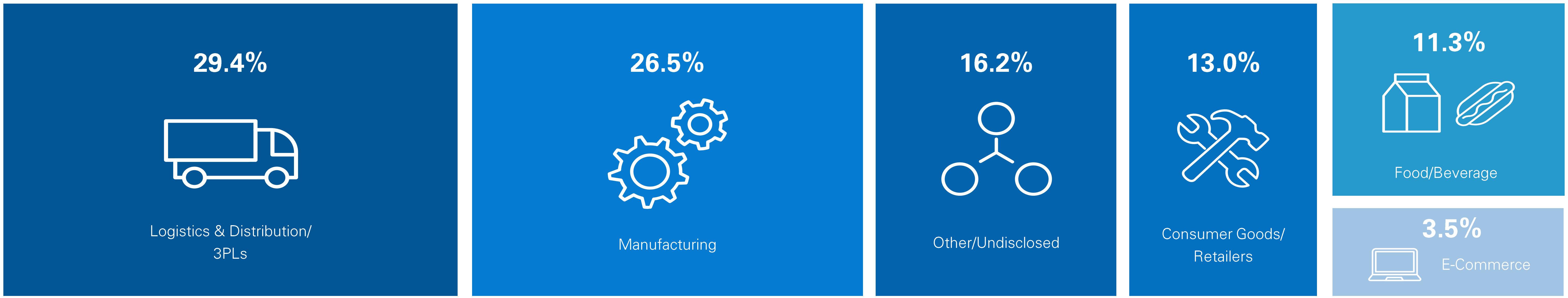


Source: CoStar, Newmark Research, May 2023.
Class A is defined as buildings 100,000+ square feet with a clear height of 30'+ built since 2000.

Industrial Leasing Trends by Sector

Consumer goods/retailers are enlisting the help of logistics and distribution/3PLs to be an important partner in managing storage, fulfillment and logistics; thus, 3PLs remained the top category for the fifth consecutive quarter. Manufacturers continue to pursue near-shoring, reshoring and domestic expansion in an ongoing effort to add resilience to the U.S. supply chain, with this category ranked second this quarter for top leases.

Top Industrial Leasing Activity by Sector, 1Q23



Notable 1Q23 Lease Transactions

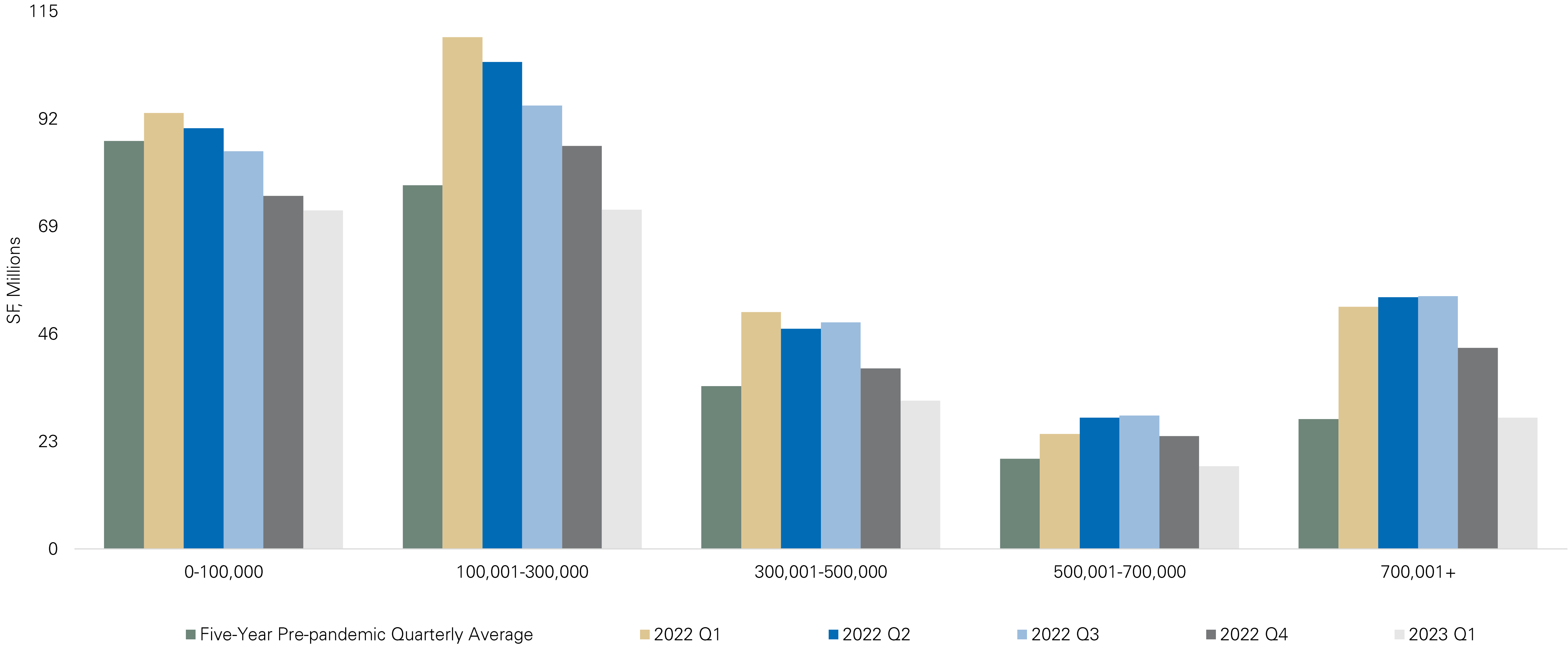
Tenant	Address	Market	Type	Square Feet	Industry
Constellation Brands	3413 Manitou Ct.	Inland Empire	Direct New	1,379,287	Food & Beverage
Target	SWC Millsdale & Route 53	Chicago	Direct New	1,218,120	Consumer Goods/Retailers
Tire Co.	1545 Production Ave.	Inland Empire	Direct New	1,101,840	Automotive
Amazon	1480 United Dr.	Penn. I-81/I-78 Corridor	Direct New	1,050,300	E-Commerce
ULINE	10322 140th St.	Milwaukee	Direct New	1,048,961	Paper & Packaging

Source: Newmark Research, May 2023.
*Note: Based on top leasing activity in markets tracked by Newmark

Big-Box Leasing Activity Normalizing and Returning to Pre-Pandemic Trends

Leasing activity in buildings sub-300,000 SF accounted for 65.1% of total activity for the quarter, illustrating that the average industrial tenant occupies space in this size range. All size ranges experienced at least a 20.0% decline in leasing activity year over year, with the segments under 700,000 SF below the five-year pre-pandemic quarterly average anywhere from -17.0% to -6.8%. The 700,001+ SF segment is up 1.1% from the pre-pandemic average and constitutes 46.8% of the under-construction pipeline, demonstrating shifting occupier preference for larger footprints.

Leasing Activity by Building Size

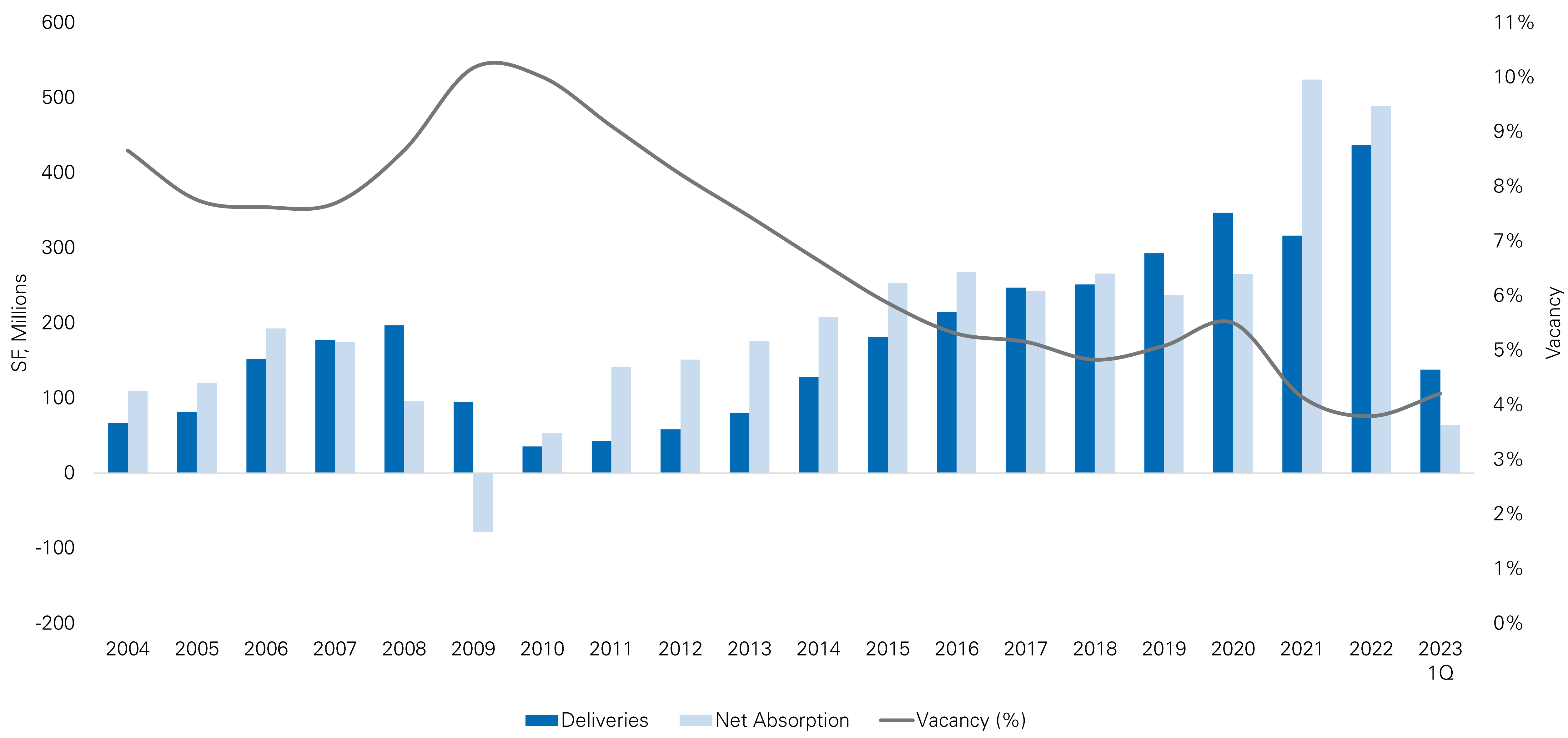


Source: CoStar, Newmark Research, May 2023.

Vacancy Rises as Economy Slows, Construction Deliveries Outpace Net Absorption

The vacancy rate increased to 4.2% in the first quarter of 2023 from 3.8% in the fourth quarter of 2022. The market is recalibrating to a new equilibrium with vacancy expected to continue to rise over the next few quarters as the economy slows and construction deliveries outpace net absorption, reversing the trend of the last two years.

Industrial Deliveries, Net Absorption, and Vacancy



Source: Newmark Research, May 2023.

United States Industrial Demand Rankings

Quarterly net absorption fell to 64.3 msf for the quarter, well below the 100+ msf experienced on a quarterly basis since the second quarter of 2021. Demand appears to be trending towards the pre-pandemic three-year quarterly average of 62.1 msf. Over the next few quarters, pre-leased construction deliveries will continue to apply upward pressure to net absorption as some right-sizing occupiers apply downward pressure through subletting or giving space to landlords. The top demand growth markets this quarter were largely either East or Gulf Coast port-serving markets or important inland regional distribution markets.

Net Absorption: Top 10 Markets

Market	2023 YTD Net Absorption (msf)
Dallas	9.0
Penn. I-81/78 Corridor	7.1
Chicago	5.7
Phoenix	5.6
Indianapolis	5.5
Houston	4.4
Savannah, GA	4.3
Greenville, SC	3.2
Atlanta	2.9
Inland Empire, CA	2.6
United States	**64.3**

Demand Growth: Top 10 Markets

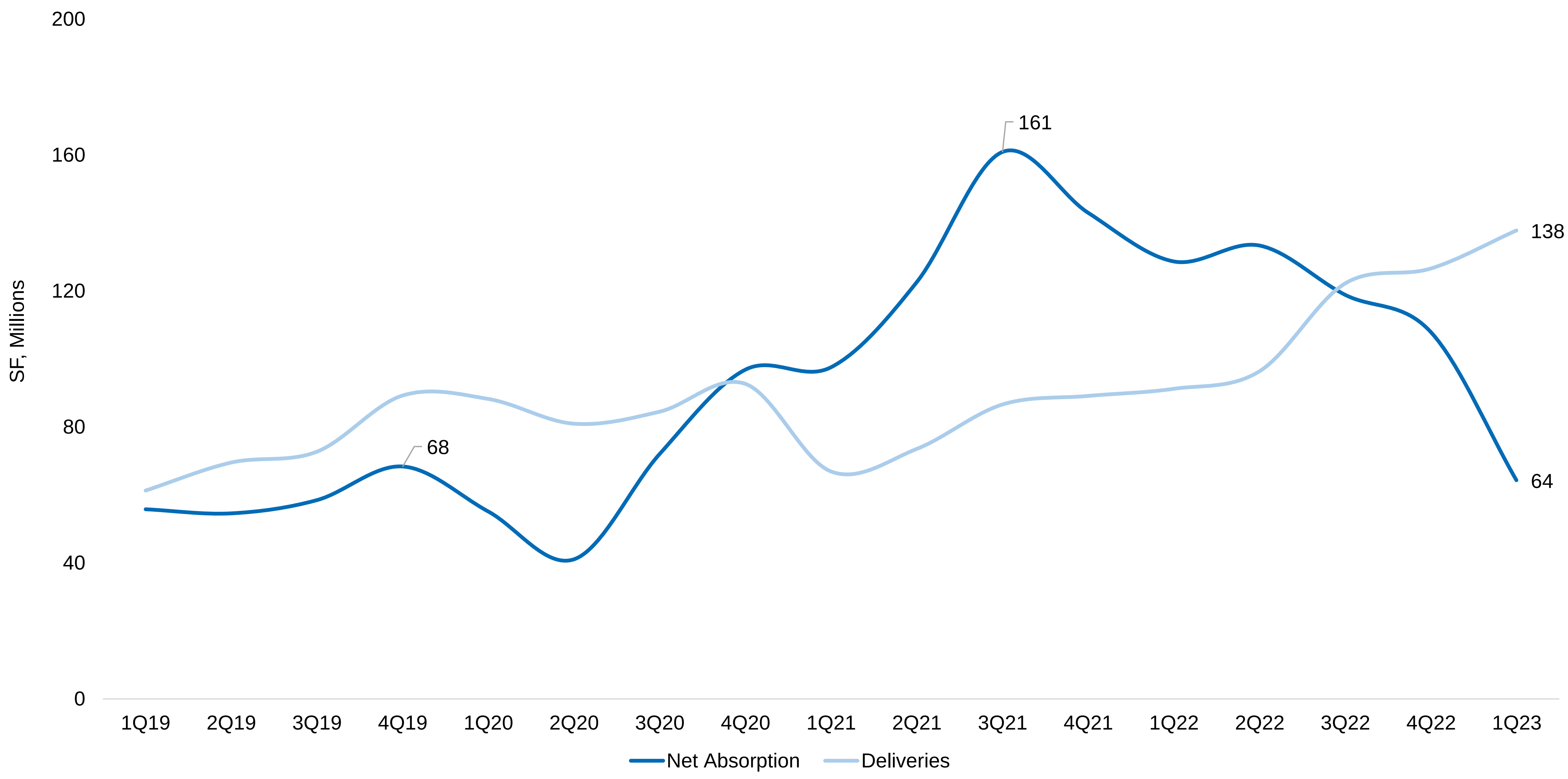
Market	2023 YTD Net Absorption (% of Occupied SF)
Savannah, GA	4.2%
Penn. I-81/78 Corridor	1.7%
Phoenix	1.6%
Indianapolis	1.5%
Greenville, SC	1.4%
Dallas	0.9%
Charleston, SC	0.9%
Tampa/St. Petersburg	0.9%
San Antonio	0.8%
Las Vegas	0.7%
United States	**0.4%**

Source: Newmark Research, May 2023.

Supply and Demand Gap Widens

Deliveries outstripped net absorption by 73.5 msf in the first 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. This is a stark reversal to the robust consumer spending years of 2020 to 2022. From the fourth quarter of 2020 to the second quarter of 2022, net absorption eclipsed deliveries by a quarterly average of 40.9 msf. As fewer projects break ground, these two metrics will come back into balance in 2024.

