# Discussion of "Foreign-currency lending" by Delis, Politsidis and Sarno

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# This Paper

**Summary**

- 1 sd increase in FX volatility increases loan spreads by 11 bps for loans made by foreign banks in the borrowers' currency.
- ~ $2 million higher interest over the course of a loan of average size & duration.
- Credit constraints and bank market power can account for this.

**Overall assessment**

- Interesting paper – important question & seriously done.
- Many important potential caveats are addressed in various robustness checks.
- Need more work on exposition, theoretical foundations, a few omitted issues.
- This discussion: I have 7 comments.

# Comment 1: It is very hard to understand the paper.

- Manthos, Panagiotis and Lucio say: “There are two sides to exchange rate risk in cross-border lending.” Not really.

| | | Bank’s perspective: LC | Bank’s perspective: FC |
|---|---|---|---|
| Firm’s perspective | LC | | “Foreign-currency lending” |
| | FC | “Foreign-currency borrowing” | Authors largely ignore this – but this is the most important (more later)… |

- Replacing “foreign-currency lending” with “Borrowing from a foreign bank in local currency” would make the life of the reader much easier.

# Comment 1: It is very hard to understand the paper.

- I have spent more time trying to understand this paragraph than I had spent trying to understand Goethe (in German):

*"Exchange rate risk is costly for lenders, implying a higher lending rate or higher loan fees. Higher lending costs create a competitive disadvantage for affected borrowers. The higher cost of credit can have significant implications for profitability, investments, and international competitiveness of* ***borrowers engaging in foreign-currency lending****, especially given that in our data* ***these firms appear on average to be less risky than firms borrowing in the bank's currency.****"*

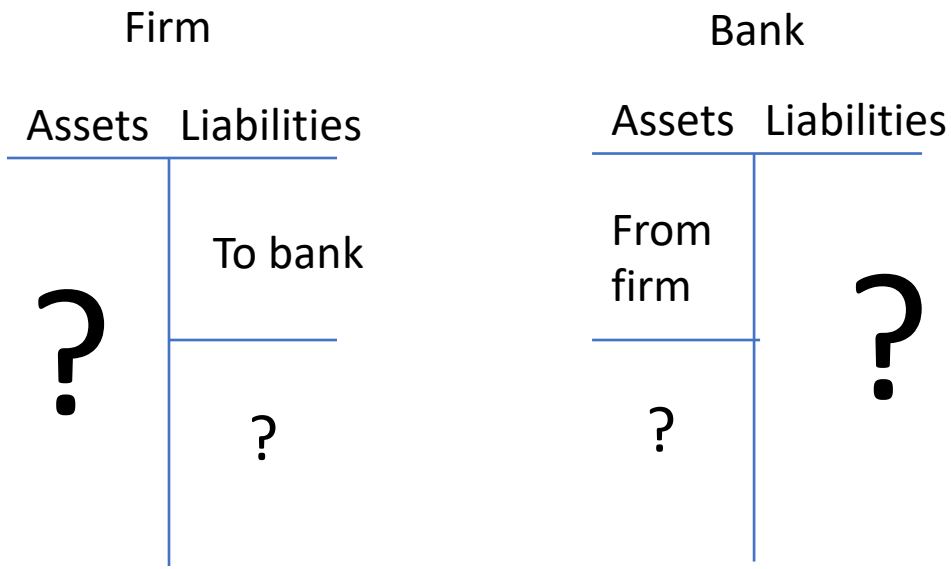
- Combining all your results, I reach the following (if wrong, not entirely my fault):
  - Good firms tend to borrow in local currency from a foreign bank.
  - Bad firms tend to borrow in foreign currency.
  - After a period of FX volatility, good firms are actually affected more.
  - Foreign banks have market power.
  - Why are these good firms doing this at the first place? To diversify? Because they are exporters to these banks' countries? Why don't good firms crowd out bad firms in the domestic market instead?

# Comment 2: Borrowing from a foreign bank in a third currency is much more important than the current focus of the paper.

| « ‹ Q2 2019 › » | All sectors | | Bank sector | | | |
|---|---|---|---|---|---|---|
| | | | Total | | Of which: Intragroup | |
| *Level:* 1 2 3 4 | Claims | Liabilities | Claims | Liabilities | Claims | Liabilities |
| ⊟ By currency | | | | | | |
| US dollar | 14,637.0 | 13,473.1 | 7,156.6 | 7,518.2 | 4,736.8 | 4,436.6 |
| Euro | 9,341.4 | 8,601.9 | 5,062.7 | 4,549.7 | 2,574.6 | 2,380.0 |
| Yen | 1,908.7 | 913.6 | 715.2 | 606.9 | 456.5 | 363.5 |
| Pound sterling | 1,389.5 | 1,343.6 | 606.5 | 621.5 | 376.0 | 396.5 |
| Swiss franc | 430.0 | 341.9 | 280.4 | 193.1 | 153.2 | 73.5 |
| Other currencies | 1,268.9 | 1,716.0 | 645.7 | 898.5 | 366.5 | 571.8 |
| Unallocated | 2,003.3 | 1,403.4 | 1,114.7 | 611.4 | 936.2 | 321.7 |

