Comment: The Expansionary Lower Bound: Contractionary Monetary Easing and the Trilemma Paolo Cavallino and Damiano Sandri

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The paper in a nutshell: main question

- Can emerging economies retain monetary policy independence when the capital account is liberalized and the exchange rate is flexible?
 - ▶ Some empirical evidence that this is not the case
 - ▶ The Expansionary Lower Bound (ELB): two frameworks
 - Policy implications

The paper in a nutshell: the proposed story

- Significant positive effects of the VIX and and US policy rates on policy rates of 8 EMs, controlling for expected inflation and output gap.
- Domestic collateral constraints (leverage restrictions) can generate an ELB on the policy rate, below which monetary easing becomes contractionary.
 - Carry-trade: Expansionary monetary policy decreases carry-trade incentives, foreign bond-holders sell domestic bonds, domestic banks decrease domestic lending to absorb bonds → credit crunch, economic contraction
 - Currency mismatch: Domestic banks borrow abroad and lend domestically. Expansionary monetary policy depreciates the exchange rate and reduces bank capital, domestic banks decrease domestic lending → credit crunch, economic contraction

General comments

- ► Extremely relevant topic
- Interesting interpretation on what constrains monetary policy independence in small open emerging economies, very intuitive exposition
- ► Is it really about an ELB or just external conditions shaping domestic monetary policy in EMs (or, SMEs in general)?

Suggestive evidence

- ► Table 1 is interesting, but it provides only very indirect suggestive evidence of the existence of an ELB on monetary policy
 - ▶ Time period is 2000-2019: complicated by the crisis and the ZLB in US
 - ► In the US, MP did not follow a Taylor rule for many years... could this be the case in other countries as well? MP rates
 - Why were other IT EM countries (Chile, Colombia, Peru) not included in the regression?
 - ▶ Is this really a story for EMs only? It would be nice to see evidence for small open IT developed economies to see what is special about EM.

Suggestive evidence: competing explanations

- ▶ Other stories could be driving the results:
 - ▶ The global financial cycle (Rey, 2015): gross flows are mainly influenced by global factors, proxied by a large extent by the VIX. Mundell's *trilemma* becomes a *dilemma*, but the mechanisms and policy implications are very different (more on this later).
 - ▶ The international price system (Gopinath, 2015): Tradables are mainly invoiced in dollars, and international prices are not very sensitive to exchange rate fluctuations. US monetary policy has spillover effects on inflation in other countries.
- ▶ Is it possible to disentangle all of these competing explanations?
 - ► Since the story is about credit constraints, why not interact a measure of domestic credit constraints with VIX and US MP rate?

Model 1: carry-trade

- ➤ Very simple, tractable model to lay out the main mechanisms behind the emergence of the ELB
- This is good and bad
 - ▶ Domestic households cannot borrow in international markets. Does the story survive if they could?
 - Export prices are fixed in foreign currency so there is no margin of adjustment through exports (Gopinath, 2015). How much of the effect comes through this channel?
 - Monetary policy reacts to changes external financial conditions γ_1 and foreign monetary policy I_1^* even if the ELB is not binding. Would a regression as the one in Table 1 incorporate all of these effects on $E_t \pi_t$ and $E_t x_t$ (especially if other shocks are considered)?

Model 2: currency mismatch

- Currency mismatches arise because banks borrow abroad and lend domestically
- Exchange rate depreciation erodes banks' networth and pushes banks towards their leverage constraint
- This is related to the fear of floating problem in EMs (Calvo and Reinhart, 2002)
 - Private agents in EMs may hedge their exchange rate risk by participating in derivatives markets
 - ▶ This seems to be the case in Chile since the 2000s (Albagli et al., 2019)
 - If this is a more general phenomenon, this channel may be less relevant than the previous one

Models: general comments

- ► It would be nice to have the two mechanisms (carry trade + currency mismatch) in a single model
- More generally, we would need the model to tell us how empirically relevant the ELB is, especially since it entails some particular policy prescriptions at odds with competing stories (more on this later)
 - ► Infinite-horizon
 - Calibration/estimation
 - Validation
 - Counterfactuals

Policy implications: ELB

- At time 1, when the ELB binds:
 - Quantitative easing is an effective tool to lower the ELB and stimulate output (only in M1)
 - ► Banks' recapitalization is effective (M1 and M2)
 - Sterilized foreign exchange intervention also lowers the ELB (only in M1)
 - Capital inflows should be subsidized, not taxed (M1 and M2)
 - Fiscal consolidation raises the ELB (only in M1)
 - ► Forward guidance is a bad idea because it raises the ELB (M1 and M2)
- At time 0, preemptively:
 - Fiscal consolidation still a bad idea (Ricardian equivalence to blaim) (only in M1)
 - Capital controls can lower the ELB (ambiguous in M1, true in M2)
 - ▶ Foreign exchange interventions help if they induce capital inflows

Policy implications: global conditions

- Global financial cycle (Rey, 2015): Targeted capital controls + macroprudential policies to limit credit growth and leverage + stricter limits on leverage to all financial intermediaries → Terrible idea if there is an FLB!
- Financial spillovers (Gourinchas, 2018): Under intermediate financial spillovers, stronger expansionary policy if US tightens policy ightarrowTerrible idea if there is an ELB!
- ightharpoonup Sudden stops (Mendoza and Bianchi, 2018): Debt taxes ightarrow Terrible idea if there is an ELB!

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It is crucial to have a quantitative assessment of the effect of ELB on economic variables and to put these stories to compete in order to design policy

Policy implications: tackle the source of ELB

- Lesson: ELB is a potential problem in emerging economies subject to currency mismatch and volatile capital flows because of carry-trade
- Short-term policies may not be a good idea
- Then tackling the source of the problem should be our best bet!

Policy implications: tackle the source of ELB

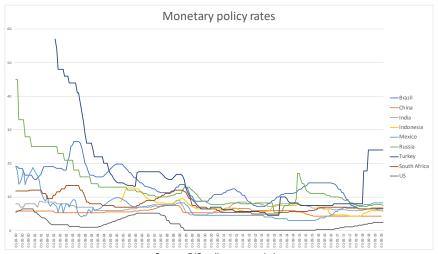
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→ Financial development in EMs

Conclusions

- Very nice, thought-provoking paper on what might limit monetary policy independence in EMs
- Great exposition to build intuition
- Further work to assess the empirical relevance of the ELB vs other existing stories of why Mundell's trilemma might be a dilemma. especially because policy implications might be very different
 - Motivating evidence suggesting an ELB
 - Take the model/idea to the data and quantify the effects of the ELB on "optimal" monetary policy

Monetary Policy Rates



Source: BIS policy rate statistics

