I. The Commercial Real Estate Bubble: What Is the Risk and What Are the Solutions?

A. The United States Commercial Real Estate Market

Commercial real estate (CRE) is broadly defined as property in the form of land or buildings that is used to provide space for people to conduct commerce.¹ CRE also includes residential properties greater than five units which are intended to generate profit for their owners through rental income or capital gain.² The six main categories of CRE are office, retail, industrial, multifamily, hotel, and special purpose properties.³ Each of these categories contains several subcategories.⁴

Recent estimates of the total value of the CRE market in the United States are difficult to come by, but one figure from the National Association of Real Estate Investment Trusts (Nareit) placed the CRE market at \$20.7 trillion in the second quarter of 2021 ("2021Q2").⁵ According to global data and business intelligence platform Statista, the CRE market in the United States was anticipated to reach \$25.37 trillion by 2024, and \$28.28 trillion by 2028.⁶

Nareit's estimates of commercial property value and square footage for 2021Q2 are as follows:⁷

¹ MRI Software, *Is Multifamily Considered Residential or Commercial*?, MRI (Dec. 11, 2023), https://www.mrisoftware.com/blog/is-multifamily-consid ered-commercial/ ("Commercial properties are intended for business operations and profit generation.").

² *Id.* ("When a multifamily property has 5 or more units, it is generally classified as commercial.").

³ Kasey Tross, *The 6 Types of Commercial Real Estate Property*, VTS (May 8, 2023), https://www.vts.com/blog/the-6-types-of-commercial-real-estate-properties (describing the six major classifications of commercial real estate).

⁴ *Id.* (describing the sub-classifications of commercial real estate).

⁵ Nareit, *Estimating the Size of the Commercial Real Estate Market in the U.S.* (2024), https://www.reit.com/data-research/research/nareit-research/estimat ing-size-commercial-real-estate-market-us-2021.

⁶ Statistia, *Commercial Real Estate – United States* (Apr. 2023), https://www.statista.com/outlook/fmo/real-estate/commercial-real-estate/united-states.

⁷ Nareit, *supra* note 5 (see Table 1).

CRE Sector	Value (\$ trillions)	Price per square foot (\$)	Square footage (millions)
Office	\$3.2	\$270	11,780
Retail	\$2.9	\$207	14,040
Industrial	\$2.4	\$106	21,698
Multifamily	\$3.8	\$235	16,383
Hospitality	\$1.6	\$607	2,625
Special Purpose (includes Specialty, Sports and Other; Data Centers; Self- Storage)	\$4.1	N/A	N/A
Healthcare	\$2.3	\$864	2,705
Towers	\$0.4	N/A	N/A
Total	\$20.7		69,231

Figure 1: CRE By Value and Square Footage

B. The Life Cycle of a Real Estate Bubble

Real estate bubbles are usually associated with periods of economic euphoria, while the bursting of such bubbles usually occurs in tandem with the widespread failure of financial institutions.⁸ Edward Glaeser and Charles G. Nathanson describe the conventional lifespan of a bubble: "They begin with an early uptick, perhaps representing good news or a little of early froth. That surge escalates, and during this growth period of the bubble, price growth escalates... Ultimately, the bubble ends in either a violent crash or in a slow deflation."9 Real estate bubbles are typically birthed during periods when interest rates are low,

⁸ CHARLES P. KINDLEBERGER & ROBERT Z. ALIBER, MANIAS, PANICS, AND CRASHES: A HISTORY OF FINANCIAL CRISES 115 (5th ed. 2005)). ("Asset price bubbles-at least the large ones-are almost always associated with economic euphoria. In contrast, the bursting of the bubbles leads to a downturn in economic activity and is often associated with the failure of financial institutions, frequently on a large scale."). ⁹ Id.

and they tend to burst when interest rates rise.¹⁰ Though commonly associated with the housing market, bubbles can emerge in all sectors of the real estate market.¹¹

Bubbles form typically due to "either exuberant expectations about economic prospects or structural changes in financial markets" that trigger a credit boom.¹² What follows is a feedback loop: asset prices rise, this rise in asset prices drives lending against these assets, and this lending further increases prices.¹³ Lenders rely on these price increases to justify loosening credit standards, as opposed to the ability of borrowers to repay loans.¹⁴ Ultimately, the bubble bursts: "the collapse in asset prices then leads to a reversal of the feedback loop in which loans go sour, lenders cut back on credit supply, the demand for the assets declines further, and prices drop even more."¹⁵ As economic activity weakens, macroeconomic risk increases in credit markets, and the financial system as a whole can become endangered.¹⁶ Research has also indicated that raising interest rates can result in a bubble bursting more severely.¹⁷

There is no official set period for how many years must pass before a real estate bubble forms, but they have been shown to have a

¹⁰ Jesse Colombo, U.S. Commercial Real Estate: Another Dangerous Bubble in the Making, INVESTING.COM (Jun. 16, 2019, 12:32AM ET), https://www.in vesting.com/analysis/why-us-commercial-real-estate-is-another-dangerous-

bubble-in-the-making-200431860 ("Unfortunately, dangerous economic bubbles form during low-interest rate periods and burst when rates rise once again.").