National Industrial Supply vs. Demand

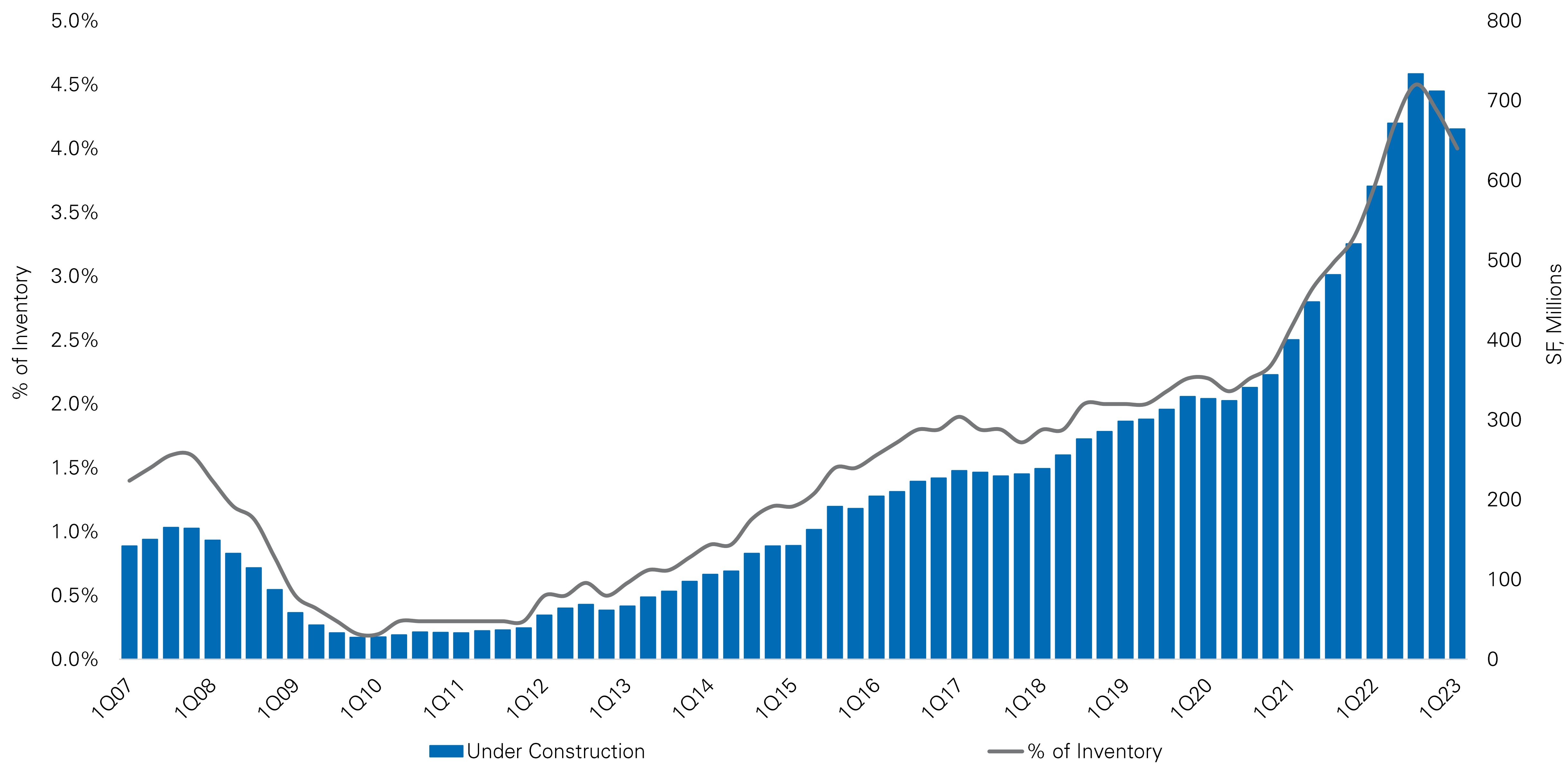


Source: Newmark Research, May 2023.

Industrial Supply Pipeline Eases as Construction Starts Dwindle

The construction pipeline trended downward for the second consecutive quarter after reaching a historic high of 733.5 msf in the third quarter of 2022. Many developers are pausing new development, with some exiting land positions, amid slowing leasing activity and a challenging financing environment for new construction. The construction pipeline will continue to decelerate throughout 2023, creating a possibility for potential supply constraints as economic conditions improve in 2024 and 2025.

U.S. Industrial Under Construction and % of Inventory

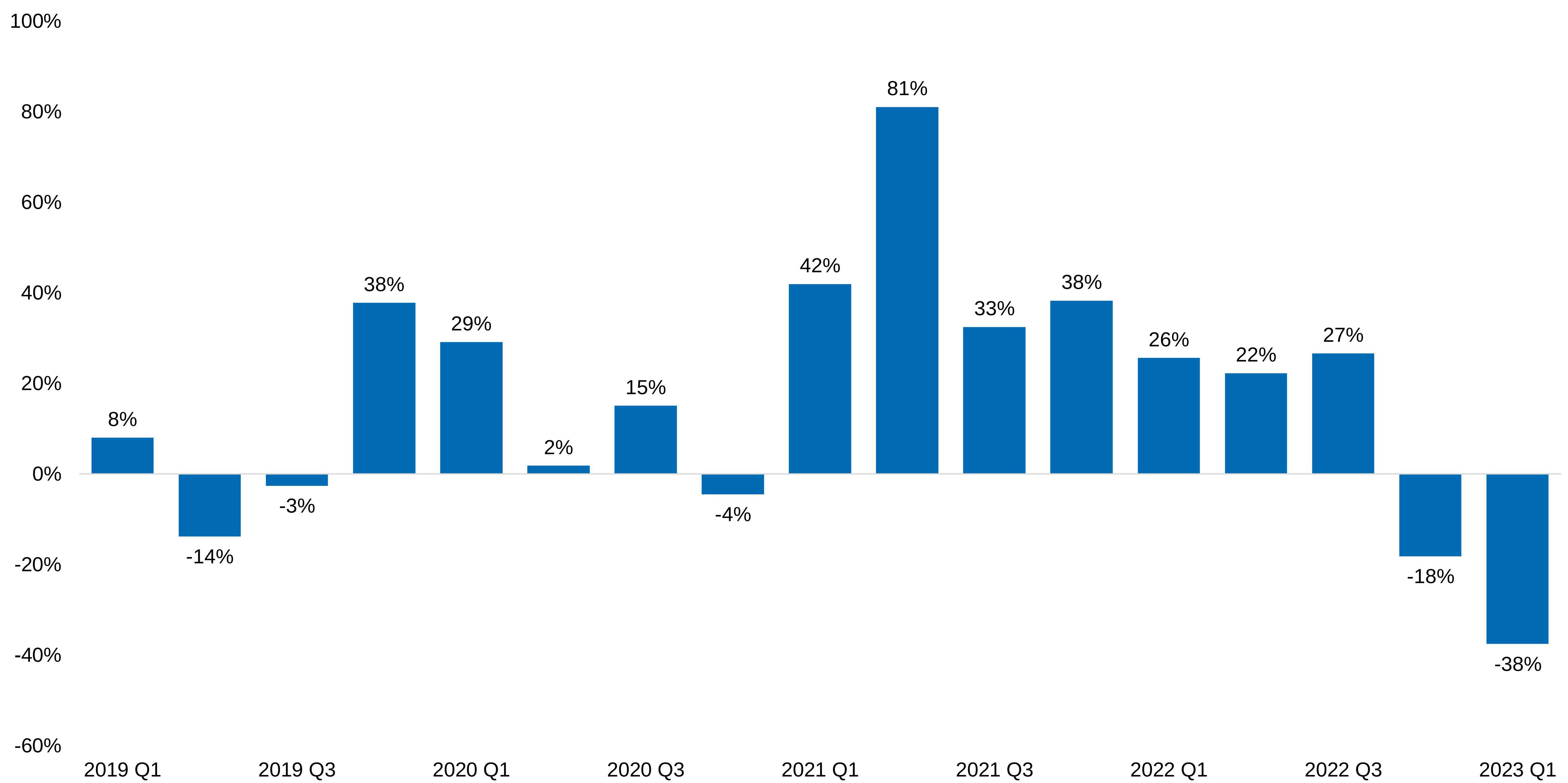


Source: Newmark Research, May 2023

Significant Pullback in New Construction Starts

Although the economic environment is weighing heavily on developer strategy, approximately 98.0 msf of new industrial projects broke ground in the first three months of 2023, a healthy volume that exceeds the 2019 quarterly average of 86.6 msf in new starts. However, this volume is down more than 38% from measures a year ago.

Construction Starts, Year Over Year Percentage Change

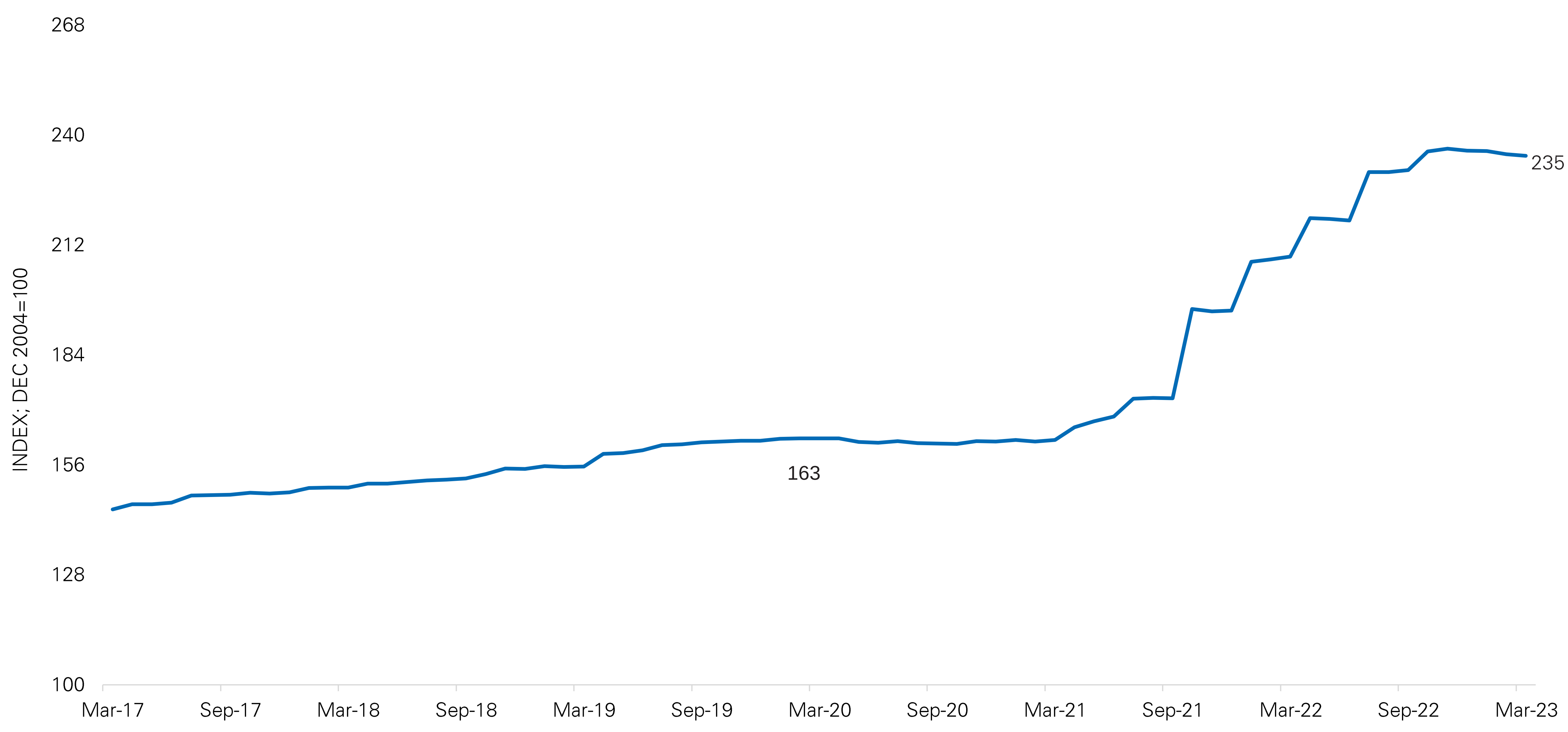


Source: Newmark Research, CoStar

Warehouse Construction Costs Have Peaked but Remain Elevated

Construction-input inflation has slowed for four straight months but remains 44.8% above 2019 measures. Although pricing performance for individual commodities and materials may differ, overall construction costs are expected to continue moderating over the course of 2023 as fewer new projects are greenlit.

Producer Price Index: New Warehouse Building Construction

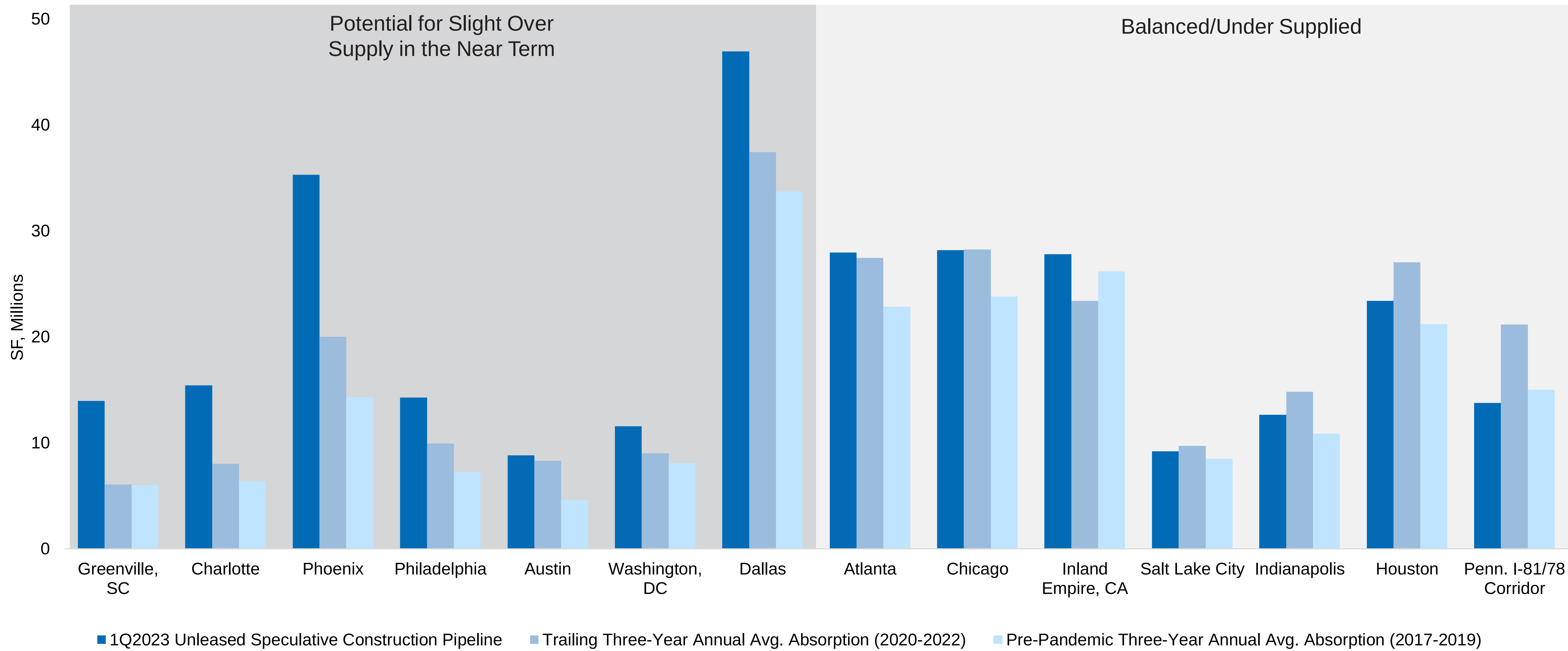


Source: Newmark Research, St. Louis Federal Bank

Oversupply? A Nuanced, Market-Specific Issue

Over the next several quarters market vacancy will be driven by new construction deliveries outpacing demand by users and, to a lesser extent, by tenant credit loss and sublease space. Markets with significantly larger unleased speculative supply pipelines in relation to recent and pre-pandemic demand performance may be more vulnerable than others to the impact of rising vacancy; however, if all of the national development pipeline delivered vacant simultaneously and demand ceased entirely, vacancy would only increase to 7.9%.

Unleased Speculative Construction Pipeline, Trailing Three-Year Annual Average Absorption (2019-2021), and Pre-Pandemic Three-Year Annual Average Absorption (2017-2019)

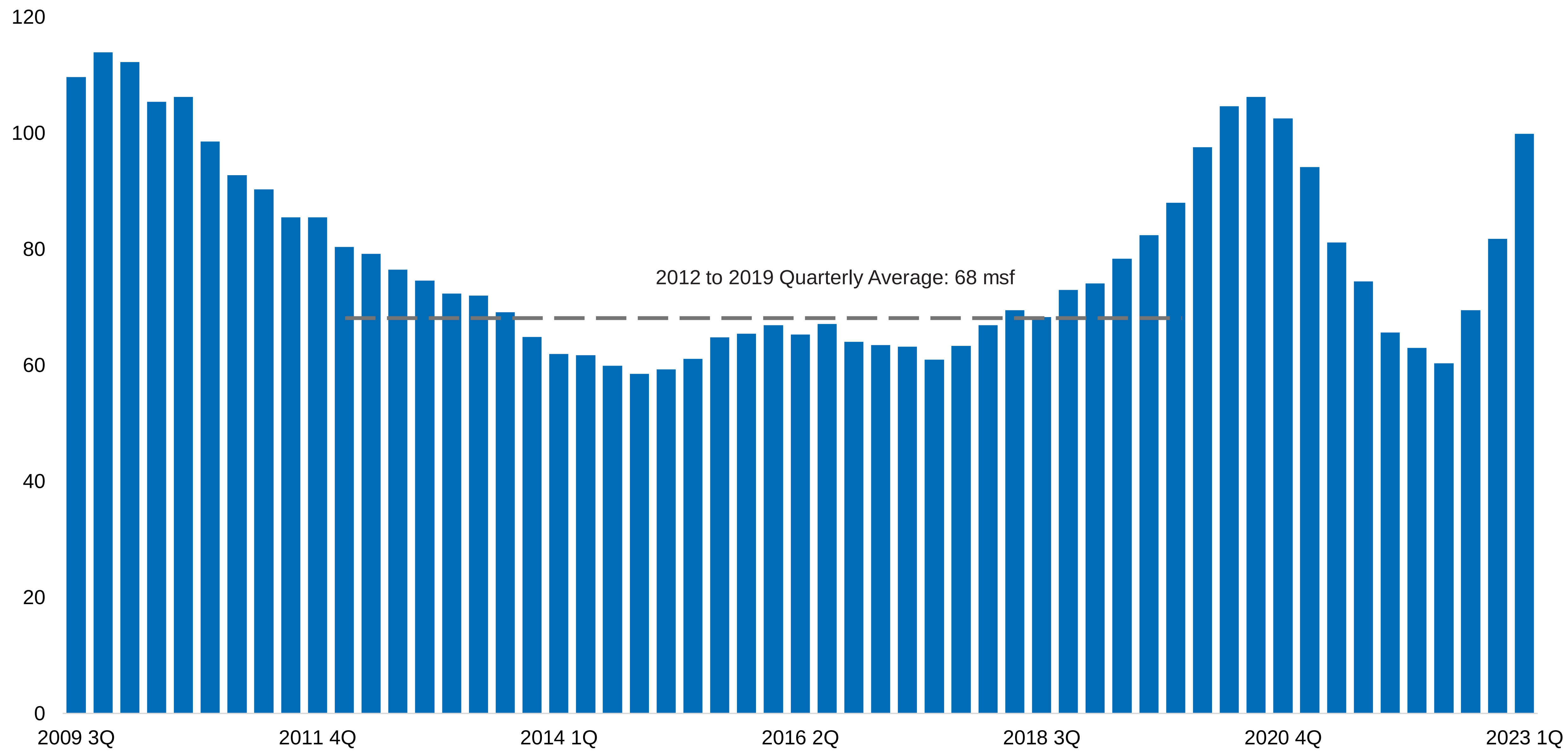


Source: Newmark Research, CoStar, May 2023.

