# Overviews, Outlooks, and Opinions on Today's Commercial Real Estate Loan and Commercial Mortgage Back Securities Market

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**Introduction**

Across the United States, banks, insurance companies, and other institutions face a financial precipice with commercial real estate. The Mortgage Bankers Association reported a delinquency rate of 6.5 percent of balances for office-backed loans, three times the rate twelve months ago (Taylor, 2024). The Financial Stability Oversight Council has “heightened concerns” about the commercial real estate loan market, a sector that totaled $2.7 trillion. (United States Department of the Treasury, 2023) Similar notions were made when the Federal Reserve published its March monetary report, stating commercial real estate prices are continuing to tumble as demand for office, retail, and multi-family sectors continues to decline (Federal Reserve, 2024). It may seem there is a storm slowly brewing in the United States economy.

Commercial real estate turmoil will have far-reaching consequences if these notions hold. For many financial institutions, commercial real estate loans make up more than half of their total assets (Conte, 2024). A rise of underwater loans may trigger financial turmoil in the market, and possibly a crisis. For many cities, commercial property taxes make up more than 10 percent of tax revenue, up to 36 percent in Boston (Brosey, 2023). This “death spiral” may cost governments millions of dollars and overall lead to more residents leaving due to poor public funding for schools, law enforcement, and infrastructure.

However, these reports starkly contrast the overwhelmingly positive economic indicators for the United States. Compared to a year ago, the United States saw a 2.5 percent change in real GDP growth, a 4 percent unemployment rate, and a 3 percent change in the personal consumption expenditures price index, as a measurement of inflation according to FRED. As macroeconomic indicators seem to signal the U.S. economy is returning to its pre-COVID-19 pandemic self and not into a recession, why is such an integral sector of the economy in the state of free fall? And more importantly, what should be done to avoid a potential financial crisis? In my analysis, I will look at the impact of rising financing costs due to the recent Federal Reserve interest hikes and changes in consumer behavior due to the pandemic, from remote work culture to the rise of e-commerce.

**Overview of the Commercial Real Estate Loan Market**

Firstly, it is important to note that the commercial real estate sector and its loan market are not a monolith. The United States commercial real estate market is often segmented into four major sectors: multifamily rental, office, retail, and industrial. Each sector has varying market dynamics, where certain favorable conditions for one can be detrimental to another. Thus, it is integral to define each one to fully understand the historical trends and how the commercial real estate market is the way it is today.

The largest commercial real estate sector is the multifamily rental. They are often just associated with apartments but more generally are defined as a commercial property that: a) contains four or more units, b) is owned by a landlord or a management company, and c) is leased out for tenants to live in. According to Moody's Analytics, they can be broken down into three categories based on how updated they are and risky: Class A, B, and C (Moody's, 2023). Demand for multifamily rentals varies on factors including local demographics, local quality of life, homeownership affordability, and local employment.

The office space sector focuses on non-sales business operations and is classified similarly to multifamily properties, with Class A or "trophy properties" being the most desirable and safest for lenders while Class B and C are more worn, less favorable location-wise, and riskier investments with higher capitalization rates. Office space demand is generally influenced by changes in office-related employment and growth in office-based industries including finance, insurance, legal, and technology sectors (OCC, 2022). More importantly, such demand is now greatly influenced by changes in the work environment including teleworking which will be discussed later.

Industrial spaces tend to be longer-term investments that focus on various non-office-based operations. They tend to be manufacturing, warehouse/distribution spaces, data centers, and flex R&D, which act as a hybrid of warehouses and office spaces. Some major demand factors include labor stock proximity, infrastructure, tax rates, city proximity, and related industry proximity (OCC, 2022). The rise of e-commerce, exuberated by the COVID-19 pandemic, has put industrial spaces into an unprecedented boom.

