Discussion of Dedola and Lombardo

Matteo Iacoviello
Boston College

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Overview

- A long-standing puzzle in IBC literature: two-country business cycle models predict larger comovement of real variables when their financial markets are not integrated. Heathcote and Perri (JME02): under financial autarky, a strong terms of trade effect can propagate foreign shocks even in absence of trade in goods and financial assets.
- Empirical evidence is mixed:
  Common view: The financial crisis and contagion literature likes to believe that contagion is larger when financial markets are integrated
  Formal studies: cross-country correlations have fallen as financial integration has risen (HP)

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This Paper

- This paper is an ambitious effort to study whether one can restore the “contagion” view in a model where “levered investors hold cross-border assets”.
- A desperate attempt to make sense of Paul Krugman’s idea of the international financial multiplier.
- Two key channels of international transmission
  1) Interconnected balance sheets
  2) Cross-border equalization of external finance premia (asset price equalization?)
- Both channels can restore the contagion view
- But wait!
- Wasn’t this already done before?

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Related Papers

My sense was – before reading the paper – yes:

1. Faia JME 2007: applies BGG to a two-country model and finds that goods trade increases comovement, asset trade decreases comovement
2. Gilchrist, Hairault and Kempf (2002): apply BGG to a monetary union model
3. and many many others...
   So why another twist?
4. Probably because the topic is hot once more and because there has been progress in solving for portfolio allocations in DSGE models with perturbation models (Devereux-Sunderland): if that is the case, (1) it is not clear in the paper; (2) it is not clear why one wants to add portfolio endogeneity together with many other frills

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Main Findings

1. **The authors view: there is lots of comovement**

   of levered cross-border investors.

   In line with the hypothesis formulated e.g. by Calvo (2000) and recently Krugman (2008), we have found that foreign exposure in interconnected balance sheets of leveraged investors can indeed act as a powerful propagation mechanism of asymmetric shocks across countries. However, in our setting

   financial and real interdependence can be very strong even with minimal balance sheet exposure to foreign illiquid assets, if financial markets are integrated. Because of the no-arbitrage conditions it imposes, a high degree

2. **My view: there is little comovement**

   It is hard to get comovement as goods and financial trade between countries becomes larger, and this holds also in a model where there is leverage and the full force of the BGG frictions. The only case when there is comovement is Figure 5, when leverage of domestic investors is very high (more on this below)

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Some General Comments

- It is a very ambitious paper...
- ....but is near impossible to read
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Suggestion 1. Simplify

In light of this, my suggestion for the authors is simple:

- step back and change. Present a simple core model that gives the intuition: e.g. show key linearized equations in text; define your model and the baseline model and compare them in Figure 1 (rather than showing 5 by 2 subcases of impulse responses)
- With so many competitors out there, no-one is in need of yet another paper with (1) habits; (2) investment adjustment costs; (3) Taylor rule and Calvo sticky prices + about 100 equations if the paper is not successful in explaining the goal it sets at the beginning. Wait to add all of this until your mechanism is clearly spelled out

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Suggestion 2. Move it Closer to the Data

In the model: investors are agents who: (1) buy K from capital producers financing themselves through short-term loans; (2) rent out KD and KF to firms that transform capital into new investment borrowing from households at a premium. (3) finance themselves either through internal funds or debt Financing problem

$$R^D = \chi\left(\frac{D_t}{N_t}\right), \chi' > 0, \chi'' > 0$$

Remark: who are the levered investors in the data: hedge funds? mutual funds? banks? firms? small entrepreneurs?

...Move it Closer to the Data (continued)

Also: be more precise about the core calibrations in the paper?
What are the basic facts that a paper such as this one should explain?
U.S. NFA are -20% of GDP
(Foreign assets are 80% of GDP
Foreign liabilities are 100% of GDP)
Here

> ital markets implies that each country holds 13.24% of the capital abroad, thus matching the substantial home equity bias in the data, while the value of the position in foreign currency bonds is -.698721, implying an offsetting long position in domestic currency bonds.
>
> An important implication of the model concerns the cyclical behavior of

How do I map these numbers to the data?

Suggestion 3. Simplify the presentation of the results

Krugman (2008) says that international transmission works through the effect of changes in asset prices through the balance-sheet effects of leverage.

1. If the point of the paper is make a point about theory, there are too many sub-cases and combinations thereof
2. If the point of the paper is make sense about an empirical fact, it is not clear what the fact is

Suggestion 4. Help the Reader: what is endogenous and what is exogenous?

I could not figure out what is endogenous and what is exogenous.
Is the leverage ratio endogenous or not?
The model presentation hints that the answer is yes.
The calibration hints otherwise.
Many other examples in the paper

e.g., page 16

markets after the 1998 Russian default. In our setting, the main gist of Krugman's argument can be rendered by postulating that entrepreneurs have a preferred, exogenously given composition of their holdings of domestic and foreign risky assets α_k and α_{k^*}, implying that:

$$K_{t+1} = \frac{\alpha_k}{\alpha_{k^*}+\alpha_k}\left(1+\frac{D_t}{N_t}\right)\frac{N_t}{Q_{K,t}} = \frac{\alpha_k}{\alpha_{k^*}+\alpha_k}\left(1+\chi^{-1}(\cdot)\right)\frac{N_t}{Q_{K,t}}$$

So, why do you need a DSGE model with "endogenous" portfolio choice?

Suggestion 5. Present Baseline Results first, and then do robustness (not the other way round)

- The combination of impulse responses:

	full home bias (KF=0)	full diversificat. (KD=KF)
Full financial autarky	1	2 (how?)
No trade K, trade B	3	4
No trade B, trade K	5	6
Full financial integrat.	7	8

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My reading:

1. All the experiments in the paper generate little or no propagation
2. The only case of right propagation (corr(Y1,Y2)>0) is Figure 5 (CASE 9?)

> leverage ratio in the steady state. Figure 5 reports responses when we set this ratio to 4, showing that financial frictions can lead to close interdependence not only in asset prices but also in investment and output across countries, as financial conditions deteriorate enough in the country hit by the shock and quickly spill over abroad because of financial integration.[10]

So the paper should only discuss whether this case is plausible or not.
(also, in case 5 consumption rises.)

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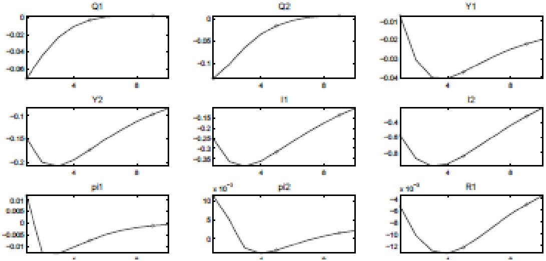
When do we get the right propagation?

Figure 5: High leverage: neutral technology shock



What is the scale on the axes? If the productivity shock is a neutral shock -1%, -0.2% is way too small, and -20% is way too large. (talk about a quantitative model). And if -0.2 is the response of the level, what is the level?

Conclusions

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