¹¹ Adam J. Levitin & Susan M. Wachter, *The Commercial Real Estate Bubble*,
3 Harv. Bus. L. Rev. 83, 84 (2013) (discussing two parallel real estate price bubbles in residential and commercial real estate).

¹² Frederic S. Mishkin, Governor, Fed. Reserve System, Speech at the Wharton Financial Institutions Center and Oliver Wyman Institute's Annual Financial Risk Roundtable (May 15, 2009), https://www.federalreserve.gov/news events/speech/mishkin20080515a.htm.

¹³ *Id.* ("The rise in asset values, in turn, encourages further lending against these assets, increasing demand, and hence their prices, even more.").

¹⁴ *Id.* ("[T]he bubble can cause credit standards to ease as lenders become less concerned about the ability of the borrowers to repay loans and instead rely on further appreciation of the asset to shield themselves from losses."). ¹⁵ *Id.*

¹⁶ *Id.* ("In the extreme, the interaction between asset prices and the health of financial institutions following the collapse of an asset price bubble can endanger the operation of the financial system as a whole.").

¹⁷ *Id.* ("Other research . . . have suggested that raising interest rates may cause a bubble to burst more severely").

defined shape.¹⁸ A well-known study showed that the real estate cycle has operated along a predictable 18-year cycle since 1800.¹⁹ This cycle consists of four phases, which are shown in the graphic below.²⁰

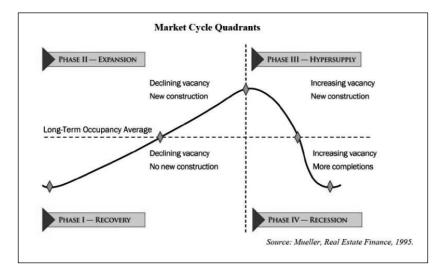


Figure 2: Real Estate Market Cycle

C. The Creation of the Current CRE Market

The Great Recession that followed the 2007-2008 financial crisis is a logical starting point from which to analyze the shaping of the current CRE market. After the crisis (which itself was rooted in part by an extended period of low interest rates)²¹—the Federal Reserve ("Fed")

¹⁸ Edward Glaeser & Charles G. Nathanson, *Housing Bubbles* 14 (Nat'l Bureau of Econ. Rsch., Working Paper 20426) ("In the popular influenced by classic descriptions such as Kindleberger (1978), bubbles have a defined shape.").

¹⁹ Teo Nichols, *How to Use Real Estate Trends to Predict the Next Housing Bubble*, HARV. EXTENSION SCH. (Oct. 18, 2016), https://extension.har vard.edu/blog/how-to-use-real-estate-trends-to-predict-the-next-housing-bubble/ (explaining Henry George's observation that the real estate market

apparently moves in an approximately eighteen year cycle). 20 Id.

²¹ Cynthia Angell & Krishna Patel, *Chapter 1. Origins of the Crisis, in* FED. DEPOSIT INS. CORP., CRISIS AND RESPONSE: AN FDIC HISTORY, 2008-2013 xiv, xiv (2019) ("The nationwide housing expansion of the early 2000s was rooted in a combination of factors, including a extended period of low interest rates.").

cut interest rates to near-zero and held them there for seven years from 2008 to 2015.²² During this period, the Fed also engaged in quantitative easing, where it purchased \$4 trillion of debt securities²³ to increase the supply of money, lower the cost of borrowing, and spur economic growth.24

While this form of monetary policy helped the U.S. economy rebound from the financial crisis, it also encouraged investors to engage in riskier transactions and resulted in inflated prices across a variety of asset types.²⁵ From 2009 to 2019, U.S. CRE prices ballooned by 111 percent on average.²⁶ The MSCI (Morgan Stanley Capital International) U.S. REIT (Real Estate Investment Trust) Index, which can be used track the performance of the CRE industry, guadrupled in value.²⁷ From 2012 through 2019, total CRE loans at U.S. banks increased by \$700 billion, or 50 percent.²⁸ This set the stage for the development of the current CRE bubble.

1. Sector Trends During the 2010s

To gain a more thorough understanding of the current CRE market, it is important to understand several trends that have shaped each of the sector's four primary segments over roughly the past decade.

²² Colombo, *supra* note 10 ("The Fed cut and held interest rates at virtually zero percent (i.e., zero interest rate policy or "ZIRP") for seven years.").

²³ William D. Cohan, A Debate with Bernanke Over the Fed's Easy Money Policies, N.Y. TIMES (Nov. 11, 2015), https://www.nytimes.com /2015/11/12/business/dealbook/a-debate-with-bernanke-over-the-feds-easy-

money-policies.html ("Mr. Bernanke championed . . . quantitative easing, in which the Fed bought \$4 trillion of squirrelly debt securities in the market and stuck them on its balance sheet.").

