Discussion of: “Monetary Policy, Inflation, and Crises: Evidence from History and Administrative Data”

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PLEASE SEE ANALYST CERTIFICATIONS AND IMPORTANT DISCLOSURES STARTING ON PAGE 23.

What does the paper say?

- **Main question**: What are effects of monetary policy actions on banking crises?

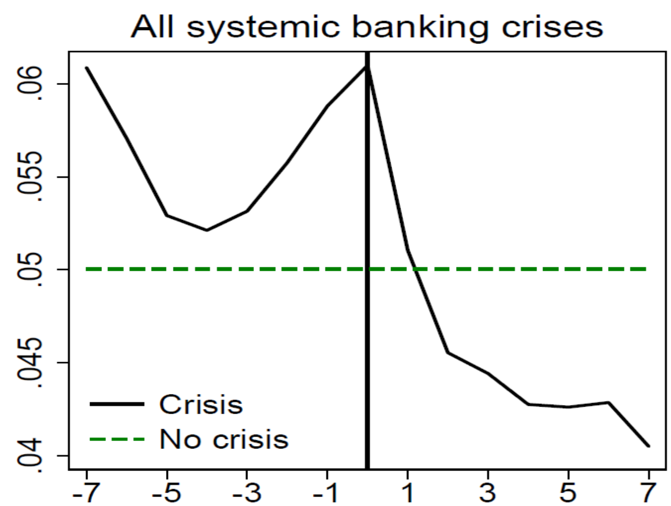
- **Approach:**
  Characterizes monetary policy rate path before banking crises:

  1. Macro history database (Jordà, Schularick, Taylor, 2016):
     - 77 systemic banking crises
     - 17 advanced economies
     - 150 years: 1870-2020
     - Crises: Schularick-Taylor (2012) narrative approach (or Baron et al. 2021)
       - *Bank runs, increases in default rates, large losses of capital, public intervention, bankruptcy or forced merger of financial institutions*

  2. Micro data set:
     - Credit registry matched with firm and bank administrative data
     - Spain, 1995-2020
     - ➔ Analyze effects of policy rate on loan default by type of bank and borrower

Paper's findings (1): Stylized facts

1. **Banking crises preceded by U-shaped monetary policy rate path**



Source: Jimenez et al. (2023)

- U: Rate cuts ~7 years before crisis followed by rate hikes ~3 years before
- Recessions often preceded by rate hikes **but not by U-shaped** path!

2. **U-shaped rate path materially increases risk of banking crisis**
   - Rate increases for 3 years only materially raise crisis risk if rates had been cut over the preceding 5-year period.

3. Spanish micro data
   - Loans issued after low interest rate period are more likely to default
   - In particular if rate hike takes place

Paper's findings (2): Mechanism

- **Rate cuts ➔ boost credit and asset prices:** Red-zone boom (Greenwood et al.,'22)
  - Red zone: build-up of financial and banking sector vulnerabilities

- **Rate hikes in red-zone**
  - Vulnerabilities crystallize (Lower returns on bank equity, bank stocks)
  - ➔ **Raise risks of banking crisis**

- So: Rate cuts (which drive red-zone booms) followed by rate hikes
  - ➔ Raise risks of banking crisis

Banking crisis = U-shaped rate path + Red zone

Magnitudes:

- If:
  - rate cut in years t-8 to t-3
  - raised between t-3 and t-1
  - and: RZ between t-3 and t-1

- Then: crisis freq. b/w t and t+2 = 38%
  Unconditional freq. = 9%

Table 8: Crisis frequencies

U-shaped MP & R-zone	0.38
U-shaped MP & no R-zone	0.09
No U-shaped MP & R-zone	0.09
No U-shaped MP & no R-zone	0.05
Unconditional	0.09

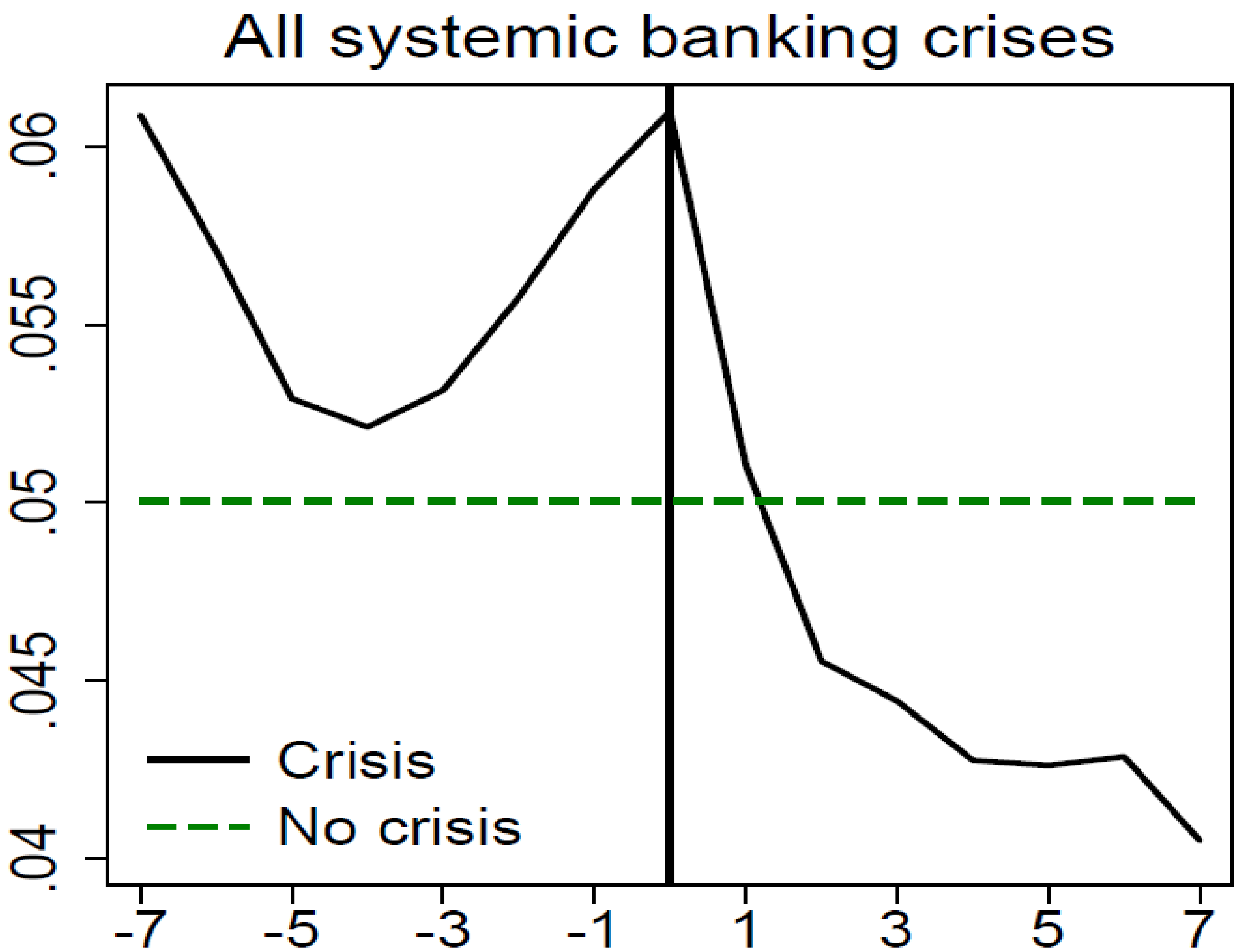
Source: Jimenez et al. (2023)

Comments

1. Are stylized facts robust?
2. U-shaped rate path: Banking crisis or recession?
3. What about real interest rates?
4. What about 2010s, 2020s?
5. U-shaped rate path: So what?