Retail properties are usually brick-and-mortar stores and are the most diverse of all commercial real estate. They range from single-tenant retailers to shopping centers to malls. Retail properties can be valued by the same class structure as multifamily and office spaces but with other unique factors including accessibility, store frontage, and parking. Local employment levels, local consumer spending, and changes in online shopping trends are some major factors that affect retail demand (OCC, 2022). Like the industrial sector, the rise of COVID-19 e-commerce has greatly affected the strength of the retail sector financial market, namely malls and smaller brick-and-mortar businesses.

For each commercial real estate sector, certain loan types are offered for varying purposes and risks. Conventional commercial loans are the most common, used for new developments or purchasing existing ones and extended by commercial banks and insurance companies. They tend to be the safest only offered to the highest credit borrowers, have a shorter-term length than residential mortgages, and have fixed rates. Bridge loans are riskier financing options to improve properties, close on leases, or refinance in the short term. At higher rates 50-200 basis points higher than typical fixed rates, they are often used as leverage to increase property values. They are offered less by commercial banks and more by private lenders. Hard money loans are similar, offering higher rates and shorter terms. Lenders often use the property itself as collateral.

Another important financing mechanism for commercial real estate is mezzanine loans. Acting as a hybrid between debt and equity financing, mezzanine lenders give more flexibility to borrowers with varying repayment terms and are not counted as debt on a borrower's balance sheet. Typically offered by specialized mezzanine lenders or private equity firms, they come with much higher interest rates compared to secured loans like conventional, bridge, and hard money loans due to lenders being subordinate to senior debt. Mezzanine loans are often used as a last resort for commercial real estate financing due to their high risk, higher loan-to-value ratios (LTV), and are not regulated compared to other loan channels. The amount and health in the mezzanine loan sector are hard to detect due to a lack of accounting and regulation (Reonomy, 2023). However, evaluated mezzanine loan default rates can be a red flag to stressed sectors as will be discussed.

**Who Holds Today's Commercial Real Estate Debt?**

To see who is most affected by commercial real estate market turbulence, we need to look at who owns the highest share of debt within the United States. As of April 2023, there is an outstanding $4.5 trillion in United States commercial real estate debt according to J.P Morgan (Schaeffer, 2023). As shown in Figure 1, the largest debt holder is government-sponsored enterprises like Freddie Mac and Fannie Mae which buy commercial mortgages in the secondary market to generate market liquidity for primary lenders. Next are life insurance companies, which often underwrite commercial real estate loans to diversify portfolios and reap profits for both the firm and policyholders.

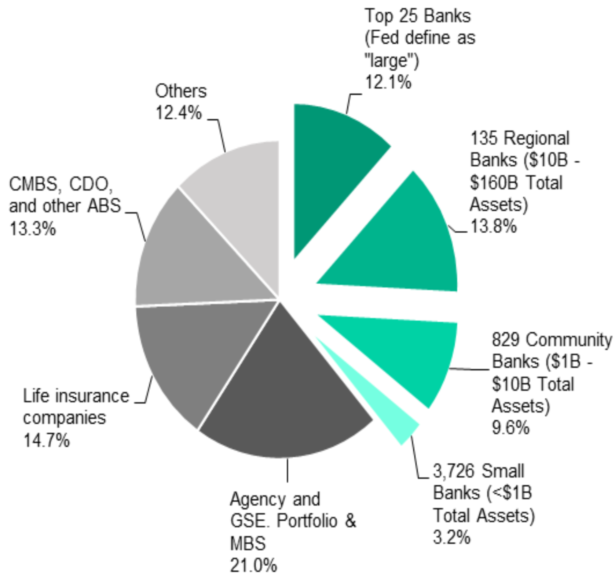


*Figure 1: Share of United States Income-producing CRE Debt, by Lender Type (Moody's, 2023)*

What is most striking is how much regional banks, community banks and small banks underwrite and own commercial real estate debt – making up a little over a quarter of the total. These banks, compared to the Federal Reserve's defined "Big Banks", are vulnerable to stressed properties due to having lower capital available to them. These banks also do not meet the requirements to participate in short-term lending markets like the interbank loan system or repo markets, which give large banks readily available cash. Lastly, while large banks tend to hold a large proportion of uninsured deposits over total deposits, many medium and small banks contain more than half of their deposits being uninsured as shown in Figure 2. Having large uninsured deposits makes these banks more susceptible to bank runs during times of stress like the 2023 spring banking crisis of SVB and Signature Bank.

