Comment on

"International Spillovers and Local Credit Cycles"

by Baskaya, di Giovanni, Kalemli-Ozcan, Ulu

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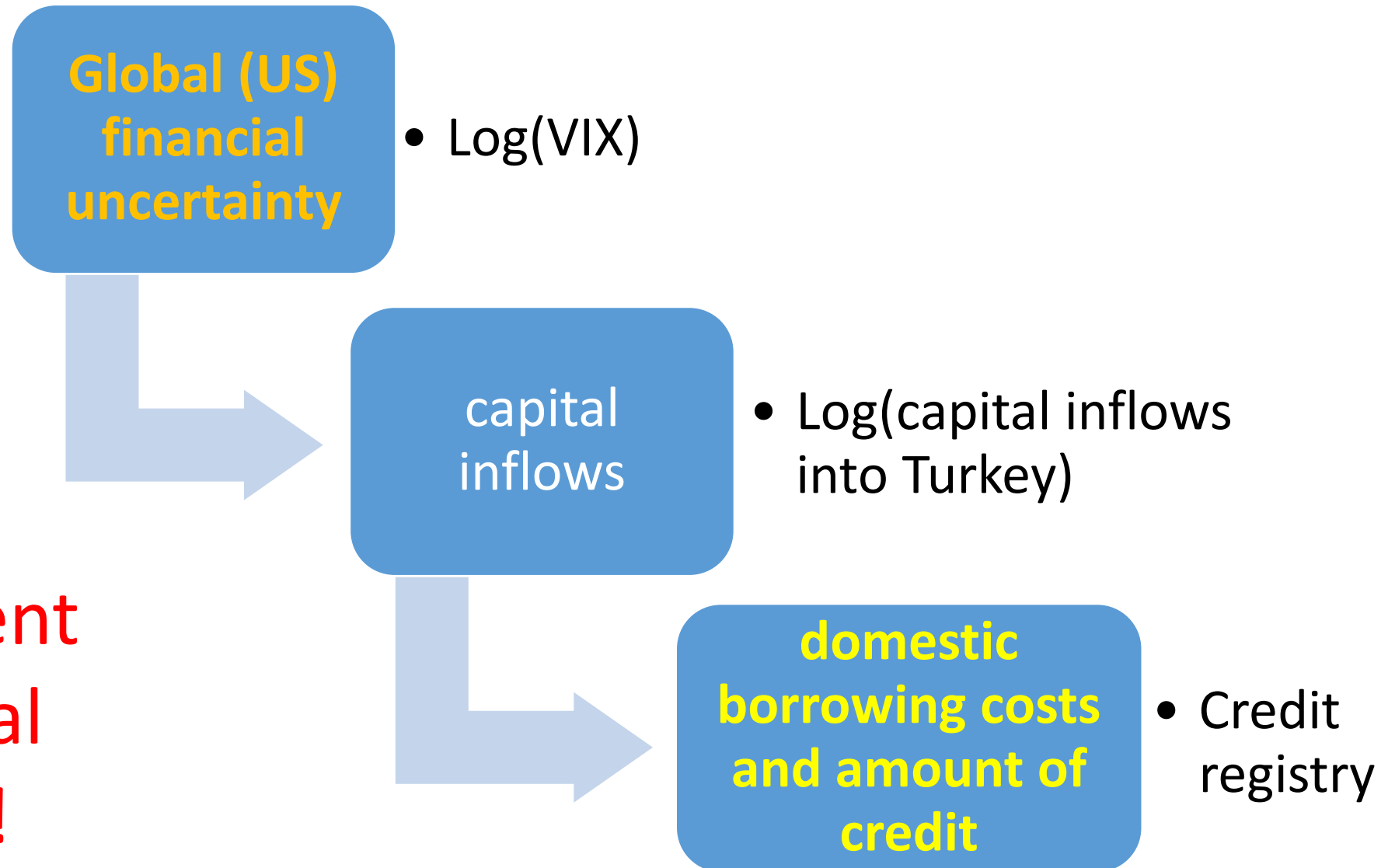
FRBSF

