

**Discussion of**

**“Effects and role of macroprudential policy:  
Evidence from reserve requirements  
based on a narrative approach”**

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**IMPORTANT paper on key research & policy questions**

**Key contribution:  
construction (very labor intensive!)  
of new database on unconventional monetary policy  
(reserve requirements)**

**Thought-provoking**

**Very careful, well-written & convincing paper**

- **Central Banks in many Emerging Market Economies (EME) use Reserve Requirements (RR) as policy instruments**
- **Idea: RR is a tax on deposits, lowers loan rate spread & loan supply**
- **HOWEVER: Little systematic empirical research on**
  - ▶ **transmission of RRP (RR Policy)**
  - ▶ **how RRP is set (RRP rules)**
  - ▶ **Interaction between RRP & interest rate policy**

- **Paper by Carlos et al. assesses role of RRP using VARs.**
- **Quarterly data for 4 Latin American countries (Argentina, Brazil, Colombia, Uruguay), 1992-2011**

- **Identification problem:**

- ▶ **RRP is endogenous**

- ▶ **RRP may affect macro variables**

**CONTEMPORANEOUSLY**

- VAR in  $[\Delta \ln(\text{GDP}), \text{inflation}, \text{RR}]$

**Cholesky decomposition produces**

**paradoxical result**

$$RR \uparrow \Rightarrow Y \uparrow$$

- Carlos et al. argue that this is due to the fact that Cholesky does not capture contemporaneous response of  $Y$  to RR innovations

# THE AUTHORS' STRATEGY

- Use NARRATIVE approach to identify

$RR^{endo}$ : RR changes motivated by GDP conditions (current/predicted)

$RR^{exo}$ : all other RR changes ('exogenous to the business cycles') -- Financial Liberalization, Micro-prudential policy.

- **Carlos et al. read statements of central banks & IMF Staff reports discussing motivation of RR changes**  
**[Inspired by Romer & Romer 2010 method for estimating tax shocks]**

# Results:

- Exogenous innovations to RR & Policy rate  $R^{CB}$  :

$RR^{exo} \uparrow \Rightarrow Y \downarrow$ , Loan rate spread  $\uparrow$ , Credit  $\downarrow$

$R^{CB} \uparrow \Rightarrow Y \downarrow$ , Loan rate spread  $\uparrow$ , **Credit**  $\uparrow$

**What explains rise in Credit in response to**

$R^{CB} \uparrow$  ?

• Responses of RR & Policy rate to macro shocks:

$Y \uparrow \Rightarrow RR^{endo} \uparrow$       **Policy rate**  $\downarrow$

**Inflation**  $\uparrow \Rightarrow$       ---      **Policy rate**  $\uparrow$

**Exch. Rate depr.**  $\Rightarrow$       ---      **Policy rate**  $\uparrow$

**Credit**  $\uparrow \Rightarrow$       ---      **Policy rate**  $\uparrow$

# ESTIMATED POLICY RULE:

- **RR used to stabilize GDP**

$$RR_t = \alpha_0 + \alpha_1 Y_t + \varepsilon_t^{RR}, \quad \beta > 0$$

(+)

- **Policy rate used to stabilize GDP & exchange rate**

$$R^{CB} = \gamma_0 + \gamma_1 Y_t + \gamma_2 e_t + \varepsilon_t^R$$

(-) (+)

# Questions/ Comments/ Suggestions

► Would be useful to report effect of RR on:

- Inflation, exchange rate, capital flows;
- leverage of banks, NFCs, households; house prices; stock prices **(important as paper is about macroprudential policy)**

‘Inflation puzzle’ in some low-dimensional VARs:

**Tighter policy RAISES inflation.**

**To solve 'inflation puzzle', many VAR studies include commodity prices (important as drivers of inflation) & other variables.**

**E.g. Christiano et al.; Coibion etc.**

**Smets & Wouters (2007):**

**Real GDP, hours worked, consumption, investment, real wages, prices, short-term, nominal interest rate.**

► **Alternative approach for estimating transmission of RR shocks: estimate structural (DSGE) models with banks, nominal rigidities, financial frictions.**

**E.g. Kollmann et al. (2011, 2012, 2013)**

**Many new models developed by central banks**

**Key advantage: would be able to assess how RR rule (systematic component of RR policy) affects macro performance.**

**Beyond scope of this paper.**

# INTERPRETATION OF RESULTS &

## POLICY IMPLICATIONS:

► Authors find that exogenous output shock **LOWERS** monetary policy rate.

$Y \uparrow \Rightarrow$  **Policy rate**  $\downarrow$

Authors interpret this as ‘fear of capital inflows’.

During surge of inflows, cannot raise Policy rate, as this would further boost inflows.

**Alternative interpretation: When output innovations (mainly) reflect Aggregate Supply (TFP) shocks, then optimal mon.pol. is pro-cyclical:**

**Price stickiness dampens the (immediate) expansion of output; procyclical mon. policy helps overcome that sluggishness of the output response.**

**Would be useful to test 'fear of capital inflows' hypothesis against alternative hypothesis.**

**► Would authors advocate use of Reserve Requirement as policy tools for Advanced Economies?**

**SUMMARY:**

**VERY USEFUL PAPER**

**NOVEL DATABASE**

**THOROUGH EMPIRICAL ANALYSIS**

**IMPORTANT CONTRIBUTION TO POLICY  
DEBATE**

**THANK YOU !**