Discussion of:

Golden Fetters, Paper Fetters

and the Rationale for Eliminating the Effective Lower Bound on Nominal Interest Rates

by M. Bordo, A. Levin, and A. Sinha

Todd Keister Rutgers University

CB&DC Virtual Seminar Series October 29, 2021

- Interesting paper that covers a lot of ground
- I would summarize the arguments in four broad statements:
 - 1. Physical attributes of the payments instrument can constrain monetary policy
 - > analogies between the gold standard and the effective lower bound
 - 2. Monetary policy has distributional effects
 - cost of constraints on policy may fall disproportionately on some groups
 - 3. Efforts to ease at the ELB may exacerbate these distributional effects
 - result: the ELB is more costly than you think
 - 4. A new regime based on CBDC can eliminate the ELB
 - without eliminating paper currency

Outline of discussion

History

- late 19th century
- ▶ 1930s
- today
- The model
 - heterogeneity
 - results and intuition

CBDC

- fetters of ... what?
- is CBDC necessary?
- ▶ is CBDC equivalent to ELB?

Late 19th century

- Discussion of the distributional effects of the gold standard focuses on the period 1870 – 1900 (the "free silver" movement)
 - period of deflation and perceived tight credit
 - benefited creditors, unpopular with borrowers
- If I were to think of a model that would capture this period:
 - something in the spirit of Sargent and Wallace (JPE, 1982)
 - borrowers (farmers) need inputs to produce
 - lenders have these resources; may want a payments instrument to make purchases
 - \blacktriangleright banks lend to borrowers \rightarrow who use funds to buy inputs from lenders
 - Ienders hold bank deposits; perhaps use them to transact
 - money in exogenous supply; grows at a given rate (gold?)

- Focus on stationary equilibria in which both money and bank deposits have the same real return
- If the money growth rate is low:
 - return on money is high \Rightarrow banks face high cost of funds
 - "tight credit" \rightarrow good for lenders, bad for borrowers
- If the money growth rate is higher:
 - ▶ reverse is true: "loose credit" \rightarrow good for borrowers, bad for lenders
- Key point: monetary policy faces a fundamental tension
- Should the U.S. have allowed free minting of silver?
 - b doing so may have helped borrowers; hurt lenders
 - not clear there would have been large macroeconomic gains

- Issue in the great depression period was different (I think)
- Main story: large macro gains to abandoning the gold standard
 - would increase inflation, loosen monetary conditions (as before)
 - which would reverse debt deflation, avoid bank failures, etc.
 - would seem to call for a different model
- Presumably there were there also distributional effects ...
 - moving away from gold would help debtors, hurt creditors (at least initially)
- ... but these are generally considered to be secondary
 - the argument for leaving the gold standard was not the need to help debtors at the expense of creditors
 - but rather: need to promote economic recovery, even if it hurts creditors

Q: Which historical episode better corresponds to the current period?

- Is the problem with the ELB that it alters interest rates and/or asset prices?
 - which makes some people worse off and others better off
 - but may not have much macroeconomic significance (given that unconventional policies are used)
- Or that it has significant macroeconomic costs?
 - and also some (secondary?) distributional issues
- The message of the paper could be clearer on this point
 - much focus on the free silver era, which I think of emphasizing winners & losers
 - I understood "golden fetters" to be about the 1930s; macro issues

Outline of discussion

- History
 - late 19th century
 - ▶ 1930s
 - today
- The model
 - heterogeneity
 - results and intuition
- CBDC
 - fetters of ... what?
 - is CBDC necessary?
 - ▶ is CBDC equivalent to ELB?

Heterogeneity

- What type of heterogeneity matters in the ELB era?
- ▶ In the 19th century period, I think of borrowers vs. lenders
 - farmers borrowed to buy land, equipment, seeds, etc.
- > The model has a different focus: savers vs. hand-to-mouth
 - or, owners of capital vs. workers
- To what extent is this formulation for technical reasons?
 - that is, hand-to-mouth consumers have an easy decision problem
- To what extent is this the relevant type of heterogeneity?
 - meaning the issue is very different from the free-silver period (I think)
 - b disparate effects come from asset prices rather than interest rates

Results and intuition

- In the model, presence of an ELB lowers welfare, affects distribution
- Q: What are the relative sizes of these effects?
- Thinking of the discussion above:
 - to what extent is the effect of removing the ELB largely distributional?
 - to what extent does it have large macro benefits?
 - what does the answer tell us about the appropriate historical comparison?
- The model is very rich; there is a lot going on
 - I would like to understand the underlying mechanism(s) better
- Q: Why does the consumption of hand-to-mouth consumers recover more slowly following a negative shock?
 - is it that savers benefitting from higher asset prices, while hand-to-mouth consumers are not? or are other things going on?

Outline

- History
 - late 19th century
 - ▶ 1930s
 - today
- The model
 - heterogeneity
 - results and intuition

CBDC

- fetters of ... what?
- is CBDC necessary?
- ▶ is CBDC equivalent to ELB?

Fetters of ... what?

- It is widely understood that the ELB is below zero (-0.5%? more?)
- But short-term interest rates in the U.S. have remained positive
 - why?
- In the aftermath of the financial crisis, a variety of institutional factors were important
 - MMMFs cannot pay negative interest rates; would shut down
 - Treasury auctions could not accept negative bids, etc.

"Why Is There a 'Zero Lower Bound' on Interest Rates?" Liberty Street Economics Blog, FRBNY, November 2011

- \Rightarrow Not clear the <u>ZLB</u> in the U.S. is related to paper currency
 - perhaps the "fetters" are institutional, regulatory
 - if so, how will the plan proposed here address them?

Is CBDC necessary?

- Paper proposes removing paper fetters without removing paper money
 - idea: set interest rate on CBDC < 0 when necessary</p>
 - and impose fees on large transfers from CBDC to paper money
 - presumably also will need fees for large transfers from deposits to paper money
- But ... why do we need CBDC for this?
 - ▶ set IOER negative (\Rightarrow bank deposit rates <0)
 - impose fees for large transfers from deposits to paper currency
 - along the lines of Agarwal & Kimball (2015)
- Can we remove CBDC from the proposal?
 - what would we lose in terms of ability the set the desired interest rate?

Is CBDC equivalent to ELB?

- The model is used to evaluate the benefits of removing the ELB
- Will introducing CBDC (and fees) will lead to that same outcome?
- If people are using CBDC ...
 - presumably they are holding less of something else. What?
 - how is the CBDC introduced? How does the CB balance sheet change?
- The proposal calls for CBDC to earn the market rate of interest
 - seems designed to lead to a different outcome than simply FLB
 - how would it affect hand-to-mouth consumers?
- For analyzing the effect of introducing a new payment instrument ...
 - > it seems desirable to use a model that includes payment instruments
 - a literature has developed along these lines; could these effects be combined with your model?