V1.6 November 20, 2023

A View into New York City CRE

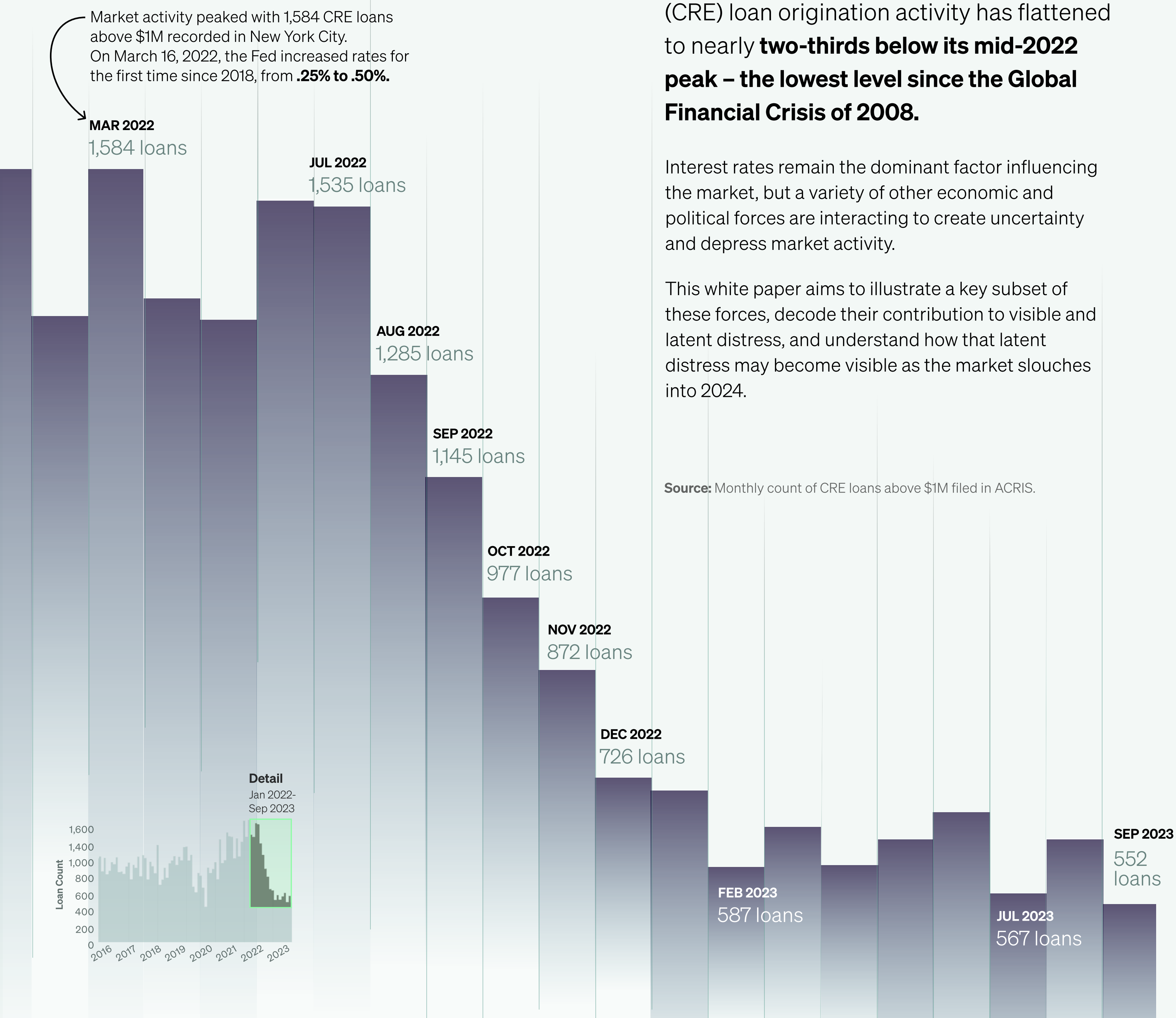
Market Distress

Q4 2023

As we move toward the close of 2023, New York City commercial real estate (CRE) loan origination activity has flattened to nearly **two-thirds below its mid-2022 peak – the lowest level since the Global Financial Crisis of 2008.**

Interest rates remain the dominant factor influencing the market, but a variety of other economic and political forces are interacting to create uncertainty and depress market activity.

This white paper aims to illustrate a key subset of these forces, decode their contribution to visible and latent distress, and understand how that latent distress may become visible as the market slouches into 2024.

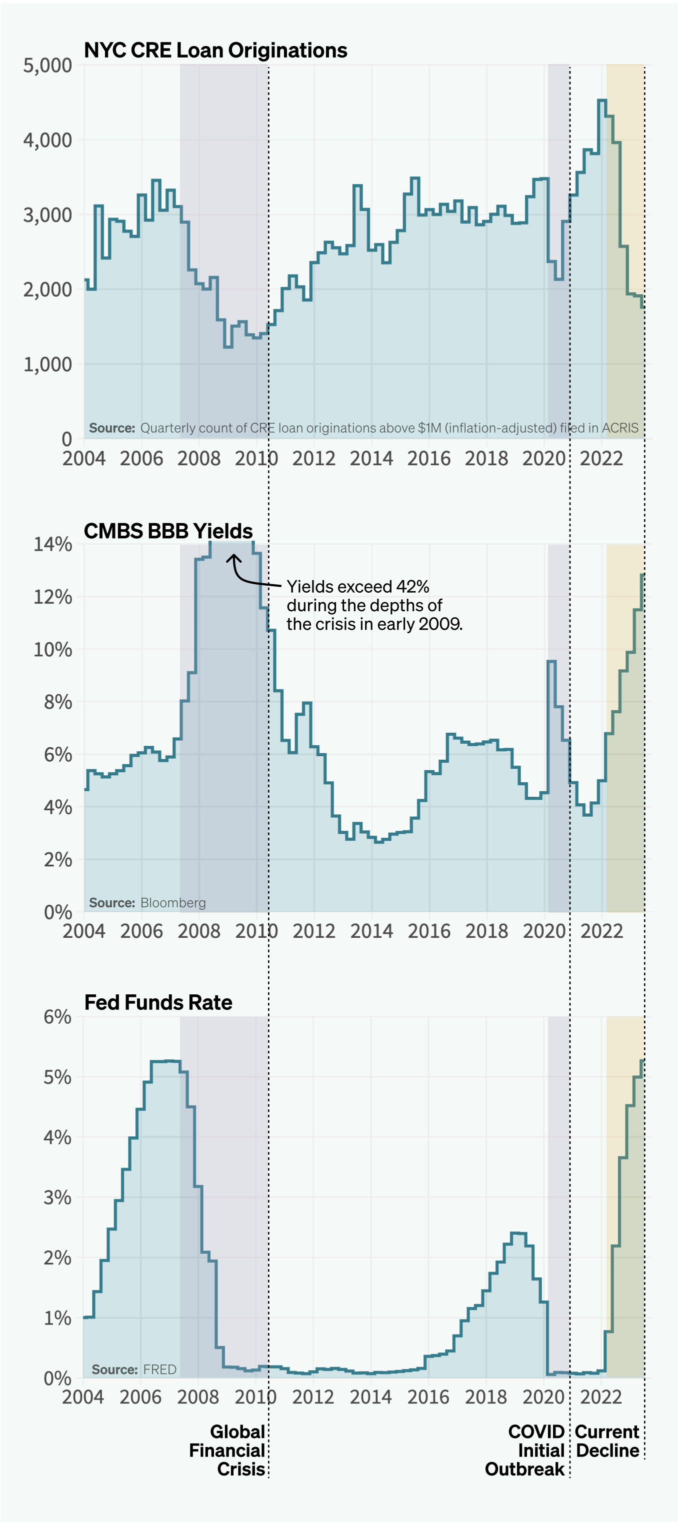


Source: Monthly count of CRE loans above $1M filed in ACRIS.

