Discussion of "Macroprudential Policy Coordination in a Currency Union" by Pierre-Richard Agénor and Pengfei Jia

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Brief Summary

- Studies a two-country model of a currency union to

    1. examine cross-border spillover effects of real and financial shocks

    2. quantify welfare gain/loss of coordinated prudential policy on *reserves requirement (RR)*

- Key Findings of Benchmark Model

    1. welfare gains from coordination, i.e. credit-output vol. reduction: 3-4.4 percentage points (productivity shocks), 1.1-1.9 (financial shocks)

    2. superior gain when optimizing the RR reactions to credit-output ratio separately for each country
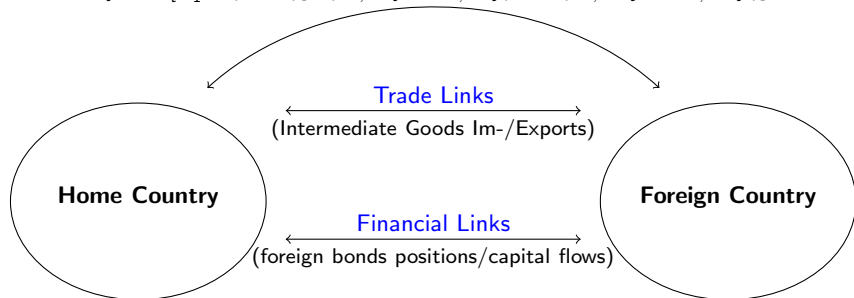
Quick Comments

▶ An interesting and rich paper!

- Rich implications: national vs. supernational level of RR implementations, distributional effects of coordination, home vs. foreign and core vs. peripheral, asymmetries of regulatory preferences and between-country shock process and economy sizes, etc.

- Novelty: "optimized" coordination per the interactions of currency union and RR policy

- focus of my discussion: how optimization is carried out and its quantitative relevance

Cross-border Transmissions

$$\hat{i}_t^R = \chi \hat{i}_{t-1}^R + (1-\chi)[\xi_1(\gamma_{F,\pi}\hat{\pi}_t^H + \gamma_{F,\pi}\hat{\pi}_t^F) + \xi_2(\gamma_{F,Y}\hat{Y}_t^H + \gamma_{F,Y}\hat{Y}_t^F)]$$

Trade Links
(Intermediate Goods Im-/Exports)

Home Country

Foreign Country

Financial Links
(foreign bonds positions/capital flows)

▶ (real productivity shocks) to intermediate goods production of country $c = H, F$:

$$Y_{jt}^{c,I} = \epsilon_t^{Y,c}(N_{jt}^c)^{1-\alpha}(K_{jt}^c)^{\alpha}$$

▶ (financial shocks) to bank loan repayment probabilities:

$$\hat{q}_t^c = \psi_1(\kappa\mathbb{E}\hat{A}_{t+1}^c - \hat{l}_t^c) + \psi_2\hat{Y}_t^c + \hat{\epsilon}_t^{Q,c}$$

Role for RR-based Macroprudential Policy

- required reserves as a fraction of bank deposits $\mu_t^c = \frac{RR_t^H}{d_t}$

- two regimes to optimize RR policy to min the financial volatility $vol(\frac{I_t^c}{Y_t^c})$

    1. Nash-equilibrium of separate optimized reactions to country-specific targets, e.g.
       $\mu_t^c = f(\frac{I_t^c}{Y_t^c}; \chi_2^c)$

    2. Jointly optimized reactions to weighted average targets $\mu_t^c = g(\frac{I_t^H}{Y_t^H}, \frac{I_t^F}{Y_t^F}; \chi_2^H, \chi_2^F)$

    - "one-size-fits-all" version of Regime 2: $\bar{\chi}_2 = \chi_2^c$ for $c = H, F$

Optimized Coefficients and Net Welfare Gain

Regime	χ_2^H	χ_2^F
A.(Real Shocks to H)		
1	27	0
2 - Common Response	15	15
2 - Separate Responses	18	3
B. (Financial Shocks to H)		
1	7	0
2 - Common Response	5.5	5.5
2 - Separate Responses	6	1

▶ Key Mechanism for Welfare Changes under Coordination of Regime 2:

- internalize the spill over effects to F
- under-responsive to shocks to H
- additional margin of adjustment if separate optimization

▶ Results:

- Higher gain for union
- unambiguous loss for H
- separate responses makes smaller loss of H and further gain of F

Other Goals of RR Policy: Funding Liquidity?

▶ RR also works as a natural buffer against bank runs and massive cash withdraw attack

- relevance: Grexit and Bailout crisis 2015 June? Greeks emptied more than a third of the country's ATMs in one day (Vox News, 2015)

- This paper: no differentiation of market liquidity and funding liquidity for liability

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▶ Critical as reflected in Section 7.1.: vol. of house prices as additional welfare concern

- min $L_t = \chi Var(\frac{l}{Y}) + (1 - \chi)var(z^A)$ by setting $\chi = 0.85$

- small weight 0.15 → 10 times of shrinkage in the magnitude of welfare gain for the union from 3 pp to 0.2 pp (productivity shocks - common response)

- Reduction of gain due to financial shocks as well though small

Funding Liquidity?

▶ Thoughts:

- introducing the inter-bank loan market, may be harder

- perhaps easier, to add a global bank sector, which reallocates funding within itself

- then reassess a welfare criterion by having funding transfer efficiency added

- reality for macroprudential concern: financial instability accumulated as Greek banks borrowed too much from German and French banks

Interest Rates in Euro Area

- ZLB constraint.: as interest rate can not be further cut to better benefit the home country? reversed union gain?

Discount Rates - Euro Area
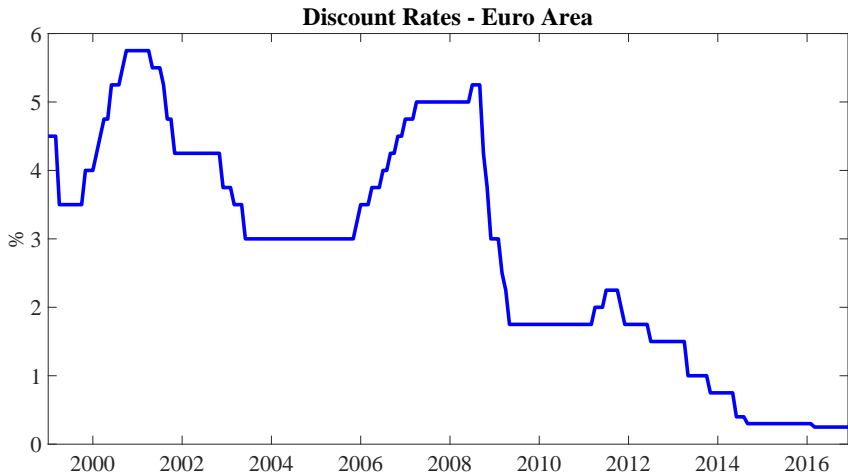
Source: IMF

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▶ a great paper!

Thank You Very Much!