1. Are stylized facts robust?

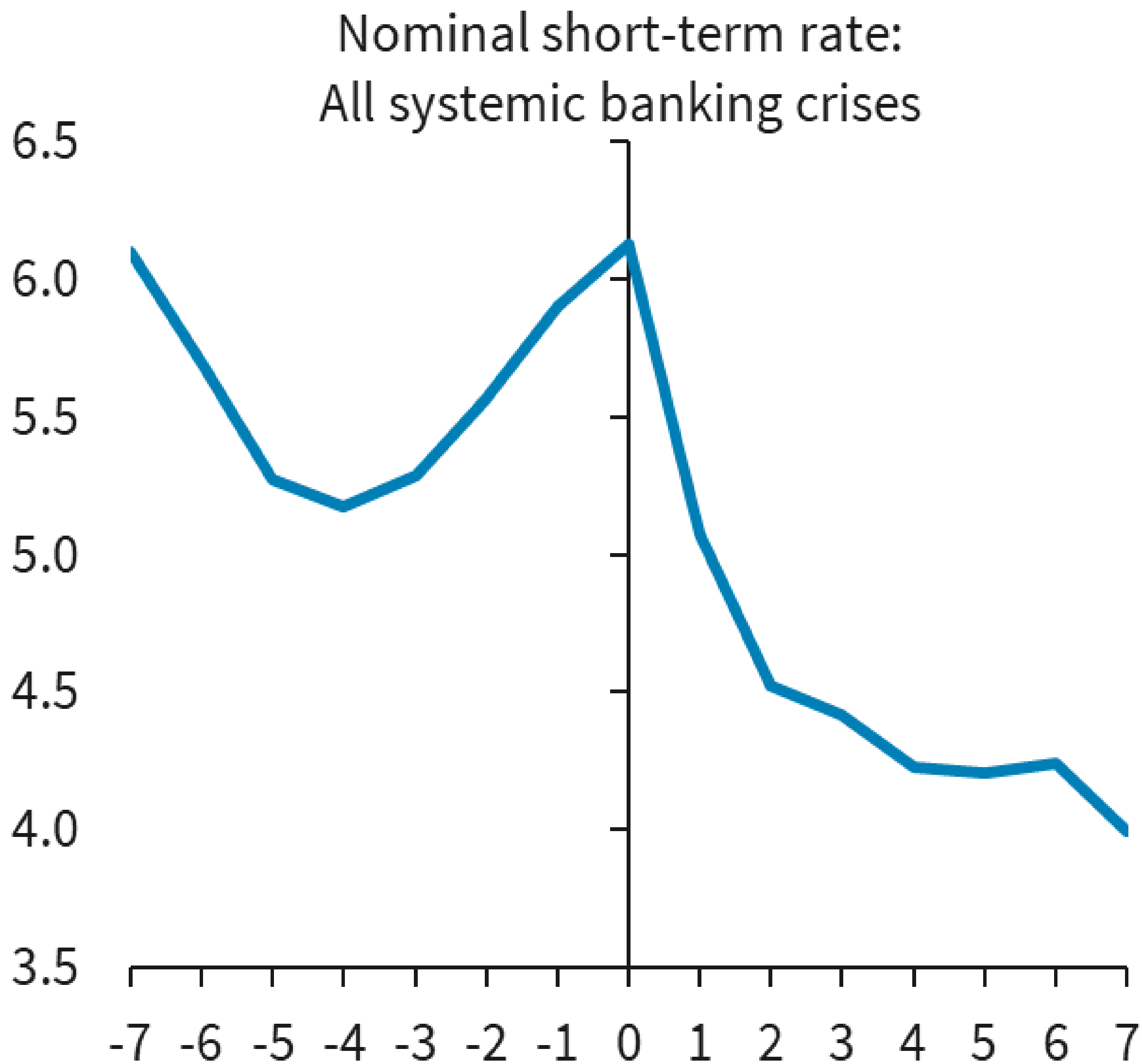
- Regression analysis indicates significant U-shaped pattern
- Also after controlling for GDP, inflation, investment



Source: Jimenez et al. (2023)

1. Are stylized facts robust?

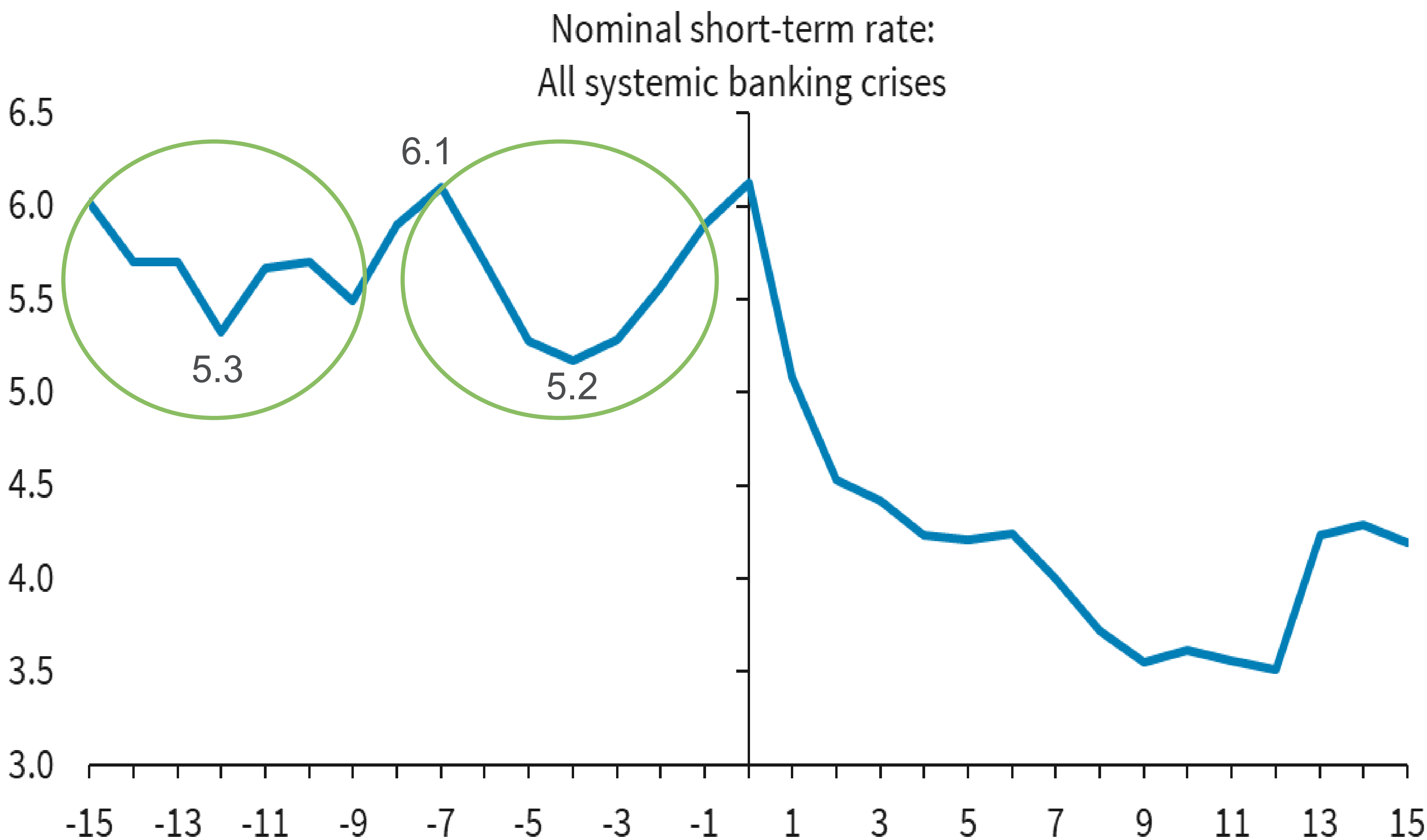
- Reproducing the main chart:



Source: Macrohistory database, Barclays Research

Robustness #1: A wider window

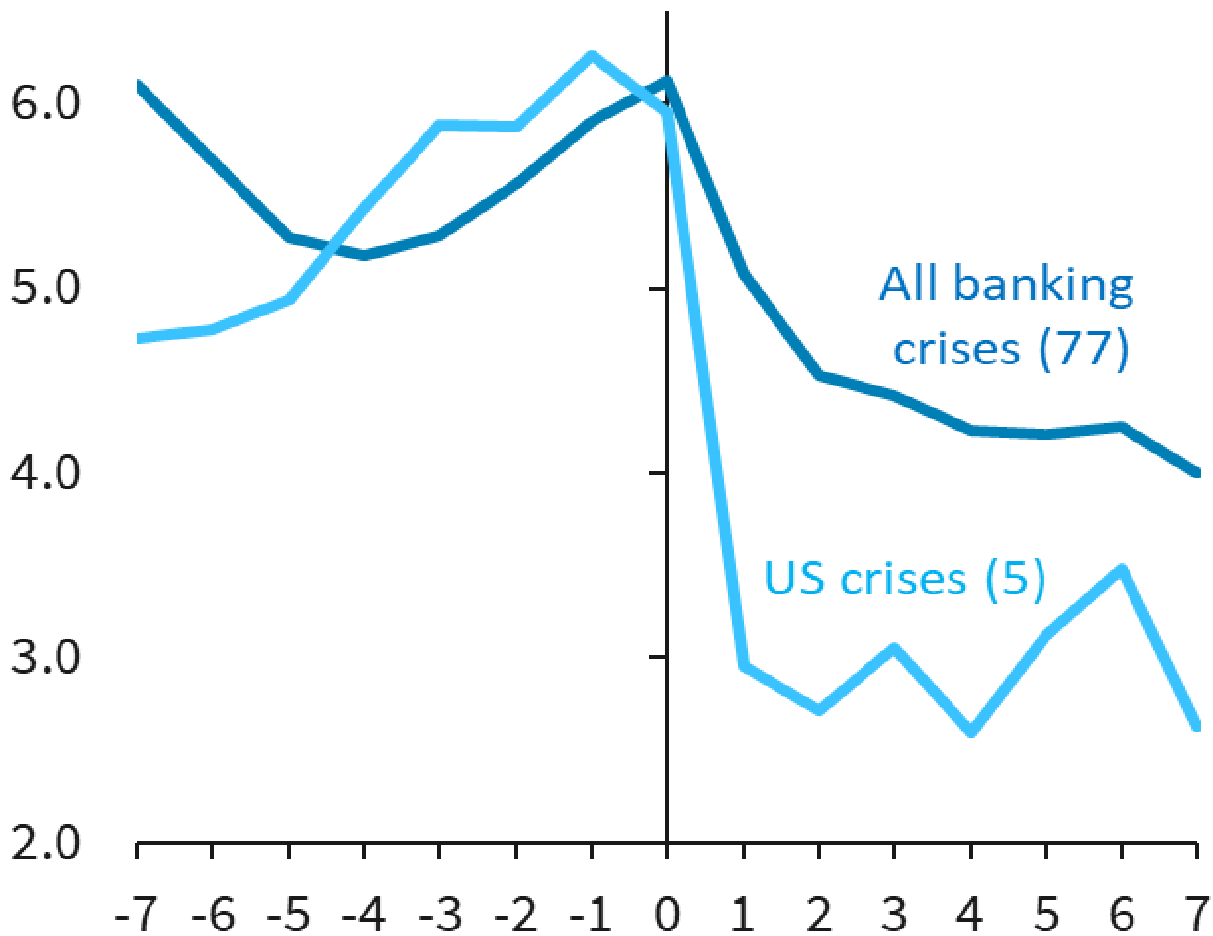
When looking back 15 years, we see other U-shaped rate paths that didn't trigger banking crises



Source: Macrohistory database, Barclays Research

Robustness #2: What about the US?

U-shaped rate paths preceding banking crisis: **Not a US phenomenon**…
…except in Great Depression and GFC



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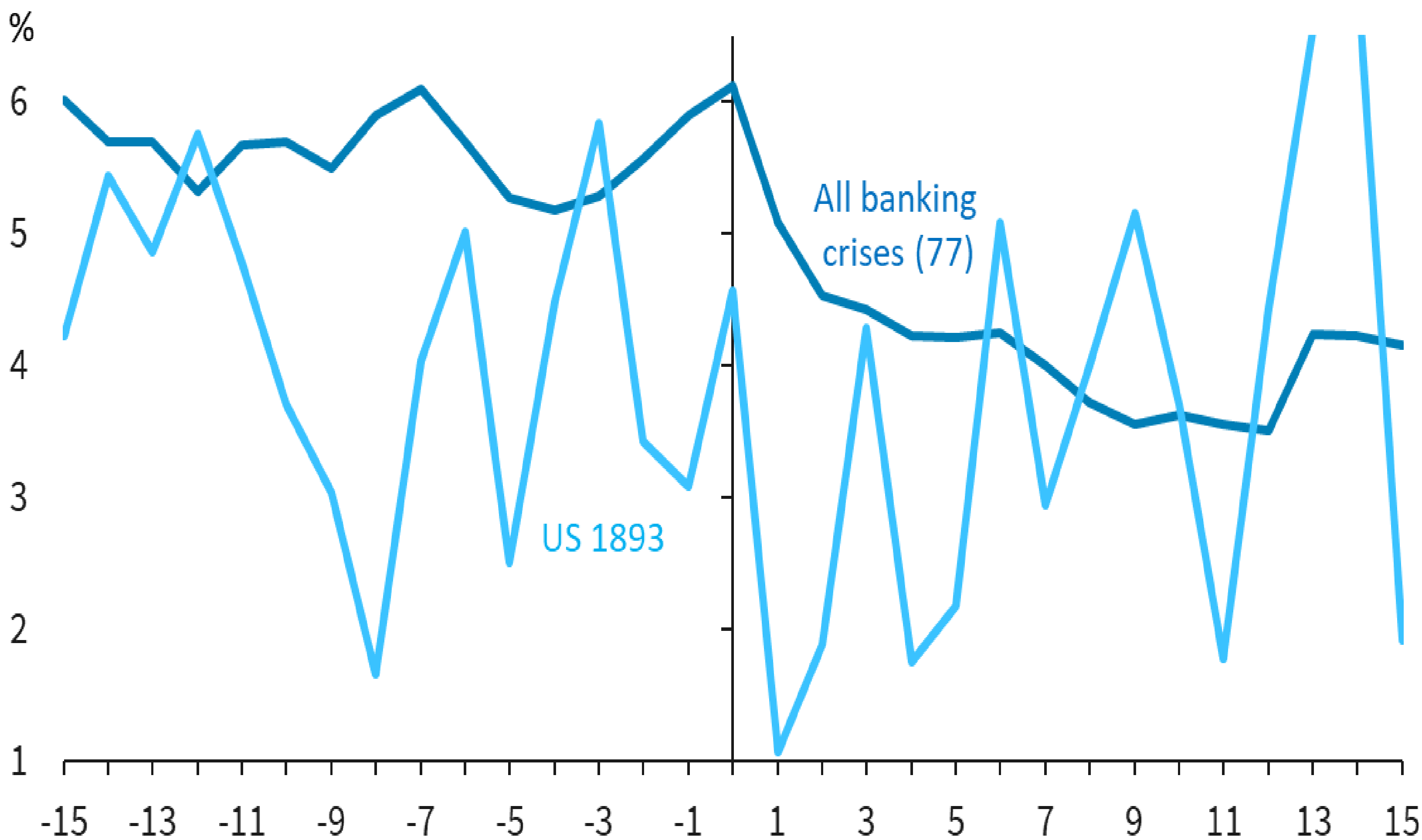
Robustness #2: What about the US?