This white paper investigates the following market dynamics:

03	**Interest rate shock**	The connection between rapidly escalating interest rates and the CRE market slowdown, including context from the last period of severe distress.
05	**Scale of outstanding debt**	Total debt in the New York City market with breakdowns by vintage and asset type; the concern of approaching maturities.
06	**Shifting lending standards**	Banks shifting toward more conservative underwriting; the new reality for borrowers today and in the future.
09	**Unique challenges in Rent Regulated Multifamily**	Consequences of the Housing Stability and Tenant Protection Act of 2019, which tightly capped income growth for Rent Regulated Multifamily properties.
10	**Continued Office fallout**	Declining Office building values and the uncertain trajectory of Class B and C Office.
11	**The persistent burden of taxes**	The continued rise of property taxes; past-due taxes as an indicator of distress.
12	**Value destruction in practice**	A practical example of how an individual property owner is affected by falling property values, rising interest and cap rates, and stricter lending standards.
13	**Magnitude of sub-performing debt**	Assessing the proportion of total New York City CRE market debt experiencing distress.

Interest rate shock



The volume of new financing activity for New York City CRE has settled into a trough below the level of Q2 2020, which was a period of unparalleled uncertainty when the market came to a virtual standstill for weeks at a time.

Looking back further, we observe a trough of similar depth as the city navigated the shocks of the Global Financial Crisis. The GFC was a credit crisis, and the failure of major banks and other financial institutions led to a freeze in credit markets and a severe, broad-based contraction in economic activity.

The middle chart on the left shows the yield of commercial mortgage-backed security (CMBS) BBB-rated bonds, an indicator of the returns that private markets demand for CRE debt. Credit was in such short supply in 2009 that yields briefly shot up to an astonishing 42% – and the market took three full years to recover. While the current circumstances are not as extreme as in 2009, yields have increased from below 4% to over 12% in the last 24 months, which indicates how quickly investor confidence in the CRE sector has been degrading.

The recovery from the depths of the GFC was predominantly facilitated by the Fed lowering rates to near-zero, a level at which they remained for seven years.

In 2023, the stagnant market is caused first and foremost by the Fed's own interest rate hikes which are aimed at slowing inflation. There is no evidence that meaningful rate cuts are on the horizon or can be counted on to restore the market to a positive trajectory.

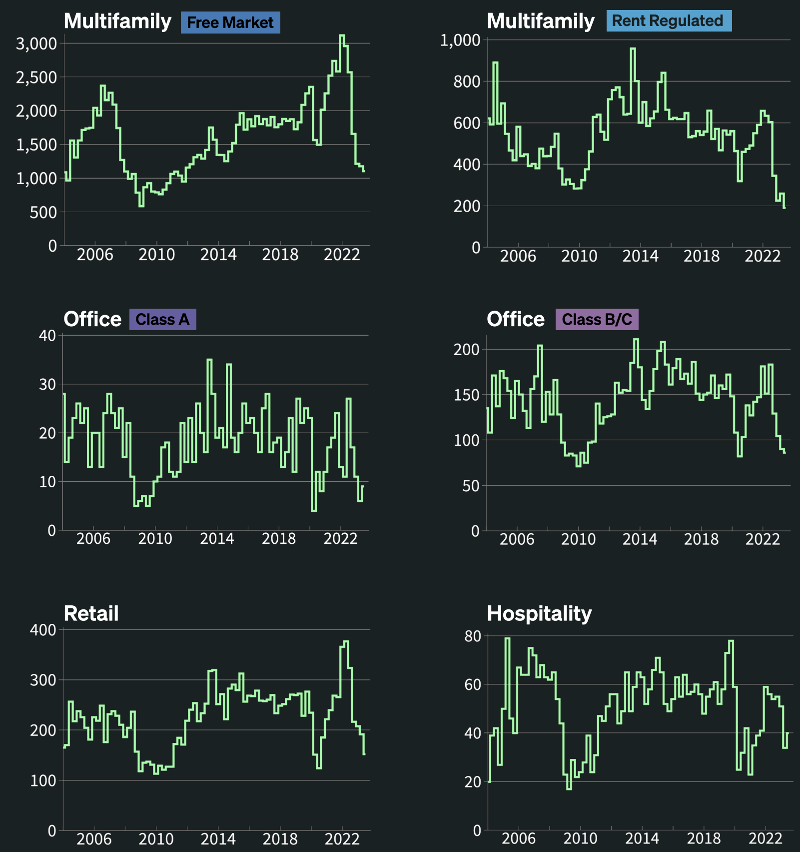
The consequence of this dramatic rate increase is undoubtedly a primary pain point in the market. However, it is not the only source of pressure.

For a very long time, extremely low rates provided an incentive for equity investors to take more risk because they could still achieve strong returns at higher prices, given the cheap leverage.

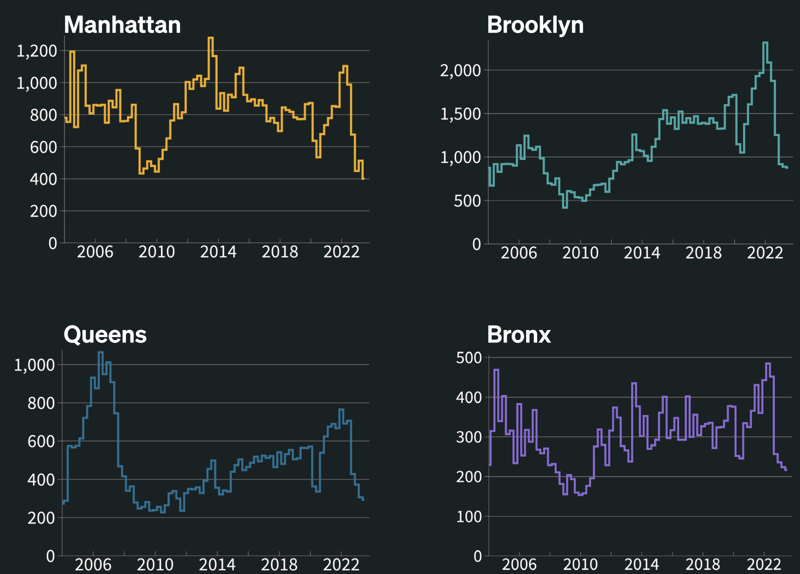
Breaking down the lending trend

By breaking down lending activity by asset type, we see additional nuances within the broader trend, including:

- The 2021-2022 surge in transactions, prior to the market plunge, was largely driven by Free Market Multifamily, and to a lesser extent, Retail. Office and Hospitality were excluded from that burst of activity due to the lingering consequences of COVID.
- While Office has experienced a recent plunge, the overall trend has been negative for the past decade.
- Rent Regulated Multifamily lending has seen the most precipitous drop, to a level below even the most challenging period of the GFC.



Broken down by borough, we see generally flat trends for Manhattan and the Bronx, the pre-GFC boom in Queens, and the remarkable growth associated with the gentrification of Brooklyn over the last decade.