- Emerging literature on understanding the currency choice of a firm's borrowing.
- Your data can potentially teach us a lot on this: is dollar the dominant currency in borrowing/lending in part because it is the easiest to hedge? Your paper seems to say no. That in itself is a very interesting result, if true.

# Comment 3: What is happening elsewhere in the balance sheets of firms and banks?




- What is the currency composition of firm's cash flows?
- What is the currency the bank uses to lend?
  - Wholesale funding in borrowers' currency? Local currency and hedge (liquid market?)?
  - Are banks merely passing on increased cost of funding? Corr(FXvol,wholesale funding)?
- What about the extent of these banks' operations in these countries?

# Comment 4: What is the theoretical foundation for your measure?

- It is not obvious why exchange rate volatility is the right measure.

$$Forex\ risk_{lt} = \sqrt{\frac{1}{N}\sum_{i \in N}(Exchange\ rate_{abi} - \mu)^2}$$

- For example, in Eren and Malamud (2019) we solve the debt currency choice of a firm that issues nominal debt. What matters for risk is not exchange rate volatility, but it is the **covariance between the firm's stock value and the exchange rate.**
  - No bank lending in our paper, so maybe this doesn't apply 1-1. But you still need a measure that comes from theory.

- The discussion about bank hedging and UIP deviations affecting hedging costs etc. is a step in the right direction to motivate your regressions theoretically. It should come much earlier and more could be done.

# Comment 5: Who else is in the syndicate? What do banks do after origination? Are there secondary market effects?

- Who else is in the syndicate? Are there local banks as well?
- Does having a local bank or not affect the result? Or share contributed by local bank?
- Do banks hold these loans in their own portfolios? Or do they sell them? To whom?

Table 2: Lender market share at origination and one or two quarters after origination
The table reports the market share of each lender type at origination and after one or two quarters. The sample includes loans whose origination date is within the reporting quarter.

| | Share held by lender type (in %) | | | Share held by lender type (in %) | | |
|---|---|---|---|---|---|---|
| | At orig. | +1 qrt | Δ | At orig. | +2 qrts | Δ |
| U.S. banks and BHCs | 25.7 | 22.3 | -3.4 | 25.7 | 22.2 | -3.5 |
| Non-U.S. banks and BHCs | 18.1 | 15.4 | -2.7 | 18.1 | 15.1 | -2.9 |
| Insurance cos./Pension funds | 3.6 | 3.9 | 0.4 | 3.6 | 3.9 | 0.3 |
| U.S. CLOs/CDOs | 8.3 | 9.2 | 0.9 | 8.7 | 9.7 | 1.1 |
| Non-U.S. CLOs/CDOs | 5.8 | 6.7 | 0.9 | 5.8 | 7.1 | 1.2 |
| U.S. inv. funds and others | 30.3 | 32.7 | 2.4 | 30.1 | 32.3 | 2.2 |
| Non-U.S. inv. funds and others | 8.3 | 9.8 | 1.5 | 8.1 | 9.7 | 1.6 |

Source: Aramonte, Lee, Stebunovs (2019)

- Does FX volatility affect secondary market liquidity, foreign currency lending and spreads at the same time (omitted variable bias)? (Niepmann and Schmidt-Eisenlohr, 2019)

# Comment 6: Timing in regressions

- You calculate this at 1M, 3M, 6M frequency, but your fixed effects are at yearly frequency. They should be aligned better:

$$Forex\ risk_{lt} = \sqrt{\frac{1}{N}\sum_{i \in N}(Exchange\ rate_{abi} - \mu)^2}$$

- These loans take time to originate.
- It is not the case that FX volatility happens. Banks wake up. Make loans.
- The period over which FX volatility takes place and banks make decisions overlap.

# Comment 7: “FR bank lending to CN firm in $” and other interactions.

- You dump “A French bank lending to a Chinese firm in $” to FC borrowing.
- It is also FC lending. Need to account for that in your empirical design.
- I am not convinced that what you do in footnote 6 is sufficient to deal with this.

- I did not understand why you do not include FC borrowing * FX risk.
- If that is collinear with the fixed effects, why is FC lending * FX risk not?