No U-shape before 1893 banking crisis



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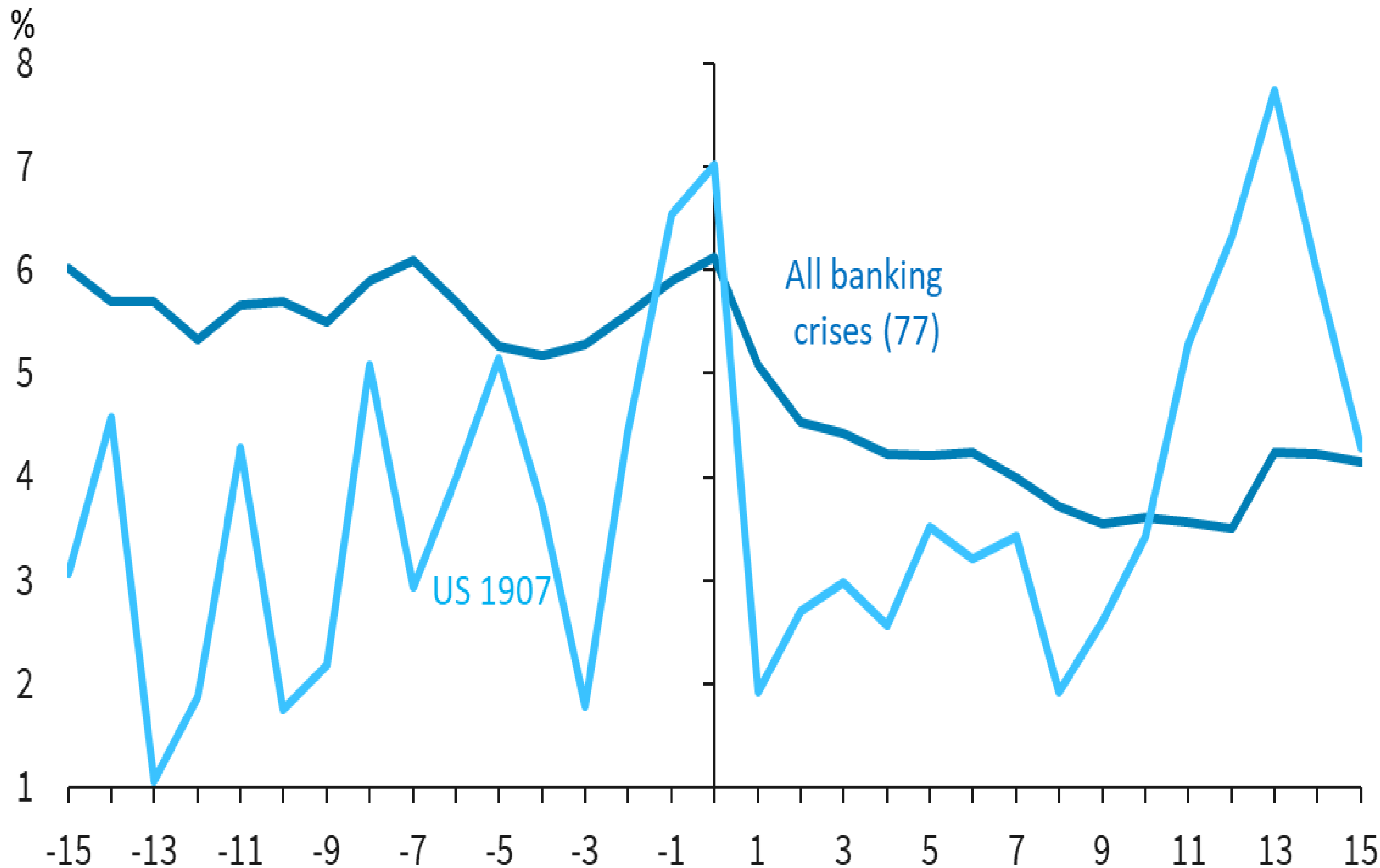
Robustness #2: What about the US?

No U-shape before 1907 banking crisis

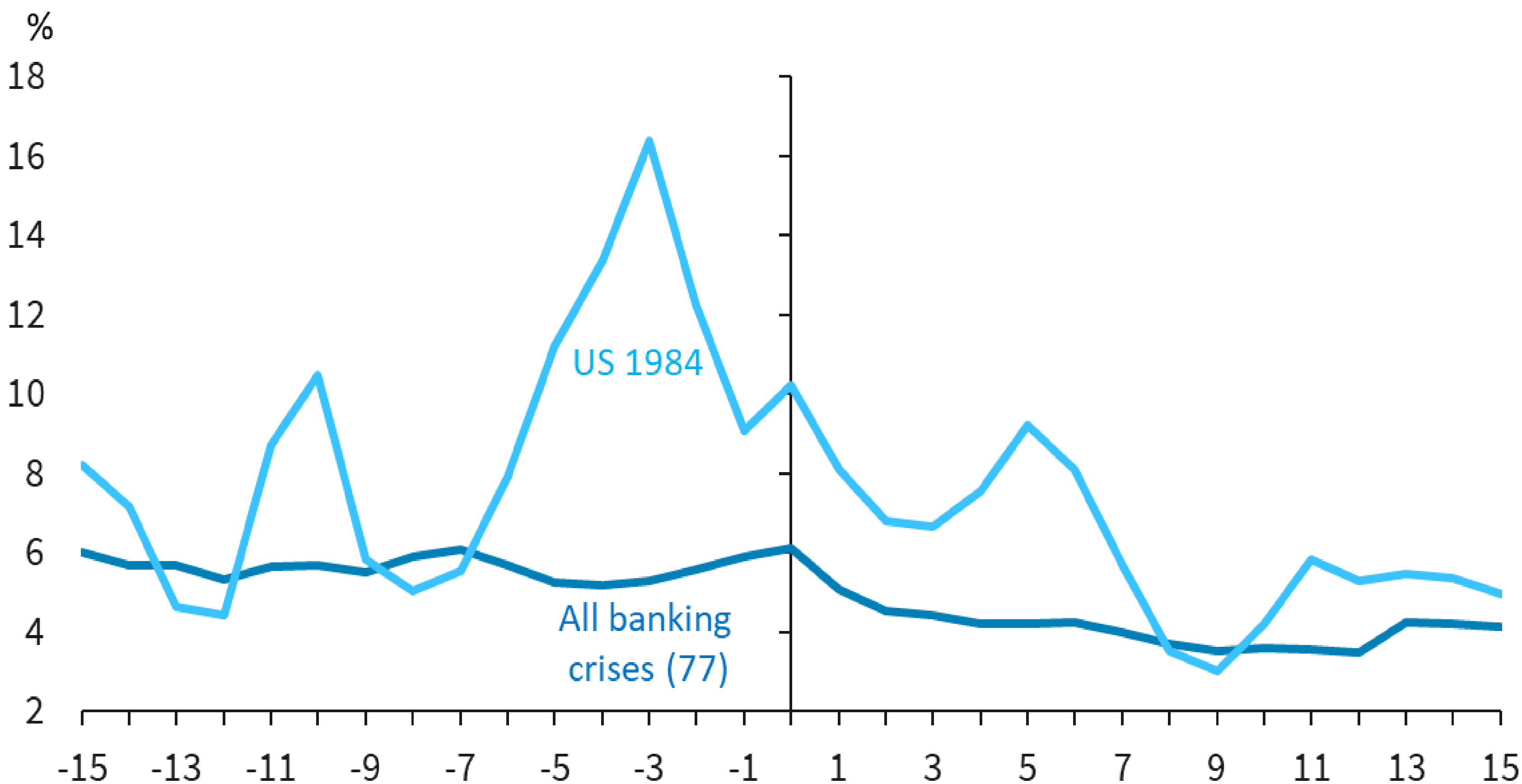


Source: Macrohistory database, Barclays Research

Robustness #2: What about the US?

