

Discussion of

**“Aggregate demand externalities  
in a global liquidity trap”**

By Luca Fornaro and Federica Romei

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Dennis Novy  
University of Warwick and CEPR

# The big picture

Motivation for macroprudential regulation: risk arises endogenously as a systemic phenomenon. Sources of systemic risk could be:

- (a) **Strategic complementarities**: e.g. financial institutions take excessive risk due to bailout anticipation.
- (b) **Animal spirits**: multiple equilibria and mispricing, e.g. fire sales and credit crunches.
- (c) **Externalities**: welfare losses due to distortions maybe can be offset, see Greenwald and Stiglitz (1986).

# Overview: Macroprudential regulation meets liquidity trap

This paper falls into the externalities category – on two levels.

## ▶ **Domestic demand externality:**

- ▶ Consumption of tradable goods affects production of non-tradable goods – not internalized by atomistic households.
- ▶ Macroprudential solution: Encourage savings in good times → lower AD → lower interest rate. Precaution against future liquidity trap.
  - ▶ Uninsurable idiosyncratic shocks → precautionary savings.
  - ▶ Frictions in credit markets.
  - ▶ Liquidity traps due to zero lower bound. Pessimistic traps can become more likely, see (b).

## ▶ **International demand externality:**

- ▶ Increasing savings depresses the global interest rate – liquidity trap becomes more likely in other countries.
- ▶ Domestic macroprudential policy can backfire on international level. Calls for international coordination.
- ▶ No international balance sheet connectedness, fire sales etc.

Very important question. Clear results. Paper is well-written. But quantitative section still missing.

Overall questions:

- ▶ Are the results dependent on extreme assumptions, or do they hold more generally?
- ▶ The role of macroprudential policy

# The size of countries

- ▶ Results sensitive to **size distribution** of countries?
  - ▶ Model has a continuum of small open economies.
  - ▶ If domestic country is sufficiently small, no effect on liquidity trips elsewhere.
- ▶ As a simplifying assumption, you assume high and low tradable endowments, split evenly across countries.
  - ▶ This is effectively a two-country world with maximum asymmetry.
  - ▶ Provides tractability, but an extreme/unrealistic case?
  - ▶ Work out the general two-country case (where countries are not point masses).

## Similarity to a specific factors model

- ▶ Labor is specific to nontradable production. Tradable good consumption depends on endowment and bond trading only.

$$\begin{aligned}C_{i,t}^N &= Y_{i,t}^N = L_{i,t} \\C_{i,t}^T &= Y_{i,t}^T + R_{t-1}B_{i,t} - B_{i,t+1}\end{aligned}$$

- ▶ Allow for more flexibility so that labor allocation across sectors can act as a shock absorber.
- ▶ In addition, frictionless trade between countries for tradable good with law of one price holding. Realistic? Trade costs empirically relevant.
- ▶ Thus, the transmission mechanism (how relative consumption of tradables vs. nontradables depends on the interest rate) is amplified by labor being “stuck” in nontradable sector.
- ▶ Also play with  $\omega \rightarrow 0$  (weight of tradable good declines).

## Is the cure worse than the disease?

- ▶ In cooperative equilibrium, countries may even impose a **tax on savings in good times**.
- ▶ Unintended consequence: Risk might build up, future domestic crash more likely?
- ▶ Might clash with microprudential oversight (accounting rules etc.)

# Which macroprudential tools should we use?

- ▶ You mention
  - ▶ setting a tighter borrowing limit,
  - ▶ subsidy on savings/tax on borrowing. See Farhi and Werning (2016) and Korinek and Simsek (2016).
- ▶ How about
  - ▶ caps on loan-to-value ratios?
  - ▶ caps on debt-to-income?
  - ▶ caps on leverage/capital requirements?
  - ▶ limits on credit growth?
  - ▶ capital controls/restricted cross-border lending?
- ▶ Monetary policy is not an option: the central bank lacks commitment (cannot circumvent ZLB by raising inflation expectations).
  - ▶ Unemployment can only arise if central bank is constrained by ZLB. Is countercyclical macroprudential policy inefficient because of unemployment or because of the ZLB, or the interaction of both? How to distinguish empirically?
- ▶ How about fiscal policy?

# The macroprudential toolkit (Claessens 2014)

	Restrictions related to borrower, instrument, or activity	Restrictions on financial sector balance sheet (assets, liabilities)	Capital requirements, provisioning, surcharges	Taxation, levies
Expansionary phase	Time varying caps/limits/rules on: <ul style="list-style-type: none"><li>- DTI, LTI, LTV</li><li>- margins, hair-cuts</li><li>- lending to sectors</li><li>- credit growth</li></ul>	Time varying caps/limits on: <ul style="list-style-type: none"><li>- mismatches (FX, interest rate)</li><li>- reserve requirements</li></ul>	Countercyclical capital requirements, leverage restrictions, general (dynamic) provisioning	Levy/tax on specific assets and/or liabilities

## Any hope for first-best solutions?

1. Improve international risk sharing (pool tradable goods across countries).
2. Remove credit market frictions.
3. Increase labor mobility (both across industries and countries).
4. Reduce the tendencies towards secular stagnation.

Perfect foresight sits uneasily with the problem: why can't crises/liquidity traps be avoided by policymaker?

# Summary

Very important question. Intuition is quite clear.

But do the conclusions hold up in a more realistic, less stylized setting?

Quantitative analysis should show how important the transmission through lower global interest rates is, also dependency on country size.