Discussion of:

The Financial Origins of the Rise and Fall of American Inflation

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Overview

The paper does two things:

1. Presents a set of intriguing empirical results
   - local inflation is, at times, correlated with local banking system structure
   - areas with higher "exposure" to the restrictions from Regulation Q had higher inflation rates
   - effects are surprisingly large
2. Offers an interpretation of these results
   - in terms of an (informal) AS/AD framework
   - draws historical policy conclusions based on this interpretation
     - the Great Inflation was not caused by accommodative monetary policy
   - and offers thoughts for the current situation in the U.S.
     - no need to fear a return of high inflation (because there is no Reg. Q)

General comments

Thought-provoking idea on an influential macroeconomic episode

- Relevant for today's inflation "fear" (Polls: US voters very π-aware)

Basic idea:

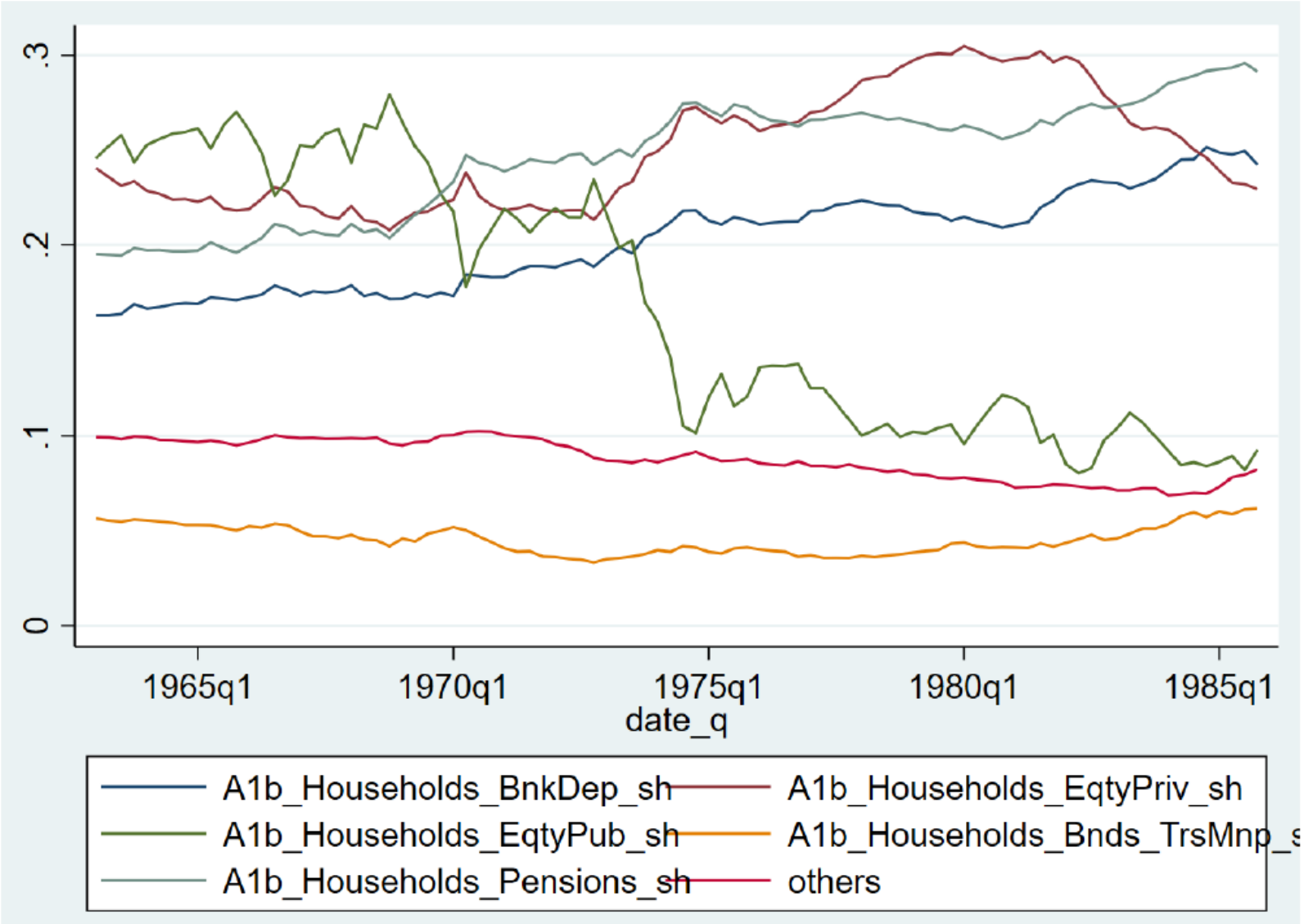
- Reg Q: R^d ceiling
- Demand: if R^d in Euler eqn, standard IS, $\pi \uparrow Y \uparrow$
- Supply: "Deposits channel" bis (DSS 2017):
  1. $R^d \downarrow \rightarrow D \downarrow$
  2. $D \downarrow \rightarrow L \downarrow$
  3. $L \downarrow \rightarrow$: $Y \downarrow$
- Sum of the two: $\pi \uparrow$ and Y stagnates