- No U-shape before 1984 banking crisis

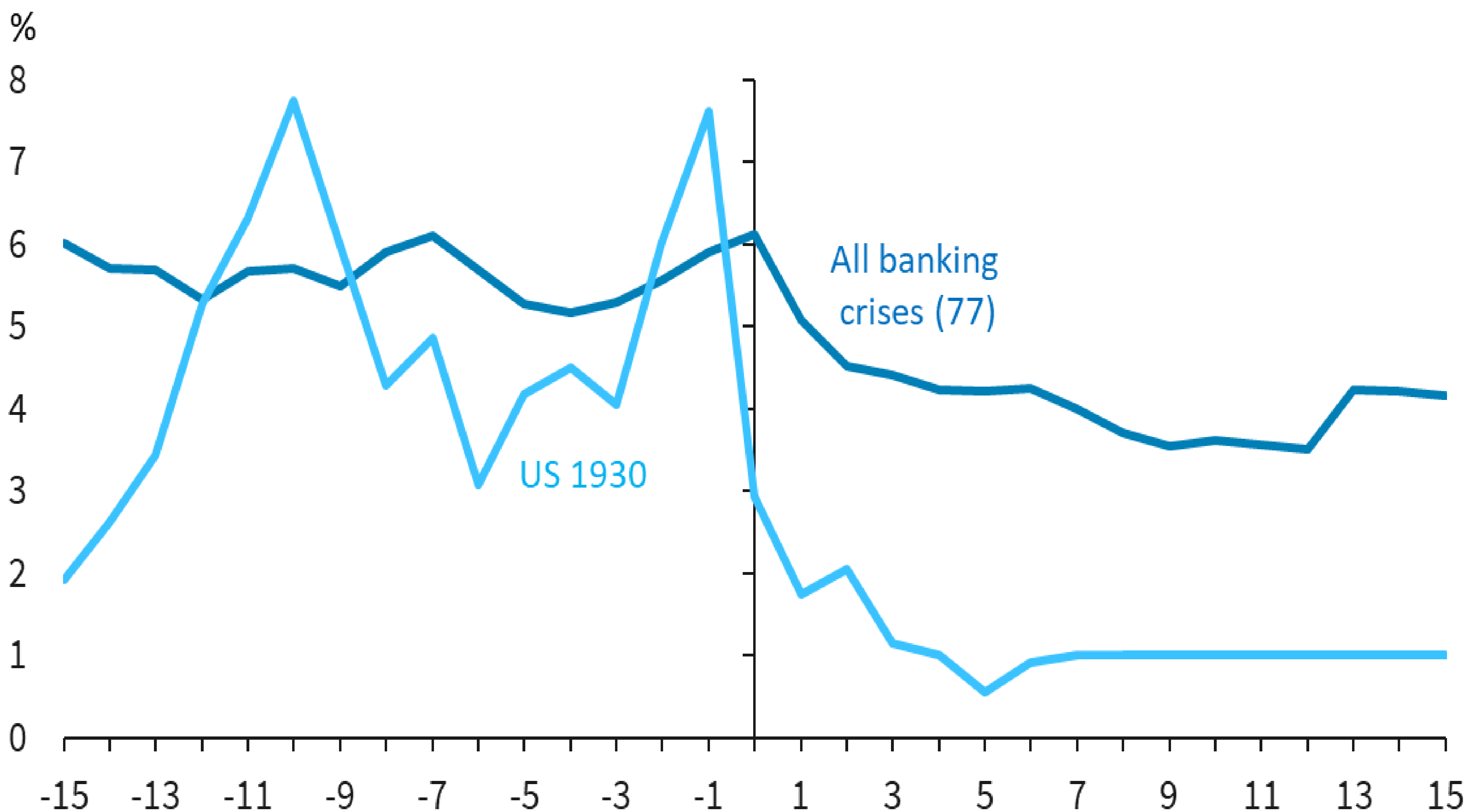
- But timing of S&L crisis is difficult: extended through 1980s and early 1990s
  - Rising interest rates (to address inflation) did stress banks (S&L)
    - Maturity mismatches: long-term fixed-rate loans, funded with short-term deposits
  - Other factors: Recession, deregulation inducing investment in riskier assets, CRE, …



Source: Macrohistory database, Barclays Research

Robustness #2: What about the US?

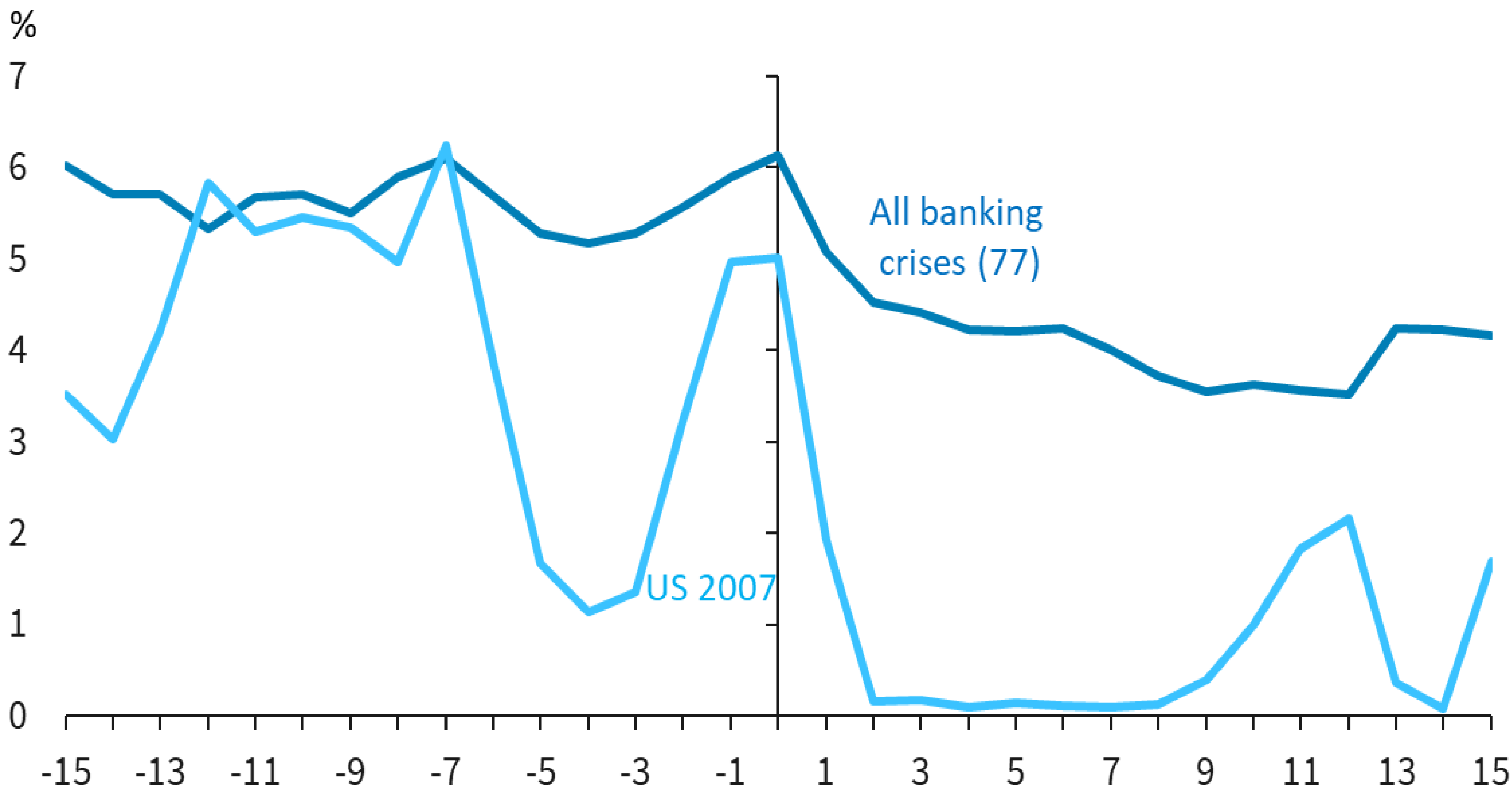
- But… there was a U-shaped path before the Great Depression
  - Rates started rising 5 years before the banking crisis



Source: Macrohistory database, Barclays Research

Robustness #2: What about the US?