Another important sector of debt holders in the United States market is commercial mortgage back securities (CMBS) and collateralized debt obligations (CDO), making up 13.3 percent of the debt. CMBS are derivatives funded from conduit loans, where capital market commercial banks, conduit lenders, or brokerage firms, give commercial mortgages with the intent to package other similar mortgages and securitize them for secondary market investors. Held in trusts, the pooled mortgages act as collateral for the CMBS in which investors get a pro-rata distribution of interest and principal payments of the commercial real estate owners. Many commercial borrowers favor them as they often have lower fixed rates than conventional commercial loans, are offered to lower creditors, are non-recourse, and are offered at higher leverages (Janover, 2023).

CDOs operate similarly to CMBS. CDOs act as a financial instrument that pools cash-

| | Billions ($) | Uninsured Deposits / Total Domestic Deposits (Percent) | | | | |
|---|---|---|---|---|---|---|
| Size (# of Banks) | Uninsured Deposits | 10th Percentile | 25th Percentile | Median Values | 75th Percentile | 90th Percentile |
| <1B (3,042) | 243.0 | 12.4 | 17.7 | 24.6 | 32.5 | 42.1 |
| 1-10B (652) | 493.4 | 10.3 | 18.0 | 30.1 | 41.8 | 52.1 |
| 10-100B (100) | 977.6 | 24.8 | 35.0 | 41.9 | 52.0 | 57.8 |
| >100B (27) | 5,523.2 | 18.1 | 32.5 | 48.6 | 67.2 | 92.8 |
| Overall (3,821) | 7,237.2 | 11.6 | 17.9 | 25.7 | 34.7 | 46.0 |

*Figure 2: Total Uninsured Deposits Ratios by Bank Size in 2022Q4 (Parkinson, 2023)*

flowing generating debt like residential real estate, auto loans, and even CMBS as collateral, securitized as a bond, and sold off in tranches based on investor risk profiles. Investors buying senior, AAA-rated tranches will receive lower returns but get paid first from recoveries in cases of defaults. Investors buying equity, nonrated tranches get higher returns via risk premiums but in case of defaults, often do not get any returns from collateral recoveries. Mezzanine tranches, functioning similarly to mezzanine loans as discussed, are in the middle of returns and risk.

Both CMBS and CDO are integral to the commercial real estate financial sector. They provide liquidity to the market to fund more developments and give investors a diversified portfolio. However, risky conduit loans fund CMBS and portions of CDOs, thus making the derivatives sensitive to stressed markets even for senior tranche investors. Furthermore, these financial instruments spread the risk beyond financial institutional commercial lenders to private equity firms, fund managers, and individual households throughout the economy.

**Current Trends in the Commercial Real Estate Market**

There has been a plethora of news stories on how property owners are selling commercial properties at haircuts. In San Francisco, a $146 million office tower was sold for $80 million, and in Washington, a $100 million office and retail space three blocks from the White House sold for $36 million (Rappeport, 2024). Malls, which make up a substantial portion of the retail commercial real estate debt, are what some analysts are calling a "death spiral." Kevin Fagan, head of commercial real-estate economic analysis for Moody's told the Wall Street Journal that around a fifth of malls are underwater, as borrowers have more debt than the property is worth (King, 2023). According to Vince Tibone of Green Street, most malls are worth less than 50% of what they were valued more than a decade before the same report. Although the headlines are catchy for most readers, it is important to look through the economic data of how widespread these "spirals" are and the overall financial confidence of borrowers and investors alike.

When it comes to measuring the overall trends of the commercial real estate market, certain metrics help paint the story. One of the primary indicators is the commercial real estate price index, which measures average prices for properties in a basket. Figure 3 shows the quarterly percent change in the commercial real estate price index level, calculated by the FRED.