Evidence:

- Macro time series (stylized facts)
- Micro data: exploit regional heterogeneity of treatment timing or intensity

On the IS channel

Flow of Funds 1962-1986



On the IS channel

Flow of Funds 1962-1986:

1. Deposits a small percent (15-20%) of total household wealth (fact driven by very wealthy)
    - Is R^d relevant for Euler equation/IS channel?
    - Wealthy more likely to be on Euler equation (Koby and Wolf)
    - Micro evidence still provides convincing evidence of $\pi \uparrow$, but what if only driven by supply shock (see next slide)?
2. Deposits share of household wealth constant or increasing during time period
    - Not sure how to reconcile
    - Paper uses real deposit growth
    - Overall wealth contraction could result in low real deposit growth even amid absence of active substitution by households, even locally (although paper provides substantial casual evidence of substitution)

On the Deposits channel

Let's take $R^d \downarrow \rightarrow D \downarrow$ for granted.

1. $D \downarrow \rightarrow L \downarrow$:
   - Can test directly in DiD? (You have bank assets, why not throw in bank loans?)
   - In other words, are banks balance sheet constrained at the time or can they sell treasuries (demanded by households!) with deposits?
2. What happens when $L \downarrow$? Quite important and of broad interest for macroeconomists
   - DSGE literature: supply/investment shocks can have different effects depending on how firms react. In all cases $Y \downarrow$ (unless capital is destroyed), but what happens to π is ambiguous. If bank loan supply shock look like higher firm mark-ups, for example, $\pi \uparrow$.
     - Could rationalize DiD without IS channel.
   - Over 20 year period, could expect non-bank financial intermediation to play a large substitution role (DiD too short to capture?)

Additional comments

- Time series analysis more formal? (VARs, Granger tests...)
- Tambalotti 2003 (Inflation, Productivity and Monetary Policy): Fed used wrong rule, made output shocks generate large fluctuations to inflation
  - Could rationalize inflation movements even without IS channel
- How to map back DiD effect to aggregate? What is % of inflation, output movements explainable by Reg Q? (SVARs)
- Costs of Reg Q probably not $R^D \times D/C$ (who owns the banks?)
- Normative implications? Should Reg Q never have existed in the first place?
  - Potential DiD test for measures for financial (bank) stability?

Great paper, look forward to see its path!

A few more comments

- Pass through
- Timing
- Lags?
- Conclusion

Pass through

- In recent decades, pass-through of monetary policy to deposit rates is well below 100%
  - DSS (2017) estimate it at 40%
  - this level of pass-through is apparently enough to control inflation
- Paper claims pass-through in the Reg-Q period was "essentially zero"
- But others have emphasized how banks found ways around Reg. Q
- Milton Friedman (1970):
  - "… bonuses for first deposits, continuous compounding, crediting interest from the first of the month for deposits made up to some later date, and so on, have been widely [used]."
  - the Eurodollar market developed, in part, as a way to avoid Reg. Q by having the "deposit" booked at an offshore bank
  - "My impression is that the degree of enforcement … is closer to zero than to 100 per cent."