Industrial Sublease Availability is Reaching 2020 Heights

Sublease volume in the first quarter of 2023 was on par with volume charted during the height of the pandemic and significantly above the long-term pre-pandemic average. The rate at which subleases were added to the market has accelerated over the past three quarters. Rising interest rates, an inflationary environment and declining consumer demand are driving some firms to control costs via supply chain optimization and consolidation, which includes putting excess or underutilized space up for sublease.

Available Industrial Sublease Volume (msf)



Source: Newmark Research

United States Industrial Vacancy Rankings

The national vacancy rate increased for the second consecutive quarter, rising from 3.8% in the fourth quarter of 2022 to 4.2% in the first quarter of 2023. Mirroring the national trend, most industrial markets experienced increased vacancy as new construction delivers and demand moderates. Even with the increase, national vacancy remains near record lows, but is expected to continue rising as the large construction pipeline unwinds.

Lowest Vacancy: Top 10 Markets

Market	1Q23 Vacancy
Los Angeles	1.5%
Orange County, CA	1.9%
Inland Empire, CA	2.2%
Milwaukee	2.4%
Northern New Jersey	2.7%
Sacramento	2.7%
Savannah, GA	2.7%
Portland	2.7%
Las Vegas	2.9%
Miami	2.9%
United States	**4.2%**

Largest Vacancy Decline: Top 10 Markets

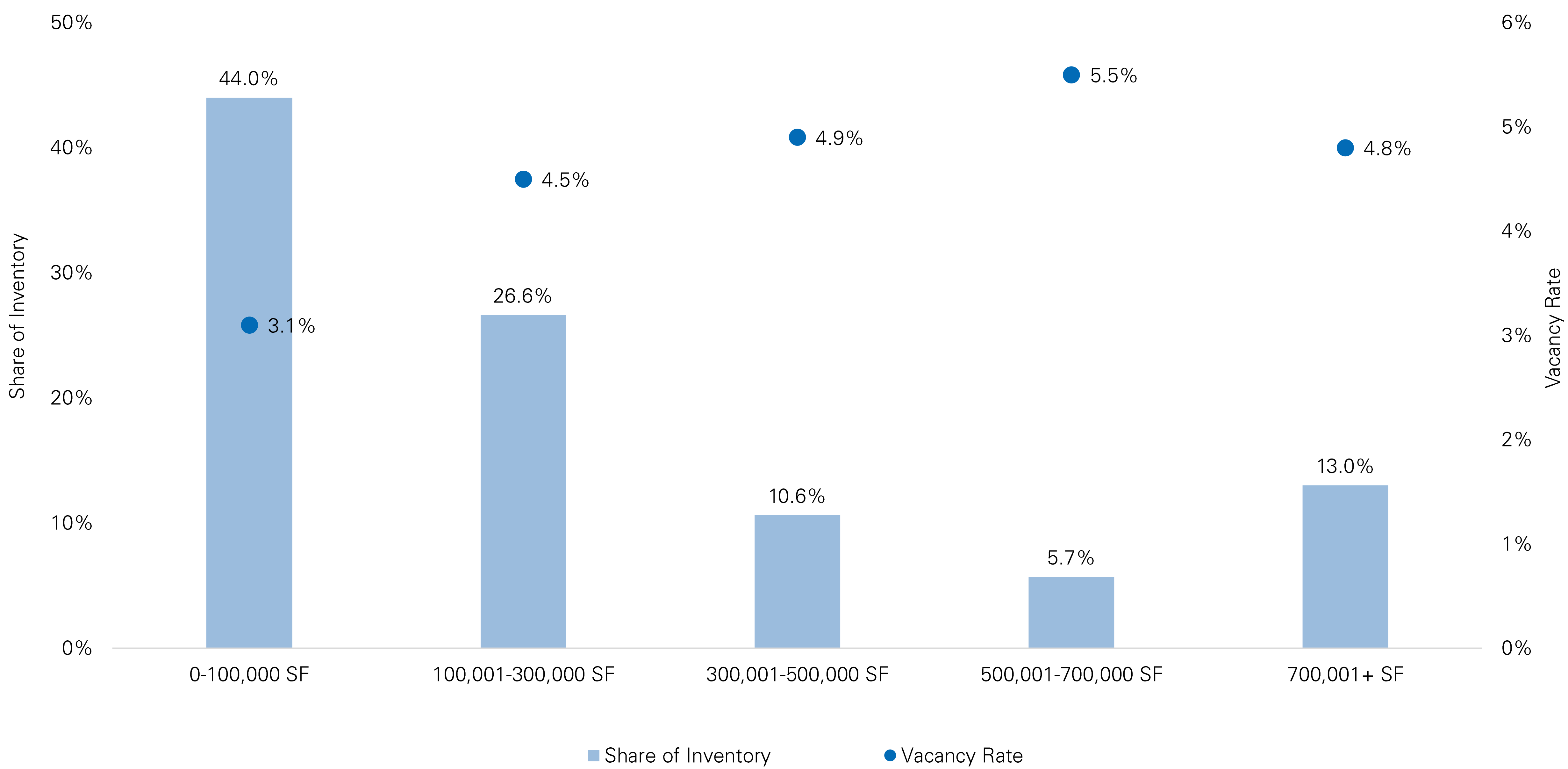
Market	1Q22-1Q23 Vacancy Change (BPS)
Nashville	-130
Memphis	-90
Cincinnati	-88
Milwaukee	-75
Portland	-63
Detroit	-62
Penn. I-81/78 Corridor	-51
Oakland/East Bay	-50
Kansas City	-50
Chicago	-37
United States	**29**

Source: Newmark Research, May 2023.

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

Vacancy remained below 10% for 50 industrial markets tracked by Newmark in the first quarter of 2023, with the highest local market vacancy topping out at 8.0%. 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.

1Q23 Industrial Vacancy Rate by Building Size

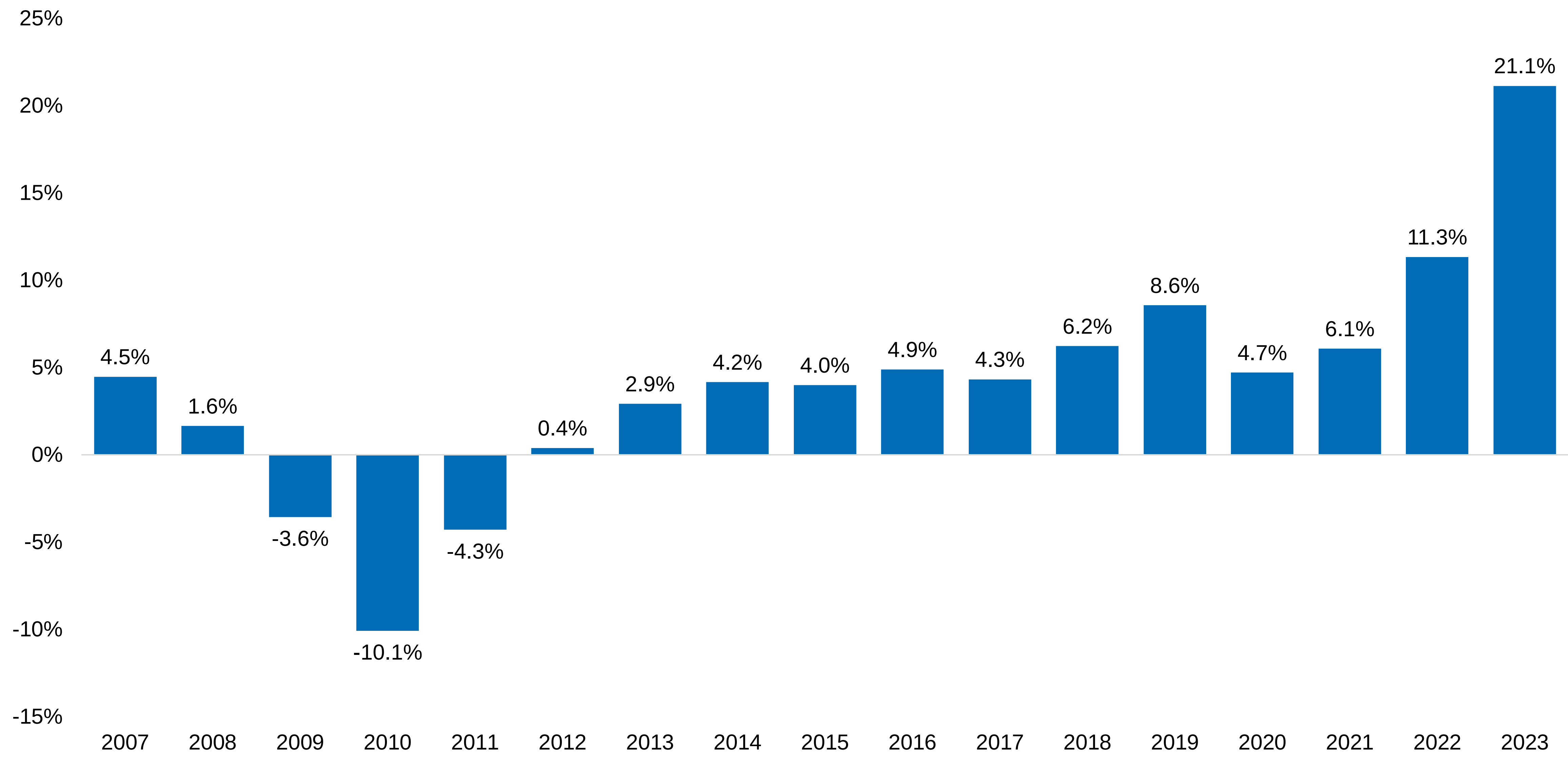


Source: CoStar, Newmark Research

Record-Pace Industrial Asking Rent Growth Continues into the First Quarter of 2023

Industrial average asking rents grew by 21.1% over 2022 measures, amid low vacancy, elevated construction costs and some lingering delivery delays. Rent growth is expected to moderate throughout the remainder of 2023 as a wave of construction delivers. Higher-priced quality space coming online in larger quantities and landlord concession levers will help maintain the asking rent growth average.

Year-Over-Year Industrial Asking Rent Growth



Source: Newmark Research, May 2023.

United States Industrial Asking Rent Rankings

Low vacancy, high demand and construction delivery delays throughout 2022 contributed to surging rent growth. Rent growth is expected to continue at a more moderate pace over the next year as industrial demand normalizes in the face of persistently high inflation and a cooling economy.

Highest Asking Rent: Top 10 Markets

Market	1Q23
Silicon Valley*	$28.14
Los Angeles	$21.18
Orange County, CA	$19.49
Oakland/East Bay	$18.50
Long Island	$18.26
Inland Empire, CA	$18.21
San Diego	$15.55
Boston	$15.07
Las Vegas	$14.25
Northern New Jersey	$13.57
United States	**$10.83**

Largest Asking Rent Growth: Top 10 Markets

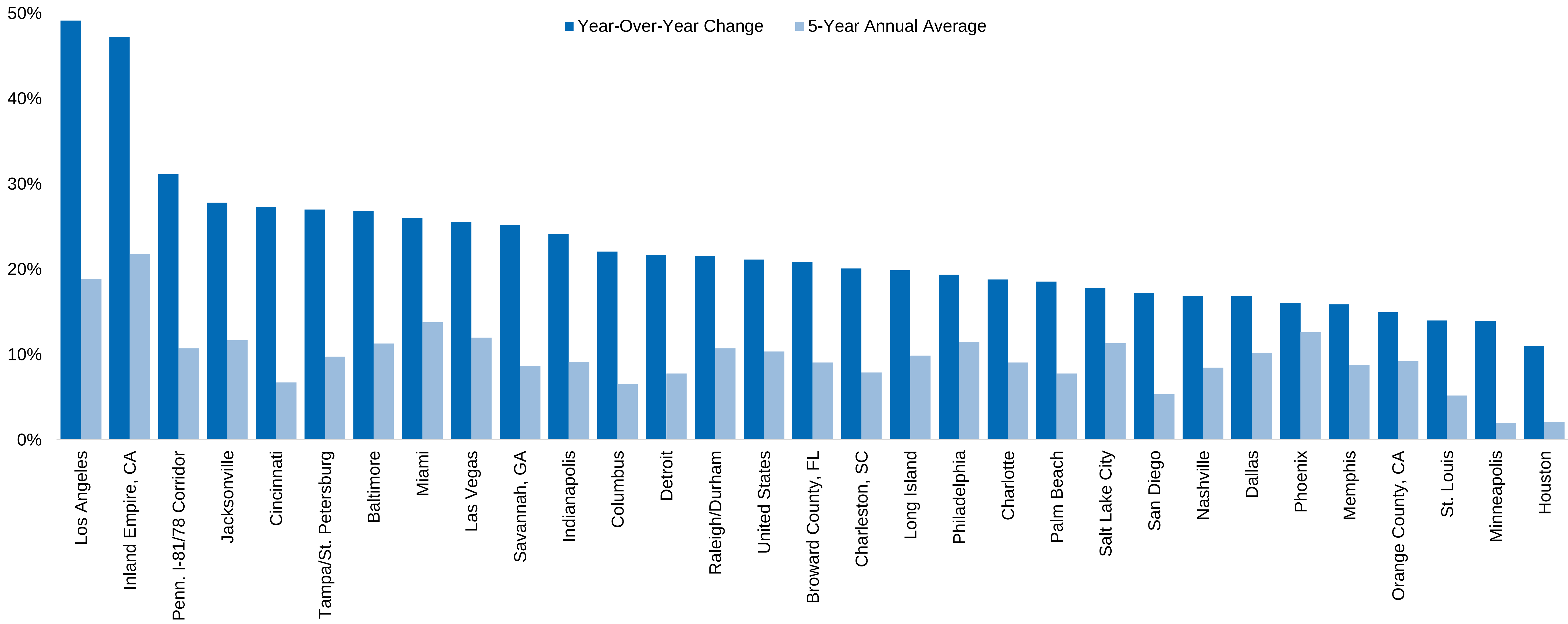
Market	1Q22-1Q23 Pct. Change
Los Angeles	49.2%
Inland Empire, CA	47.2%
Penn. I-81/78 Corridor	31.2%
Jacksonville	27.8%
Cincinnati	27.3%
Tampa/St. Petersburg	27.0%
Baltimore	26.8%
Miami	26.0%
Las Vegas	25.6%
Savannah, GA	25.2%
United States	**21.1%**

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

Port-Serving and Regional Distribution Markets Experiencing Strongest Rent Growth

The Southern California port-serving markets of the Inland Empire and Los Angeles continue to experience the strongest year-over-year rent growth and the lowest vacancy in the country. With Gulf and East Coast ports gaining market share activity from the West Coast ports, rent growth will have greater runway in markets such as Houston, Miami, Charleston, Savannah and Northern New Jersey.

Market Rent Growth, Annual and Historical Average

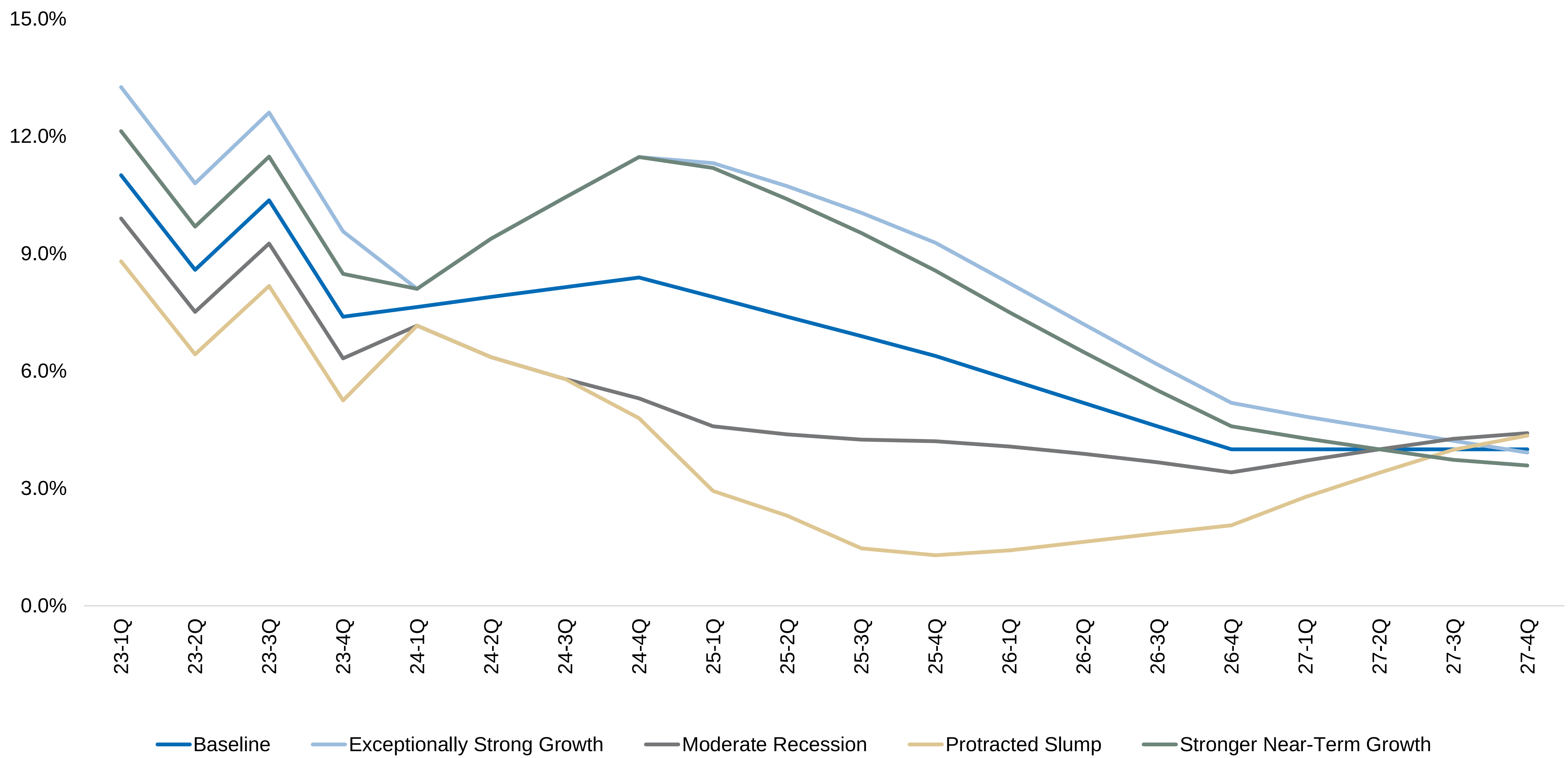


Source: Newmark Research, May 2023.