²⁴ James A. Dorn, The Pitfalls of the Federal Reserve's Zero Interest Rate Policy, CATO INSTITUTE (Oct. 15, 2015), https://www.cato.org/publica tions/commentary/pitfalls-federal-reserves-zero-interest-rate-policy ("Lower rates . . . encourage greater leverage, i.e., borrowing to invest, and boost asset prices. This "wealth effect" would then stimulate consumption and economic growth.").

²⁵ Id. ("Some of those costs, oddly, are also the claimed benefits-namely, increased risk taking and surging asset prices.").

²⁶ Colombo, *supra* note 10 ("On average, U.S. commercial real estate prices have surged by 111%, or more than double, since their 2009 low.")

²⁷ Id. ("[T]he MSCI U.S. REIT Index has quadrupled in value during the current bubble.").

²⁸ Id. ("Since 2012, total commercial real estate loans at U.S. banks have increased by an alarming \$700 billion or 50%.").

(a) Office

One theory links the rise in CRE lending and prices, particularly in the office sector, to the dramatic growth in venture capital investing.²⁹ The rise in CRE lending and prices corresponded with the growing popularity of venture capital investing: investments in private U.S. startups expanded eightfold between 2012 and 2022, reaching \$344 billion.³⁰ This uptick in tech startup investing may have helped form a bubble.³¹ As investments in emerging companies grew, so did their demand for office space.³² Companies not only grew, but also "set out to make a statement about their new place in the market and the world," in part, through their "ambitious office designs."³³

(b) Retail and Industrial

Another development that has come to shape the CRE market, specifically the retail and industrial sectors, is e-commerce.³⁴ E-commerce sales doubled from 2012 through 2019.³⁵ Physical retailers shut down over 9,000 stores in 2019 alone, a record at the time.³⁶ The "retail

²⁹ See Id. ("One of the major risks that will help to pop the commercial real estate bubble is the coming tech startup bust.").

³⁰ Erin Griffith, *From Unicorns to Zombies: Tech Start-Ups Run Out of Time and Money*, N.Y. TIMES (Dec. 7, 2023), https://www.nytimes.com/20 23/12/07/technology/tech-startups-collapse.html ("From 2012 to 2022, investment in private U.S. start-ups ballooned eightfold to \$344 billion.").

³¹ See Colombo, *supra* note 10 ("I strongly believe that a devastating bust is ahead that is going to wipe out thousands, if not tens of thousands, of non-economically viable tech startups as investors lose their appetite for such pie in the sky investments.").

 $^{^{32}}$ *Id.* ("The creation of tens of thousands of tech startups has generated a tremendous amount of demand for office space, which has benefited the commercial real estate industry.").

³³ Hamza Shaban, *How Offices Looked in Each Decade of the Post Hundred Years*, WASH. POST (Apr. 13, 2023), https://www.washington post.com/technology/2023/04/13/office-work-place-through-the-years/.

³⁴ Wolf Richter, *E-Commerce is Wiping Out Mall Retailers One by One. Here's the Data*, WOLF STREET (Mar. 13, 2019), https://wolfstre et.com/2019/03/13/e-commerce-is-wiping-out-mall-retailers-one-by-one-heres-the-data/ (describing the effects of e-commerce on traditional brick-and-mortar retail).

³⁵ *Id.* ("E-commerce sales have doubled over the past five years.").

³⁶ Austan Goolsbee, *Never Mind the Internet. Here's What's Killing Malls*, N.Y. TIMES (Feb. 14, 2020), https://www.nytimes.com/2020/02/13/bus

apocalypse" has also been fueled by other trends: the rise of warehouse clubs and big box superstores, a hollowing middle class, higher saving rates by high-income households, and a shift in spending towards services rather than goods.³⁷ While these trends have threatened the retail sector of the CRE market, they have also brought about devaluations to retail over time, resulting in less-inflated asset prices and protecting retail from a potential decline in the CRE market.³⁸ Meanwhile, the industrial sector of the CRE market has benefited from the spike in e-commerce: more e-commerce has meant heightened demand for urban infill warehouse locations, and more space to manage reverse logistics.³⁹

(c) Multifamily

Several trends that have shaped the multifamily CRE market are: the increase in the number of Millennials moving out of their parents' homes and into multifamily developments,⁴⁰ efforts by cities to incentivize housing density,⁴¹ and the difficulties Millennials have faced purchasing homes.⁴² Additionally, the U.S. birthrate is at a historic

iness/not-internet-really-killing-malls.html ("[P]hysical retailers closed more than 9,000 stores in 2019 . . . ").

³⁷ *Id.* (describing the factors that have led to a decline in physical retail establishments and shopping malls).

³⁸ Sydney Lake, *Top Economist Who Predicted 2008 Housing Crash Says the Commercial Real Estate Bubble Is About to Burst*, FORTUNE (Nov. 20, 2023), https://fortune.com/2023/11/20/economist-who-predicted-2008-housing-

crash-says-commercial-real-estate-bubble-will-burst/ ("[S]ome properties, such as shopping malls or retail, were somewhat protected due to prior devaluations resulting from the rise of e-commerce").