While there have been ebbs and flows throughout the past decade in the commercial real estate market prices, 2023 is seeing a nosedive. The second half of 2023, saw the worst with a -2.5 and a staggering -6.5 percent change respectively from the previous quarter. The only larger percent decrease recorded was in 2009 during the real estate crisis. As mentioned by Fagan, this can lead to many borrowers having underwater loans, which already have in certain sectors.

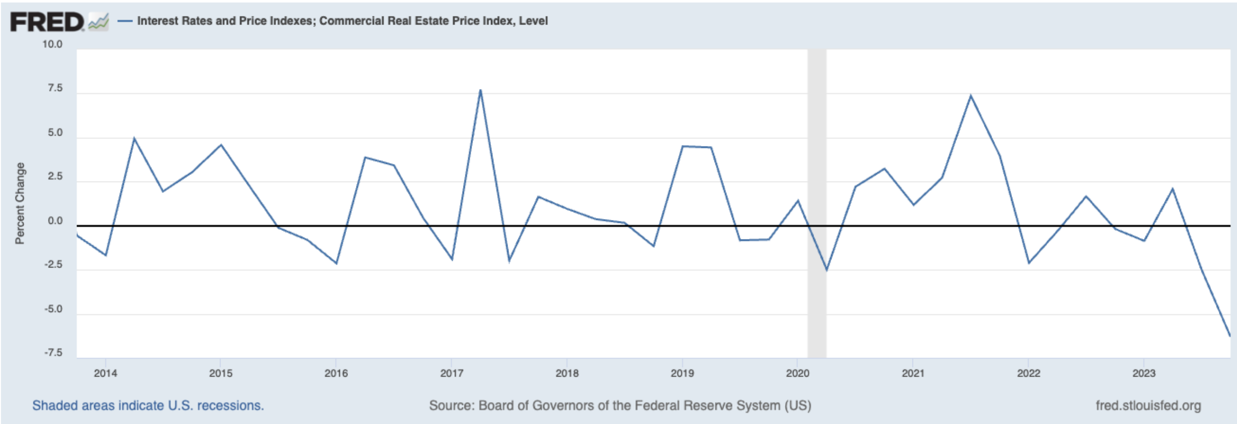


*Figure 3: Quarterly Percent Change in Commercial Real Estate Price Index Level from 2014Q1-2023Q4 (FRED, 2024)*

A recent NBER report states that nearly 14 percent of total commercial real estate loans have gone underwater, with 44 percent of office loans being underwater as a major driver (Piskorksi et al, 2023). The price declines only further worsen commercial prices as market confidence drops for new potential borrowers looking to get into the market or expand. Furthermore, this puts not only borrowers at greater risk of defaulting, but banks charge off the loan, realizing a loss due to the price drop and selling the debt off to collectors. As shown in Figure 4, this possible trend is seemingly steaming ahead as delinquent loans are increasing in the office, retail, health sectors, and overall totals. Industrial and multifamily sectors have the lowest rates as rents for each of them are continuing to rise or remain steady due to demand.

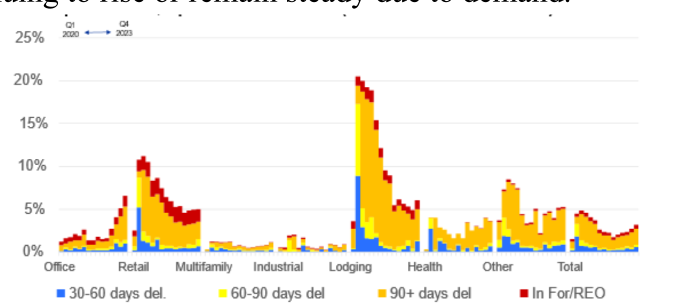


*Figure 4: End-of-Quarter Delinquency Status, By Sector, By Total Unpaid Balance, 2020Q1-2023Q4 (Taylor, 2024)*