Source & Methodology:
Count of loan originations, CRE loans above $1M filed in ACRIS

Scale of outstanding debt

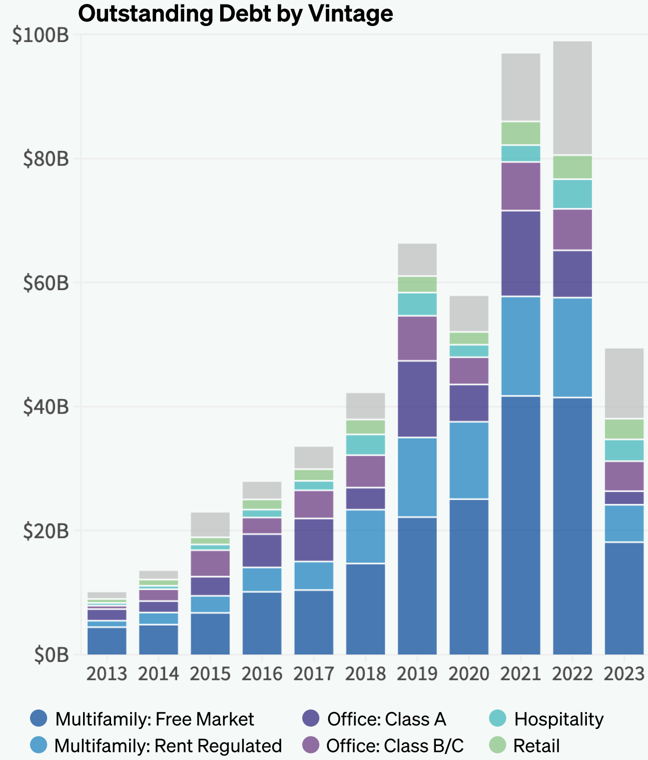
There is $520B in outstanding CRE debt in the New York City market. Most of this debt is in the form of fixed-rate loans with terms of five to ten years.

Looking at a breakdown of outstanding debt by vintage and asset type (right), we see that:

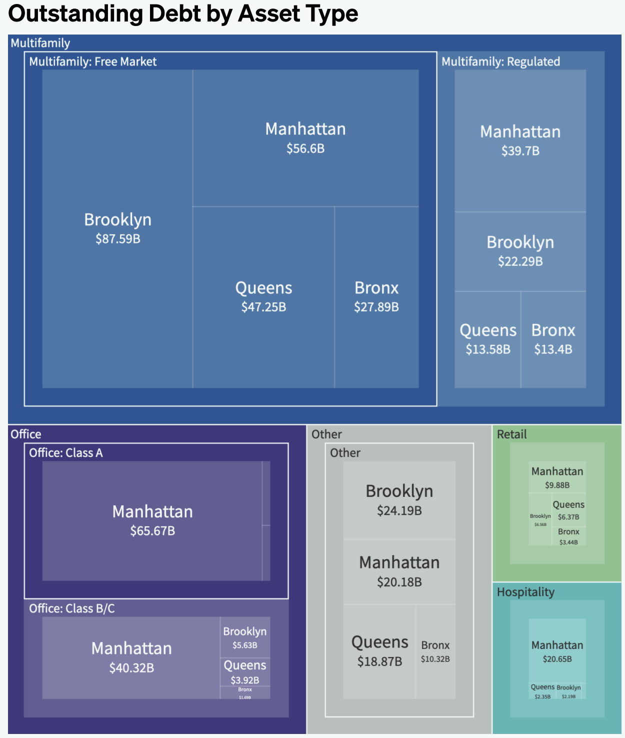
- With three quarters of 2023 behind us, current total origination dollar volume is less than half of 2021 and 2022 levels.
- While the exact term of these loans is uncertain, the volume of Office debt that will be passing five years since origination in 2024 is substantial. As these loans reach maturity the Office reckoning is likely to accelerate.
- Significant Rent Regulated Multifamily debt was refinanced in 2021 and 2022 at very low rates, which will provide much-needed debt-service relief to a subset of owners. However, when these loans mature, the increased debt-service costs associated with refinancing may prove untenable, a scenario that is examined on page 12.

To understand the conditions borrowers will face when their current debt matures, we must understand how lender behavior has shifted in the last 18 months.