³⁹ Deloitte, *The Future of the Industrial Real Estate Market: Preparing for Slower Demand Growth*, DELOITTE INSIGHTS (2019) at 4, https://www2.del oitte.com/content/dam/Deloitte/ar/Documents/realestate/arg-2019-future-of-

industrial-real-estate.pdf ("More recently, however, e-commerce companies experiencing double-digit sales growth have been taking up space for more warehouses to fulfill online customer deliveries.").

⁴⁰ Deborah Hanamura, *Multifamily Real Estate Trends for 2019 and Beyond*, BLDG. DESIGN+CONSTR. (Apr. 17, 2019), https://www.bdcnetwork.com/bl og/multifamily-real-estate-trends-2019-and-beyond.
⁴¹ *Id.*

⁴² Chris Salvati & Rob Warnock, 2018 Millennial Homeownership Report: *American Dream Delayed*, APARTMENT LIST (Dec. 6, 2018), https://www.apart mentlist.com/research/2018-millennial-homeownership-report-americandream-delayed.

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low,⁴³ and studies have shown that that Gen-Z⁴⁴ and Millennials⁴⁵ prefer urban living. The expansion of Airbnb, particularly in cities, has also affected the multifamily sector: studies have shown an "Airbnb effect" whereby an increase in Airbnb listings results in increases in rent and housing prices.⁴⁶

2. Recent Years: COVID-19, Rising Inflation, and Macroeconomic Policy

The COVID-19 pandemic of March 2020 and its aftermath upended the global economy and fundamentally altered how people live, work, shop, and play.⁴⁷ In immediate response to the pandemic, the Fed cut interest rates at two emergency March meetings, dropping the federal funds target rate to near zero.⁴⁸ Inflation peaked at about nine percent in June 2022, due to the federal government's \$5 trillion in stimulus funding, supply chain bottlenecks, and the Russian invasion of

⁴³ Andrew Van Dam, *Millennials Aren't Having Kids. Here's Why*, WASH. POST (Nov. 3, 2023), https://www.washingtonpost.com/business/2023/11/0 3/millennials-only-children/.

⁴⁴ Swapna Venugopal Ramaswamy, *Big Cities Are a Big Draw for Gen Z: These Are the Areas That Gen Z Is Rapidly Migrating To*, USA TODAY (Feb. 24, 2023), https://www.usatoday.com/story/money/personalfinance/real-estate/2023/02/24/genz-moving-big-cities-migration/11337814002/.

⁴⁵ Richard Florida, *Young People's Love of Cities Isn't a Passing Fad*, BLOOMBERG CITYLAB (May 28, 2019), https://www.bloomberg.com/ news/articles/2019-05-28/u-s-millennials-really-do-prefer-cities.

⁴⁶ Gary Barker, *The Airbnb Effect on Housing and Rent*, FORBES (Feb. 21, 2020), https://www.forbes.com/sites/garybarker/2020/02/21/the-airbnb-effect-on-housing-and-rent/?sh=eac755d22260 ("A separate U.S. study found that a 1% increase in Airbnb listings leads to a 0.018% increase in rents and a 0.026% increase in house prices.").

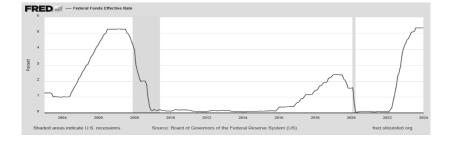
⁴⁷ McKinsey Global Institute, *How Hybrid Work Has Changed the Way People Work, Live, and Shop*, MCKINSEY (July 13, 2023), https://www.mc kinsey.com/mgi/our-research/empty-spaces-and-hybrid-places-chapter-1#/.

⁴⁸ Jane E. Ihrig, Gretchen Weinbach, Scott A. Wolla, *How the Fed Has Responded to the COVID-19 Pandemic*, FED. RSRV. BANK OF ST. LOUIS (Aug. 12, 2020), https://www.stlouisfed.org/open-vault/2020/august/fed-response-covid19-pandemic ("The federal funds rate, which serves as the FOMC's policy interest rate, is the rate banks charge each other for overnight loans. During two unscheduled meetings on March 3 and March 15, the FOMC voted to reduce the target range for the federal funds rate by a total of 1½ percentage points, dropping it to near zero.")

Ukraine.⁴⁹ In response, the Fed raised interest rates eleven times between March 2022 and July 26, 2023 to the current range of 5.25% to 5.50%.⁵⁰

The chart below shows the fluctuations in the federal funds effective rate from 2004 through the present.⁵¹

Figure 3: Federal Funds Effective Rate (2004 to Present)



⁵⁰ Taylor Tepper, *Federal Funds Rate History 1990 to 2023*, FORBES (Jan. 26, 2024), https://www.forbes.com/advisor/investing/fed-funds-rate-history/ (describing how the Fed has raised interest rates by over 5% throughout 2022-23).
 ⁵¹ Federal Funds Effective Rate (FEDFUNDS), FEDERAL RESERVE ECONOMIC DATA | FRED | ST. LOUIS FED (last visited Feb. 17, 2024), https://fred.st louisfed.org/series/FEDFUNDS#.