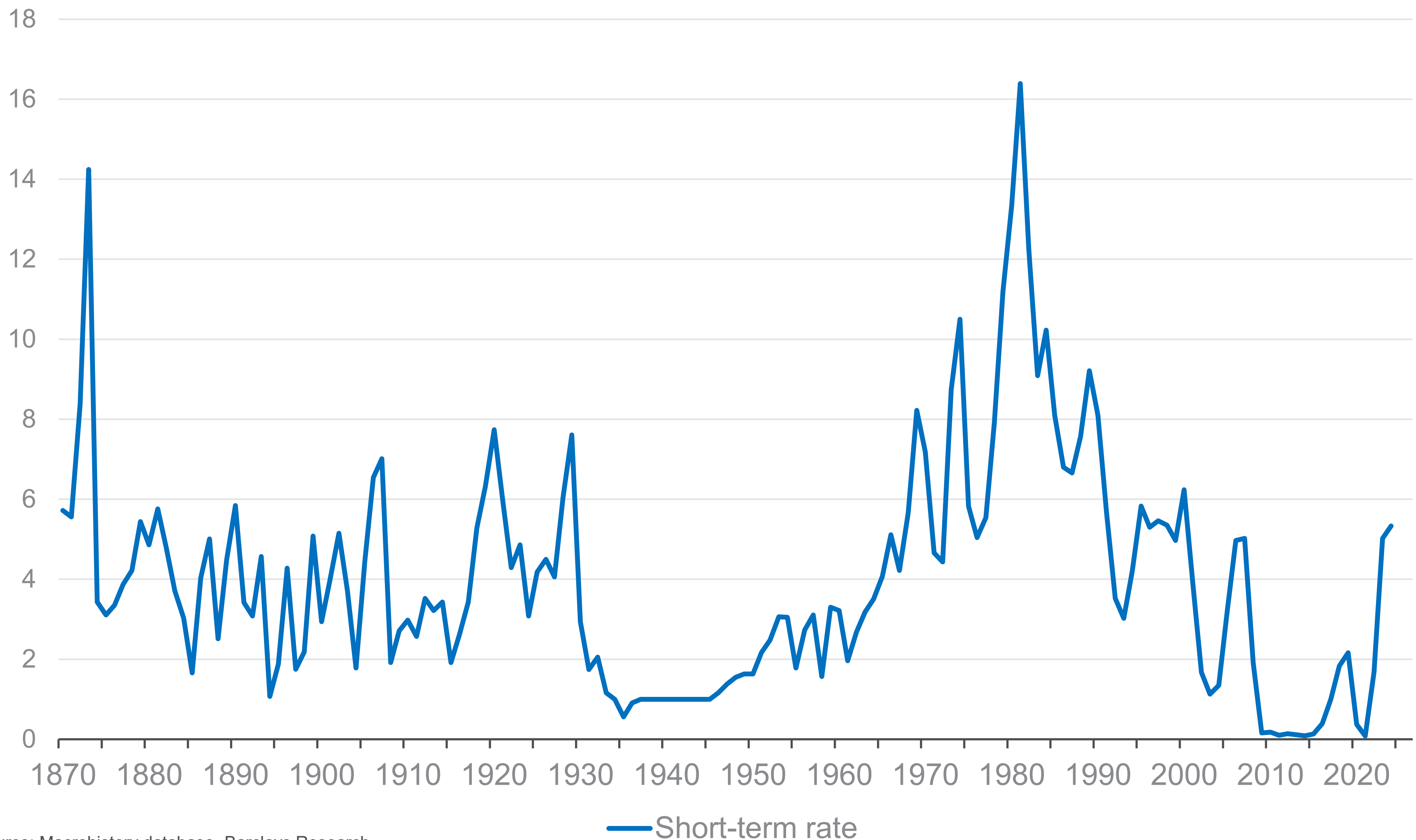
- And…there was a U-shape before the Global Financial Crisis
- **In the US, U-shaped patterns emerged before two large banking crises: GD and GFC**
  - **2 observations?**



Source: Macrohistory database, Barclays Research

2. U-shape: Banking crisis or recession?

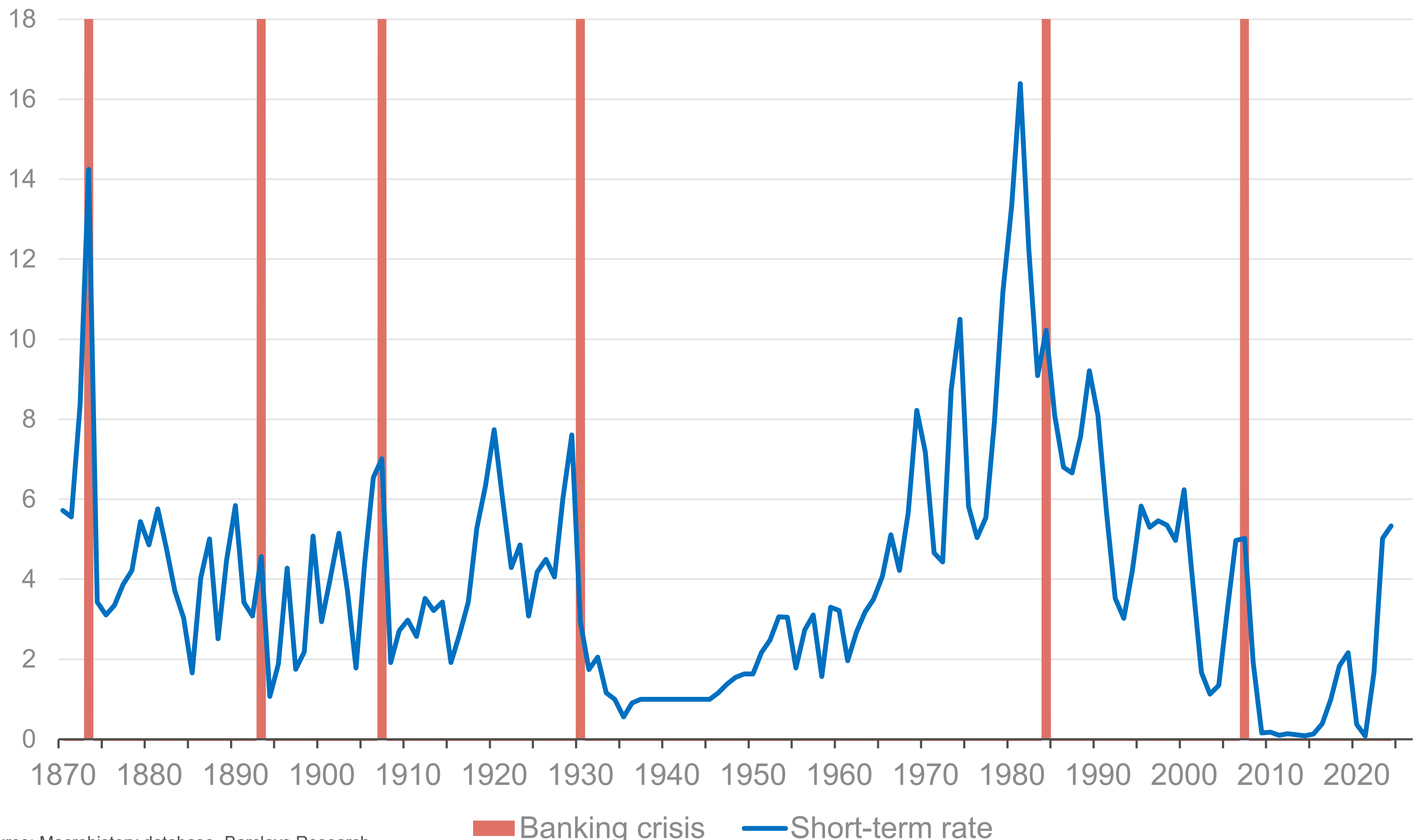
- US has seen lots of U-shaped rate paths since 1870…



