# **LSEG Yield Book**

# July 2024

#### **Executive Summary**

- The non-agency CMBS market had little support in the initial Covid crisis, leaving it heavily exposed to both the Fed's 500bp tightening and structurally lower demand for office and retail space particularly
- Lack of transparency in CRE bank loans and collateral pricing makes the true scale of the problem hard to assess
- But maturing non-agency CMBS fixed-rate loans data gives us a window to analyze the CRE market, so we can project maturity fail rates for different Fed rate-cutting scenarios, given the maturity walls
- Even assuming a "pretend and extend" bail-out approach, higher for longer rates with cuts of 100bp per annum could lead to maturity fail rate of 35%
- Aggressive rate cuts, like the GFC and Covid, reduce the maturity fail rate to 5%, but would likely lead to lower net operating income
- Despite containment to date, broader systemic risks in the regional banking system may become a financial stability issue for the Fed

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Luke Lu Head of Credit Research and Quantitative Modeling luke.lu@lseg.com It is well known that weakness in commercial real estate (CRE) helped drive several US regional bank failures in March/April 2023. In a previous paper "CMBS and the Fed; is there a crisis brewing in the office?", published in November 2020, we highlighted the risks in the non-agency CMBS sector, given the limited degree of government and Fed rescue programmes, and the structural challenges to the sector from Covid lockdowns. Compared to relative stability in the residential housing market, where reduced housing supply has protected valuations, the US CRE market, has suffered from a brutal combination of higher rates and reduced demand for office and retail space, post-Covid.

The main Fed support to the CRE sector during the pandemic was via agency-CMBS purchases in the QE programme, but the non-agency sector was not eligible. Higher rates since 2022 have compounded the strains on the sector (see Exhibit 1) with overall delinquency rate rising from 3.29% (March 2022 when the tightening begins) to 4.82% (June 2024), vs. office loan delinquency rate jumping sharply from 1.52% to 7.34% in the same period. With the market now discounting Fed rate cuts beginning in September, the question becomes will the rate cuts be too little and too late to prevent a major spike in defaults, and CRE crash?



#### Exhibit 1: Non-agency CMBS Delinquency Rates are Rising

Source: LSEG Yield Book Research, Trepp (July 2024)

# The importance of Fed Rate Cuts to Maturity Risk

Specifically, for conduit CMBS loans facing imminent maturity refinancing, what does the maturity wall look like over the next two years? Here, we try to quantify the challenges in refinancing from the existing fixed loan rate, eg, 4%, to an ongoing market rate near 7%, and its impact on the debt service coverage ratio (DSCR) - a key metric in loan underwriting qualification. For conduit CMBS loans, typically a DSCR >=1.20x is required for loan refinancing approval.

As an example, consider a 4% rate loan with a current DSCR of 1.80x. A 7% refinancing rate will reduce the DSCR to 1.03x, assuming the net operating income (NOI) stays the same, and debt service is linearly proportional to the loan rate. This would disqualify it from refinancing. But if we assume a Fed rate reduction of 100 bps, and a delta of 0.6 for the impact on 10-year Treasury yield, the 10-year yield would fall 60bp, bringing the new refinancing loan rate down to 6.4% from 7%. This would result in an underwriting DSCR of 1.27x, making refinancing possible.

# Maturity walls enable an assessment of how Fed easing can reduce re-financing risk

A detailed look at the maturity walls for conduit CMBS loans which are typically fixed rate, combined with Fed rate cut scenarios, offers more clarity on the extent to which CMBS maturity risk can be mitigated by Fed easing. Unlike floating rate CMBS loans, where the cost and complexity of option rate-caps must be built into the analysis, fixed-rate loans enable a cleaner assessment of re-financing and fail risks. There are \$89 billion of conduit CMBS loans maturing in the two years from July 2024 to June 2026, with \$48 billion, roughly 53% of the total, projected to pay off on maturity, either

because they are defeased<sup>1</sup> already (\$16 billion) or they are able to refinance at current market rates with a sufficient DSCR cushion (\$32 billion).

But what will happen to the remaining \$41 billion of conduit CMBS loans, which can not refinance because they don't meet the DSCR requirements at current refinancing rates? Assuming the rental rate and occupancy rates remain unchanged (i.e., NOI remains unchanged), it would seem the loans can only be saved by Fed interest rate cuts.

## We project Fed rate cutting scenarios, based on easing cycles since 2000...

We consider 3 possible Fed rate-cut scenarios, based on Fed easing cycles since 2000. In previous cycles, the faster the easing cycle, the lower the terminal rate for Fed funds<sup>2</sup>.

#### (1) Higher for longer.

Sticky services inflation, high employment and a resilient economy may only allow a slow pace of rate reduction. In this scenario, we assume 25bps in rate cuts per quarter, and a terminal rate (TR) of 2.25% for Fed funds after 3 years, eg, 300bps in Fed easing, and no QE.

#### (2) A more Normal rate-cutting cycle.

50bps in rate cuts each quarter for 2 years, ending at a TR of 1.25%. Before the GFC and Covid easing cycles, this pace of easing was more typical.