Outstanding Debt by Vintage



Outstanding Debt by Asset Type



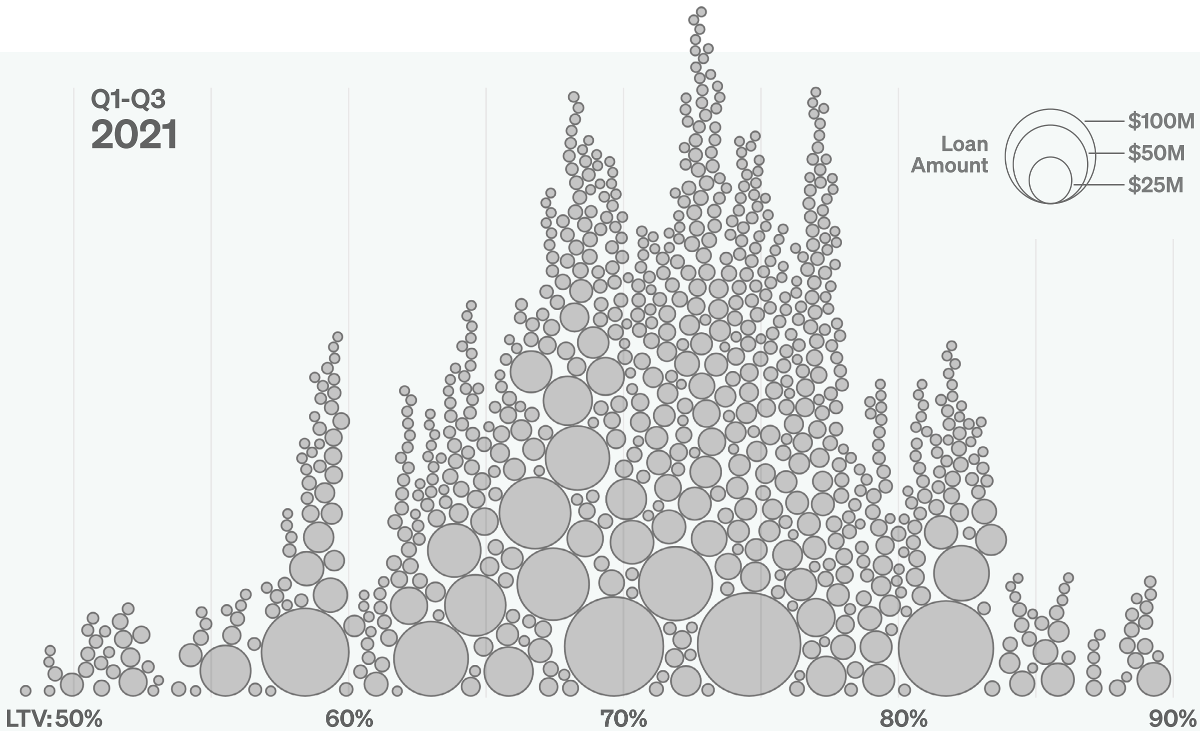
Shifting lending standards

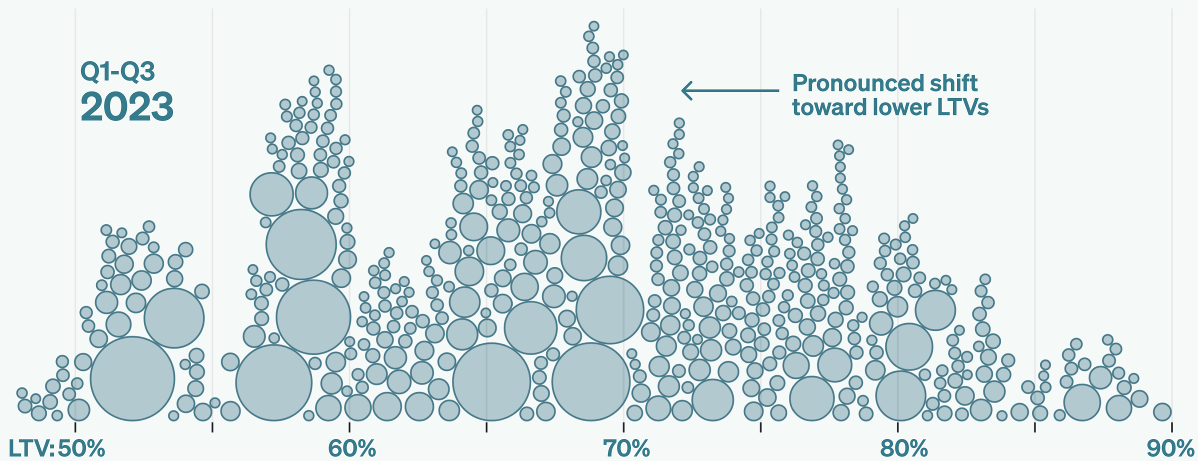
The willingness of lenders to accept risk can be assessed via the Loan-to-Value (LTV) metric; i.e., what percentage of a property's value a lender will finance with debt vs. the percentage of equity contributed by the borrower.

The LTV distribution varies considerably by vintage, neighborhood, and asset class. As a rule of thumb, 70% LTV can be viewed as a long-term median. To assess how lender risk tolerance has changed, we can compare lending activity in the first three quarters of 2021 to the same period in 2023.

The charts below show every CRE acquisition loan originated in each period. Beyond the reduced volume of loans originated in 2023, the shift toward the left (lower LTV) side of the distribution is pronounced.

Borrowers should now expect credit availability between 60-70% LTV, not the 70%+ range that has been normal in recent years.



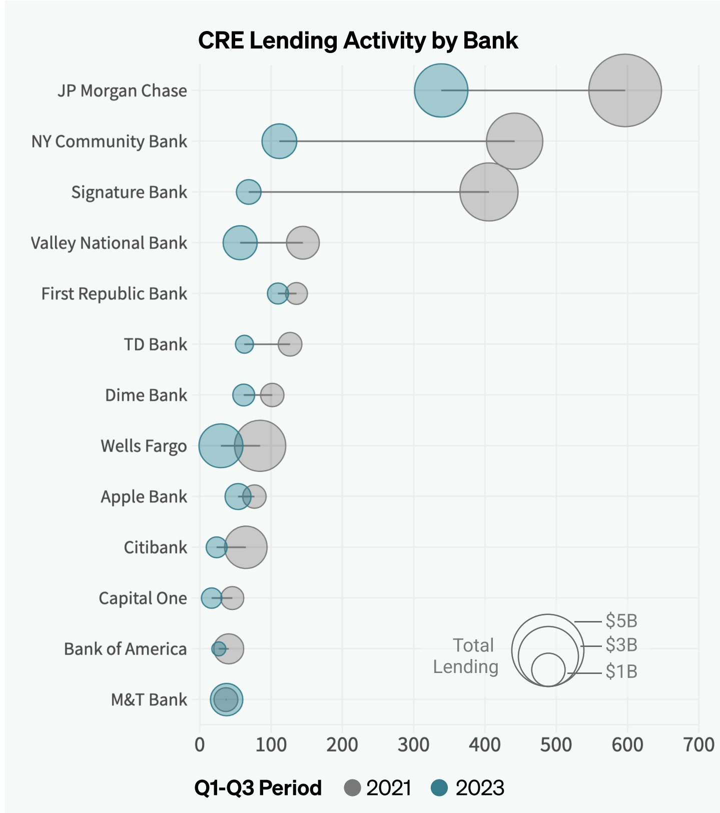


Source & Methodology: LTV is calculated by matching deed transfers and financing transactions recorded in ACRIS, excluding construction loans. Loans with LTV above 80% generally include pledges of added collateral or other assurances for lenders.

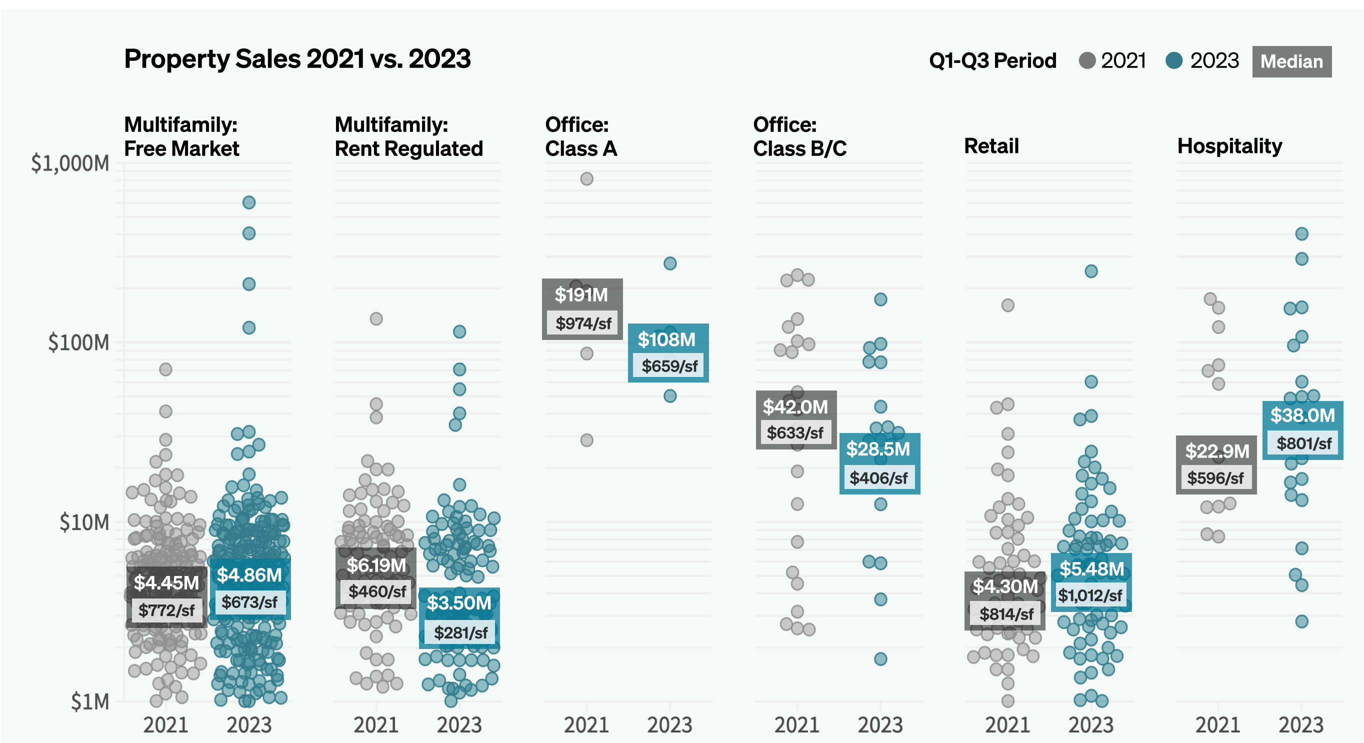
This decline in risk tolerance can be expected to continue as lenders grow increasingly sensitive to CRE exposure on their balance sheets. The chart at right illustrates lending volume during the first three quarters of 2021 compared with the same period in 2023.

JP Morgan Chase has nearly halved its lending by both dollar amount and loan count. New York Community bank, one of NYC's two largest regional CRE lenders, has reduced its CRE lending by two-thirds. Signature Bank, which has historically been NYC's other large regional lender, is out of business as of March 12, 2023.