Another metric is looking at the changes to the commercial real estate capitalization rate in the market. As mentioned, cap rates are risk measurement which is a ratio of annual net operating income and the property's market value. For example, a cap rate of 4.5 percent would mean a 4.5 percent annual revenue given the price of the property. A higher rate would be a higher return at

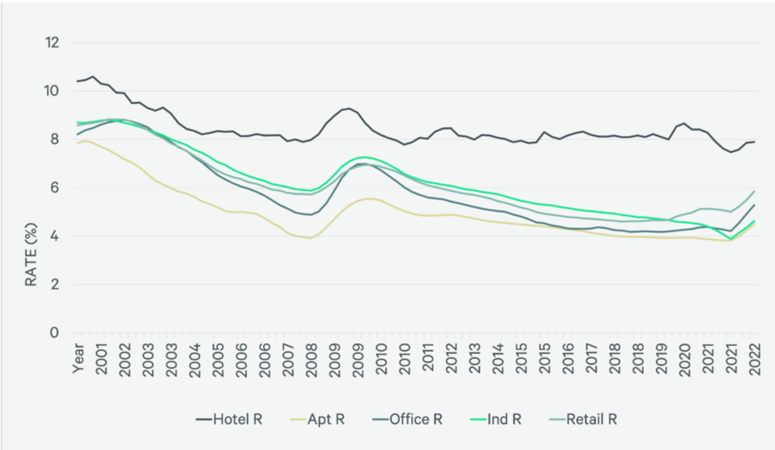

*Figure 5: CBRE Capitalization Rates by Year, by Sector (CBRE, 2024)*

the cost of higher risk in the market. Looking at Figure 5 shows the overall changes in the cap rates for different sectors in the commercial real estate market, calculated by CBRE, a commercial real estate investment firm. While the cap rates declined steadily following the GFC, all sectors' cap rates spiked following 2021. Retail cap rates increased and remained elevated before 2021 which may signal other confounding factors as well. The same can be said for office spaces as they exhibit the biggest percent point change in cap rates. This intuitively makes sense as aggregate prices of commercial properties start to decrease as shown in Figure 3, cap rates should go up.

The trend data is supported by a recent report by J.P Morgan, which analyzed cap rates for 2023Q3 in seven major American cities and nationally. When compared to the 2022Q3 cap rates, nearly all of them rose to 1 percentage point aside from retail which stagnated (J.P. Morgan, 2024). For each sector still, the cap rate has not been this elevated since the GFC. This presents many similar worries, as potential lenders will start to avoid commercial properties with the perception of higher risk. It is important to note that while declining property values may be pushing cap rates upward, the lack of steady income from these sectors may be a factor as well.

Lastly, we can look at the riskier end of the commercial real estate loan market, namely the performances of conduit loans (CMBS), CDOs, and mezzanine financing. Derivative health is integral to a stable market, as more than $17 billion worth of office CMBS are coming due in the next year (Siegel, 2024). During the GFC, MBS, and CDOs often contained mortgages of lower-end credit borrowers and were more likely to fail first. These indicators can act as harbingers of potential credit trouble given turbulent market conditions. Additionally, this form of borrowing amplifies seemingly singular market-specific woes into a more systematic financial crisis via hedge funds, pension funds, and asset management firms. Mezzanine loans act similarly with the promise of converting debt into equity, giving way to additional risk to private equity firms and riskier REITs.