#### (3) An aggressive easing cycle, with QE.

If a financial or economic shock emerges, 100bps in rate cuts per quarter would be quite plausible, based on the GFC or Covid cycles, and a TR of 0.25%.

Given these scenarios, we can project Fed funds rates over the next two years, as in Exhibit 2.

#### Exhibit 2: Fed interest rate cut scenarios

Fed Funds Rate Cuts	Scenario1	Scenario2	Scenario3
2024Q3	5.25	5.25	5.25
2024Q4	5	4.75	4.25
2025Q1	4.75	4.25	3.25
2025Q2	4.5	3.75	2.25
2025Q3	4.25	3.25	1.25
2025Q4	4	2.75	0.25
2026Q1	3.75	2.25	0.25
2026Q2	3.5	1.75	0.25
2026Q3	3.25	1.25	0.25
2026Q4	3	1.25	0.25
2027Q1	2.75	1.25	0.25
2027Q2	2.5	1.25	0.25
2027Q3	2.25	1.25	0.25

Source: LSEG FTSE Russell (July 2024)

<sup>&</sup>lt;sup>1</sup> Defeasance refers to a borrower selling property before loan term ends with the replacement of the collateral of a loan with securities (generally Treasury bonds) that will offer a lender an equivalent return.

<sup>&</sup>lt;sup>2</sup> See Timing, Tempo and Terminal rates – lessons from previous G7 easing cycles, LSEG, 2024.

# ...and then use deltas for the 10-year Treasury yield drawn from previous easing cycles

To make a projection for the 10-year Treasury yield, in these scenarios, we looked at the three easing cycles since 2000. This enabled us to gauge the sensitivity, or delta, of the 10-year yield to Fed funds rate cuts. Using the data from previous cycles, we assume the delta (10-year Treasury yield change/Fed rate cut) is 0.27, 0.68, and 0.88 for scenarios 1, 2, and 3, respectively. We also calculated the average loan coupon rate by each property type for conduit CMBS loans originated in 2024 and used them as a proxy for current market refinancing rates.

#### Exhibit 3: Current market refinance rates (%)

<b>Refinancing Rate</b>				
Industrial	6.93			
Lodging	7.68			
Multifamily	6.84			
Office	7.24			
Retail	7.02			

Source: LSEG Yield Book Research, Trepp (July 2024)

Given the projections for Fed funds rates, and deltas, we can assess maturity fail<sup>3</sup> rates on loans in different scenarios. For scenario 1, we project only \$3.0billion of maturity loans will be bailed out by Fed rate cuts upon maturity, and an additional \$7.3billion could be bailed out later in a form of "pretend and extend" with larger cumulative rate cuts, as Exhibit 4 shows. But \$30.7billion of maturing loans won't benefit from the rate cuts, for a total fail rate of 35%, as their DSCRs have been severely impaired and won't qualify for refinancing even after all the rate cuts materialize in this scenario.

			Extension			
Scenario 1	Payoff	Bailout	& Bailout	Fail	<b>Grand Total</b>	Fail Rate
2024Q3	5,459		1,195	3,495	10,148	34%
2024Q4	7,028	88	1,073	4,334	12,523	35%
2025Q1	6,600	144	1,065	3,883	11,693	33%
2025Q2	6,899	480	696	4,864	12,940	38%
2025Q3	7,906	641	1,555	5,090	15,191	34%
2025Q4	6,091	685	740	4,099	11,615	35%
2026Q1	4,269	558	558	3,046	8,431	36%
2026Q2	3,518	438	452	1,906	6,314	30%
<b>Grand Total</b>	47,769	3,034	7,334	30,718	88,856	35%

#### Exhibit 4: Conduit CMBS Maturity Outcome (\$million) with Scenario 1 - Higher for longer

Source: LSEG Yield Book Research, Trepp (July 2024)

For scenario 2, we find \$13.8 billion of maturity loans can be refinanced with the faster pace of Fed rate cuts, at maturity, and an additional \$15.9 billion can be extended and bailed out later, as Exhibit 5 shows. However, \$11.4 billion of maturity loans will fail to refinance, for a total fail rate of 13%, as the rate cuts are still not sufficient to boost their DSCR above the 1.2x underwriting requirement.