Green Street Industrial Asking Rent Forecast

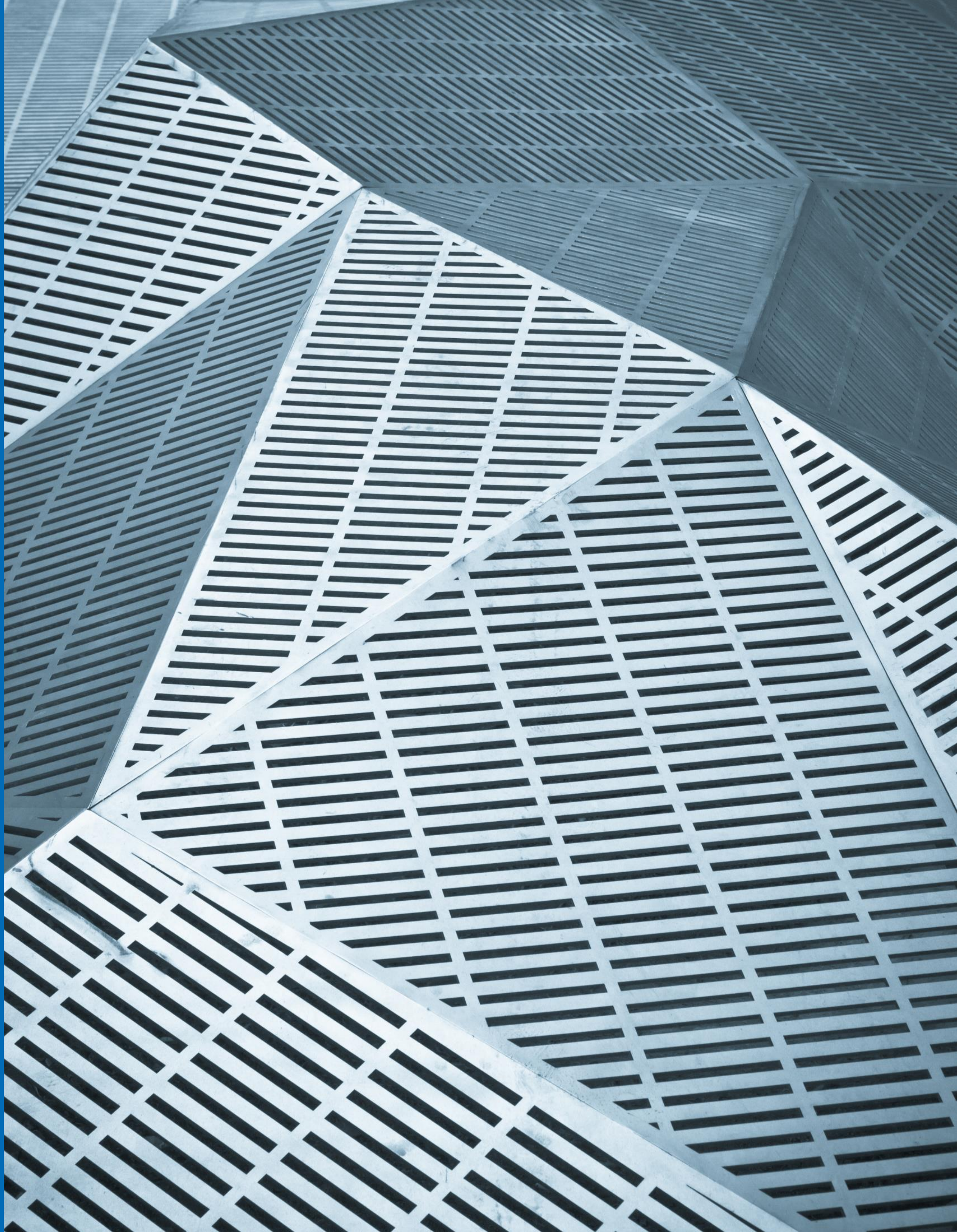
The U.S. industrial market is in a period of uncertainty and unpredictability as economic headwinds cloud rent forecasting. The various forecast scenarios show strong, albeit irregular, rent growth throughout 2023. Under all scenarios, annual rent growth remains above 4.5% through the fourth quarter of 2024, and the baseline scenario doesn't drop below the pre-pandemic five-year annual asking rent growth average of 5.8% until the first quarter of 2026.

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



Source: Newmark Research, Green Street, May 2023.

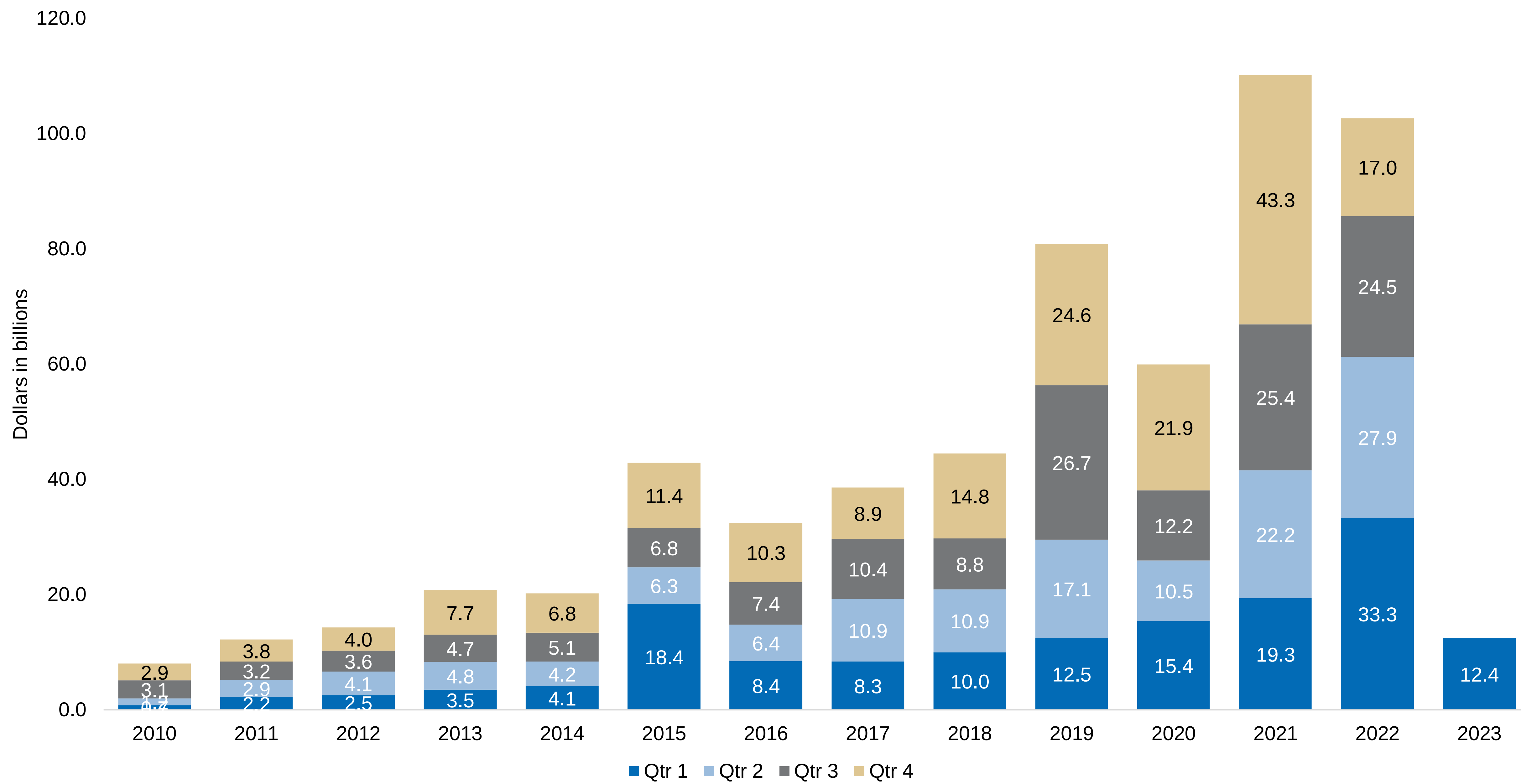
Capital Markets



Industrial Debt Originations Down 63% Year-Over-Year in 1Q23

While debt volumes are subject to sometimes significant later revisions, it is unlikely that new data will significantly alter the market picture. The MBA's origination survey found that volumes declined 72% year-over-year, corroborating the data shown below. The picture that emerges is of a rapidly cooling transaction market, a cooling that began in the fourth quarter of 2022. Perspective and nuance are important; however, as some buyers of industrial buildings with shorter WALTs are buying all-cash and placing debt post-closing. Also, originations in the first quarter of 2023 were only modestly below 2019 levels and above all but one preceding period.

Industrial Debt Origination Volume*

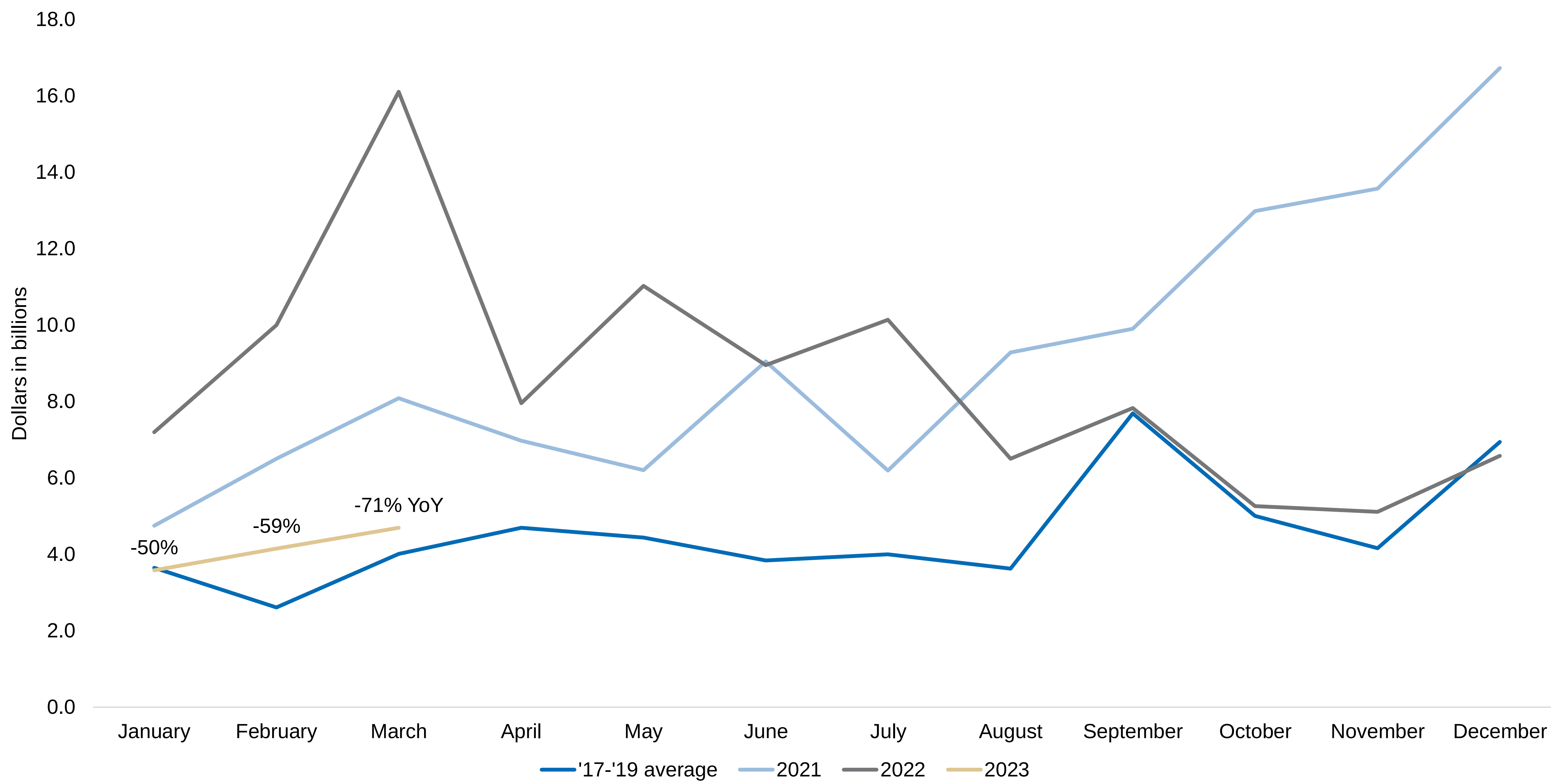


Source: RCA, Newmark Research as of 5/3/2023
* Excludes construction finance. Data is based preliminary loan sums, which are subject to future revision – potentially significant.

Originations Have Decelerated since May but Remain above Pre-Pandemic Levels

Originations have clearly been trending downwards since March of 2022. Up until July 2022, originations were still outpacing very strong 2021 levels. By December, however, activity had fallen not only below 2021 but below pre-pandemic levels. In the first three months of 2023, volumes are sharply down compared to 2022's record levels, but they have outpaced pre-pandemic originations. In this sense, the first quarter of 2023 is a relative improvement over the preceding quarter.

Monthly Industrial Debt Originations Volume*

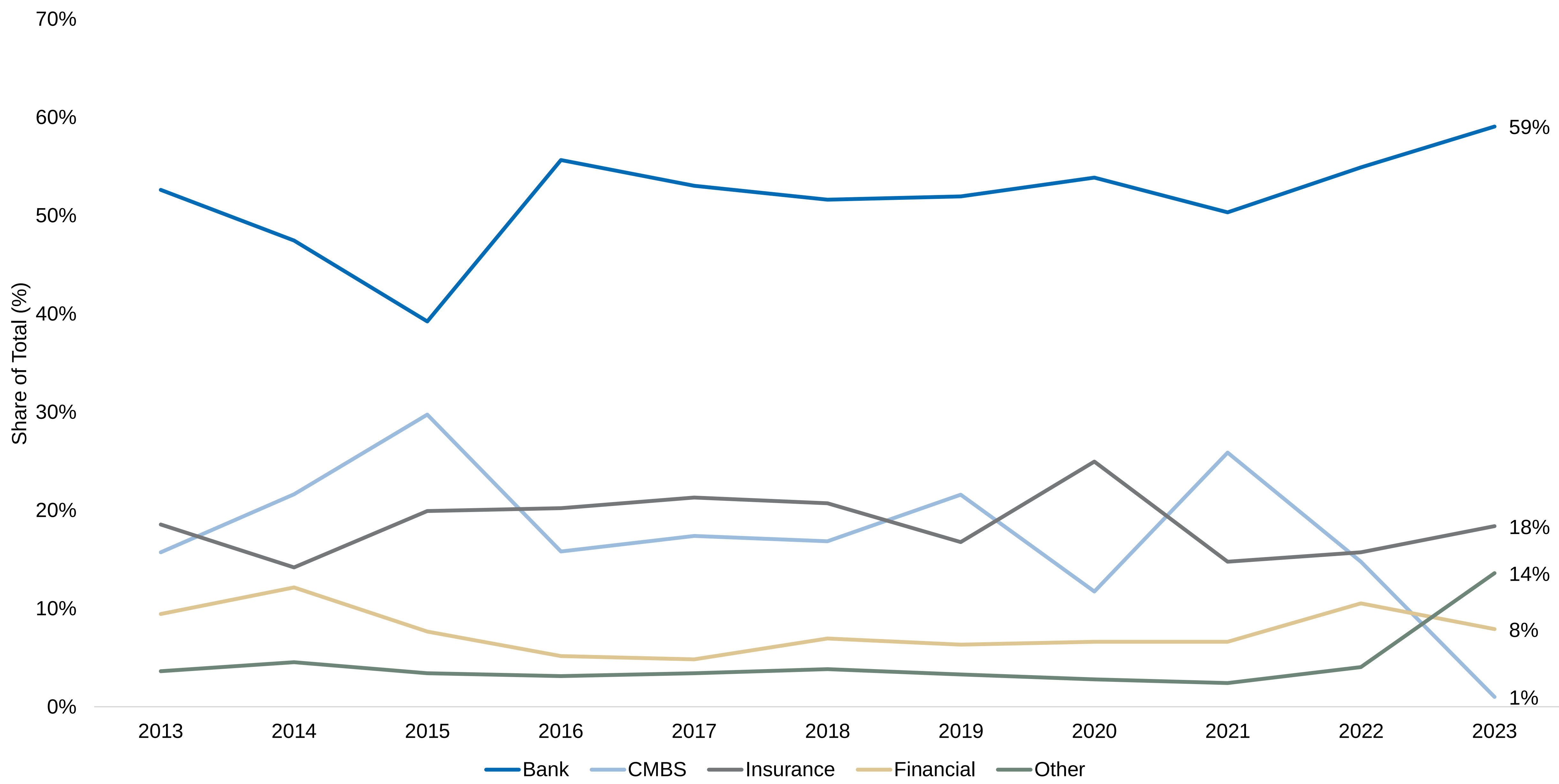


Source: RCA, Newmark Research as of 5/3/2023
* Excludes construction finance. Data is based preliminary loan sums, which are subject to future revision – potentially significant.

