# Discussion of:
# Monetary Tightening, Commercial Real Estate Distress, and US Bank Fragility

by Erica Jiang, Gregor Matvos, Tomasz Piskorski, and Amit Seru

**Matteo Crosignani**
New York Fed

January 4, 2025

**Emerging Threats to Financial Stability: Nonbank Financial Institutions and Commercial Real Estate**
AEA Annual Meeting

# Fragility of US banks: Rapid hiking cycle + distress in CRE

· Credit losses (CRE) and drop in MTM value of assets (Fed hikes since 2022:Q1)
  → vulnerability for **low-capital** banks with high **uninsured deposits**

· Credit losses added to the framework in Jiang, Matvos, Piskorski, Seru (JFE 2024)

# Why focus on CRE?

- **US banks are highly exposed to CRE**
  - CRE constitutes 25% of assets of the typical bank as of 2022:Q1 (5% GSIBs; 30% large banks)

- **CRE is largely distressed**
  - Higher rates + persistence of hybrid/remote work (2022:Q1 onward)

- **Increasing CRE delinquency rates**
  - 5.4% (8.0% for office) in June 2024

# CRE distress mostly concentrated in office

- Office delinquencies rising fast but still below the GFC peak in June 2024
- As of June 2024, not too different from lodging and retail
- As of <u>Dec 2024</u> (TREPP data): 10.35% for office space (diverging from retail and lodging)
→ Observed delinquencies aligning with market prices from REITS

|             | June 2024 | March 2024 | December 2023 |
|-------------|-----------|------------|---------------|
| Overall     | 5.43      | 4.67       | 4.51          |
| Office      | 8.09      | 6.58       | 5.82          |
| Lodging     | 6.17      | 5.45       | 5.40          |
| Multifamily | 2.63      | 1.84       | 2.62          |
| Retail      | 6.14      | 5.56       | 6.47          |
| Industrial  | 0.64      | 0.47       | 0.57          |

Recent Commercial Real Estate Loans Delinquency Trends (based on the CMBS data)

- Bank loans might differ from CMBS (ex-ante differences + banks' extend-and-prented)
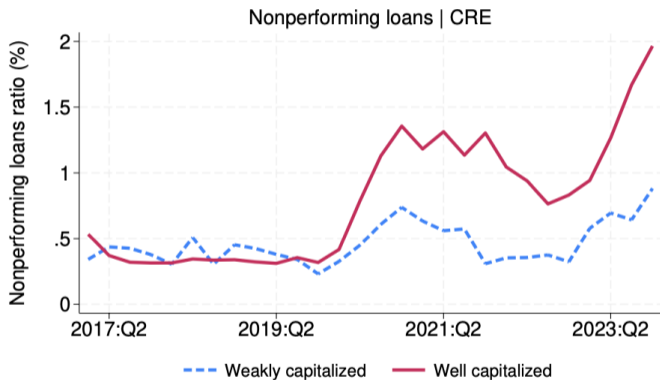
# Banks' NPLs: aggregate CRE
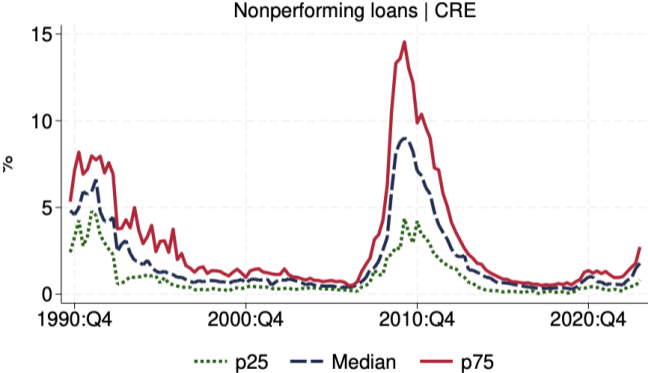


Time-series evolution of the nonperforming loans ratio (stock of nonperforming loans divided by the stock of loans) across CRE. The solid line, long dash line, and short dash line indicate the third quartile, the median, and the first quartile at any given point in time in the cross-section of our sample banks. The data runs at a quarterly frequency from 1990:Q3 to 2023:Q4. Source: FR Y-9C. Source: Crosignani and Prazad (2024).

# Banks' NPLs: non-farm non-residential CRE
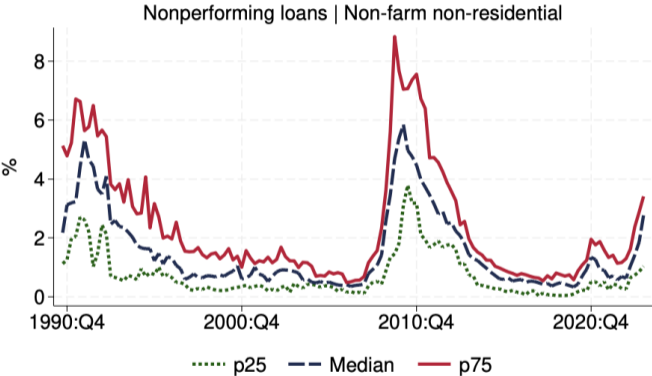


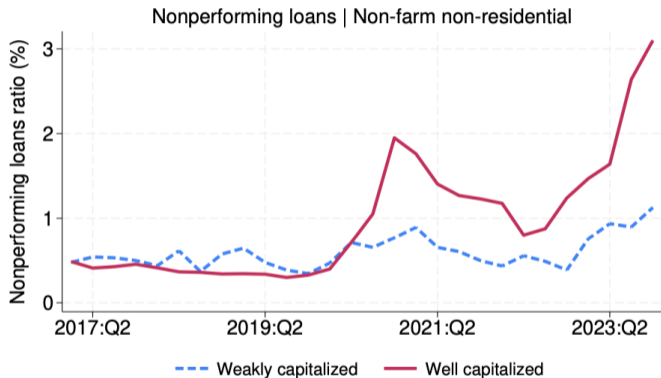Nonperforming loans | Non-farm non-residential

Time-series evolution of the nonperforming loans ratio (stock of nonperforming loans divided by the stock of loans) across non-farm non-residential. The solid line, long dash line, and short dash line indicate the third quartile, the median, and the first quartile at any given point in time in the cross-section of our sample banks. The data runs at a quarterly frequency from 1990:Q3 to 2023:Q4. Source: FR Y-9C. Source: Crosignani and Prazad (2024).