⁴⁹ Leonardo Vasquez, *Unpacking the Causes of Pandemic-Era Inflation in the US*, THE NBER (NATIONAL BUREAU OF ECONOMIC RESEARCH) DIGEST (Sep. 2023), https://www.nber.org/digest/20239/unpacking-causes-pandemic-era-in flation-us (describing the causes of inflation in the U.S. economy).

D. The Risks & Potential Effects of a CRE Market Bubble

1. Views on the Existence of a CRE Market Bubble

Many economists and real estate investors believe that the CRE market is currently experiencing a bubble, and have put forth dire predictions of a "tsunami"⁵² or "trainwreck."⁵³ Among those who believe that there is a CRE bubble, opinions vary as to how quickly and severely the bubble will burst, or if it even will burst in the traditional sense.⁵⁴ However, some banks do not see the CRE market in crisis and believe that "successful dealmakers will find opportunities."⁵⁵

Some experts predict that while property valuations will continue fall, the CRE market is more in a "slow grind" as it normalizes; in other words, the deflation of a balloon as opposed to the popping of a bubble.⁵⁶ Under this view, the CRE market is in the process of a correction.⁵⁷ For instance, FS Investments ("FS") believes that the CRE

⁵² Komal Sri-Kumar, *CRE Tsunami? It's Coming!*, SRIKONOMICS (Feb. 10, 2024), https://srikonomics.substack.com/p/cre-tsunami-its-coming?utm_sou rce=profile&utm_medium=reader2.

⁵³ Lake, *supra* note 38. ("'It could easily take several years for the office market to stabilize,' Stijn Van Nieuwerburgh, a professor of real estate and finance at Columbia Business School, told Goldman Sachs in its Commercial Real Estate Risks report released in October. He added that it's 'a trainwreck in slow motion.").

⁵⁴ *Id.* ("'I think the biggest bubble right now is commercial real estate,' Gary Schilling, an economist best known for correctly forecasting the 2008 housing crash, said . . . "This isn't of the magnitude of the subprime-mortgage bonanza . . . but I think it is a bubble which is beginning to crack.").

⁵⁵ Sydney Lake, *"We're in the First Inning of the Commercial Real Estate Correction," Billionaire Real Estate Investor Jeff Greene Says*, FORTUNE (Sep. 12, 2023), https://fortune.com/2023/09/12/commercial-real-estate-correction-crash-to-pick-up-steam/.

⁵⁶ Alena Botros, *What's Next For Commercial Real Estate After the* \$500 *Billion Wipeout of 2023? It's A Lot More Complex Than 'Mass Obsolescence,' Industry Watchers Say*, FORTUNE (Dec. 30, 2023), https://for tune.com/2023/12/30/commercial-real-estate-property-value-losses-how-badwill-it-get/ ("It's looking more like a slow grind...").

⁵⁷ Andrew Korz et al., *Chartered Territory: Anatomy of a CRE Correction*, FS INV., 1 (Dec. 30, 2023), https://fsinvestments.com/fs-insights/chartedterritory-anatomy-of-a-cre-correction-

market has been enduring a correction since mid-2022, pointing to the fact that "property values have broadly declined between -10% and -20%."⁵⁸ FS is not certain how much further the correction has to go before the CRE market reaches a new equilibrium, but declines in property values have slowed noticeably in recent months.⁵⁹ If the current economic environment persists, FS expects a gradual correction as opposed to a sharp downtown.⁶⁰

2. Risks in the Office Market

The office sector has emerged as the poster child for postpandemic CRE market woes.⁶¹ A major source of uncertainty is how, if, and when, the office sector will ever "normalize."⁶² Hybrid remotework policies appear to be the new normal,⁶³ and a report by Cushman & Wakefield predicts that there could be up to one billion square feet of unused office space by 2030.⁶⁴ The national office vacancy rate reached 19.6% in Q4 2023, breaking the 19.3% record-high rate in 1986 and 1991.⁶⁵ Some predict that office values could "fall 40 percent peak-to-

andrewkorz/#:~:text=The%20U.S.%20commercial%20real%20estate,that%2 0began%20in%20mid%2D2022 ("The U.S. commercial real estate (CRE) market has been in the clutches of a correction that began in mid-2022.").

⁵⁸ *Id.* ("Since that time, property values have broadly declined between -10% and -20%...").

⁵⁹ *Id.* ("Declines in property values have slowed markedly in recent months . . .").

⁶⁰ *Id.* ("It would not surprise us to see the current environment persist into 2024, which would imply a shallower but more gradual correction, rather than the sharp CRE downturn that many (wrongly) forecasted for 2023.").