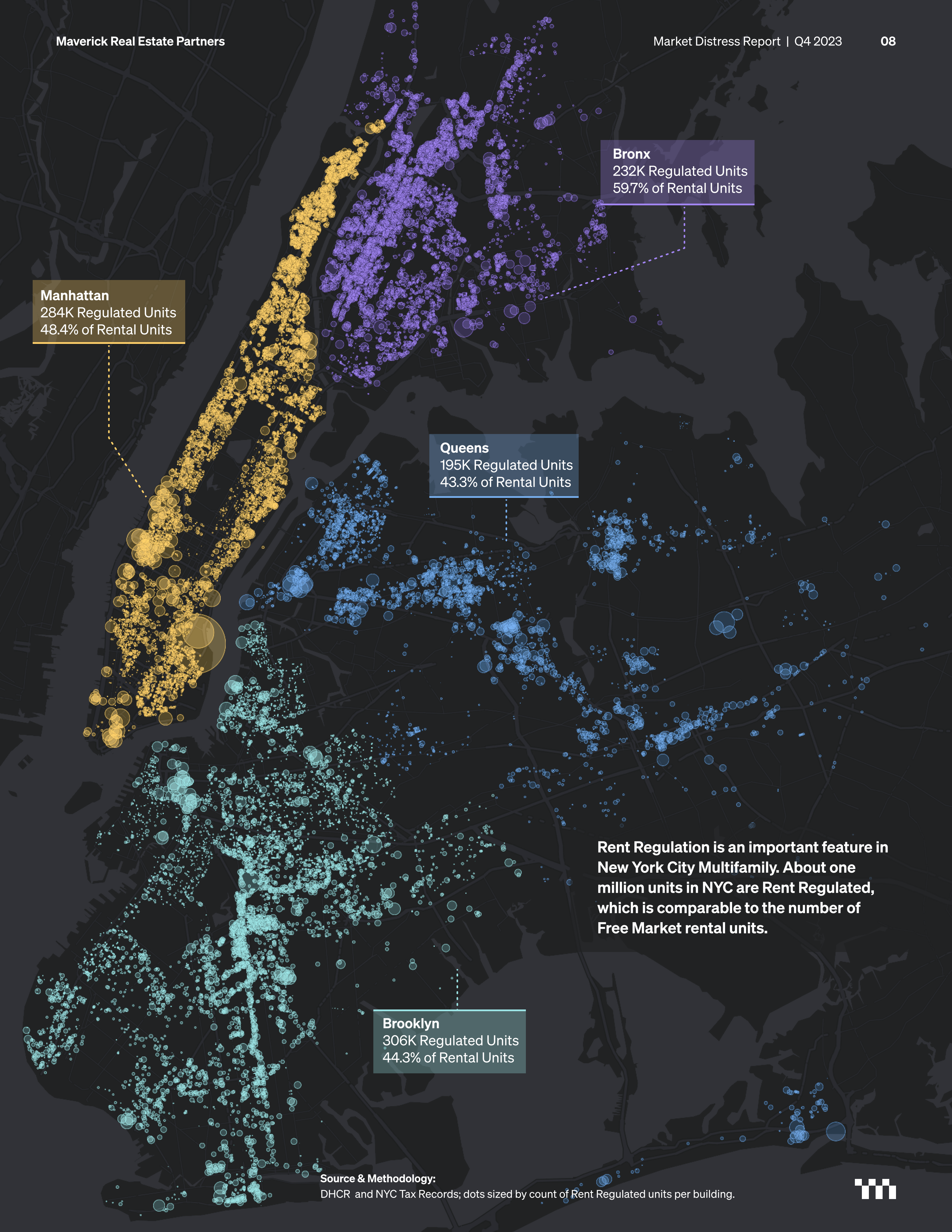
With the FDIC's takeover of Signature Bank, **one of New York City's largest CRE lenders has exited the market.** For Signature borrowers, the challenge of finding new financing for maturing loans will be a daunting task.



Continuing the comparison of 2021 and 2023, the chart below plots all Manhattan CRE sales above $1M in the first three quarters of each year. Median sale prices and price per square foot are shown in the color blocks. Declining values are particularly pronounced in Office and Rent Regulated Multifamily, where median sale prices have fallen by a third or more.



Source & Methodology: Loan and financing transactions recorded in ACRIS. Rent Regulated Multifamily includes properties with at least 20% of units subject to regulation. Office class designations via CoStar. Office includes properties 20K sq feet and larger.



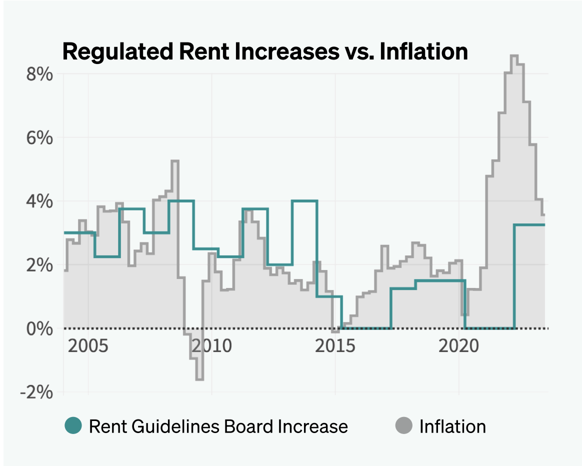
Rent Regulation is an important feature in New York City Multifamily. About one million units in NYC are Rent Regulated, which is comparable to the number of Free Market rental units.

Source & Methodology:
DHCR and NYC Tax Records; dots sized by count of Rent Regulated units per building.

Unique challenges in Rent Regulated Multifamily

The Housing Stability and Tenant Protection Act, passed in June 2019, enacted a comprehensive overhaul of rent regulation in New York City that included:

- Elimination of rent increases or deregulation upon vacancy
- Elimination of high-income and high-rent deregulation
- Stipulation that Major Capital Improvements to the building cannot be recovered via rent increases greater than 2%
- Recovery of Individual Apartment Improvements via rent increases are capped at $15,000 over a 15-year period (translating to a maximum of $83/month)



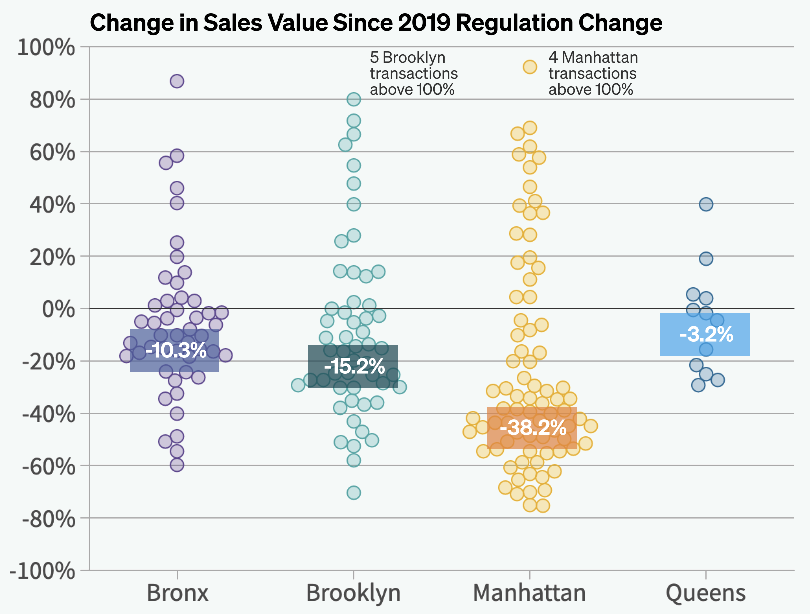
The practical impact of the law change is controversial. Landlord groups maintain that capping rents materially below inflation (chart at upper right) leads to operating losses, undercuts the financial means to make improvements or even conduct routine maintenance, and encourages landlords to “warehouse” units off the market entirely rather than lock in unfavorable lease terms.