Industrial Borrowers Heavily Dependent on Bank Finance

Banks continued to dominate industrial property finance in the first quarter of 2023. Securitized debt finance by contrast has fallen sharply from its recent peak in 2021 amid the lowest quarter for securitizations in 11 years. "Other" lenders, mostly private, increased their share in the first quarter of 2023.

Origination Share by Lender Group

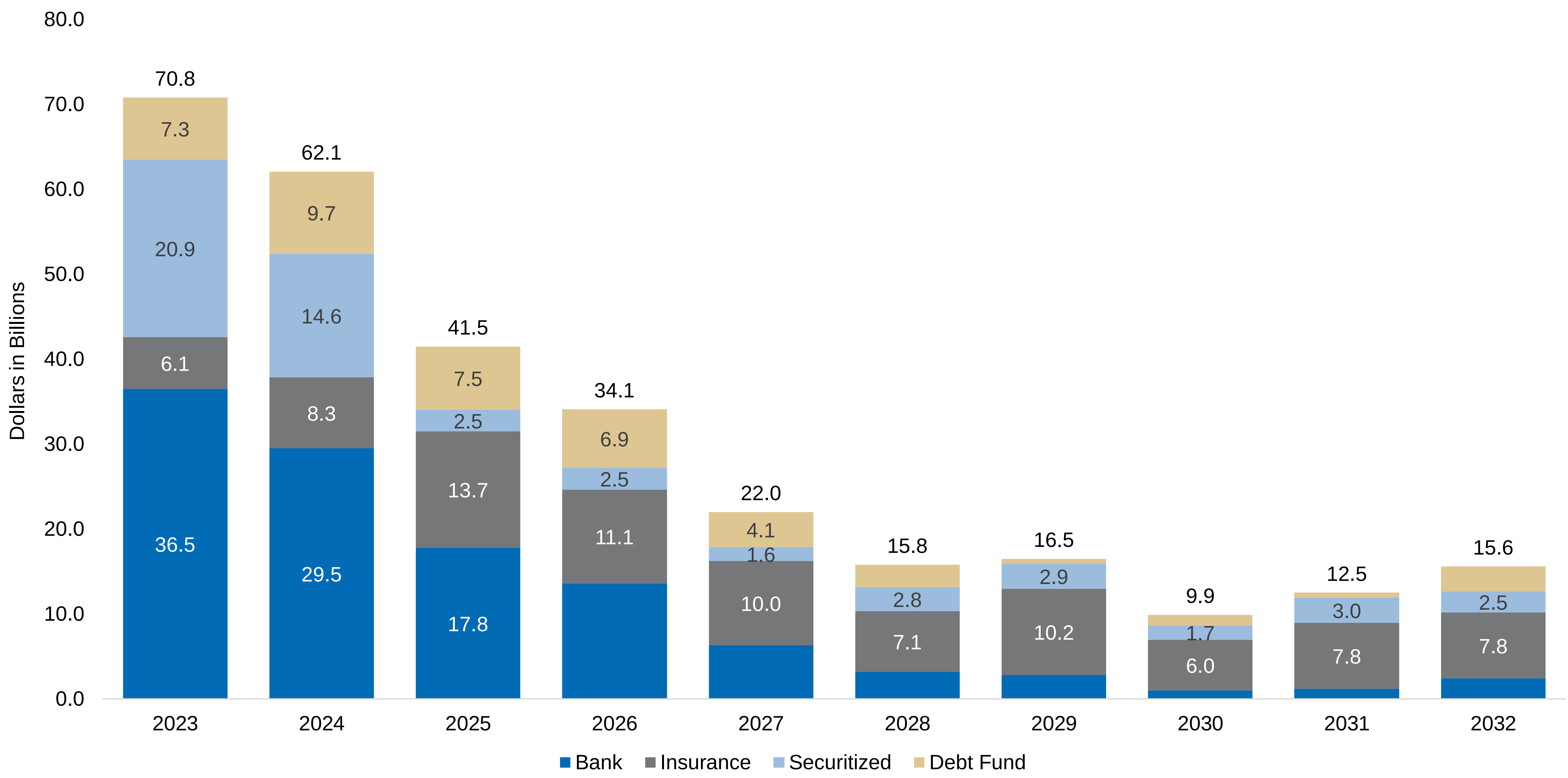


Source: RCA, Newmark Research as of 5/3/2023
* Excludes construction finance. Data is based preliminary loan sums, which are subject to future revision – potentially significant.

Elevated Maturities in 2023-2024

Upcoming debt maturities are heavily concentrated in bank and securitized borrowings. Additionally, available data suggests that 83% of the debt maturing in 2023 was originated in 2020 or later. That is, the majority of the debt maturing this year was issued at extremely low rates.

Industrial Loan Maturities*

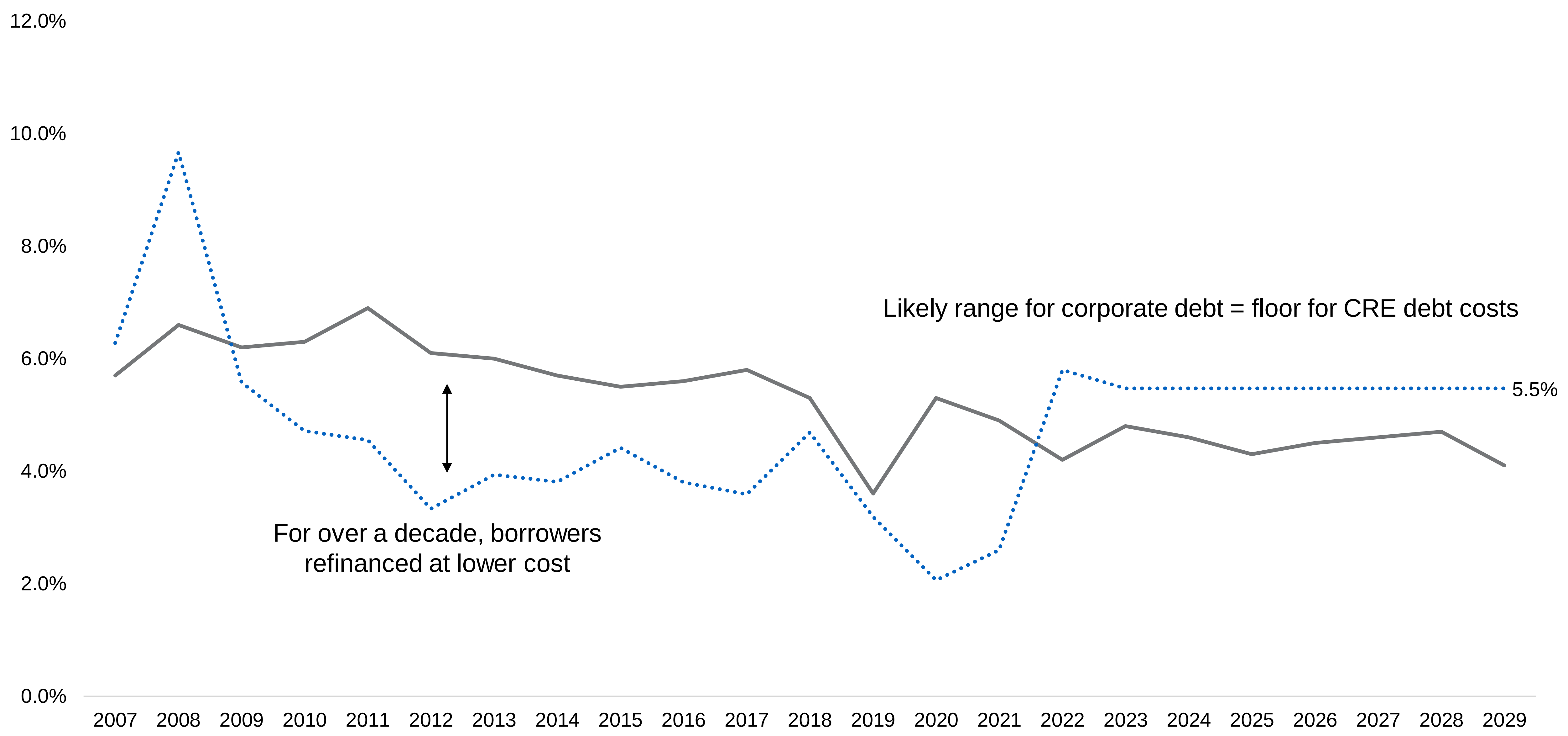


Source: MBA, Trepp, RCA, Newmark Research

Borrowers Still Face Starkly Higher Costs as Loans Mature

Higher debt costs on refinancing will lower returns for all and will give rise to a range of reactions within the market. Some borrowers will choose to pay down their debt, especially if the asset has appreciated meaningfully. Others will refinance the principal or partially pay down, whereas in a lower cost-of-capital environment, they would have re-levered. Still others will be unable to make the math work and will need to pursue a loan modification, return the keys and/or source rescue equity at an appropriate price point.

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

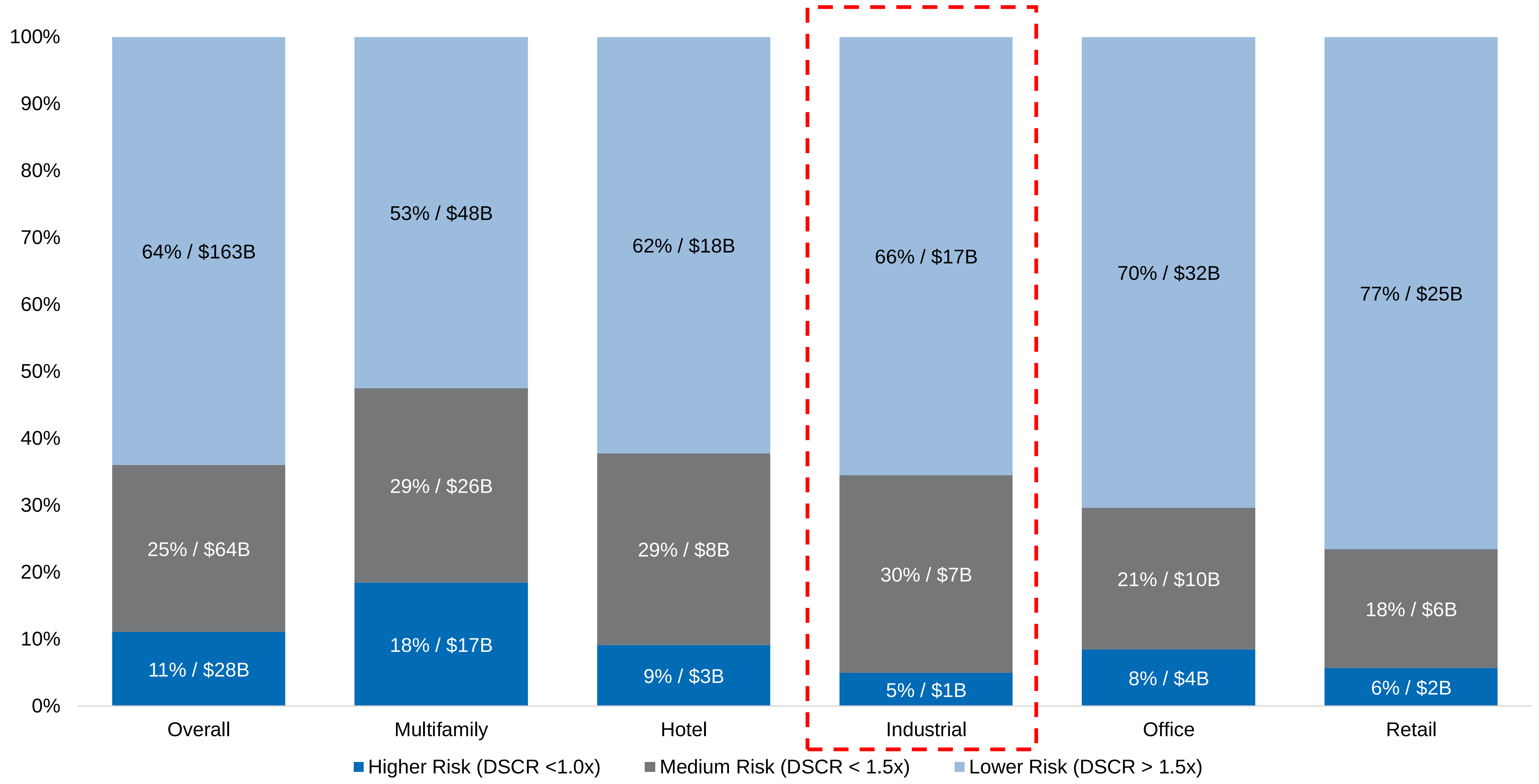


Source: RCA, ICE Data Indices, Newmark Research as of 5/3/2023

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

Even property types with strong operating fundamentals could face challenges covering new, higher interest costs. Transitional debt is likely even more fraught.

DSCR Profile of Securitized CRE Debt Maturing in 2023/4

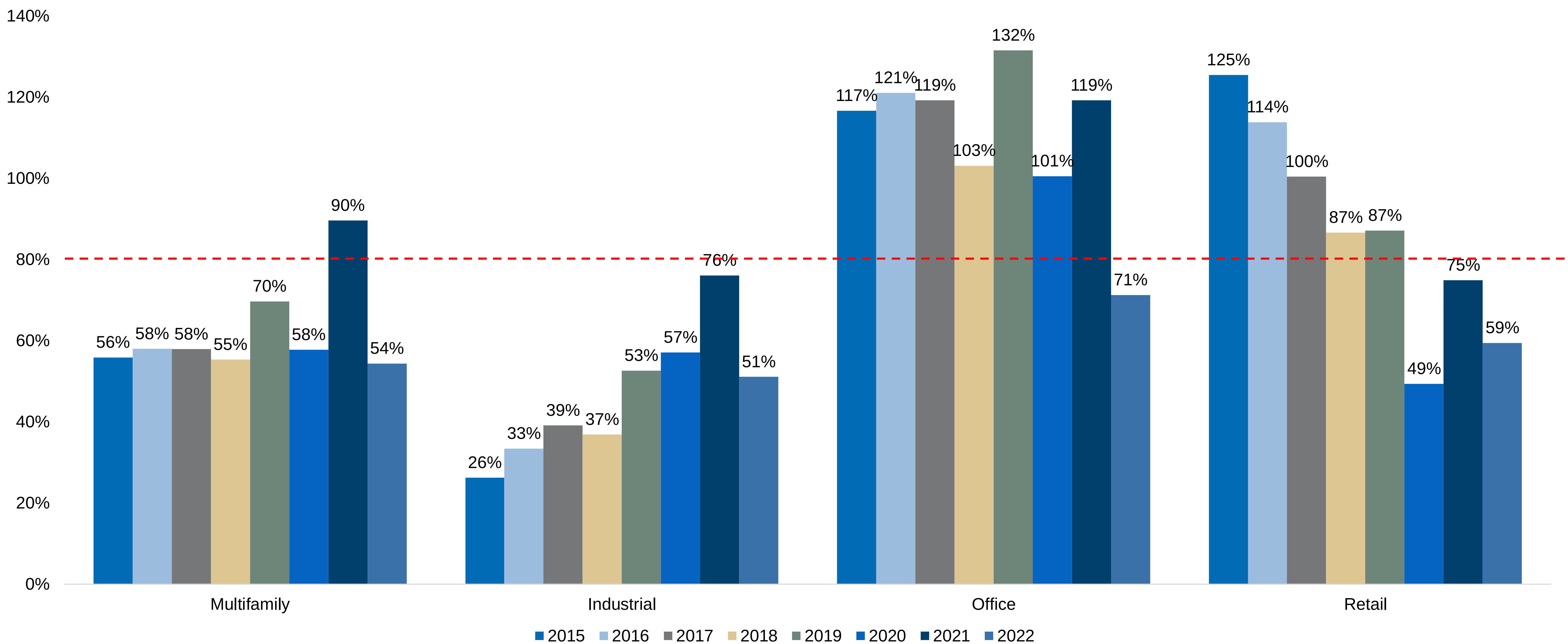


Source: Trepp, Newmark Research as of 5/11/2023

Strong Price Appreciation Will Protect against Industrial Distress

Industrial values have risen tremendously since 2015. As a result, most recent loan vintages have organically deleveraged even when accounting for the recent reduction in market values. That said, industrial loans originated in 2021 are at greater risk, having been struck at the top of the market though this is counterbalanced by further-off maturity dates. Transitional debt and construction loans will also bear watching.