⁶¹ Botros, *supra* note XX ("The failure of a mass return-to-office is the poster child for the woes of commercial properties post-pandemic.")

⁶² Botros, *supra* note 56 ("[I]t's going to take time for it to normalize and discover what it is in the future.")

⁶³ Bailey Schulz, 2023 Was the Year Return-to-Office Died. Experts Share Remove-Work Trends Expected in 2024, USA TODAY (Dec. 21, 2023), https://www.usatoday.com/story/money/2023/12/21/remote-work-from-home-trends-2024/71991203007/.

⁶⁴ Lake, *supra* note 55 ("By 2030, there could be 1 billion square feet of unused office space in the U.S., according to a report released in early 2023 by global real estate firm Cushman & Wakefield.").

⁶⁵ Thomas LaSalvia, Lu Chen & Nick Luettke, *Q4 2023 Preliminary Trend* Announcement: Apartment and Industrial Changed Course, Office Entered Uncharted Territory, and Retail in Holding Pattern, MOODY'S (Jan. 8, 2024),

trough by the end of 2025, with no recovery even by 2040."⁶⁶ CRE prices already dropped by over eleven percent since March 2022,⁶⁷ and "98 percent of the net new distress in the CRE market since mid-2021 has come from the office sector." ⁶⁸ Rising office vacancy rates, combined with declining property values, could together lend themselves to a market crash.⁶⁹

3. Other CRE Market Risks

Two factors that could spark the bursting of the CRE bubble are higher long-term interest rates and tightening credit conditions from lenders.⁷⁰ Over \$2 trillion of CRE debt is set to mature by 2027, and while a large portion of the \$540 billion of CRE debt that matured in 2023 was granted extensions, this "extend and pretend" strategy is ultimately unsustainable.⁷¹

Some economists expect a wave of defaults or delinquencies as loan extensions come to an end.⁷² This would be in line with the past four consecutive quarters, during which delinquency rates for

⁶⁶ Botros, *supra* note 56.

⁶⁸ Korz et al., *supra* note 57, at 8.

⁷² Id.

https://cre.moodysanalytics.com/insights/cre-trends/q4-2023-preliminary-

trend-announcement/ ("The national office vacancy rate rose 40 bps to a recordbreaking 19.6%, shattering the previous record of 19.3% set twice previously: once in 1986 driven by a five-year period of significant inventory expansion and the other in 1991 during the Savings and Loans Crisis.")

⁶⁷ Filip De Mott, US Commercial Real Estate Is Suffering One of the Steepest Price Declines in At Least Half a Century, IMF Warns, BSN. INSIDER (Jan. 22, 2024), https://www.businessinsider.com/commercial-real-estate-property-pricedrop-values-offices-defaults-delinquency-2024-1 ("Since the Federal Reserve's first interest rate hike in March 2022, US commercial property prices have slumped by over 11%").

⁶⁹ Lake, *supra* note 55 ("Lisa Shalett, chief investment officer for Morgan Stanley Wealth Management, suggests that rising vacancy rates and declining property values could lend itself to a crash even worse than the Great Financial Crisis.").

⁷⁰ Jennifer Sor, *This Year Could Be the Breaking Point for Commercial Real Estate Distress, Research Firm Says*, BSN. INSIDER (Jan. 23, 2024), https://www.businessinsider.com/commercial-real-estate-crash-property-

price-drop-defaults-interest-rates-2024-1 ("Commentators have been warning of a crash, thanks to tightening credit conditions as a wave of debt from property owners comes due.").

⁷¹ Id.

commercial mortgages rose.⁷³ One forecast predicts \$590 billion of losses in CRE values in 2024, and \$120 billion of losses in 2025.⁷⁴

4. Effects of the CRE Market Bubble Bursting

Regarding the likelihood of a potential contagion effect, some have suggested that there is not enough evidence that the bursting of the CRE market bubble, even if it were to occur, would cause a systemic financial crisis.⁷⁵ The effects of the CRE bubble bursting would largely be inflicted upon banks that have "considerable exposure to the space."⁷⁶ One hedge fund manager estimated that US banks could lose \$250 billion, or 10 percent of their combined \$2 trillion in equity.⁷⁷ Small banks account for nearly 70 percent of all outstanding CRE loans,⁷⁸ and one study estimates that approximately 300 regional banks

⁷⁷ Id.

⁷³ Lake, *supra* note 38 ("Delinquency rates for commercial mortgages, which include office, multifamily, and other commercial properties, have been on the rise for four consecutive quarters, according to the Mortgage Bankers Association (MBA).").

⁷⁴ Botros, *supra* note 56 ("It's largely this higher interest rate environment that's caused the substantial distress experienced thus far, amounting to what research firm Capital Economics estimates at a \$590 billion loss in commercial real estate property values this year... Capital Economics ... predicts another ... \$120 billion loss in 2025 ...").

