Discussion of "Exchange Rates and Monetary Policy with Heterogeneous Agents: Sizing up the Real Income Channel" by Auclert, Rognlie, Souchier & Straub

Kurt Mitman

IIES, Stockholm University, CEPR and IZA

NBER SI IFM
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- Interested in understanding *real income channel* and contribute to the debate on *contractionary devaluations*

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- What they find:
  - Theory: condition on trade elasticity χ that characterizes amplification or dampening relative to RA model
  - Quantitative: calibrated model with delayed expenditure switching generates contractionary devaluations
  - Policy Implications: Trade-off for MP, fight recession or fight devaluation?

Why we should care

- Long debate about whether devaluations are expansionary or contractionary, whether to float or fix...
- Early contributions by Diaz-Alejandro (1963) and Krugman and Taylor (1978) emphasized the real income channel
- Tries to provide a serious quantification of the real income channel:
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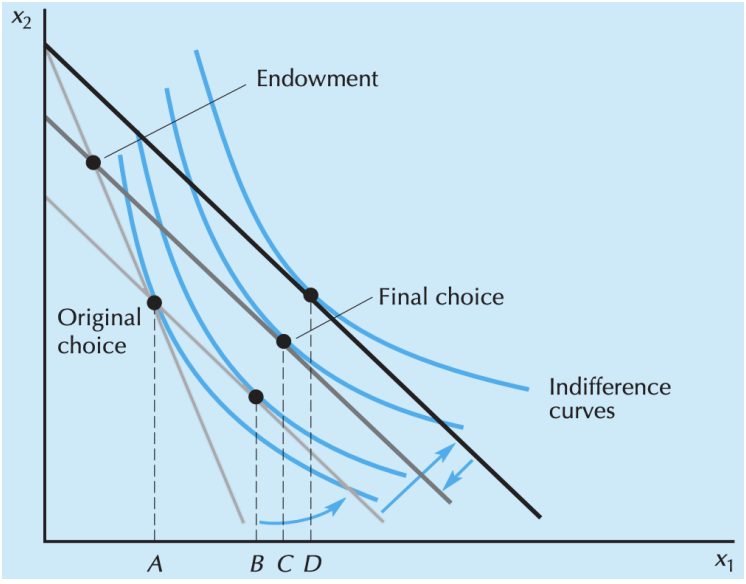
- Though, it took 94 pages and 94 rigidities to get there...

Back to Intermediate Micro (Varian Textbook)



Devaluations, Real Income and Consumption

- Useful benchmark to compare: Corsetti, Dedola and Leduc (2008)
- Two-country RBC model, with supply and taste shocks
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  - $\Rightarrow$ Expansionary supply shocks can lead to contractions in C
- We "know" real income channel can be strong
- With sticky prices is the multiplier big enough for $-dC \Rightarrow -dY$?

MPCs and Contractionary Devaluations

- Simple two-period, two-agent model
- Ricardian and hand-to-mouth agents
- Relatively easy to show, admits contractionary devaluations depending on trade elasticity, MPC, and taste for home goods
- In fact, Ludwig worked this out when discussing de Ferra, Mitman and Romei (2020) at ISOM 2019!
- It would be helpful here to clarify what HA vs TA adds in terms of the theoretical results

Equilibrium Determination

- Show $\exists!$ steady state with $Q_{ss} = 1$
- Claim: economy always returns to this SS. No need for debt-elastic interest rate as in Schmitt-Grohe and Uribe (2003).
- But: $\exists$ a continuum of SS with different (Y, Q, C, nfa)
- What force in the model returns $Q_t \to 1$?
- How do we know that we don't end up at one of the other SS?

Equilibrium Determination - One Possible (Re-)Solution

- Use Demand Theory of the Price Level (Hagedorn 2016)
- Introduce positive supply of nominal government bonds (as in the data)
  - Incomplete markets + nominal bonds $\Rightarrow$ P pinned down from DTPL
  - P pinned down $\Rightarrow$ Nominal Exchange Rate pinned down
  - NER pinned $\Rightarrow$ that $i - i^*$ pinned down
- Advantage is that then can get IRFs to a more exogenous shock (RER I think of as an endogenous variable)
- We use similar DTPL in Hagedorn, Manovskii and Mitman (2019) to study monetary and fiscal policy in closed economy, and show that resolves many NK puzzles

Quantification

- I appreciate the attempt to bring together both micro and macro data
- Felt a bit of patchwork of data: some from Mexico, some from Peru
- I would focus on one particularly country:
  - Calibrate the SS to that particular country
  - Compare model/data IRFs to (e.g. U.S. MP shocks)
- Right now feels more like "proof of concept"

Some Annoying Comments

- How should we think about non-linearities? Are we interested in small devaluations?
- For MP exercise should we stabilize output or look for 0 labor wedge?
- Heterogeneous exposure of households by working in tradable/non-tradable?

Conclusion

- Very nice paper - brings the real income channel back into the forefront
- Excited about continuing the agenda of bringing HA into Int'l Macro
- Perhaps too much for one paper:
  - One focused on the theoretical findings?
  - One more focused quantification?