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

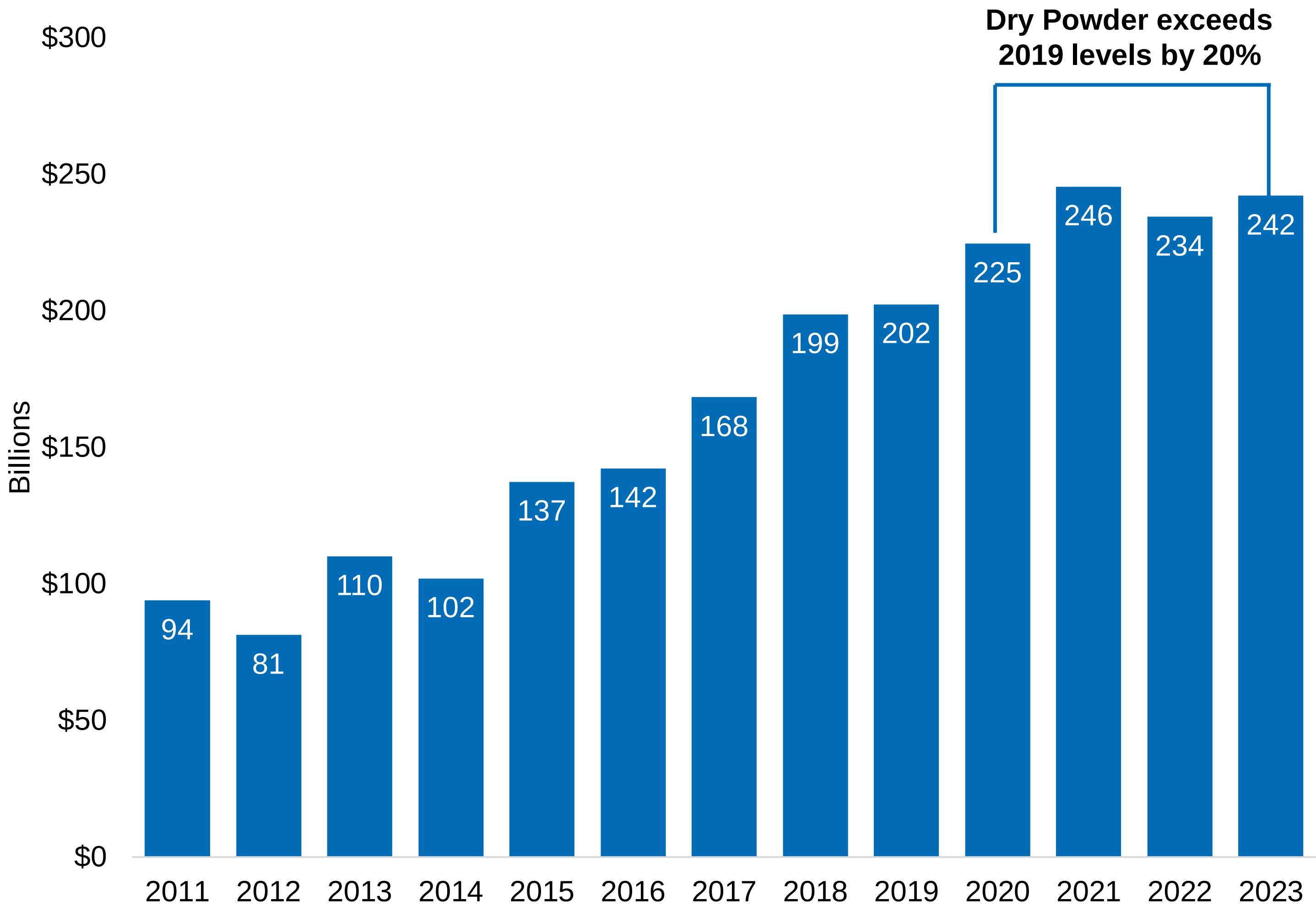


Source: RCA, Dow Jones, S&P Capital IQ, Newmark Research as of 5/11/2023
*We take the average LTV in a given year and then increase the value of the denominator by the cumulative price return of the corresponding Dow Jones REIT property sector index since the year the loan was originated. For example, 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.

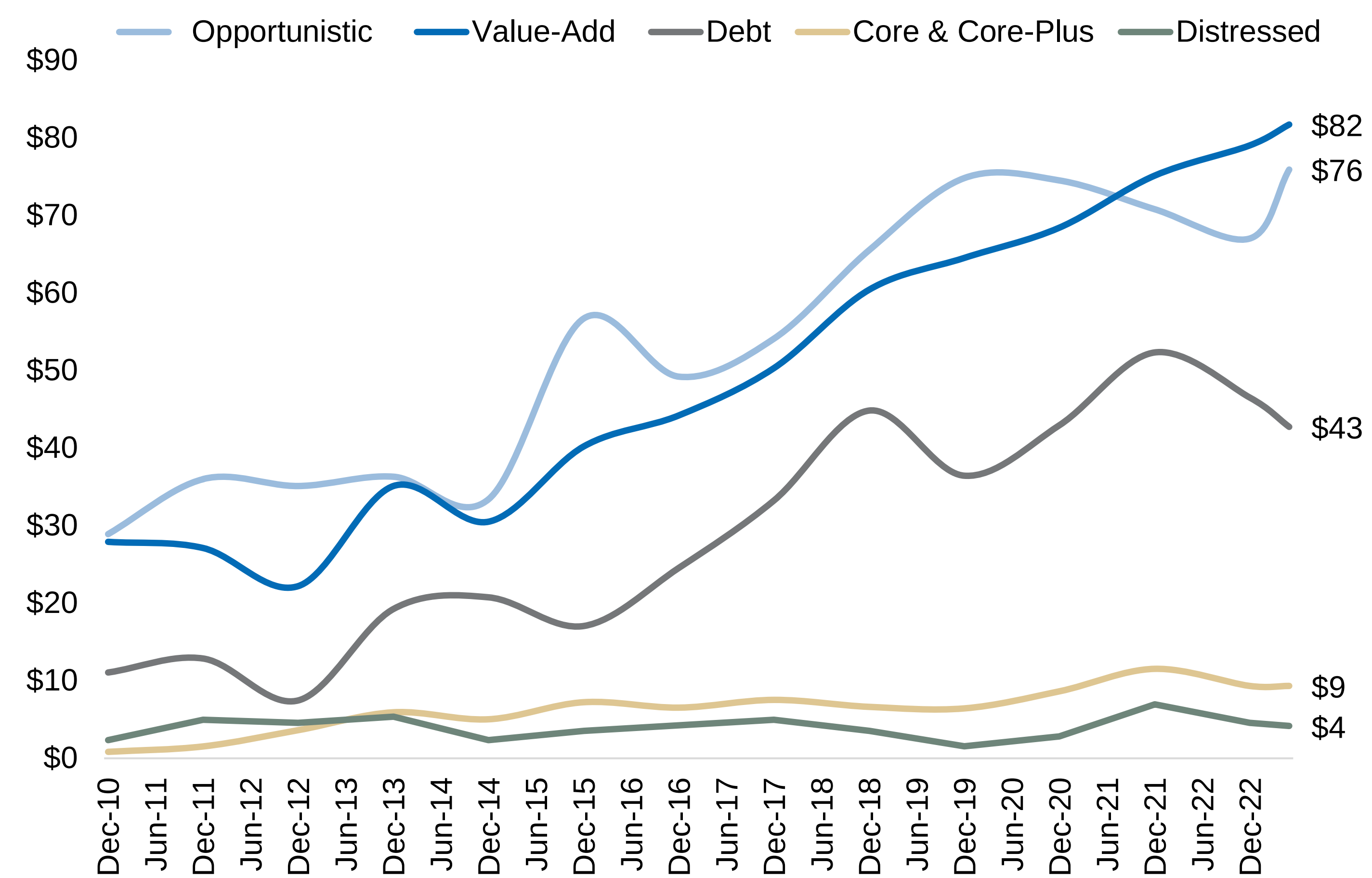
Private Equity Dry Powder Still Near Record Levels

Fundraising has led to an incredible amount of dry powder to be deployed for commercial real estate acquisition; investor allocation to industrial product will remain high, along with multifamily. Numerous funds are being raised for alternative/niche asset types in the industrial sector, such as industrial-service properties, cold storage and advanced manufacturing facilities.

Dry Powder – Closed-End Funds



Dry Powder by Strategy*

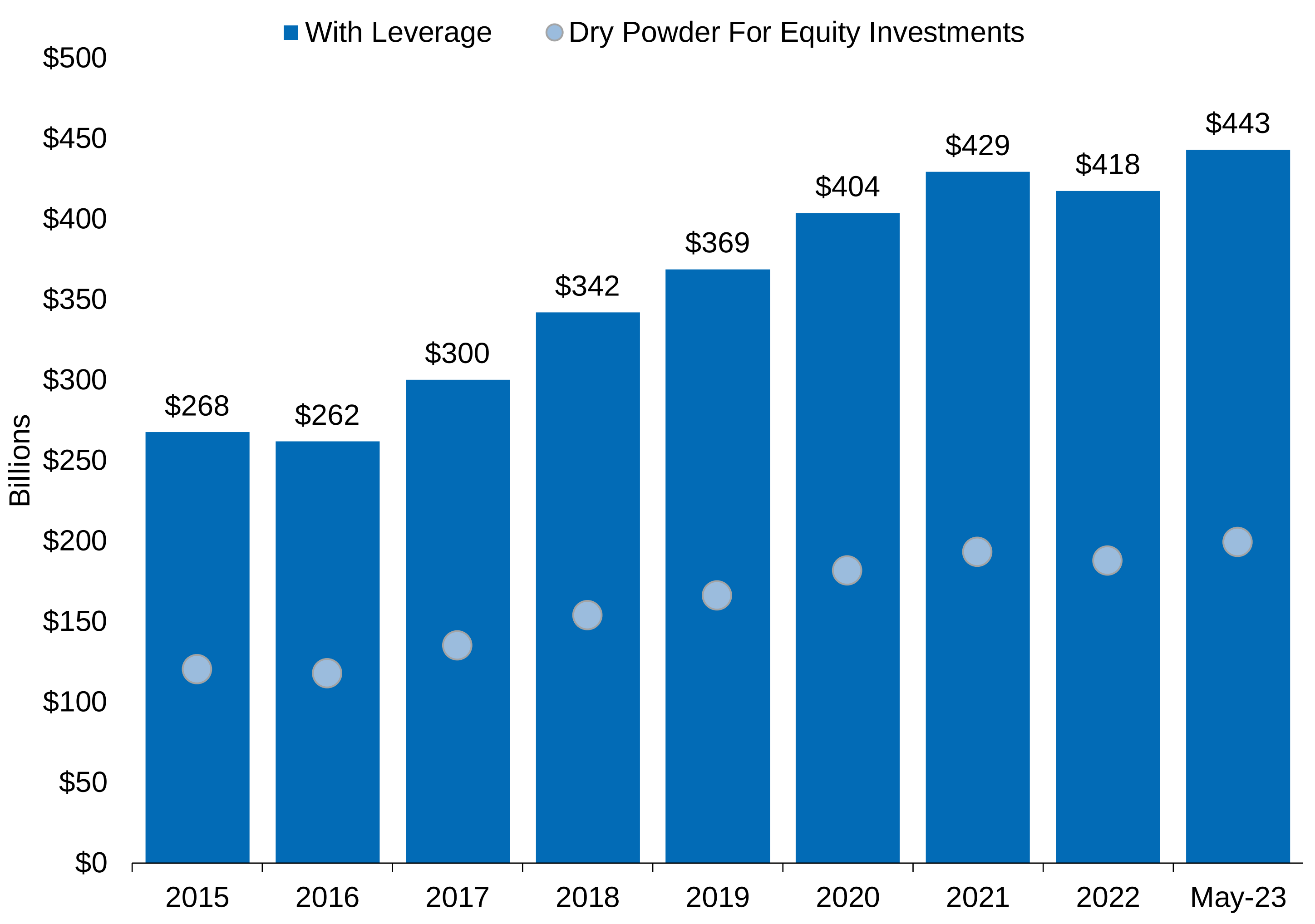


Source: Newmark Research, Preqin as of 5/11/2023
*Not shown: Fund of funds, co-investments, and secondaries strategies

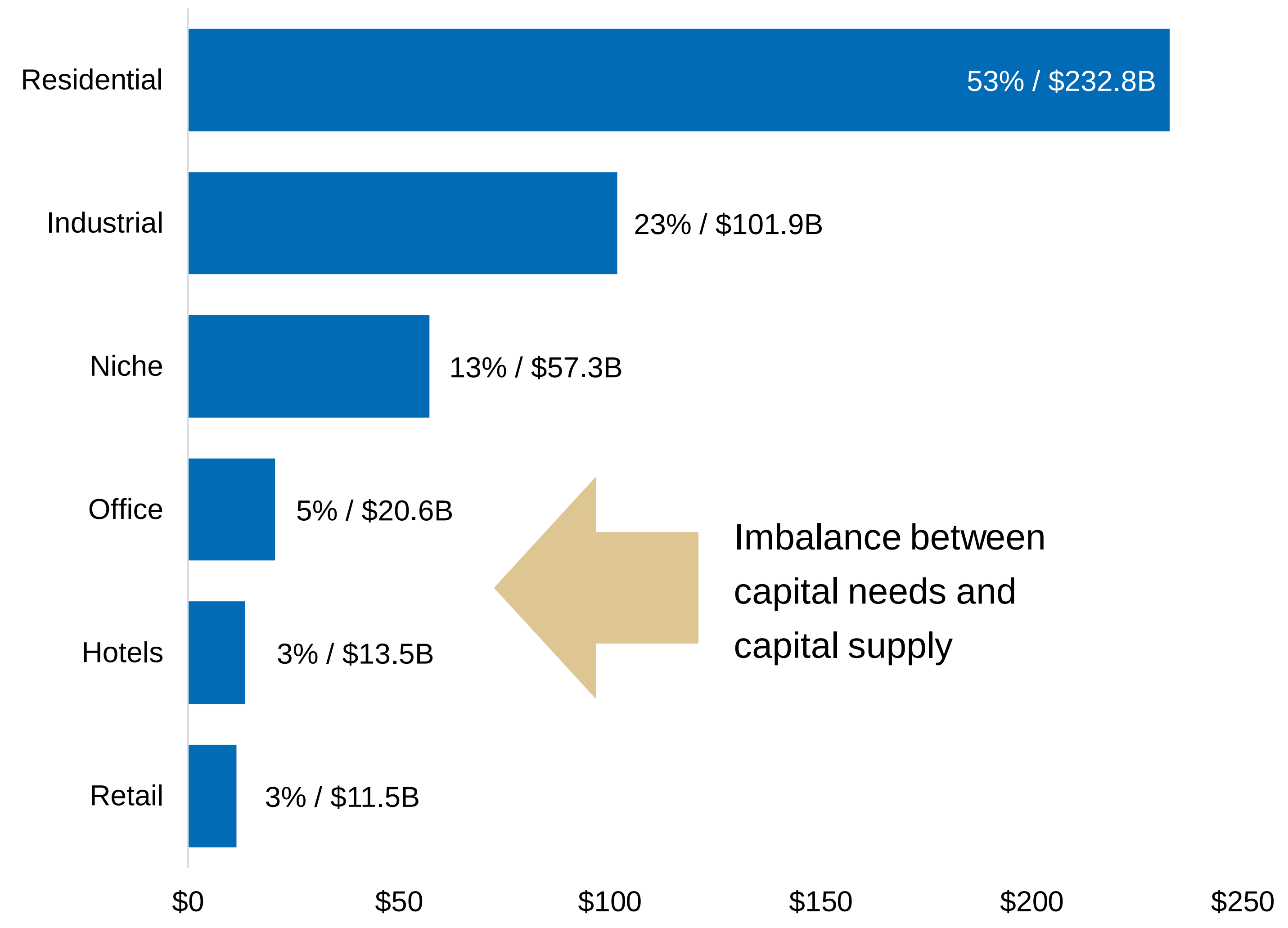
Ample Capital for Industrial Investment, Recapitalization

The $199 billion in dry powder raised for equity investments, not including dry powder raised for debt strategies, equates to a leveraged purchasing power of $443 billion, using a 55% loan-to-value ratio. We estimate that over half of this capital is targeted at residential assets, with most of the remainder focused on industrial assets. The capital targeting office and retail assets is quite small by comparison, which could ultimately represent a contrarian opportunity.

Dry Powder at 55% Leverage



Leveraged Dry Powder by Property Type*



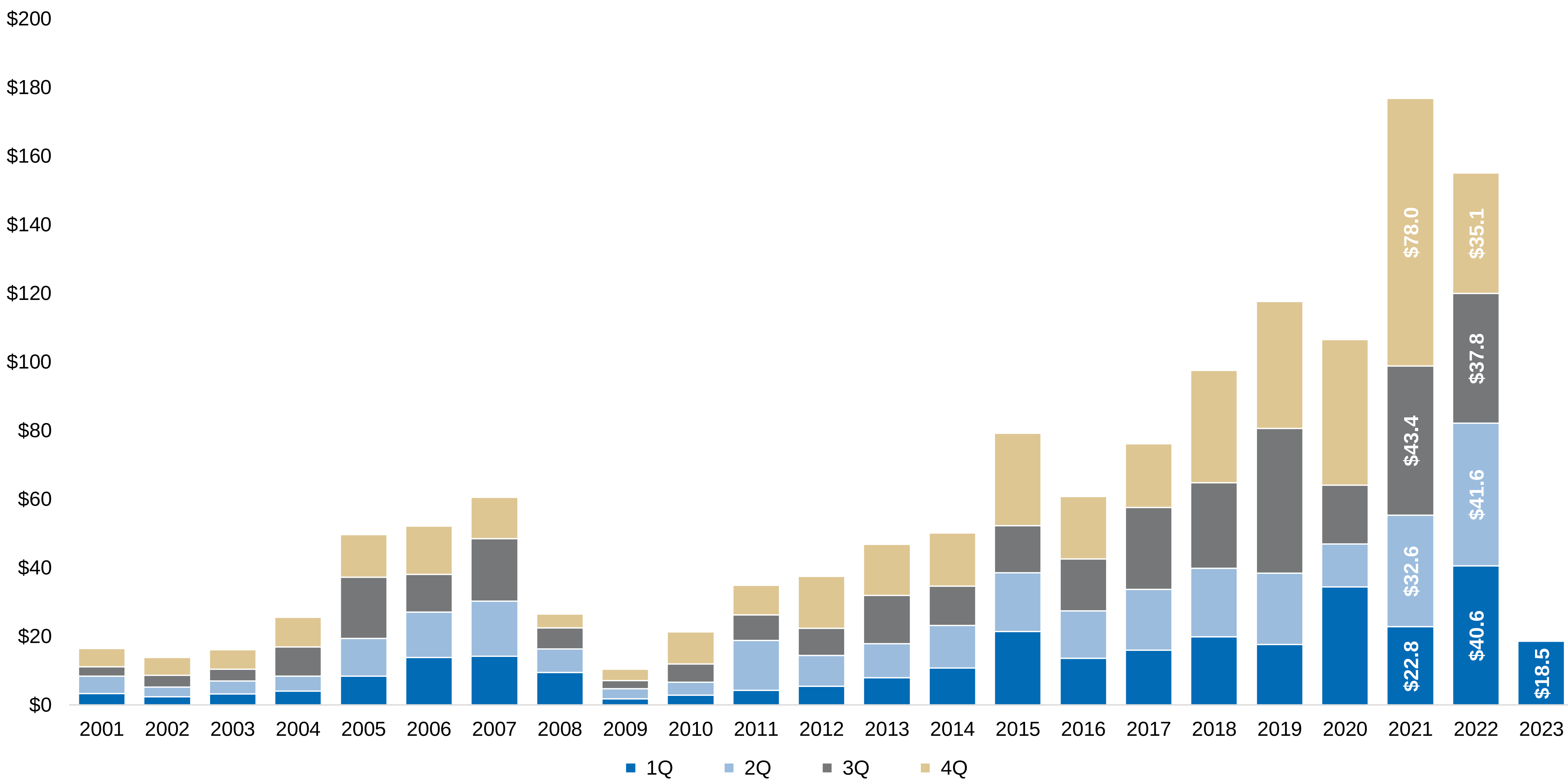
Source: Newmark Research, Real Capital Analytics, Preqin as of 5/11/2023

*We looked at the percent called by vintage year and applied this to the total amount fundraised in each year to calculate the amount of uncalled capital (i.e. dry powder), broken out by main property type. Roughly half the dry powder was at diversified funds. This was allocated to the various property types in proportion to their share of total dry powder, excluding diversified funds. Finally, we grossed up the dry powder assuming 55% leverage would be used.