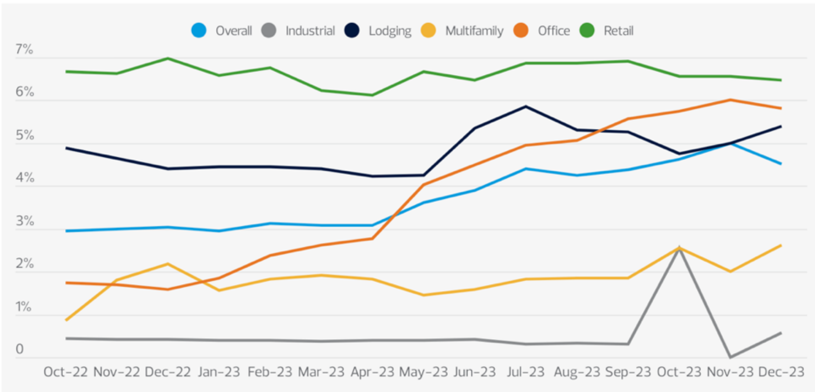


*Figure 6: Delinquency Rates of CMBS, per Sector (Gerdes and Sunbury, 2024)*

There is a steady climb in delinquency rates in office, lodging, and overall CMBS in the market as shown in Figure 6. Starting in April 2023, in the middle of the monetary contraction by the Fed, more than half of the sector saw a general trend upward. Industrial and multifamily remained steady for a little until their rates climbed as well in late 2023. Retail is shown to have the least variance but by far the highest likelihood of default of the entire sector throughout the two years. These indicators are worrisome as not only do they show credit and liquidity issues uniformly affecting the market but also sector-specific issues in the retail, lodging, and office space. By extension, CDOs with more focus on these sectors are likely to turn toxic but more diversified ones may be in the clear.

Foreclosures on properties with mezzanine loans are also rising according to a Wall Street Journal report. In 2023, the report found foreclosure notices for 62 mezzanine loans and other risky loans, more than double in 2022 and the highest total ever recorded in a single year (Putzier, 2023). This number is likely an underestimate as foreclosures and liquidation often take many months to complete via the court system. Additionally, the mezzanine loan's opaque nature makes it hard to find how much debt is in the market, only until foreclosures happen. Nevertheless, the sharp rise of defaults on such loans is a big red flag that commercial real estate is on a sharp downward trajectory.

**Causes of the Commercial Market Woes and Recommendations**

As shown, commercial real estate lenders are facing alarming trends in borrower's ability to repay and overall property prices. But what are the biggest reasons for this price freefall?

Remote work created a shift in corporate work culture that has never been seen before. Employees can work at home without the need to commute, saving time and money. Companies can reduce costs by reducing varied costs like overhead, leasing less space for a physical location with hybrid working, or eliminating a physical space entirely. In economic terms, higher efficiency as work can hypothetically be as productive at a lower cost. However, this leaves the landlords and the lenders holding the bill as excess supply causes their loans during pre-pandemic price highs to take massive price drops as discussed. The rise of vacancy rates in offices is shown in Figure 7, slowly climbing since the start of the COVID-19 pandemic with effective rent going into the negative, a measure of rent a landlord receives after deducting costs for securing the lease.

Unfortunately for commercial landlords, this trend is likely here to stay. According to a recent report by McKinsey, office attendance has stabilized roughly around 30 percent less than its pre-pandemic levels with predictions that demand for office space be 13 percent lower by 2030. This is further exacerbated by suburbanization in many of America's biggest cities, with workforces moving away from the city further reducing the ability for in-person/hybrid work and demand for office space (Mischke et al, 2023). This has increased demand for real estate in many city suburbs, leading to price increases in many markets despite the rise in interest rates. This may also explain the rising vacancies in multifamily housing, which tends to focus on cities.