Tenant advocates contend that these new regulations preserve affordable housing, reduce improper deregulation and tenant harassment, and do not lead to a reduction in property maintenance.

Time will tell how recent regulation changes impact the tenant experience, and this will be a controversial and politicized topic for the foreseeable future. **The consequences of the law for asset values, however, are unambiguous and consequential.**

Our research identified 201 individual properties that sold in the five years prior to the 2019 law change, and have sold again since the law change. The value change between the first and second sale is plotted on the chart at right. Manhattan properties – which had the greatest potential for rent growth or redevelopment – show the most pronounced negative impact, with that potential now lost due to regulation changes.

This historical sales data likely underestimates the true loss in value, as the full shock of higher financing costs has not yet been felt, in part due to generous COVID-related loan modifications offered by lenders.



Source & Methodology: Sales comparison includes properties with at least 20% of units subject to regulation, with a recent sale (deed transfer recorded in ACRIS) since Sept. 1, 2019, as well as a prior sale between June 1, 2014 and June 1, 2019. Sale amounts are adjusted for inflation to create an equitable comparison. Excludes multi-parcel transactions, government agency transactions, and properties demolished since original sale.

Continued Office fallout

Remote work, the future of urban Office centers, and the "urban doom loop" have been written about extensively in the last three years. It is unclear when any of those complex issues will reach a steady state.

Offices are divided into three primary classes: modern, glass-clad, amenitized towers that are located primarily in Midtown and Lower Manhattan (Class A); and older, typically mid-rise masonry buildings, often built in the late 1800s and early 1900s (Class B/C).

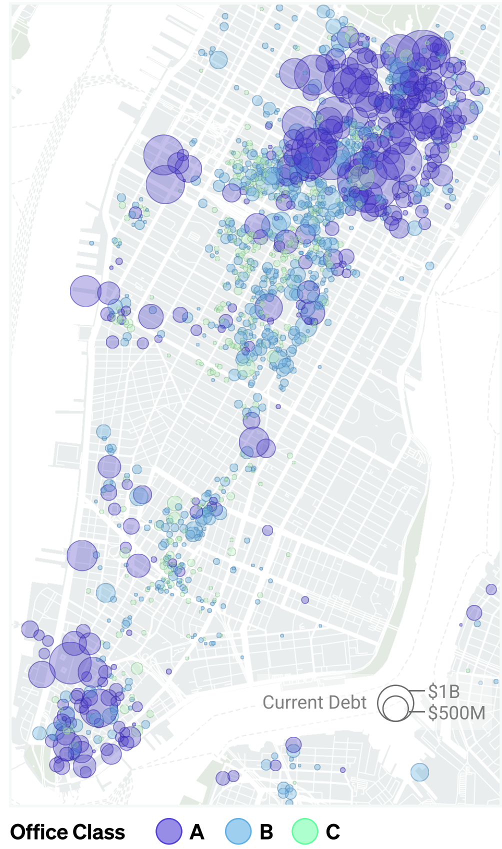
Office classes are determined subjectively, and no consistent classification is sanctioned by city government. The map on the right illustrates the Manhattan Office landscape, colored by Office class. The circle size represents current debt load.

The chart below shows ten years of Office sales in Manhattan, where the vast majority of Office buildings are located (both by square footage and by value). The recent decline in values and reduced transaction volume is apparent.

The 2023 bounce in median class B/C Office price was driven by residential or mixed-use conversion projects. The largest sales in 2023 were cases of buildings in desirable locations with zoning flexibility allowing demolition / redevelopment, or floor plates suitable for residential conversion.

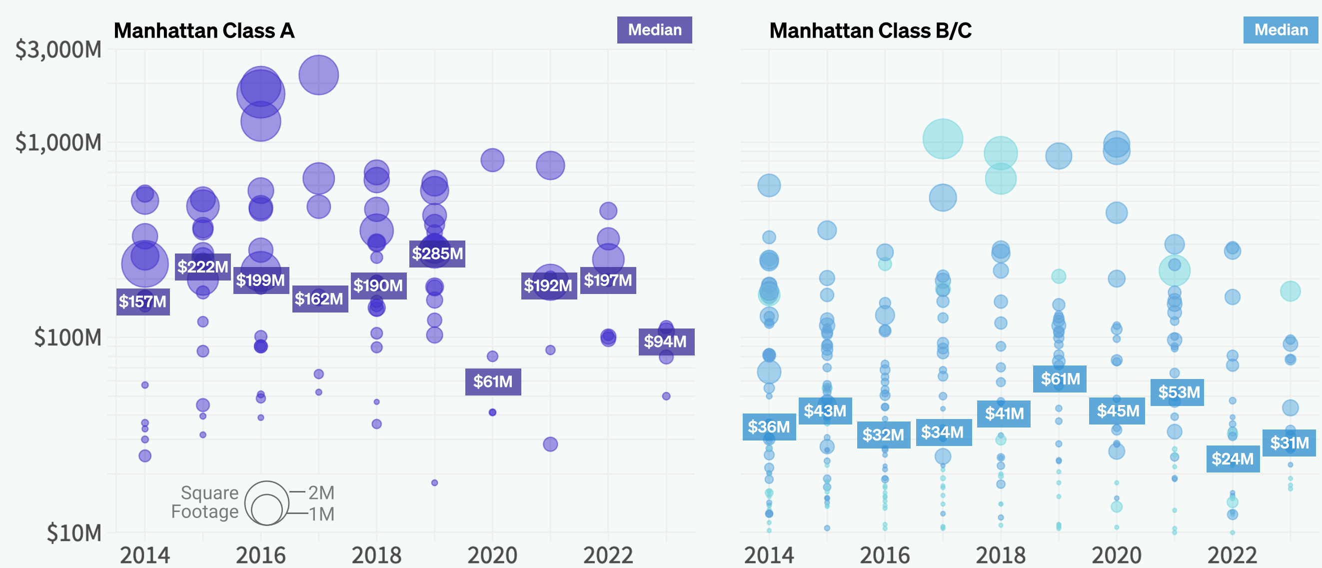
Unfortunately, most Class B/C buildings lack these features and increased borrowing costs make redevelopment challenging.

NYC Office Stock



Source: ACRIS, Office class data via CoStar.

NYC Office Building Sales, 2014-2023



Source: ACRIS, Office class data via CoStar.