Low 1Q23 Sales Volume – But Year-Over-Year Comparisons Are Skewed

Quarterly sales volume continues to decline from all-time highs as acquisitions became more challenging to finance amid every successive interest rate hike. However, sales volume in the first quarter of 2023 was right in line with pre-pandemic history, measuring 5.0% above volume in the first quarter of 2019.

Investment Sales Volume in Billions

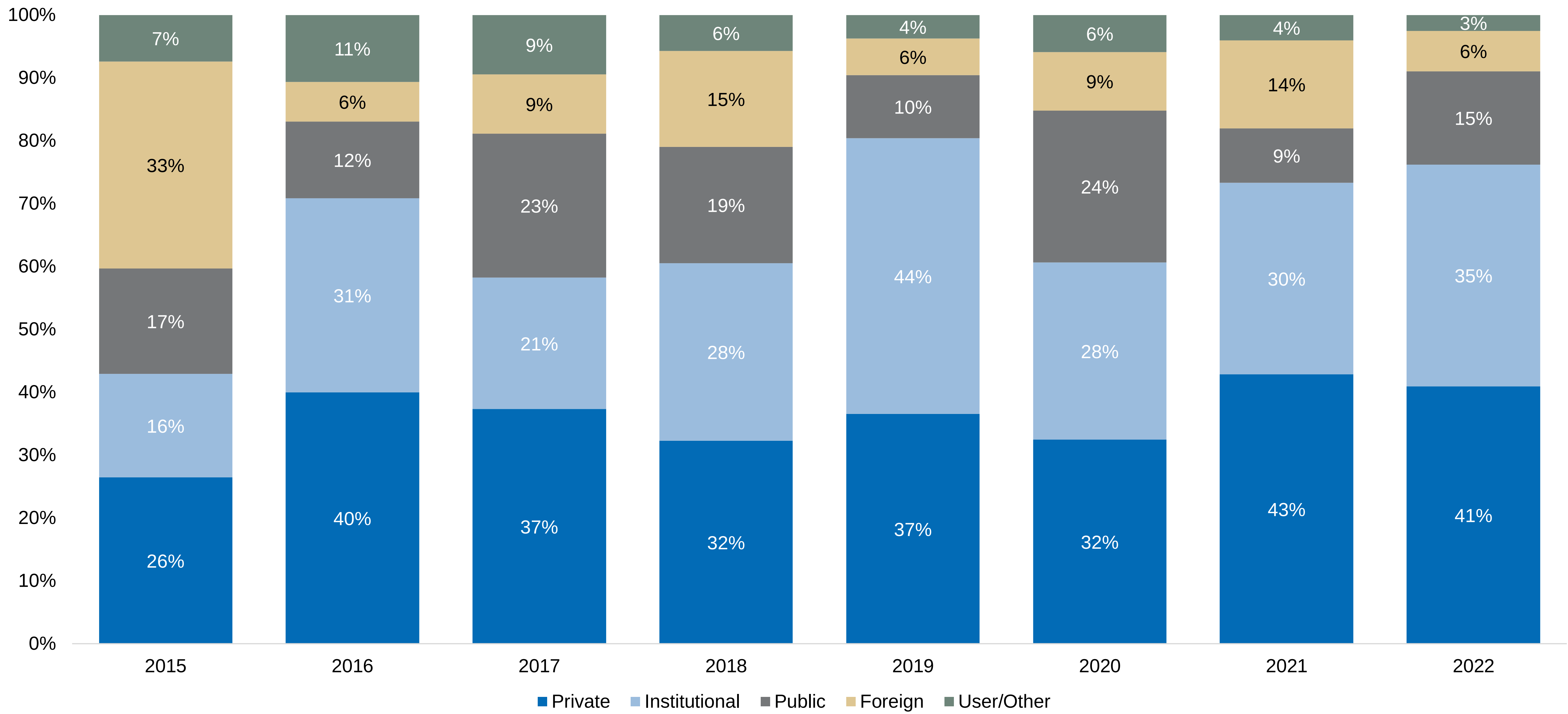


Source: Newmark Research, MSCI Real Capital Analytics

Industrial Buyer Composition Mostly Unchanged

Cross-border investors and users have cooled acquisition activity more dramatically than other types of buyer profiles. By contrast, REITs gained share, despite negative share performance. Users have largely been priced out of opportunities year-to-date and the strong dollar has dissuaded some potential cross-border investment. All-cash buyers and non-heavily leveraged investors will see significant opportunities, as will potential users, during a prolonged period of price discovery.

Composition of Industrial Buyers

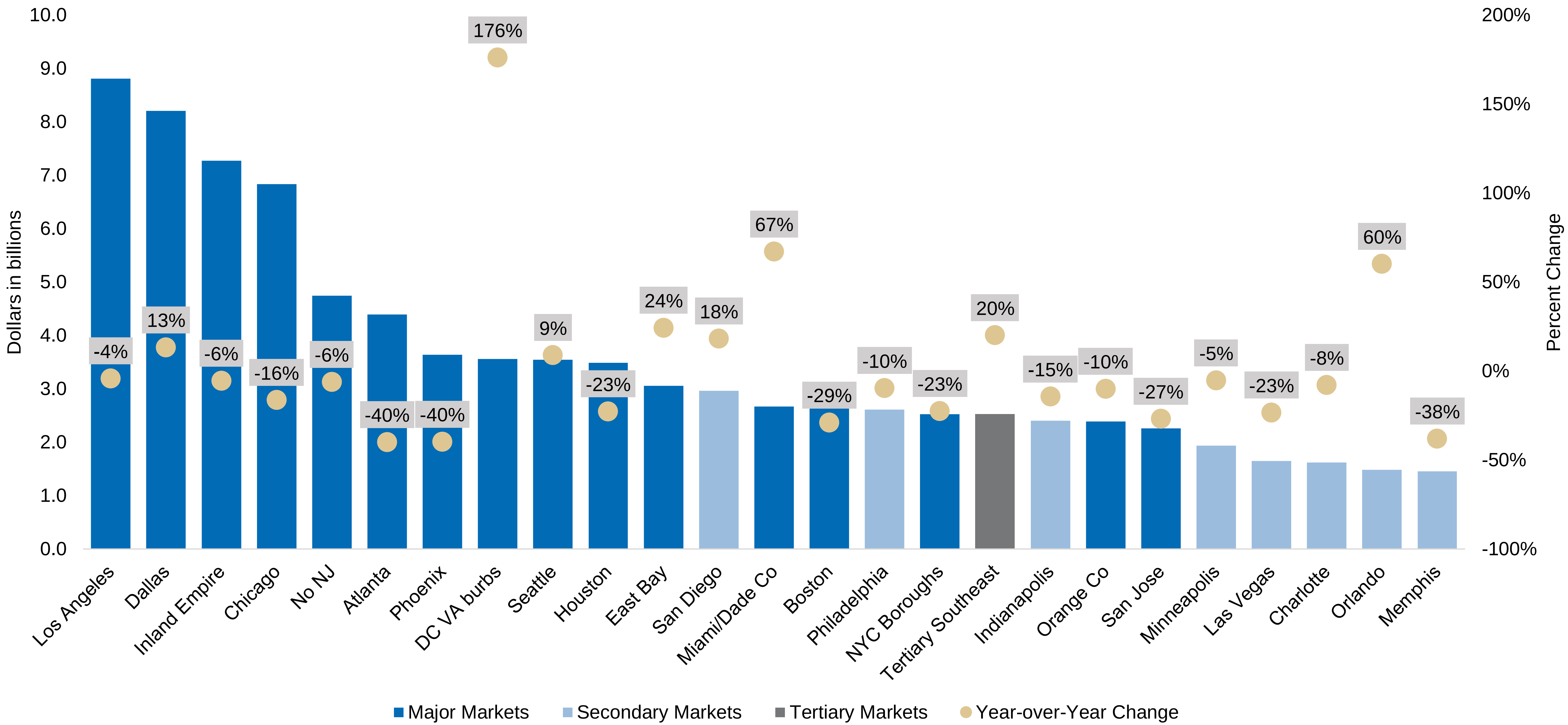


Source: Newmark Research, MSCI Real Capital Analytics

Major Industrial Markets Dominated the Top 25 By Volume in 2022

Traditional industrial powerhouse markets accounted for the first 11 markets by investments sales volume in 2022, led by markets in the Greater Los Angeles region, Dallas, Chicago and Northern New Jersey. Together these markets accounted for 26% of annual investment sales. The balance of the top 25 was mostly accounted for by Sun Belt ports and distribution hubs from Miami to Phoenix. Of the 156 markets for which data is available, volumes increased year-over-year in 63. The average change for major markets was 0% compared with negative 14% and 18% respectively for secondary and tertiary markets.

Top 25 Industrial Markets by 2022 Sales Volume

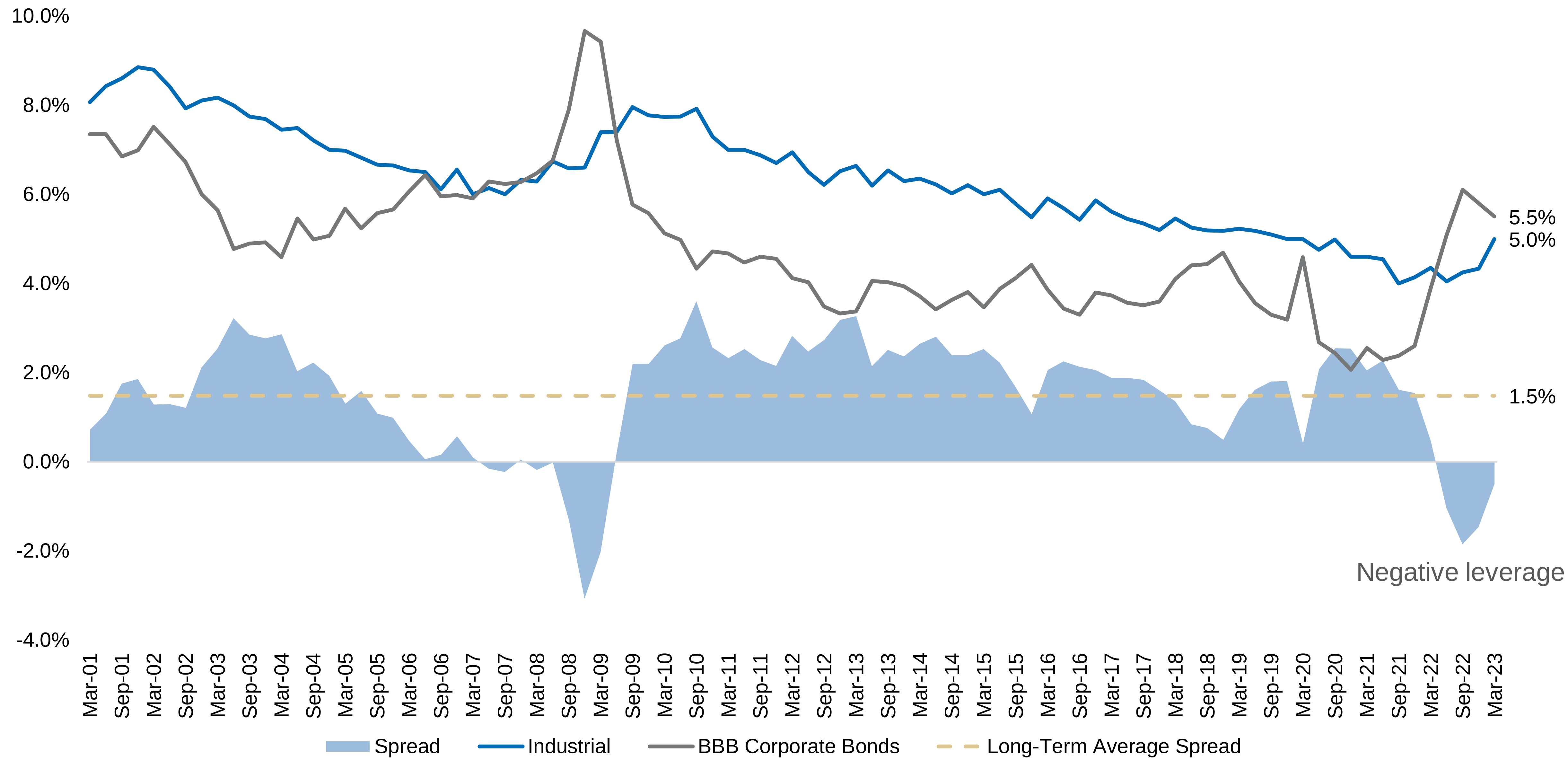


Source: Newmark Research, MSCI Real Capital Analytics

Rising Cost of Debt Placing Pressure on Cap Rates

Industrial transaction cap rates saw significant movement in the first quarter of 2023, increasing 70 basis points from the prior quarter. The cost of debt continues to place upward pressure on cap rates as the sector remains in negative leverage. The gap is narrowing, however, both as industrial cap rates rise and the cost of debt has fallen. The market is still far from equilibrium. The long-term average spread is 1.5% and it is -0.5% today. Even if equilibrium spreads have declined, there is still at least another 100bps of adjustment to come.

Top Quartile Transaction Cap Rate*

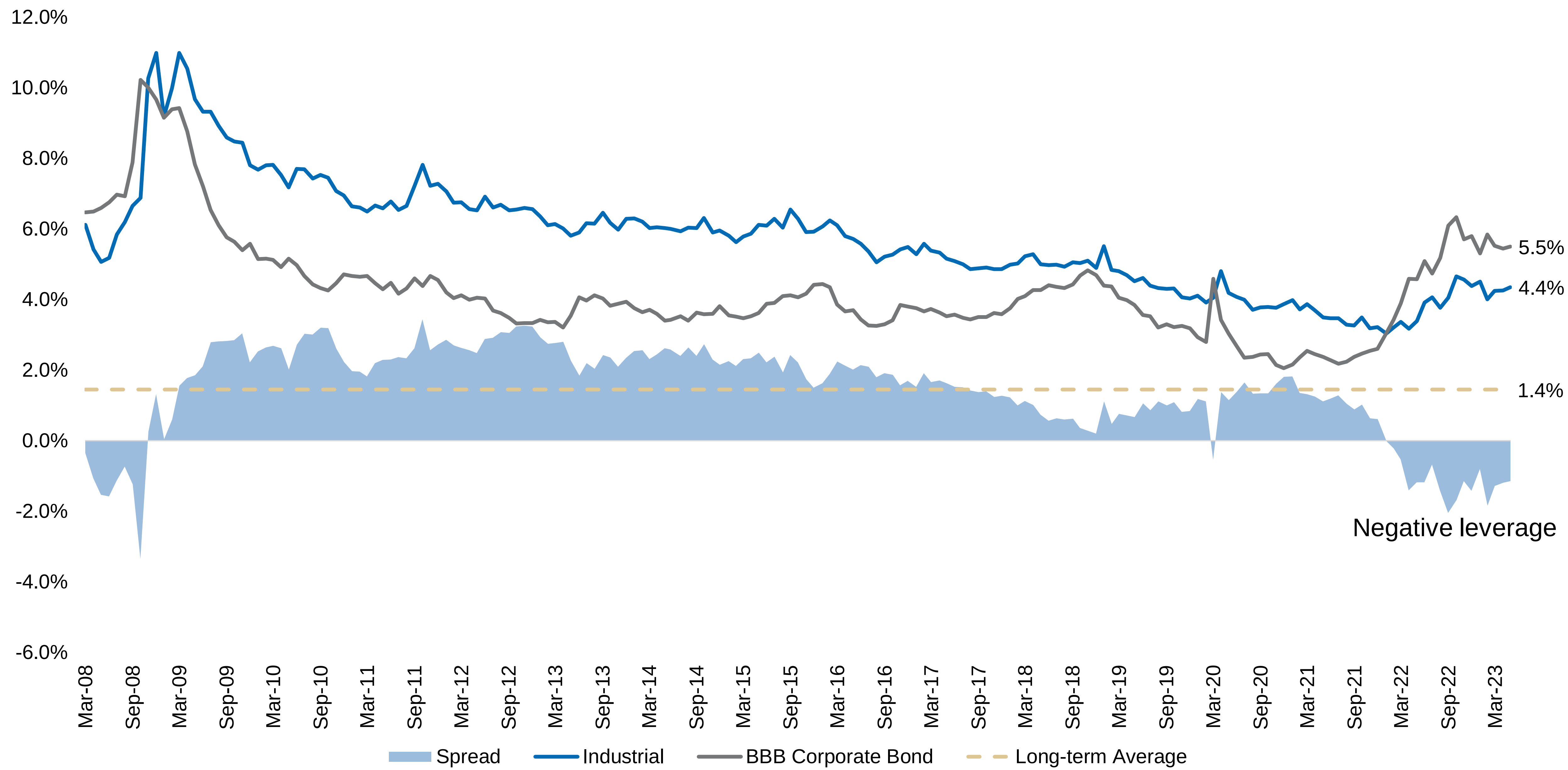


Source: Real Capital Analytics, Federal Reserve Bank of St. Louis, Moody's as of 5/16/2023
*Quarterly

Public Markets Responded Earlier but Yields Have Recently Been Range-Bound

While transaction cap rates have only begun rising in the last two quarters, REIT-implied cap rates responded quickly to rising Treasury and corporate bond yields. REIT-implied cap rates peaked along with corporate bond yields in October and have been range-bound since that time. As a result, a state of negative leverage has persisted now for 16 months. This suggests that industrial REIT investors expect a collapse in the cost of debt. If debt costs remain range-bound, then industrial REITs have significant downside risk (rising cap rates).