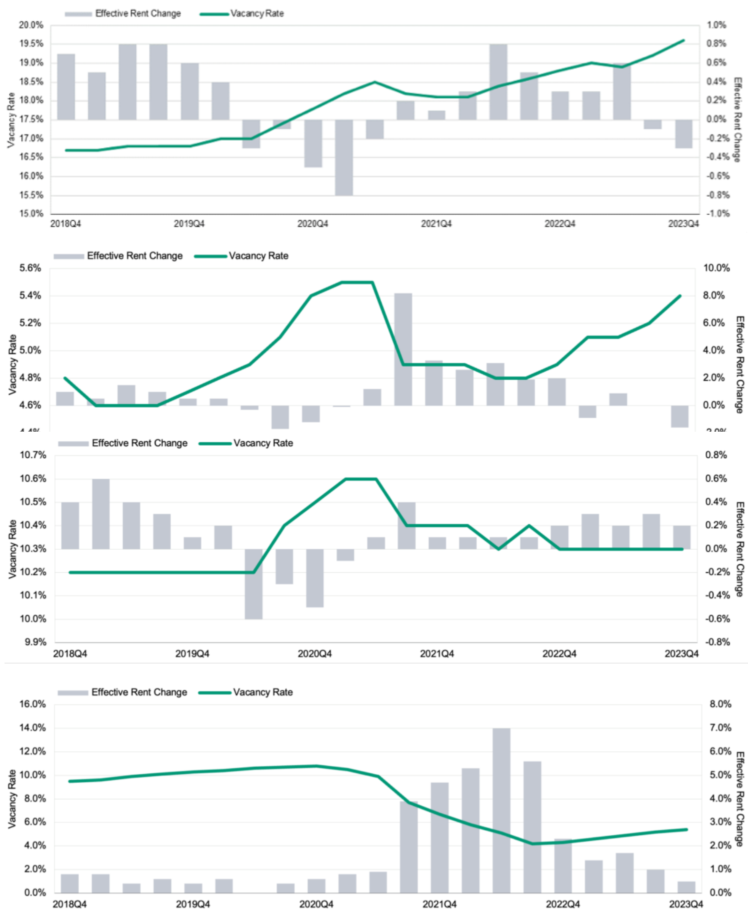


*Figure 7: Effective Rent Change and Vacancy Rate of Multifamily, Office, Retail and Industrial Respectively, (LaSaliva et al, 2024)*

The same report found that retail foot traffic dropped sharply during the pandemic and while saw some gains following the lockdowns, many cities never recovered. This is credited to the rise of e-commerce, from the rise of Amazon to many brick-and-mortar stores switching to online delivery, like grocery stores and restaurants via Instacart, Doordash, and Uber Eats (Mischke et al, 2023). However, the rise of big retail switching towards delivery over in-store purchases has given rise to industrial property lending, mainly warehouses where goods are stored. Again, Figure 7 tells this story, as retail vacancy rates jumped during COVID-19, and decreased to a new equilibrium level which has remained steady since. The industrial vacancy had an inverse relationship at around the same time, with decreasing vacancy rates and a spike in effective rent.

These commercial real estate market structural changes were only amplified by the rising investment costs due to the 2022-2023 Federal Reserve raising the federal fund’s target range. The rising rates cause many commercial real estate properties to decline in value as they cannot afford new financing for renovations, expansions, or any new developments. The higher cost of debt makes returns via leverage lower thus demand eventually falls. According to the IMF, this monetary tightening has seen the worst price drop in commercial real estate ever due to higher borrowing costs and lower demand (Natalucci et al, 2024). The higher rates also make refinancing unfavorable to many debt holders who are trying to deal with falling collateral values due to the new commercial real estate landscape. With the March 2024 inflation rate, as measured by the 12-month CPI change, being 3.5 percent, the likelihood the Fed will cut rates is seemingly getting lower. All in all, this is a perfect storm for the commercial real estate market, getting squeezed on all sides without an end in the short term.

With the permanent structural changes in the retail, office, and industrial space and elevated debt costs, what should be the next move for landlords and lenders? This mainly comes down to the markets adjusting and investors taking their losses. Landlords, which are usually larger corporations, will have to adjust their portfolios accordingly to adjust to these new risks in the market, based on their risk preferences. Lenders like banks, insurance companies, and CMBS holders must charge off some of these loans eventually. This was expected for a few medium-sized banks, however, as 2023 stress tests required increases in capital buffer for this exact scenario (Wack, 2023). Of course, it is hard to make a sweeping generalization on what each bank and commercial property lender should do as commercial loans are constantly bundled and diverse with different financial situations for each lender's balance sheet. Nevertheless, increasing capital reserves and having access to liquid assets should be paramount for many of the local and regional banks. Based on the Basel III requirements, the FDIC should consider increasing the capital buffers for all small and medium-sized banks, beyond the capital equity 1 ratio minimum of 4.5 percent. In addition, for possible bank failures, the FDIC and Fed need to reduce the possible contagion on by providing emergency loans in case for possible bank runs.