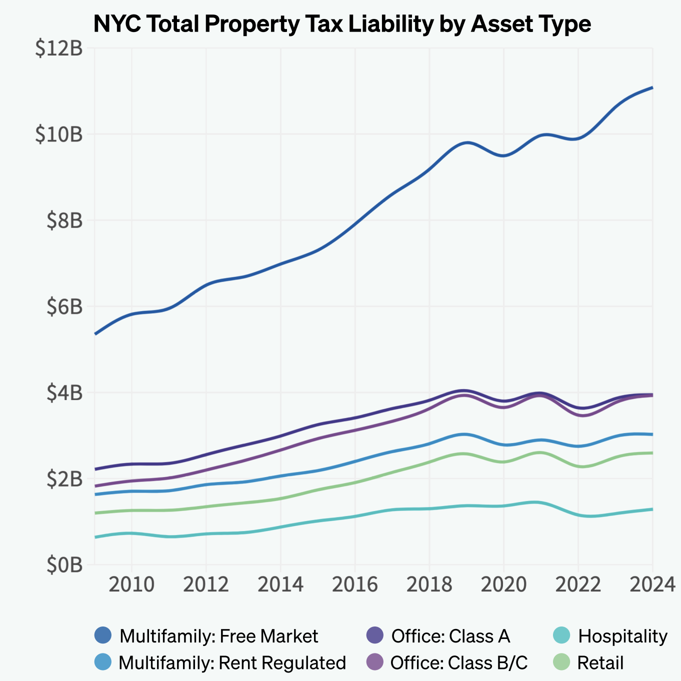
The persistent burden of taxes

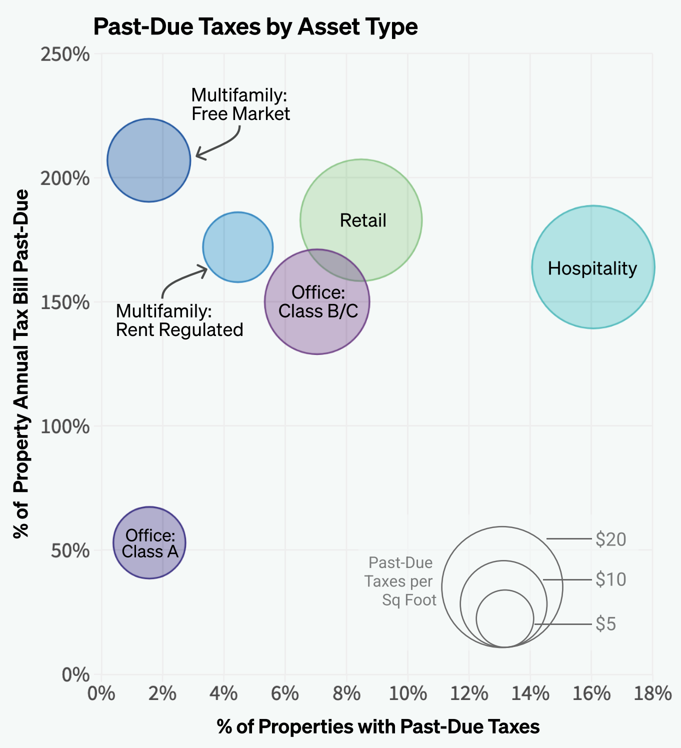
While inflation and increasing debt-service costs may be the primary expense pain points, tax obligations remain a fact of life for property owners.

Although the steady growth in taxes tempered slightly due to COVID, **property taxes remain a cornerstone of the city's tax base and continue to grow, even as property revenue flattens or declines**.

Past-due taxes are an important indicator of distress. In the chart at lower right we see how this distress manifests in various asset classes.

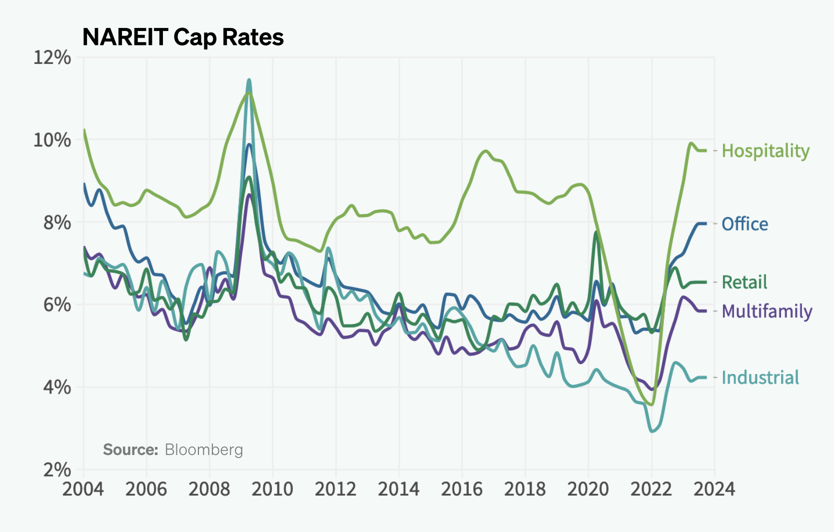
- Class A Office and Free Market Multifamily exhibit low rates of past-due taxes – each with about 1.5% delinquency.
- Three times as many Rent Regulated Multifamily properties (4.5%) have past-due taxes compared to Free Market properties.
- Class B/C Office has a much higher delinquency rate as compared with Class A – 7% of B/C Office buildings have delinquent taxes, with an average past-due tax burden of $15/sq ft. Given the weak demand and low pricing for leases in these buildings, this represents a significant encumbrance on these properties.
- There is a large disparity in the financial condition of Hospitality properties. Properties that survived the COVID storm are now able to take advantage of the restored health of the hotel market due to increased tourism, the removal of Airbnb short-term rental stock via recent regulation, and city contracts for migrant housing. Other properties remain seriously weakened due to the impacts of COVID.
- Retail also shows the lingering effects of COVID, as many storefronts remain vacant across the city.





Source & Methodology: Past-due tax amounts sourced from NYC Dept. of Finance tax records. Office classification via CoStar. Rent Regulated Multifamily includes properties with at least 20% of units subject to regulation.

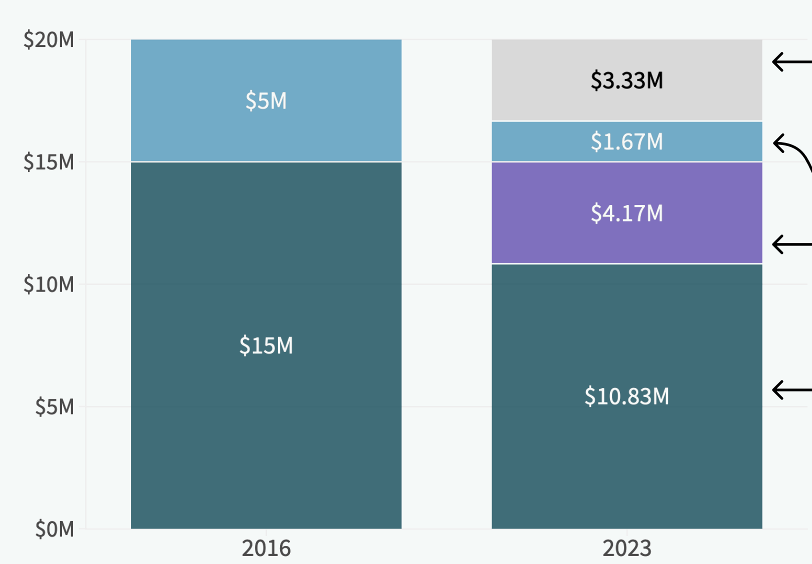
Value destruction in practice



Cap rates have risen significantly and roughly in step with Fed rates, as shown in the chart on the left. Combined with reduced lender appetite for CRE exposure and tighter underwriting standards, property owners seeking refinancing are confronting a significantly different borrowing landscape.

Below, we explore the case of a Free Market Multifamily building which had $1M in Net Operating Income (NOI) in late 2016. At the prevailing 5% cap rate, the property was valued at $20M. Based on that valuation, the owner borrowed $15M (75% LTV) at 3.5% for a 7-year term.

As maturity approaches in late 2023, cap rates have increased from 5% to 6% and lenders are willing to extend only 65% LTV. The diagram below illustrates the shift in economics for this owner:



Equity Lost | $3.33M
A 1% shift in cap rates from 5% to 6% translates to a 16.7% loss in property value. Two-thirds of this owner's equity has been wiped out.

Original Equity Remaining | $1.67M

New Equity Required | $4.17M
To refinance in the current environment at a reduced LTV, a significant injection of new equity will be required.