Source: Macrohistory database, Barclays Research

2. U-shape: Banking crisis or recession?

- US has seen lots of U-shaped rate paths since 1870…
  …but "only" 6 banking crises (Schularick-Taylor)



Source: Macrohistory database, Barclays Research

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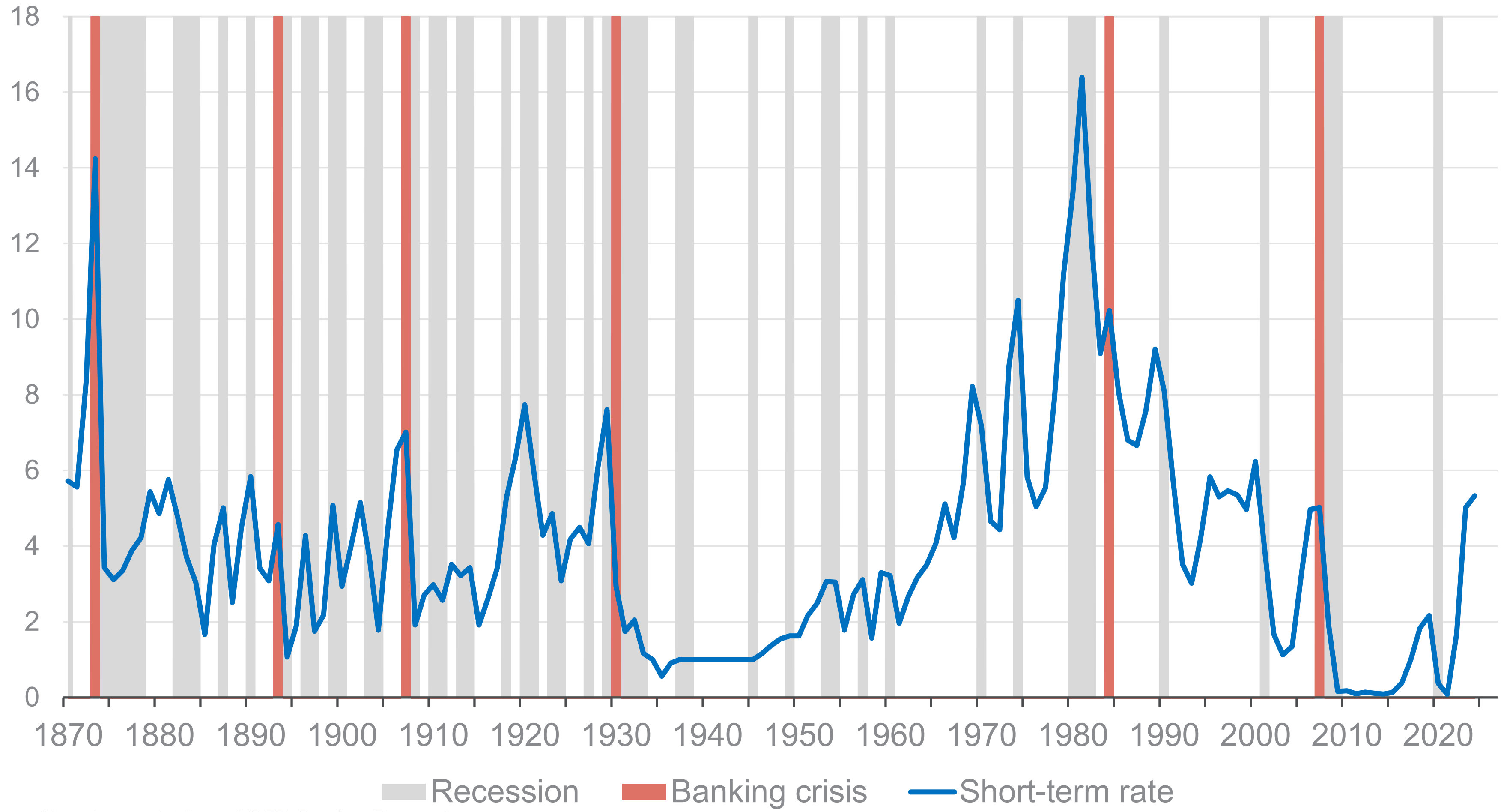
2. U-shape: Banking crisis or recession?

- US has seen lots of U-shaped rate paths since 1870…and many recessions
- <u>Authors</u>: Recessions often preceded by rate hikes **but not by U-shaped** path!
  - **Not in the US!**
  - *Recessions used to be frequent → shorter U-cycles than considered by authors*



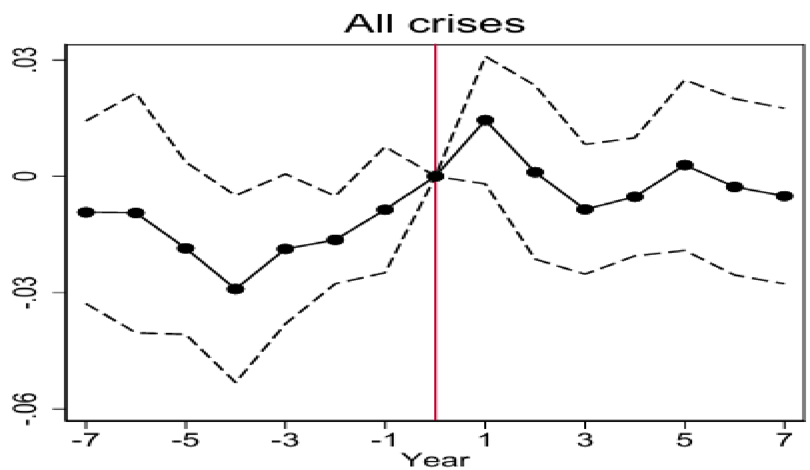
Source: Macrohistory database, NBER, Barclays Research

3. What about real rates?

- Main story: Low nominal rates boost credit and asset values ➔ Red-zone

- But banking crises have occurred with high nominal rates (e.g. 1873, 1984) or low rates.
  - Reflects in part inflation

- If crisis is caused by excessively stimulative monetary policy: U-shaped real rate paths
  - But no clear / significant relationship between real rates and banking crises