⁷⁵ Shankar Ramakrishnan, *Liquidity Gridlock Worsens in US Commercial Real Estate Sector*, REUTERS (Nov. 8, 2023), https://www.reuters.com/mar kets/us/liquidity-gridlock-worsens-us-commercial-real-estate-sector-2023-11-08/ ("But [Moody's] head of commercial real estate economics Thomas LaSalvia said probability of a contagion effect was low . . . 'There will be a clearing out of a good deal of over-supply of assets that no longer work in the current economy but there is not enough evidence for this to cause a systemic crisis,' he added.")

⁷⁶ Matthew Fox, *Office Sector Collapse Will Cost US Banks as Much as \$250 Billion, Hedge Fund Boss Says*, BSN. INSIDER (Sep. 11, 2023), https://mar kets.businessinsider.com/news/stocks/office-real-estate-crash-cost-us-banks-250-billion-bass-2023-9?_gl=1*degazz*_ga*ODc2NTc2OTUyLjE3M

DYzODMyMjg.*_ga_E21CV80ZCZ*MTcwODM4MzQxMC4xMS4xLjE3 MDgzODgzMTkuNTQuMC4w.

⁷⁸ Caroline Mandl, Matt Tracy & Saeed Azhar, *Real Estate Pain for US Regional Banks Is Piling Up, Say Investors*, REUTERS (Feb. 12, 2024), https://www.reuters.com/markets/us/real-estate-pain-us-regional-banks-is-piling-up-say-investors-2024-02-12/ ("[S]mall banks account for nearly 70%

are at the risk of collapse from distress in the CRE market.⁷⁹ However, regional banks are also diversified, and their loans to retail and industrial properties—which are performing well—could keep them safe.⁸⁰

Perhaps the greatest concern is around banks that not only have CRE holdings as a proportion of total risk-based capital above 300 percent—which exceeds FDIC guidelines—but also a high exposure to rent-stabilized multifamily loans.⁸¹ The chart below shows the largest U.S. banks with CRE exposure above FDIC regulatory guidelines.⁸²

	0%	100%	200%	300%	400%	500%
Valley National Bank	479%					
Valley National Bancorp**	472%					
Flagstar Bank	471%					
New York Community Bank**	468%					
Axos Bank	366%					
Washington Federal Bank	363%					
WAFD	351%					
Axos Financial**	356%					
Bank OZK	355%					
Umpqua Bank	319%					
Columbia Banking System**	317%					
Pacific Premier Bancorp**	312%					
BCI Financial Group**	309%					
Independent Bank**	302%					
City National Bank of Florida	300%					

Figure 4: CRE Loans in Regional Banks

of all commercial real estate (CRE) loans outstanding . . ."). [ES: Added direct quote parenthetical]

⁷⁹ Matt Levin, Could Commercial Real Estate Still Tank Regional Banks?, MARKETPLACE (Dec. 21, 2023), REUTERS (Feb. 12, 2024), https://www.mar ketplace.org/2023/12/21/could-commercial-real-estate-still-tank-regionalbanks/ ("300. That's more or less the number of regional banks at risk of collapse next year because of distress in the commercial real estate market . .

^{.&}quot;). ⁸⁰ *Id*.

⁸¹ Mandl et al., *supra* note 78.

⁸² *Id.* (citing Trepp).

Older, less desirable office buildings are at risk of demolition in a higher interest rate environment.⁸³ Ninety percent of all U.S. office vacancies are currently within older, less attractive office buildings with "limited amenities and reduced functionality."⁸⁴ These buildings may not be able to service their debt moving forward, especially given the "new normal" of increased work-from-home.⁸⁵

E. Possible Solutions to the CRE Market Bubble

There are several actions that can be taken to help mitigate the risks of the (alleged) CRE bubble bursting.

1. Lower Interest Rates

One possible solution is for the Fed to slash interest rates. This would lower the cost of borrowing and reduce the risk of borrowers being unable to refinance their CRE loans at maturity. This would ultimately lower defaults and delinquencies in the CRE market. However, lower interest rates can only help the CRE market so much. The CRE market is still "not immune to cyclical challenges," and lower interest rates "may not be that big of a relief due to the mounting concerns plaguing the sector."⁸⁶

⁸³ Fox, *supra* note 76.

⁸⁴ The Misunderstood US Office Market, BROOKFIELD (Feb. 16, 2024), https://www.brookfield.com/news-insights/insights/misunderstood-us-officemarket#:~:text=But%20we%20believe%20the%20real,been%20decades%20i n%20the%20making [hereinafter Brookfield] ("[Ninety percent] of all U.S. office vacancies are contained in the bottom 30% of buildings, largely characterized by older offices with limited amenities and reduced functionality.").

⁸⁵ Fox, *supra* note 76 ("[Hayman Capital Management founder and CIO Kyle] Bass has previously advocated for demolishing underperforming office buildings, as he doesn't see hybrid work trends ending anytime soon while it's also very difficult to transform office buildings into apartments.")