# Nonperforming CRE loans, weakly vs. well-capitalized banks



**Nonperforming loans | CRE**

Time-series evolution of the nonperforming loans ratio (stock of nonperforming loans divided by the stock of loans) for aggregate CRE. Solid lines (dashed lines) indicate the median nonperforming loans ratio for well capitalized (weakly capitalized) banks. The data runs at a quarterly frequency from 2017:Q1 to 2023:Q4. Source: FR Y-9C. Source: Crosignani and Prazad (2024).

# Nonperforming CRE loans, weakly vs. well-capitalized banks



Nonperforming loans | Non-farm non-residential

Time-series evolution of the nonperforming loans ratio (stock of nonperforming loans divided by the stock of loans) for non-farm non-residential CRE. Solid lines (dashed lines) indicate the median nonperforming loans ratio for well capitalized (weakly capitalized) banks. The data runs at a quarterly frequency from 2017:Q1 to 2023:Q4. Source: FR Y-9C. Source: Crosignani and Prazad (2024).

# Detailed analysis of negative equity and cash flow issues

- LTV of office loans from 54% at origination to 86% in Dec 2023 (45% have equity<0)
- Likelihood of default? Do the findings in Piskorski and Seru (2018) *fully* apply?

- CRE and office loans were underwritten with an average DSCR>2
- By Dec 2023, DSCR such that 64% of office loans not able to access regular refinancing

# Backing out banks' capacity to withstand CRE distress

· Banks report the values of *"loans and leases excluding loans that are secured by first liens on 1-4 family residential properties"* by maturity and repricing breakdowns.

· CRE Distress: range of CRE distress scenarios from 2% to 20% default rate at each bank

→ Can you link these scenarios to potential future paths of interest rates and/or WFH?

# Effect of CRE defaults not too large, but it's an *additional* effect
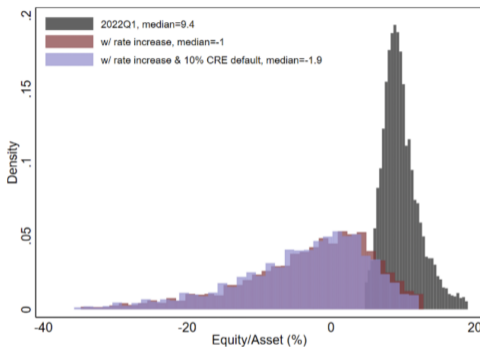


Histograms (density) of the equity to asset ratio, valuing all non-equity bank liabilities at its face value. The equity to asset ratio is plotted for three cases. First, we show the density of equity to asset ratio given the bank equity position as of 2022:Q1. Second, we show the mark-to-market equity to asset ratio as of 2024:Q1 that incorporates the value of asset declines following recent increase in interest rates by extending the calculation in Jiang et al. (2023). Finally, we show the equity to asset ratio that in addition to these asset declines also incorporates losses from the CRE distress scenario assuming 10% default rate on commercial loans at each bank and a 30% loss given default expressed as the percentage of outstanding loan balance. Data Sources: Bank Call Reports.

# CRE losses might be concentrated in time
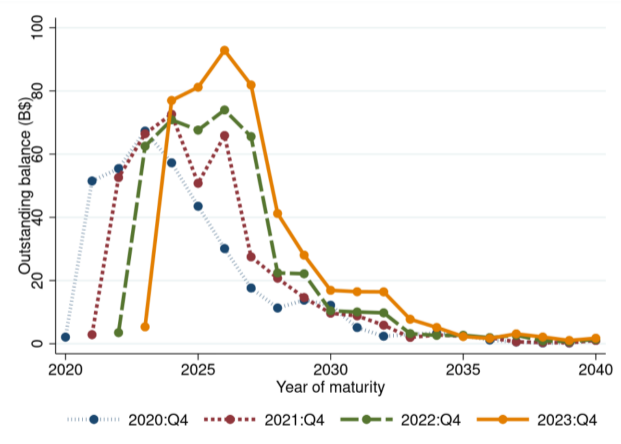


This figure shows the maturity wall faced by banks as of 2020:Q4, 2021:Q4, 2022:Q4, and 2023:Q4. Each line shows, as of one of these four dates, the dollar value of CRE mortgages expiring in each year in the future (x-axis). Mortgages maturing after 2040 are cut off for exposition purposes. Source: FR Y-14Q Schedule H.2. Source: Crosignani and Prazad.

# CRE losses vs. MTM losses

- · Both might trigger runs
- · Different impact on capital
- · Large CRE losses might act as a bank run "catalyst"
- · CRE losses might cause spillover effects (e.g., crowding-out origination of new credit)

# Overall

· Impressive paper, careful data work using CMBS loan-level data, highly topical

· Further highlights the fragility of the US banking sector following rate hikes

· My suggestions and comments:
    - Address tension between CMBS loan-level data and extrapolation to bank loans
    - Link CRE stress scenarios to potential paths for rates
    - Extend-and-pretend might cause a concentration of CRE defaults in time