# Discussion of International Banking and Liquidity Risk Transmission Claudia Buch and Linda Goldberg

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## **IRBN**

- Bank-level data collected for 11 European countries 2006-2013.
- Balance sheet information: deposit base, capital, leverage, credit, etc.
- International dimension at bank level: purely domestic, foreign affiliate, parent/affiliate, net due within bank network.
- Wealth of information akin to "Call Reports" in the US. With added cross-country dimension.

## The Paper

- Summary of 11 country-specific studies, with analogous specifications.
- Main empirical question: heterogeneous effect of shock to cost of credit, depending on banks' balance sheet characteristics, and on official interventions:

$$\Delta L_{i,t} = \alpha_i + \gamma_t + \beta_1 \chi_{i,t-1} + \beta_2 \chi_{i,t-1} \cdot r_t$$

and

$$\Delta L_{i,t} = \alpha_i + \gamma_t + \beta_1 \ \chi_{i,t-1} + \beta_2 \ \chi_{i,t-1} \cdot r_t + \beta_3 \ \chi_{i,t-1} \cdot r_t \cdot F_{i,t}$$

*i* indexes bank,  $r_t$  aggregate spread,  $\chi_{i,t-1}$  balance sheet info, and  $F_{i,t}$  official intervention. Run country by country.

#### Results

- Wealth of results country by country. Recurrent conclusion is importance of international dimension. Great, as precisely the novelty in these data!
- For purely domestic banks,  $\beta_2=0$ . For international banks,  $\beta_2\neq 0$  and systematically significant. But the  $\chi_{_{i,t-1}}$  that matters is not the same across countries.
- $\beta_2$  is especially significant for cross-border loans, especially in Europe. Less for US, Canada.
- $\beta_2$  also depends on  $F_{i,t}$ .
- Shocks are channeled within banks' own international network.

#### The Data

- The most disappointing aspect of the paper is on page 2:
  - "... The participants analyze bank-level datasets by country and share empirical results and insights (not data)".
- Not data?
- IRBN has the potential to spur a literature on Europe akin to what Call Reports / Home Mortgage Disclosure Act spurred on US economy.
- On: banking and the real economy, banking and asset prices, banking competition, predatory banking, discrimination, finance and inequality, etc.
- An enormous literature, enormously relevant, and published at highest level. Free access and international dimension are of the essence.

## Interpreting the results

• First key result is that coefficient  $\beta_2$  significant for international banks, but not for purely domestic ones?

$$\Delta L_{i,t} = \alpha_i + \gamma_t + \beta_1 \chi_{i,t-1} + \beta_2 \chi_{i,t-1} \cdot r_t$$

- Two explanations:
- ullet the key difference is that domestic banks have homogeneous  $\chi_{i,t-1}$  and international banks have heterogeneous  $\chi_{i,t-1}$  for precisely the same characteristic.
- the key difference is that international banks lend across borders, and that's the
  first margin of adjustment in response to shock. If cost of credit shock binds, for
  whatever reason in the balance sheet, the first thing to go are cross-border
  transactions.
- Check heterogeneity in  $\chi_{i,t-1}$  across domestic banks for those aspects that matter for international banks.
- But would be a surprising coincidence. Latter explanation more likely.

# Cross-border lending is the "first to go"

- European banks use cross-border lending as first margin of adjustment in response to binding shock. Domestic lending less responsive.
- Suggests imperfect banking integration since both margins do not seem equally costly.
- Contrast with non-European banks differences between two margins smaller.
- Allen and Gale (2000) tell us intermediate levels of integration are precisely prone to create contagion.
- Important to ascertain this result: for contagion in Europe, for crisis in Europe, and perhaps for tranquil times as well (earlier coverage than 2006?).
- Suggests bank linkages in Europe create contagion between countries.

## Official Intervention

• Second key result is importance of official intervention  $F_{i,t}$ .

$$\Delta L_{i,t} = \alpha_i + \gamma_t + \beta_1 \chi_{i,t-1} + \beta_2 \chi_{i,t-1} \cdot r_t + \beta_3 \chi_{i,t-1} \cdot r_t \cdot F_{i,t}$$

- But difficult to think of  $F_{i,t}$  as exogenous to LHS: official intervention motivated (at least partly) by credit decision of bank i.
- Except perhaps for discount window at the Fed but certainly for capital injections provided for banks in distress. (e.g., Germany).
- Caution in interpreting these results.
- Would also recommend caution about "credit supply" shocks.  $\beta_2$  or  $\beta_3$  significant could just reflect anticipated demand shock affects both  $\chi_{i,t-1}$  and  $\Delta L_{i,t}$

#### Real Effects

- In the end, this is all about *real* effects of credit, within and between countries.
- Question transcends nature of "balance sheet" shocks. Transcends Europe.
   Probably transcends even Great Recession (earlier coverage than 2006?).
- Natural next step of research using IRBN: real contagion because of bank linkages, across countries (since that's IRBN advantage).
- Current evidence goes against real contagion via bank linkages. So no hope?
- Kalemli-Ozcan, Papaioannou, and Peydro (2013):countries with bank linkages tend to be OUT OF SYNCH.
- Cesa-Bianchi, Imbs, and Saleheen (2014) show this is an artefact of common shocks. Focused on idiosyncratic shocks, countries with bank linkages are IN SYNCH.
- Promising area of research.

### Conclusion

- Don't stop now!
- Circulate!
- Extend coverage pre-2006!
- Implications on European banking integration
- Implications on real effects of financial integration.