⁸⁶ Matthew Fox, *Here's Why the Fed Cutting Interest Rates Is a Double-Edged Sword for Commercial Real Estate*, BSN. INSIDER (Apr. 6, 2024), https://markets.businessinsider.com/news/commodities/commercial-real-estate-outlook-interest-rate-cuts-fed-recession-default-2023-4.

2. Reposition Assets

A solution that has been proposed in recent years is for owners of CRE, particularly office buildings, to convert them into residential buildings. Some do not see this as realistic on a larger scale because of both costs⁸⁷ and architectural challenges.⁸⁸ Such a strategy would only be feasible with public policy incentives such as tax abatements and subsidy programs.⁸⁹ This would allow office space that would otherwise sit empty to generate revenue as housing.

A more popular and economically feasible trend has been office-to-industrial conversions, particularly in suburban markets. This has in part been driven by the increased demand for industrial space due to the rise in e-commerce.⁹⁰ A 2023 report found that "15.2 million square feet of offices nationwide had been converted to industrial use, a 33.7 percent increase in just two years."⁹¹ However, challenges to such conversions, including zoning, "construction quirks," long approval processes, and community pushback, remain.⁹²

3. Raise Rents

Landlords could try to raise rents on existing CRE tenants, or at least keep them at existing levels. A recent report showed that despite high office vacancy rates, "asking office rents somehow rose in the fourth quarter of 2023."⁹³ Manhattan's average asking rent for office

⁸⁷ Botros, *supra* note 56.

⁸⁸ Emily Badger & Larry Buchanan, *Here's How to Solve a 25-Story Rubik's Cube*, N.Y. TIMES (Mar. 11, 2023), https://www.nytimes.com/interactive e/2023/03/11/upshot/office-conversions.html (discussing conversion challenges due to differences in architectural typologies).

⁸⁹ Id.

⁹⁰ Jeffrey Steele, *Industrial Space Replacing Offices in North American Suburbs*, FORBES (Jan. 8, 2024), https://www.forbes.com/sites/jeffsteele/20 24/01/08/industrial-space-replacing-offices-in-north-american-suburbs/?sh=13b1287214c9.

⁹¹ David M. Levitt, *The Office-to-Industrial Conversion Trend Is Here*, COM. OBSERVER (Jan. 8, 2024), https://commercialobserver.com/2023/06/office-to-industrial-conversions/.

⁹² Steele, *supra* note 90.

⁹³ Brian Pascus, U.S. Office Asking Rents Increase Despite Higher Vacancy, COM. OBSERVER (Mar. 8, 2024), https://commercialobserver.com/2024/03/re port-office-asking-rents-increase-despite-vacancies-hovering-20-percent/.

space rose five consecutive months as of August 2023.⁹⁴ However, increasing rents appear to apply mainly to newer, high-quality office spaces at the top end of the market, and may not be feasible for older buildings.⁹⁵

4. Bring Employees Back to the Office

This strategy could reduce vacancies and reinvigorate demand for office space. While the five-days-a-week-in-office model looks like a thing of the past, a recent report showed that "90 percent of companies plan to implement return-to-office policies by the end of 2024," and "only two percent of [the surveyed] business leaders said their company never plans to require employees to work in person." This could reassure lenders that office is here to stay. Moreover, there are opportunities for companies to redesign their spaces to attract young talent, and many companies have already done so.⁹⁶

5. Invest More Equity Into CRE

In an environment of tightening credit standards, owners can invest more equity in CRE to reduce debt. This would lower their debt burden and add more liquidity to the CRE market.

F. Conclusion

The CRE market faces unprecedented challenges that have threatened its financial viability in the short and long term. Recent trends have reshaped the demand for CRE, with the office sector in particular facing an uncertain future. Macroeconomic policy, consumer preferences, and the actions of lenders and landlords will all play vital roles in how the CRE industry moves forward. Despite somewhat

⁹⁴ Offices Need \$200 Rent To Pencil Out: Boston Properties Prez, THE REAL DEAL (Sep. 13, 2023), https://therealdeal.com/new-york/2023/09/13/boston-properties-president-office-rents-need-to-double/.

⁹⁵ Brookfield, *supra* note 84.

⁹⁶ Emma Goldberg & Anna Kodé, *The Envy Office: Can Instagrammable Design Lure Young Workers Back?*, N.Y. TIMES (Nov. 26, 2023), https://www.nytimes.com/2023/11/26/business/office-design-rto.html; *see also* Alana Semuels, *Companies Are Finally Designing Offices for the New Work Reality*, TIME (May 22, 2023), https://time.com/6280986/hybrid-office-return-to-work-design/.

ominous predictions, CRE is "entering a new era of thinking, building, and operating,"⁹⁷ which presents exciting opportunities for what lies ahead.

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⁹⁷ Annual Urban Land Institute, PwC Report Outlines "The Great Reset" A New Era in Real Estate, PRICEWATERHOUSECOOPERS (Oct. 31, 2023), https://www.pwc.com/us/en/about-us/newsroom/press-releases/emerging-trends-in-real-estate-2024.html.

⁹⁸ Student, Boston University School of Law (J.D. 2025).