## Monetary Policy, Inflation, and Crises: Evidence from History and Administrative Data

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Discussion by Maximilian Jager, Frankfurt School of Finance October 19, 2023 Core message: the link between monetary policy and banking crises is not trivial Cornerstones:

- Show that **only** a *U*-shaped MP path leads to banking crises
- Show that the cutting-part of the *U* is associated with levels of dangerously high credit and asset prices followed by stark drops after MP hikes (macro evidence)
- Show that the *U*-path also drives banks' performance through loan defaults (micro evidence)

# What is the mechanism?

My current reading of your mechanism:

Mechanism 1: Authors' version

A series of rate cuts *somehow* leads to elevated levels of bank balance sheet risk that *somehow* only materialize if the rates hike subsequently.

This begs the question:

- Why does risk increase? Why is the risk buildup harmless if it does not stem from rate cuts?
- Why does risk materialize with rate hikes? Why is this risk harmless if there are no subsequent rate hikes?

#### Mechanism 2: String theory a la Angrist, Jordà and Kuersteiner (2018)

Monetary policy cuts do have little real economic effects, but hikes have strong real economic effects.

How does this help?

- With rate cuts, risk increases because credit becomes cheaper expanding the intensive and/or extensive margin without an actual improvement in economic fundamentals. This risk does not build up without rate cuts, because then the credit expansion is driven by economic fundamentals.
- Risk materializes because rate hikes worsen economic conditions.

#### Mechanism 2: String theory a la Angrist, Jordà and Kuersteiner (2018)

Monetary policy cuts do have little real economic effects, but hikes have strong real economic effects.

How to test?

- Macro-level: does the *U*-shaped monetary policy path follow the string theory pattern: not spurring real economic activity with cuts, but halting activity with hikes?
- Micro-level: is credit expansion by banks associated with higher risk premia or any other indication that they understand their expansion is **not** driven by economic fundamentals?

#### Mechanism 3: Banks as liquidity intermediaries

In times of ample liquidity, banks commit credit lines (Kashyap, Rajan and Stein (2002) boosting their profitability; in times of liquidity shortage these lines get drawn dampening their profitability.

How does this help?

- Risk builds up because banks ignore systemic risks (as does regulation, Acharya, Engle, Jager and Steffen (2023)). Without rate cuts, liquidity is less ample, and any increase in credit supply is driven by better economic fundamentals.
- Rate hikes squeeze liquidity out of the market causing coordinated drawdowns on credit lines hurting banks' profitability and lending ability (Greenwald, Krainer and Paul (2020)).

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How to test?

- Macro-level: is there a build-up of credit commitments in the cut phases (tough data ask)? Are measures of market-wide or banking sector liquidity (e.g., deposits/assets) also following a *U*-pattern?
- Micro-level: see above. Further, are the cross-sectional patterns between banks driven by credit lines?

#### Mechanism 4: Banks' (zombie) lending practices

A series of rate cuts is a reaction to a bad economic state. Thus, banks have plenty of bad borrowers on their balance sheet. Rate hikes indicate that the economy has turned around, allowing banks to accommodate some defaults.

How does this help?

- Risk is inherently there, rate cuts just indicate this is the case (reverse causality). Banks evergreen loans to prevent losses (Caballero, Hoshi and Kashyap (2008)).
- Rate hikes indicate the underlying economic conditions have eased. Banks let some old borrowers default (→ higher default of loans during rate cuts), and give credit to new, less-monitored, borrowers (→ higher default of loans during rate hikes, Acharya, Lenzu and Wang (2021)).

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A series of rate cuts is a reaction to a bad economic state. Thus, banks have plenty of bad borrowers on their balance sheet. Rate hikes indicate that the economy has turned around, allowing banks to accommodate some defaults.

How to test?

- Macro-level: not sure if possible.
- Micro-level: Is there increased zombie lending during rate cuts? Is the extensive margin the driver of the defaults during rate hikes?

There are other things that could be at play as well:

- The (missing) cyclicality of regulatory forces (Behn, Haselmann and Wachtel (2016), Jager (2023))
- International capital flows (Reinhart and Rogoff (2009), Diebold (2023))
- ... the list goes on

- Well-executed paper (robustness level: over 9000)
- Motivation and documentation of economic mechanisms could be strengthened
- Important piece of research to strengthen our understanding of the impact of monetary policy **paths** on the economy

### References

Acharya, Viral V, Robert F Engle, Maximilian Jager, and Sascha Steffen, "Why did bank stocks crash during COVID-19?," *NBER Working Paper*, 2023.

- \_ , Simone Lenzu, and Olivier Wang, "Zombie lending and policy traps," *NBER Working Paper*, 2021.
- Angrist, Joshua D, Òscar Jordà, and Guido M Kuersteiner, "Semiparametric estimates of monetary policy effects: string theory revisited," *Journal of Business & Economic Statistics*, 2018, *36* (3), 371–387.

#### References ii

Behn, Markus, Rainer Haselmann, and Paul Wachtel, "Procyclical capital regulation and lending," *The Journal of Finance*, 2016, *71* (2), 919–956.

- **Caballero, Ricardo J, Takeo Hoshi, and Anil K Kashyap**, "Zombie lending and depressed restructuring in Japan," *American economic review*, 2008, 98 (5), 1943–1977.
- **Diebold, Lukas**, "Golden Fetters or Credit Boom Gone Bust? A Reassessment of Capital Flows in the Interwar Period," *Working Paper*, 2023.
- **Greenwald, Daniel L, John Krainer, and Pascal Paul**, "The credit line channel," *Working Paper*, 2020.

Jager, Maximilian, "Regulatory Heterogeneity and Credit Allocation," *Working Paper*, 2023.

- Kashyap, Anil K, Raghuram Rajan, and Jeremy C Stein, "Banks as liquidity providers: An explanation for the coexistence of lending and deposit-taking," *The Journal of finance*, 2002, *57* (1), 33–73.
- **Reinhart, Carmen M and Kenneth S Rogoff**, *This time is different: Eight centuries of financial folly*, princeton university press, 2009.