REIT-Implied Nominal Cap Rate

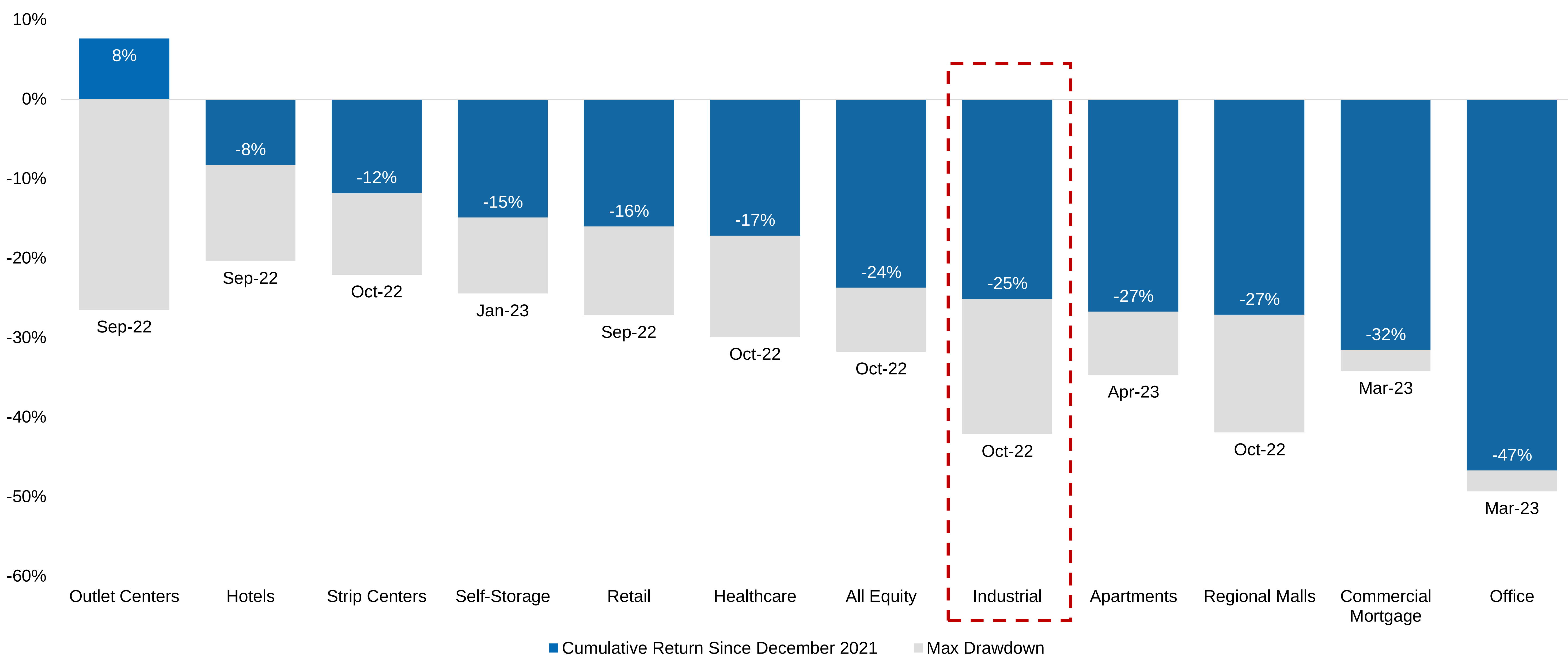


Source: Green Street, FRED, Moody's, Newmark Research as of 5/16/2023

Industrial REITs Down 25% Since December 2021, but Have Rallied Strongly Recently

Industrial REITs were down 42% in October 2022 compared with December 2021 on a total return basis, but they have since staged a strong rally on the back of robust operating fundamentals and lower interest rates.

Dow Jones REIT Index Total Returns

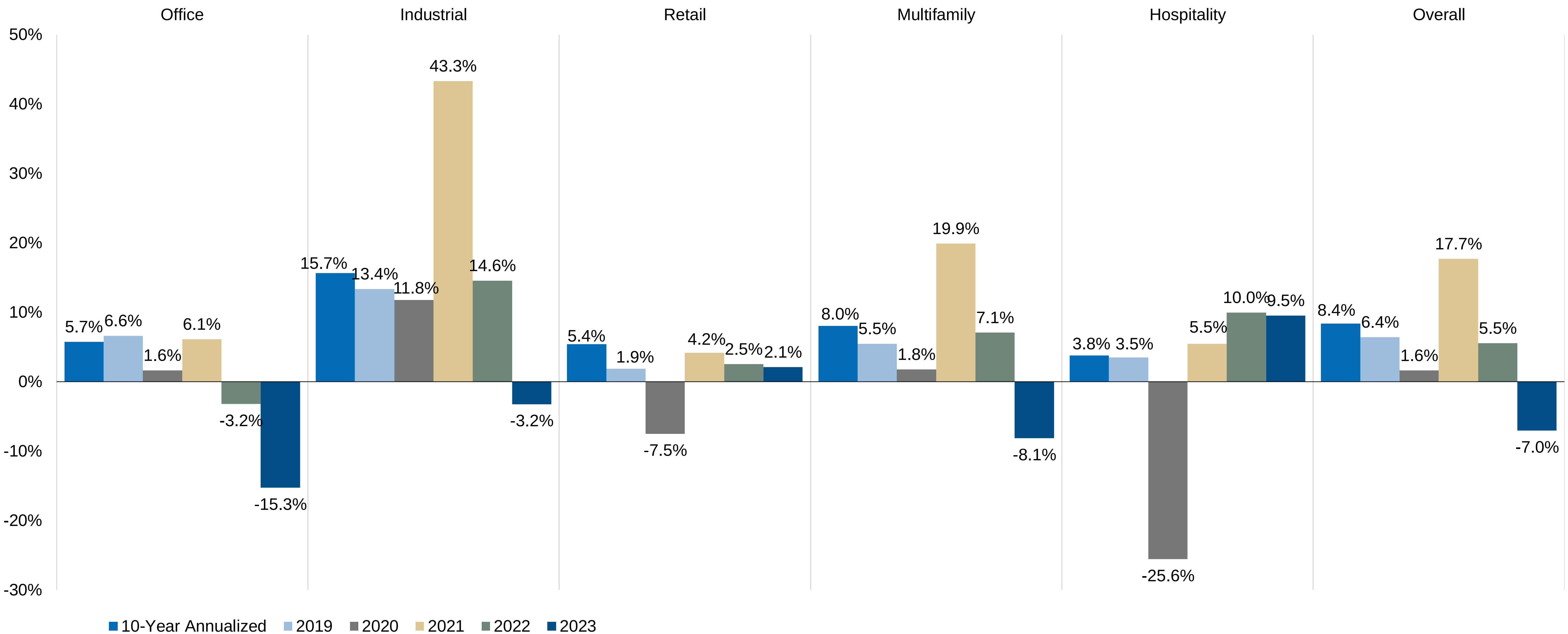


Source: Dow Jones, Newmark Research as of 5/12/2023

Industrial Has Consistently Outperformed All Other Sectors

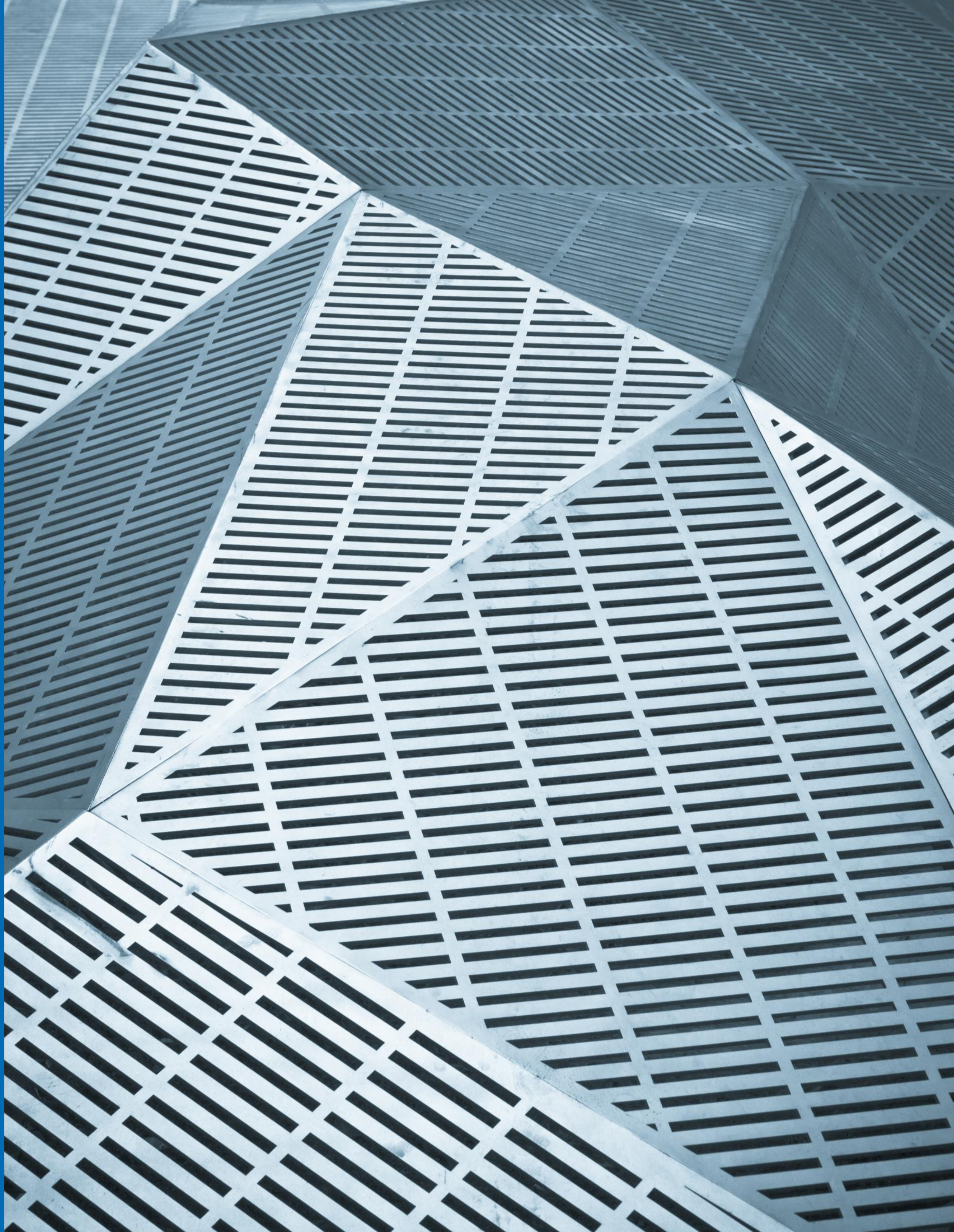
From the second quarter of 2016 to the second quarter of 2022, industrial outperformed all other property sectors in the NCREIF index every quarter. That streak was broken in the third quarter of 2022. Industrial has underperformed the index in each of the last two quarters as capital values are revised downwards, despite still-strong NOI growth. As the market goes through this adjustment, it is important to keep in mind that industrial has still generated an 82% cumulative return since 2019, more than double any other property sector.

NCREIF National Property Index Total Return



Source: NCREIF, Newmark Research

Appendix: Market Statistics



National Industrial Market Statistics

First Quarter 2023

Market Statistics

	Total Inventory (SF)	SF Under Construction	SF Absorbed This Quarter	SF Absorbed Year-to-Date	Vacancy Rate	Average Asking Rent (Price/SF)
National	**16,612,246,061**	**664,493,448**	**64,308,177**	**64,308,177**	**4.2%**	**$10.83**
Atlanta	733,368,720	35,477,039	2,920,012	2,920,012	4.1%	$6.63
Austin	120,433,975	16,720,609	615,901	615,901	5.8%	$13.23
Baltimore	263,707,692	999,760	-1,432,754	-1,432,754	6.0%	$8.08
Boston	215,769,059	6,552,283	-918,228	-918,228	4.6%	$15.07
Broward County, FL	116,265,059	1,007,850	194,240	194,240	4.6%	$13.15
Charleston, SC	91,788,416	12,242,864	789,214	789,214	3.1%	$7.83
Charlotte	424,902,941	23,420,681	-439,866	-439,866	4.9%	$6.51
Chicago	1,200,174,762	35,289,613	5,687,608	5,687,608	4.0%	$6.35
Cincinnati	302,897,459	14,457,167	493,234	493,234	3.1%	$5.87
Cleveland	291,212,410	4,203,748	3,868	3,868	4.3%	$5.41
Columbia, SC	66,221,252	2,248,402	-59,116	-59,116	3.9%	$4.67
Columbus	278,192,972	9,260,726	905,118	905,118	6.2%	$5.31
Dallas	1,039,901,462	62,585,973	8,959,209	8,959,209	6.4%	$8.46
Denver	219,388,935	10,188,514	747,830	747,830	7.8%	$10.63
Detroit	425,720,505	7,906,935	2,283,263	2,283,263	3.2%	$7.47
Greenville, SC	243,759,891	19,821,157	3,228,662	3,228,662	4.3%	$4.87
Houston	713,663,884	36,213,893	4,382,190	4,382,190	5.7%	$8.83
Indianapolis	401,364,779	20,869,064	5,506,029	5,506,029	5.5%	$5.76
Inland Empire, CA	688,878,009	41,179,498	2,636,645	2,636,645	2.2%	$18.21

Note: Asking rents are quoted on a NNN basis. The average asking rent is the weighted average across warehouse, manufacturing, flex, and general industrial properties. Older, available buildings often cite asking rents, while newer facilities often withhold rent values. Based on this, today's asking rent averages are materially understated.

National Industrial Market Statistics

First Quarter 2023

Market Statistics

	Total Inventory (SF)	SF Under Construction	SF Absorbed This Quarter	SF Absorbed Year-to-Date	Vacancy Rate	Average Asking Rent (Price/SF)
National	**16,612,246,061**	**664,493,448**	**64,308,177**	**64,308,177**	**4.2%**	**$10.83**
Jacksonville	144,640,086	7,396,788	-259,991	-259,991	3.8%	$8.18
Kansas City	321,313,577	6,337,114	541,713	541,713	3.8%	$5.30
Las Vegas	147,669,156	15,453,128	965,103	965,103	2.9%	$14.25
Long Island	166,846,699	1,897,120	-283,908	-283,908	4.3%	$18.26
Los Angeles	1,058,923,750	6,865,947	-2,440,322	-2,440,322	1.5%	$21.18
Memphis	310,045,674	10,047,092	-927,457	-927,457	6.0%	$4.59
Miami	221,150,252	9,426,673	1,198,185	1,198,185	2.9%	$13.32
Milwaukee	247,874,284	1,543,186	344,275	344,275	2.4%	$4.87
Minneapolis	415,974,540	7,698,688	1,897,653	1,897,653	3.2%	$6.78
Nashville	274,649,370	11,954,845	615,758	615,758	3.1%	$8.39
New Jersey Northern	683,772,442	8,246,923	1,605,860	1,605,860	2.7%	$13.57
Oakland/East Bay	257,695,989	5,377,586	604,114	604,114	4.4%	$18.50
Orange County, CA	265,968,333	2,335,048	-102,403	-102,403	1.9%	$19.49
Orlando	172,638,789	7,840,698	225,230	225,230	4.7%	$9.34
Palm Beach	45,872,278	2,890,416	-17,950	-17,950	5.4%	$12.96
Penn. I-81/78 Corridor	451,895,177	21,164,489	7,108,509	7,108,509	5.3%	$7.07
Philadelphia	514,027,237	19,131,818	1,248,527	1,248,527	4.3%	$9.36
Phoenix	360,491,676	45,087,512	5,606,719	5,606,719	5.4%	$12.71
Pittsburgh	152,565,456	1,625,417	232,315	232,315	6.2%	$5.32

Note: Asking rents are quoted on a NNN basis. The average asking rent is the weighted average across warehouse, manufacturing, flex, and general industrial properties. Older, available buildings often cite asking rents, while newer facilities often withhold rent values. Based on this, today's asking rent averages are materially understated.

National Industrial Market Statistics

First Quarter 2023

Market Statistics

	Total Inventory (SF)	SF Under Construction	SF Absorbed This Quarter	SF Absorbed Year-to-Date	Vacancy Rate	Average Asking Rent (Price/SF)
National	**16,612,246,061**	**664,493,448**	**64,308,177**	**64,308,177**	**4.2%**	**$10.83**
Portland	205,663,799	6,179,473	228,246	228,246	2.7%	$11.29
Raleigh/Durham	137,463,039	9,443,008	68,655	68,655	4.5%	$11.45
Sacramento	169,180,625	3,756,035	659,749	659,749	2.7%	$10.04
Salt Lake City	284,258,042	20,060,460	1,224,048	1,224,048	3.3%	$10.30
San Antonio	153,940,559	7,699,905	1,189,018	1,189,018	5.2%	$8.36
San Diego	166,928,956	2,256,951	-694,952	-694,952	3.4%	$15.54
Savannah, GA	107,182,512	22,643,075	4,348,155	4,348,155	2.7%	$6.36
Seattle	314,834,418	12,169,917	-662,699	-662,699	4.0%	$12.31
Silicon Valley	139,373,200	2,938,729	121,650	121,650	8.0%	$28.14
St. Louis	291,247,005	1,787,420	-232,138	-232,138	4.8%	$5.94
Tampa/St. Petersburg	246,151,781	3,821,433	1,983,746	1,983,746	5.3%	$8.18
Washington, DC	344,395,178	18,770,778	1,409,710	1,409,710	4.9%	$12.61

Note: Asking rents are quoted on a NNN basis. The average asking rent is the weighted average across warehouse, manufacturing, flex, and general industrial properties. Older, available buildings often cite asking rents, while newer facilities often withhold rent values. Based on this, today's asking rent averages are materially understated.

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