#### Discussion of:

Net Interest Margins and the Monetary Transmission Mechanism by M. Eichenbaum, F. Puglisi, S. Rebelo, M. Trabandt

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## Summary

- Asymmetric response of both NIM and real economic activity to contractionary MP shocks across low and high policy-rate states:
  - ▶ NIM increases in low-rate states and decreases in high-rate states
  - Real GDP and consumption decline by more in low-rate states
- Explanation for joint asymmetric response of NIM and growth.
  - ► NIM asymmetric response ⇒ in low-rate states 'profits' go to low MPC people, and in high-rate states to high MPC people
  - ▶ In high-rate states consumption declines less ⇒ GDP declines less
- ► Theory behind asymmetry in:
  - ► NIM: Share of households attentive to deposit rates change differently following low- and high-rate states;
  - Economic activity: households' interest-income interacts with their high MPC, so when interest-income is high (NIM low), economic activity decline less

# Key points

► This study documents a new asymmetry in economic response to MP shocks and the explanation puts forward is intriguing

My comments aim at making sure that:

- Asymmetric response is robustly estimated (as it is the motivation for entire study, and empirical IRFs are used to calibrate theoretical IRFs)
  - This mostly depends on the measures of MP shocks
- Proposed mechanism is in the aggregate quantitatively relevant
  - Is it capturing key features of distribution of financial assets?
  - ► Are implications for asset risk in line with empirical evidence?

# Measures of MP shocks do not seem fully exogenous

- ▶ Inflation is not responding correctly to tightening shocks
- ▶ If MP shocks identified by instances in which expected policy rate moves in opposite direction of expected inflation and GDP (D'Amico and King, JME 2023), inflation down significantly;
- Same is true in Jarocinski and Karadi (2020) and Miranda-Agrippino and Ricco (2021);
- This might suggest MP shocks used are not fully exogenous and magnitude of IRF is biased downward by endogenous component.
- Bauer-Swanson measures eliminate some but not all instances in which expected policy rate, inflation, and GDP move in same direction;
- ▶ If those instances are not equally distributed across low- and high-rate states, relative size of IRF across states could be affected.

# Measures of MP shocks less appropriate in low-rate state

- ▶ Low-rate state ( $\overline{FFR}$  < 4% in previous 6Q) mostly post 2001  $\Longrightarrow$  large overlap with ZLB;
- ▶ If in low-rate state, MP has been done mostly through FG and QE, and Fed communication has been quite different from high-rate state;
- Since MP shocks measured using FFR or very short-term ED futures;
- Size of MP shocks could be underestimated, as those measures of actual and expected policy rates do not vary much at ZLB;
- ▶ Better to use longer-horizon actual and expected interest rates to capture MP at the ZLB, otherwise in low-rate state MP shocks are biased downward relative to those in high-rate state.

## Comparison of MP shocks across states

- ▶ If in low-rate state a one-standard-deviation MP shock is on average smaller than a one-standard-deviation MP shock in high-rate state;
- and, a one-standard-deviation MP shock has similar effects across the two states;
- Then, when one-standard-deviation MP shocks are re-scaled up to induce a 100bp change in FFR, the MP shocks in low-rate state will be re-scaled up by a larger number;
- ► This re-scaling could mechanically induce larger IRF in low-rate state than high-rate state;
- So it would be good to see also IRFs to a one-standard-deviation MP shock across states.

#### Assumptions on ownership of financial assets

- Ownership of commercial bank stocks seems concentrated in low-MPC households, which doesn't help growth in low-rate states;
- ▶ High-MPC households do not own bank stocks, but also don't seem to hold any other assets except bank deposits;
- ▶ In reality, between these two extremes there are households that hold stocks, bonds, and bank deposits and have decent MPC.
- ▶ Is the share of these two extremes large enough to affect growth asymmetrically across the two states?
- ► Could ownership of bank stocks be less concentrated in low-MPC households (e.g., through 401(k)) than assumed in the model?
- ▶ If high-MPC households hold other securities, would losses in interest-income be offset by other profits and therefore become less relevant?

## Implications for financial asset risk

- Joint state-dependence in response of NIM and growth implies their covariance switch from negative (NIM up, growth down) in low-rate states to positive (both down a bit) in high-rate states;
- Hence, stocks of commercial banks seem to be a good hedge in tightening cycles following low-rate states: they deliver high profits when growth is declining;
- But, stocks of commercial banks are usually considered high-beta stocks, as highly pro-cyclical;
- ▶ Is there empirical evidence that stocks of commercial banks perform well in tightening cycles that follow a low-rate environment and perform poorly in tightening cycles that follow a high-rate environment?