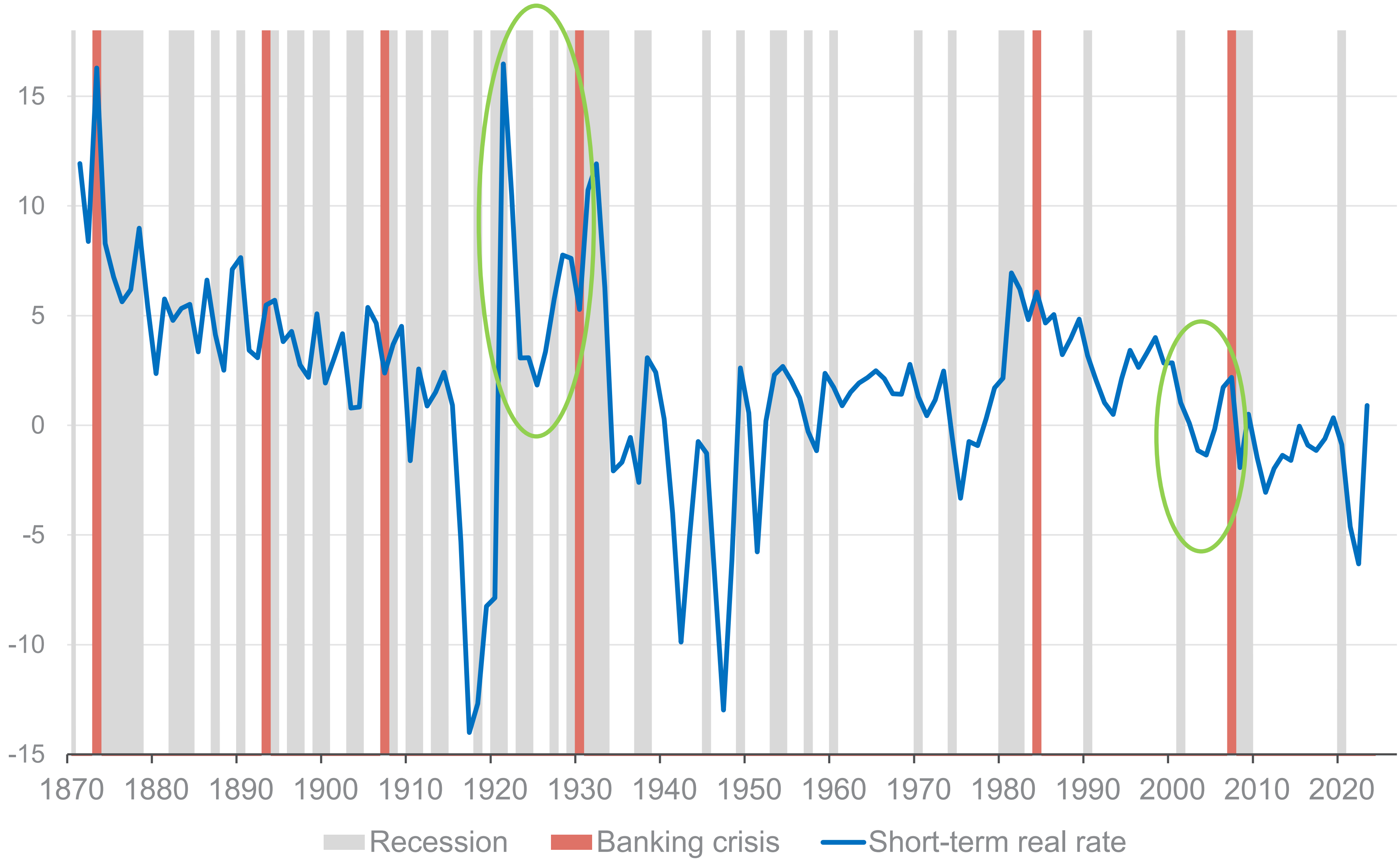


Source: Jimenez et al. (2023)

➔ Suggest that other factors are at play
  - Financial innovation, deregulation, etc
  - E.g., supply-driven boom followed by bust could also cause financial instability, along with inverted-U real rate (Bossay, Collard, Gali, Manea, 2023)

3. What about real rates?

- In the US, no U-shaped pattern in real rate before crises, except before GFC & GD



Source: Macrohistory database, Barclays Research

4. What about the 2010s and 2020s?

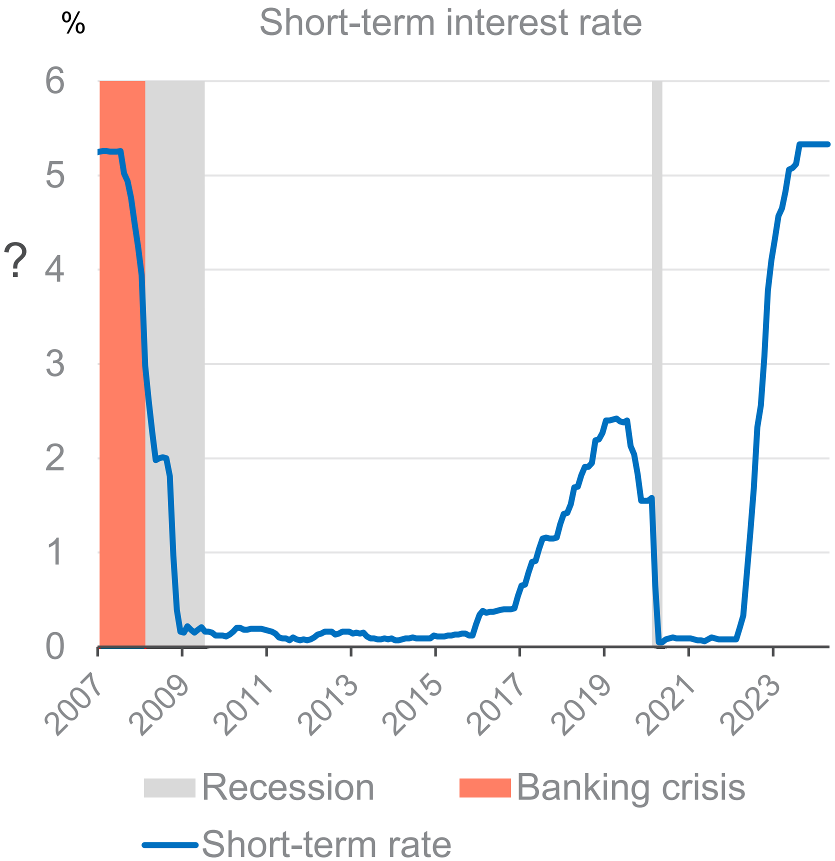
- 2010s: U-shaped path, but no red zone?
  - Economy was also recovering from GFC

- 2020s: U-shape, but shorter than typical 7-y window

  - Did-we get close to banking crisis?
  - Was SVB collapse a result of U-shaped rate path?
  - Drop in rates in 2020 might have caused some banks to invest in long-dated ('safe') securities… … while not protecting against interest-rate risk

  - Other things went wrong:
    - Concentrated deposits: flight risk
    - Uninsured deposits
    - Mismanagement

  - Fed's BTFP likely helped prevent contagion



Source: Macrohistory database, FRB, NBER, Barclays Research

5. U-shaped rate path: So what?

Macro-stabilization vs financial stability:

- Authors' conclusion:
  - *"if monetary policy have been low for some time, allowing financial risks to build up, increasing monetary policy rates would actually crystallize these vulnerabilities and dramatically increase crisis risk"*

  - ***"important to address the asset price and credit booms before the economy enters the financial red zone, for example by leaning against the wind, or by using macroprudential policy"***

- <u>Ideally</u>: use multiple instruments
  - Interest rate for macro stabilization, even if warrants U-shape
  - Macro-prudential tools for financial stabilization

- <u>But what if policymakers don't have (enough) macro-pru tools?</u>
  - Is it worth adjusting policy rates slightly to not cause U-shape and red zone?
  - Big debate on costs vs benefits:
    - Svensson, Bernanke, Woodford, Kocherlakota….

Overall assessment

- **Very interesting paper: provides valuable stylized facts**

- **Combination of U-shaped rate path + red zone as warning sign for banking crisis:**
  - **Very useful**
  - **But may not be sufficient**

- If banking crisis is caused by excessively stimulative monetary policy:
  - Should likely also see U-shaped patterns in real rates
- For the US:
  - Lots of U-shaped cycles. Have often ended in recession
  - But not many cases of financial crisis (fortunately) ➔ few observations

- **Other factors** have likely also played a role in causing banking / financial crises:
  - Financial innovation, deregulation, mis-management, fraud, etc

- **Worth for policymakers to continue monitoring a broad set of financial system vulnerabilities and risks**
  - E.g. Fed's *Financial Stability Report or* IMF's *Global Financial Stability Report*
    - Valuation pressures
    - Excessive borrowing by businesses and households
    - Excessive leverage within financial system
    - Funding risks

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