- Friedman emphasized: Reg. Q changed *composition* of bank liabilities
  - "from December 25, 1968, to July 30, 1969 … large negotiable CD's declined $9.9 billion; …
  - liabilities of U.S. banks to their foreign branches rose $7.5 billion. …[and] 'other short term liabilities' of U.S. banks to foreign banks went up $1.6bn
  - It is no coincidence that the sum of the last two numbers is so close to the first number. … *These bookkeeping operations have affected the statistics far more than the realities*."
- Suppose we measure the average interest rate on all bank liabilities
  - straight average or weighted? (I don't know)
  - want the rate that is most relevant for the (aggregate) Euler equation
- How large would the pass-through of monetary policy be?
  - Friedman seems to think it is far from zero
  - could it be close to 40%? Or would it be well below?

Timing

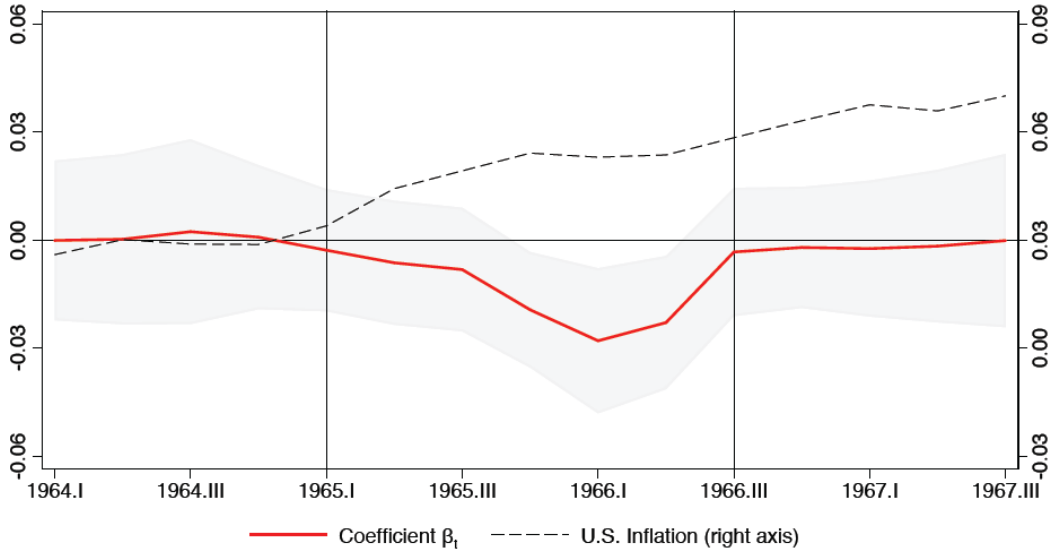
- Setting up Euro-dollar accounts and other workarounds takes time
  - particularly in the early part of the period …
  - substantial uncertainty about future path of interest rates, Reg. Q ceiling
- Even if monetary policy was being passed through to "effective" deposit rates …
- … perhaps the process took significantly *longer* than usual
- In other words:
  - to the extent Reg. Q did not prevent the pass-through of monetary policy
  - … perhaps it was *delayed*

Q: If pass-though was delayed, by how long?

- would this delay be sufficient explain the rise in inflation?

Lags?

- We think of monetary policy as working with "long and variable lags"
- Effects here seem to appear surprisingly quickly
  - ceiling expanded to S&Ls in 1966 → easing of monetary policy
  - inflation in S&L-dominated areas increases instantly



- Is this reaction implausibly fast?
  - perhaps not because the change was largely anticipated?

Conclusion

- It is easy to think of reasons Reg. Q should not have mattered much
  - created some distortions, but banks largely found ways around it
  - for this reason, it is largely a footnote in discussions of the 60s and 70s
- But … the empirical results in the paper seem quite robust
  - seems like something was going on
- Presents an interesting challenge to theory
  - suppose we accept that Reg. Q kept deposit rates artificially low
  - and other products are imperfect substitutes for deposits
  - what would standard macro theories predict?
- Not obvious that standard models would predict stagflation
  - what can macro theory "learn" from these empirical results?