## Supply-and Demand-side Factors in Global Bank Credit

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Discussion by Sebnem Kalemli-Ozcan

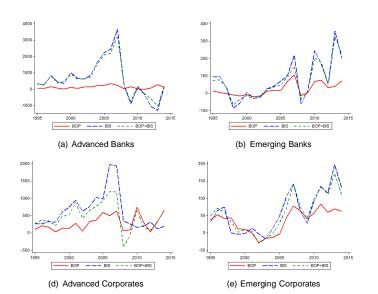
## What does the paper do?

- Try to identify demand (pull) and supply (push) factors of bank flows and at the same time explain aggregate patterns
- Main finding is that <u>supply shock</u> contributed significantly to credit contraction during GFC, whereas common shocks were more important pre-crisis.
- For European crisis, negative demand shocks were more important than negative supply shocks

## **General Impression**

- I like the paper a lot.
- Highlights the fact that common shocks may not be important at the same time for US and Europe during GFC (Kalemli-Ozcan, Papaioannou, Peydro/Perri, JF, JIE 2013, 2014)
- Highlights the strength of BIS data over residency based BOP data

## Capital Flows Facts and Follies: Adjiev, Hardy, Kalemli-Ozcan, Serven



## **General Impression**

- Makes use of Amiti-Weinstein (2015) methodology in bilateral banking flow context being careful about pros and cons of this approach
- Teaches us something new: supply shocks can be heterogenous and separate from common shocks (advantage of using nationality based concept of BIS consolidated statistics as opposed to residency of BOP)
  - Important since whether GFC is a US shock that is transmitted via financial linkages or a common shock to all developed countries debate is still not settled.

# I will make three points which will help strengthen the paper further:

- Definition of demand and supply shock and what they capture
- How different the methodology from weighted GLS
- Alternative way of separating demand and supply

## Point 1: What are demand and supply shocks?

- Identification comes from differences within the cross-section—demand and supply shocks are deviations from host or source countries
- What is deriving these deviations, are they really demand and supply?
- Example: Discover oil, demand shock, capital flows in. But if this cause a change in oil prices worldwide, this would be a supply shock on others

Consolidated data combined with the methodology is great for supply shocks but maybe not so clear to interpret for demand shocks.

## Point 1: What are demand and supply shocks?

#### The authors also acknowledge this, footnote 3:

The terms "supply" and "demand" in reference to the estimated shocks are not as precise as we would like them to be. We cannot, for example, say in relation to an estimated negative demand shock that the borrowers that had previously demanded credit suddenly no longer wanted it; one or more key creditor banking systems that decided to pull out, either because of an increase in the perceived riskiness of that borrower country or because they decided to channel funds previously given to that country elsewhere, would also register a negative "demand shock".

## Point 1: What are demand and supply shocks?

- Graph 15: several countries has negative supply and positive demand
- Interpretation gets more difficult for European crisis: why periphery is negative demand, why not negative supply? (weak banks, weak firms, rollover risk, fall in demand)

## Point 2: Methodology

- Methodology is similar to fixed effects but better because of weights and adding up constraints.
- How the methodology differs from WGLS (if one has all the loans via multiple banks) is not clear—will be good if the difference can be shown in the case of single lender/borrower.
- Weights had to be pre-determined. Not hard to imagine links from shocks to weights via output—ENDOGENEITY problem remains

## Theory: Push and Pull Factors for Capital Flows

Inflows are  $\frac{\text{contractionary}}{\text{pushed}}$  for a given policy rate if flows are "pushed"

- Exchange rate appreciates
- Exports go down (expenditure switching)
- If monetary policy "leans against the wind" results are ambiguous

Effect of inflows on output is <u>ambiguous</u> if flows come to fullfill and AD boom

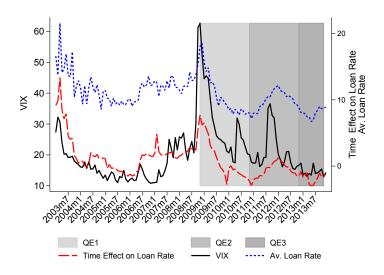
- Non-tradable consumption/output might go up, whereas tradeable down via higher relative price (appreciation)
- Given parity, nominal and real interest rate decline, domestic investment go up

# Point 3: Alternative way to separate demand and supply: quantity and price

- + Demand shock:  $\uparrow P \uparrow Q$ + Supply shock:  $\downarrow P \uparrow Q$ 
  - Using this and time varying fixed effects in WLS, we isolate effects of supply ("push") driven and demand ("pull") driven capital inflows
  - When global liquidity is abundant, global uncertainty is low, and risk appetite is high:
    - Capital inflows into Turkey
    - This generates a decrease in the borrowing costs
    - and an increase in the credit volume

Baskaya, Di Giovanni, Kalemli-Ozcan, Peydro, Ulu (2015)

## **VIX** and Borrowing Costs



#### **Conclusion**

- Great paper, must read!
- Will be even better if linked to push-pull debate of capital flows in general and sharpen the interpretation of demand-supply shocks