Discussion on "Financial Frictions, Financial Integration and the International Propagation of Shocks" by Luca Dedola and Giovanni Lombardo

Gianluca Benigno

December 2010

Overview of the paper

- Scope of the paper: study the international transmission of various shocks when leveraged investors can hold cross border risky assets.
- Rich two-country model (of market incompleteness) with:
  - i) trade in nominal bonds and equity;
  - ii) only tradeable goods (home bias in consumption);
  - iii) nominal price rigidities in goods market;
  - iv) investor sector with financial frictions through financial accelerator that invests in claims on capital (Bernanke, Gertler and Gilchrist, 1999);
  - v) endogenous portfolio choice by households and investors;
  - vi) productivity and financial shocks (shocks to external finance premia);

Main Results

- Interdependence among economies (transmission of shocks) depends on valuation channel through balance sheet effect (Calvo, 2000 and Krugman, 2008) and "no-arbitrage" channel that depends on the degree of financial integration.
- Key result: even with limited foreign exposure, no arbitrage channel acts as a powerful cross country propagation mechanism.
- Analysis of policy implications: there is complementarity in policy rate that is compatible with global liquidity trap.

Why is this paper interesting?

- Essentially combines two strands: international portfolio literature model (Devereux and Sutherland, 2008) with open economy financial accelerator model (Bernanke et al.(1999), Gertler Gilchrist and Natalucci (2007) and Faia (2007)
- Recent related work by Devereux and Yetman (2010) has a similar aim.
- Nice thing about the paper: highlights the differences with previous works.
- Main contribution: no-arbitrage channel and its interaction with financial integration plus introduction of financial shocks.

Propagation mechanism: "Balance Sheet" and "No-arbitrage"

- Balance Sheet (Calvo, 2000 & Krugman, 2008):
  - There is asset complementarity through balance sheet of investors. Asset prices affect investors' net worth and demand of other assets. Channel depends on cross holding exposure.
- No arbitrage (Dedola and Lombardo):
  - Since home and foreign investors (subject to external finance premia) trade common asset, the model will generate an arbitrage condition that links external finance premia. This condition (UIP in real terms) is affected by the degree of financial integration (i.e. the type of assets that are traded by households). So financial integration will create comovements of external finance premia ("credit spreads").

Comments and Suggestions

- Rich model that, to me, has a tension between emphasizing qualitative (no arbitrage channel) and quantitative aspects.
- Possibly there is a scope for two papers: one that describes the new mechanism at play and the other one that examines the extent to which these mechanisms have a quantitative dimension.
- Is the scope of the paper qualitative or quantitative?

Comments and Suggestions

Qualitative analysis:

- There are a lot of results and cases. Most of the qualitative results could be obtained without the apparatus of a DSGE model (use a simple two-period model for example)

    a) Interesting result is that the complementarity in asset prices generated by balance sheet effect might not hold once we consider feedback effect of exchange rate movements (see page 27 of current draft)

    b) No arbitrage channel increases synchronization among macro variables.

- There are asymmetries in the treatment of household and investors:

    - Households have frictionless access to financial markets while investors are subject to external finance premium. Why?

- Not clear what does endogenous portfolio allocation of household and investors add to the analysis.

- In this part you can abstract from sticky prices (see figure 7) and habit formation.

Comments and Suggestions

Quantitative analysis:

- To be fair, authors acknowledge the fact that the purpose of the calibration is illustrative.
- It will be interesting to see if the mechanism proposed by Dedola and Lombardo is able to address any of the comovements that we observe in international business cycle. For example will a properly calibrated model replicate cross correlation of output $>$ cross correlation of consumption?
- Another possibility is to examine how cross correlation have changes with the degree of financial integration (see for example Heathcote and Perri, 2002) and relate these facts with model under different assumptions on financial integration.
- Quantitative analysis should be conducted at first in simple model of financial frictions with no sticky prices.
- Compare the results with Faia (2002).

Comments and Suggestions

- New part with respect to previous version: analysis of the possibility of zero lower bound.
- Possibly potential for another paper that examines the policy implications at zero lower bound conditional on different degrees of financial integration.
- Two results:
    a) as cross country propagation of shocks is higher, financial integration increases the probability of policy spillovers.
    b) at the same time the effects of financial shocks are attenuated (why?)
- Solution algorithm makes strong assumption in terms of interest rate being zero at the same time.
- What policy authority could do at zero lower bound? (examine unconventional policies).
- Is there any role for policy coordination?

Conclusions

- Rich model and ambitious paper.
- Two ways to go: one just qualitative analysis; second make the paper quantitative.
- Last part on zero lower bound analysis is also interesting but could itself become another paper.