As mentioned, the retail and office space sectors changes seem here to stay but could lenders and borrowers agree to not charge off a loan and wait until interest rates fall again? This strategy of “pretend and extend” is a policy many commercial banks, insurance companies, and other lenders use during economic downfalls like the GFC and the 2020 COVID-19 recession. The idea is to kick underwater mortgages down the road with the hopes that borrowers will be able to come up with capital later, hope interest rates will fall or collateral prices will go up again. As NASDAQ reports, this may be a valid strategy for some banks where they have the capital to afford it, citing banks during the GFC that weathered the storm to avoid big losses. However, this means lender assets are tied up in this mortgage limbo preventing adaptability to invest in safer lending sectors. More importantly, if conditions do not improve, this creates a backlog of toxic assets in the lender’s balance sheet that could create chaotic consequences and possible bankruptcy (Adams, 2023). This practice could be helpful for investors in the less problematic commercial real estate sectors like industrial where rising rates are the main factor for decreasing costs. However, using “pretend and extend” on office and retail loans would be risky at best and irresponsible at worst as market conditions are likely not the get better soon.

Other common directions borrowers and lenders may decide on are recapitalization and reconversion of property investments. Recapitalization is when debt owners see a property loan going underwater, they will convert their debt into capital as part of equity on the property itself. While it might provide temporary relief with extra capital for property owners to increase the value of their property, again this seems unwise as market forces are driving this price reduction (Jorgensen, 2023) Reconversion of the property has also been a popular pathway for investors, mainly converting office space into multifamily/apartment space. Intuitively, this seemingly is a net positive as it kills two birds with one stone: readjusting the supply of inefficient office space while adding supply to the highly demanded apartment spaces. The challenges, however, make it a hard sell for investors, mainly due to physical limitations, financial costs, and zoning laws. According to the Bipartisan Policy Center, it is estimated that only 3% of New York City office buildings can be converted into residential buildings due to codes that require redoing plumbing, electricity, windows, and overall room structures. These reconversion costs can amount to $100 to $500 per square foot, additional debt most medium-sized banks will not want to take on additionally (Waters, 2023). Governments may provide funds, either through tax credits or general funding, to help with such projects but few have been greenlighted so far. Investments in mixed-commercial properties or partial conversion may be more cost-efficient and safer, although it again heavily depends on governments acting on changing zoning laws for this new reality of the commercial real estate market.

**Conclusion**

The United States commercial real estate market is in distress and continues to be in the full attention of financial institutions, borrowers, and governments. As shown, the market is diverse and lenders who have commercial real estate debt in many different sectors may not see too much trouble with their balance sheets. However, mortgages on office and retail space are slowly dragging the commercial real estate market down with the changing market demands on in-person working and shopping. While some institutions may hold on for interest rates to be cut in other sectors, lenders may need to cut their losses on office and retail spaces, ensuring they have enough capital to cover. However, the reality noted by Fed Chairman Jerome Powell is some firms will fail, mainly small and medium-sized institutions that may trigger bank runs and contagion like the 2023 banking crisis. The importance of the Fed and FDIC to possibly provide access to repo facilities for banks will suffer runs containing healthy assets may prevent a possible banking crisis while not “bailing out” banks with poor assets.

The landscape of the commercial real estate market has changed forever. Financial institutions must look at rising sectors like mixed-purposed properties and warehouses as possible “blue chip” investments as consumer behavior has changed. Governments should act on this new reality by rewriting zoning laws to allow more efficient construction of such spaces. While it is impossible to predict how markets will change in the future, it is important to adapt now or face more possible financial turmoil.

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