#### Exhibit 5: Conduit CMBS Maturity Outcome (\$million) with Scenario 2 – A more normal Fed rate cutting cycle

<sup>&</sup>lt;sup>3</sup> Maturity fail is defined as a loan that cannot be refinanced or paid off upon maturity or even with extension after maturity

			Extension			
Scenario 2	Payoff	Bailout	& Bailout	Fail	<b>Grand Total</b>	Fail Rate
2024Q3	5,459		3,056	1,634	10,148	16%
2024Q4	7,028	446	3,188	1,861	12,523	15%
2025Q1	6,600	1,189	2,320	1,583	11,693	14%
2025Q2	6,899	1,354	2,600	2,086	12,940	16%
2025Q3	7,906	3,472	2,156	1,658	15,191	11%
2025Q4	6,091	2,589	1,825	1,111	11,615	10%
2026Q1	4,269	2,507	677	978	8,431	12%
2026Q2	3,518	2,241	80	476	6,314	8%
Grand Total	47,769	13,798	15,901	11,387	88,856	13%

Source: LSEG Yield Book Research, Trepp (July 2024)

For scenario 3, a much larger proportion of loans, at \$25.5 billion, are expected to refinance upon maturity as a result of Fed rate cuts, as Exhibit 6 shows. An additional \$11.1 billion maturity loans can be extended and eventually bailed out as the rate cut benefits increase, leaving only \$4.5 billion (5%) of maturity loans to fail in the end.

			Extension			
Scenario 3	Payoff	Bailout	& Bailout	Fail	<b>Grand Total</b>	Fail Rate
2024Q3	5,459		4,196	494	10,148	5%
2024Q4	7,028	1,229	3,511	755	12,523	6%
2025Q1	6,600	2,264	2,033	795	11,693	7%
2025Q2	6,899	3,918	1,162	960	12,940	7%
2025Q3	7,906	6,427	194	665	15,191	4%
2025Q4	6,091	5,230		295	11,615	3%
2026Q1	4,269	3,835		328	8,431	4%
2026Q2	3,518	2,562		234	6,314	4%
Grand Total	47,769	25,464	11,096	4,527	88,856	5%

Exhibit 6: Conduit CMBS Mat	rity Outcome (\$millior	) with Scenario 3 – An	aggressive easing cycle
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Source: LSEG Yield Book Research, Trepp (July 2024)

The contrast between the three scenarios is stark. Scenario 3 has by far the largest bailout effect for conduit CMBS maturity loans, as more aggressive Fed rate cuts potentially rescue \$36.5billion, or some 41% of the total maturity wall, over the next two years (\$25billion + \$11billion). On the other hand, the scenario 1, given its timid rate cut schedule, can only help refinancing for \$10.4 billion (\$3.1billion + \$7.3billion) or 11% of the maturity walls.

Finally, focusing on the office sector which has dominated the headlines of CRE woes, we can see how different Fed rate cut scenarios drive the share of the \$23.8billion in maturing office loans that survive unimpaired. More aggressive rate cuts in Scenario 3 support most loans at \$10.9billion, or 46% of all maturity office loans in the next two years, leaving only \$1.7billion (7%) to fail. In contrast, scenario 1 rate cuts only bail out 9%, leaving 44% to fail. These results are shown in Exhibit 7.

Extension						
<b>Office Maturity</b>	Payoff	Bailout	& Bailout	Fail	Grand Total	Fail Rate
Scenario 1	11,131	661	1,530	10,459	23,781	44%
Scenario 2	11,131	3,114	5,436	4,100	23,781	17%
Scenario 3	11,131	6,745	4,188	1,717	23,781	7%

#### Exhibit 7: Office Conduit CMBS Maturity Outcome (\$million) across rate cutting Scenarios

Source: LSEG Yield Book Research, Trepp (July 2024)

#### **Conclusions and broader implications**

**Opacity in the pricing of underlying loan collateral in property crises frequently makes the true scale of the crisis difficult to assess.** There are also strong incentives to "pretend and extend" loans in the banking system, rather than mark to market-clearing prices more realistically. These factors often cause property crises to last many years, particularly when combined with long commercial property leases, and a switch to a higher interest rate regime since 2022/23.

However, the window on the US CRE market provided by Yield Book CMBS fixed rate loans data gives more transparent data, enabling analysis of the underlying issues. This shows the importance of rapid, and sizeable, Fed rate cuts in the refinancing of maturing loans. This is unsurprising given the speed of the 500bp of Fed tightening in 2022-23. A higher for longer Fed funds rate cutting scenario 1 – with rate cuts of only 100bp per annum- shows the fail rate for refinancings at 35%, and for office loans it is even higher at 44%, even allowing for some "pretend and extend" loan behaviour – which is typical in property crashes.

Delinquency rates on Office loans have already spiked above those in other CRE sectors, reflecting the "perfect storm" for the sector, in much higher financing costs and the decline in structural demand for office space since Covid, as working from home has increased.

A rate-cutting scenario more like Covid and the GFC – of 400 bp per annum, gives a much lower maturity fail rate of 5%. But this is a highly favourable, or "first best", US CRE scenario which also presumes net operating income is not reduced, despite 400 bp in rate cuts per annum. A recession and deflationary shock requiring rate cuts on this scale seems likely to squeeze NOI as well.

Finally, although the Fed has been successful to date in preventing contagion from US regional banks' CRE exposure, **the scale of the CRE loan refinancing raises concerns about US financial stability**, even if systemically important US banks have comfortable Tier 1 capital ratios. Instability in deposit bases of regional banks and duration mismatches have already highlighted the problems in the sector.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> U.S. Bank Runs, Fed Policy And The Law Of Unintended Consequences | Seeking Alpha

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