Debt | $10.83M
At market rates, the interest rate will rise from 3.5% to 7% for this property, increasing annual interest payments from $525K to $758K – a 44% increase in interest expense despite the materially reduced debt amount.

Many owners lack the liquidity to make major contributions of new equity upon maturity of their current loans. With the increased cost of capital, a significant cohort of owners will find it challenging to maintain their minimum Debt-Service Coverage Ratio (DSCR), typically 1.3x.

The risk to borrowers whose debt matures or resets to current rates in the near term, where rates are likely to remain high, is significant.

Magnitude of sub-performing debt

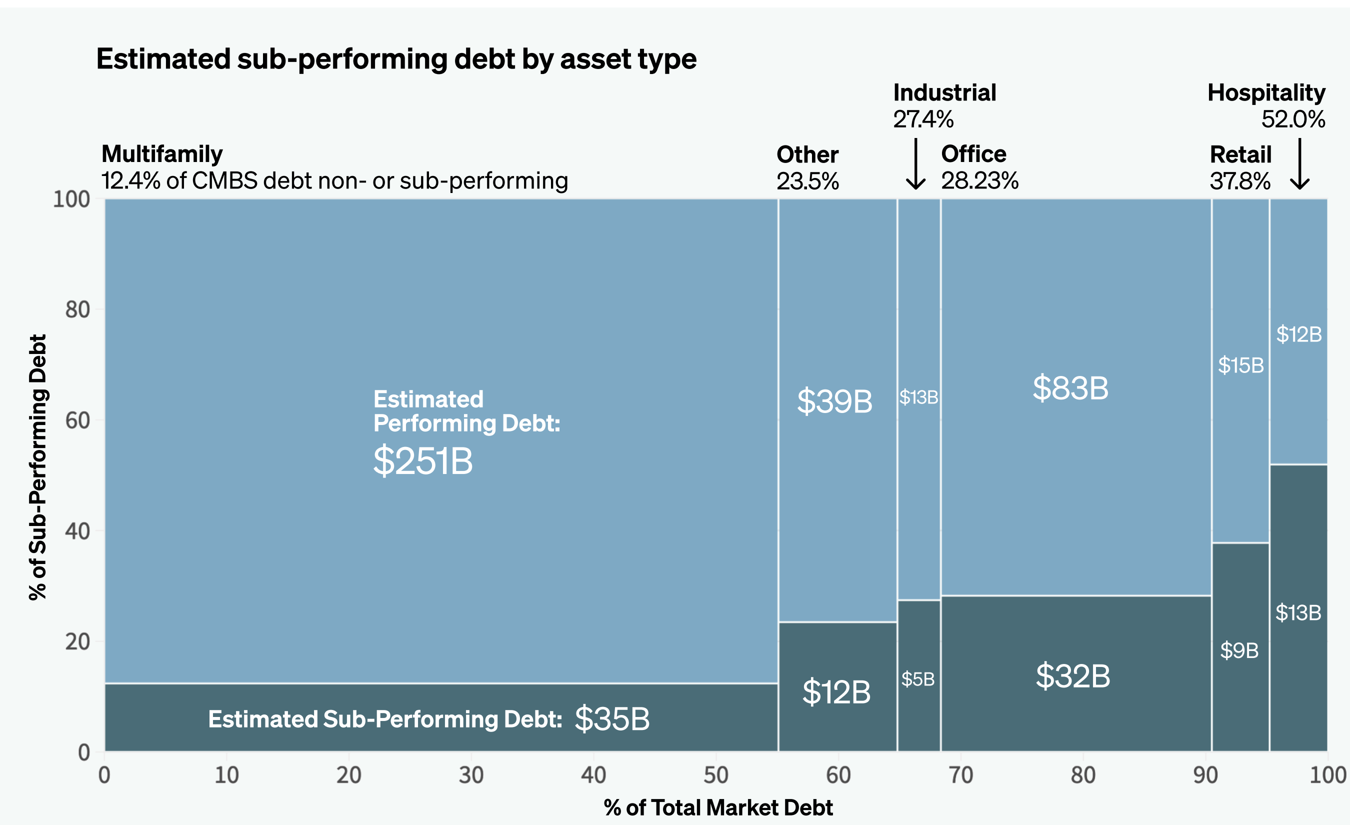
While banks publicly report non-performing (defaulted) loans, there is a much larger, undisclosed segment of sub-performing loans exhibiting distress due to the factors described previously.

To estimate the full scale of sub-performing debt in the market, we can use the condition of securitized CMBS debt as a proxy. The financial performance data for properties with CMBS debt is public information.

When a property with securitized debt begins to exhibit specific indicators of distress (but prior to default), it is placed on a "watchlist." These distress indicators include falling below the required DSCR threshold, a notable occupancy or income decline, or a pending maturity where refinancing challenges are expected.

Currently, 22% of CMBS debt in the New York metro market is secured by properties with a DSCR below 1.0 – the property produces less cashflow than is required to service its debt. Notably, most CMBS loans are fixed-rate. As these loans come up for refinancing, an even larger percentage of loans can be expected to face debt-service challenges.

To estimate the percentage of the $520B in debt that is sub-performing, we apply the percentage of non-performing and watchlisted CMBS debt to the total market. While there are some differences between the loans held on bank balance sheets and securitized loans, there are more parallels than differences, so this methodology provides a reasonable estimate of total market distress. The following chart shows the results of that calculation:



Source: CMBS loan performance data via Bloomberg.

Using this methodology, **we estimate that $107B in NYC CRE debt is sub-performing, including $35B in Multifamily debt and $32B in Office debt.**

About Maverick Real Estate Partners

Maverick is the **most active distressed debt investor** in the New York City commercial real estate market.

Founded in 2010, Maverick has deployed $800 million into 187 investments. 96% of capital deployed by Maverick has been within New York City, the most liquid real estate market in the world.

Maverick has invested in building an extremely comprehensive dataset covering NYC real estate market activity, used for deal sourcing, investment management, and market intelligence.

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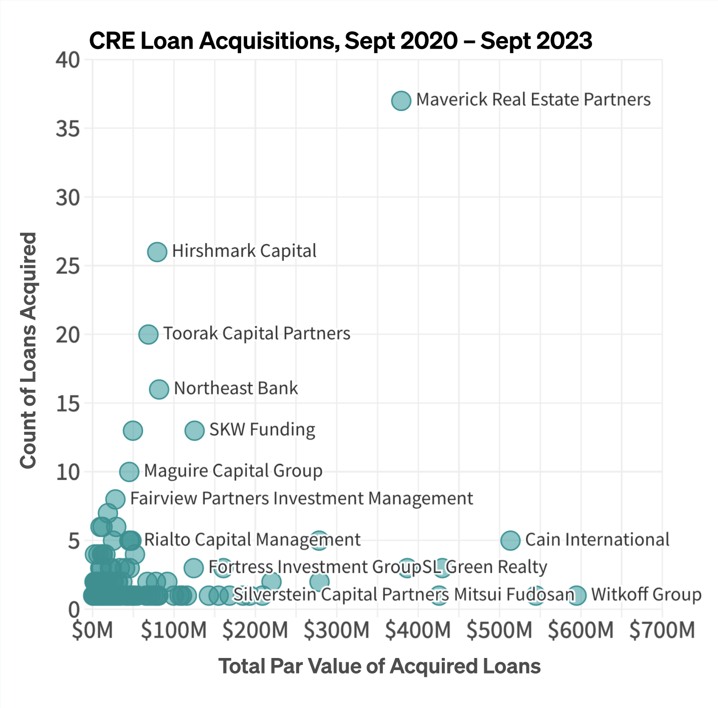

Source: Third-party loan sales data sourced from PincusCo.

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