As you would expect, a well executed paper that addresses an important question

- **Important question** – *How does global uncertainty affect credit to firms in emerging economies?*
  - ➢ Speaks to literature on global shock spillovers more generally
- **High-quality execution**
  - ➢ Firm-bank-loan (including small) data
  - ➢ Strong identification through heterogeneity of banks and firms (approach similar to IBRN)
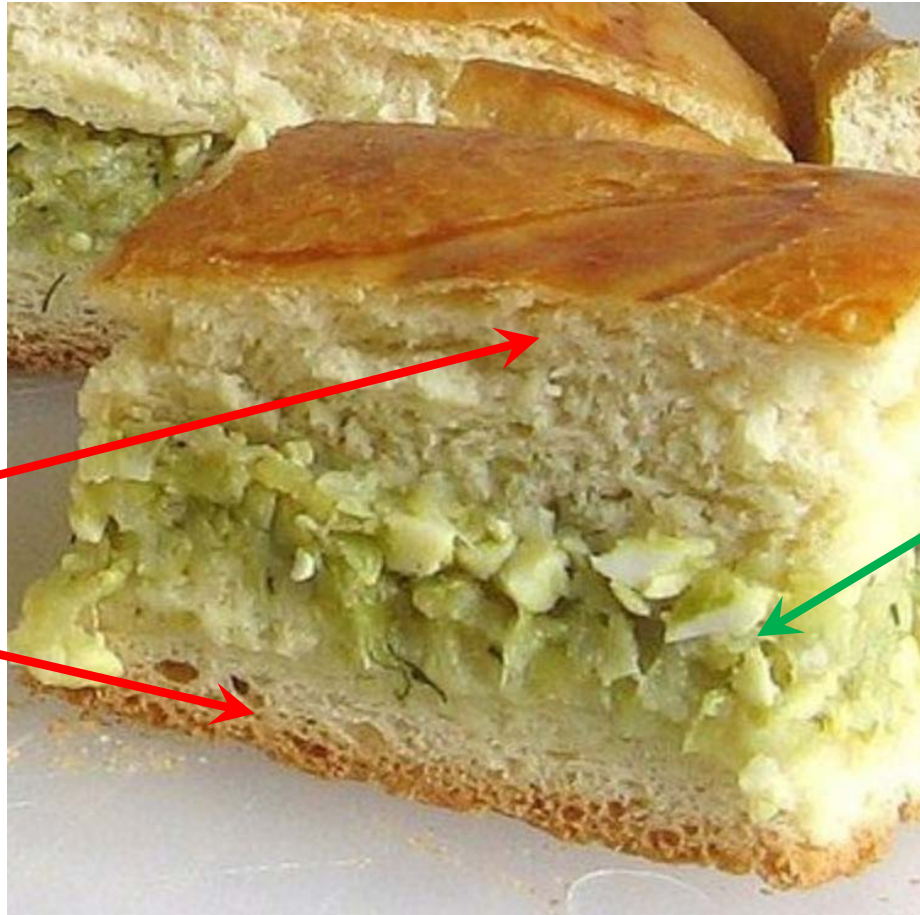
Main findings

Global (US) financial uncertainty
- Log(VIX)

capital inflows
- Log(capital inflows into Turkey)

domestic borrowing costs and amount of credit
- Credit registry

Independent of collateral constraint!

Crust is as important as the filling.
Also, they need to be well connected

- Conceptual framework
- Interpretation and conclusions

- Data
- Empirical setup
- Empirical results

PIE CRUST

(For a 9-inch lower crust.   Double recipe for two crusts)

1¼ cupfuls Igleheart's Swans Down Cake Flour

¼ teaspoonful baking powder

¼ teaspoonful salt

5 (level) tablespoonfuls shortening

¼ cupful cold water (about)

Sift together the flour, baking powder, and salt; cut in the shortening, then add water, a little at a time and mix with a knife to a paste of a consistency to clean the mixing bowl of all flour or paste.

"A new international spillover mechanism"

- Needs to be better explained:

What mechanism?

VIX

    ->   - country risk premium (in UIP)

       - firm risk premium (idiosyncratic)

New, but not
well explained   **->**   domestic cost of credit

(tested indirectly   Not new   **->**   cost and quantity of loans

for firms)   extended to firms

My "model" of the link
VIX -> risk premium on loans

- **VIX** = volatility (uncertainty) in U.S. equity market
  - ➢ *Not price of risk, quantity of risk* (more on that later)
- Global banks have trading book and loan book. Risk of trading book increases with VIX
- The VaR constraint => have to reduce risk in loan book
- Reduce lending to riskiest borrowers & increase risk premium on loans => higher costs of credit to local banks
- Local banks **reduce supply of loans**, **especially to riskier borrowers**
  - ➢ <u>Additional test of mechanism</u>: is there an increase in *excess bond premium (BP)*? Will results of IV and reduced form regressions hold for BP instead of VIX?
  - (See Gilchrist & Zakrajsek, 2012; Moreno & Serena-Garralda, 2018)

Semantics+

- I don't think the presence of risk premium as UIP failure – it is evidence of imperfect asset substitutability

- Also, UIP not holding is not arbitrage – there is risk involved

- Real interest rates are found to be 8pp higher for lira loans than for foreign loans. Will mean inflation of nearly 9%, this is not evidence of UIP failing, but rather PPP assumption not holding

I know it looks like I am defending the UIP – I am not, I am asking for more careful argument. Also, not central to the paper – less focus on UIP and more on mechanism will help the reader.

- Both global uncertainty and domestic fundamentals can be viewed as credit supply factors (domestic fundamentals determine creditworthiness = > supply)

Crust-filling connection

Is there a culinary term for this?

Conceptual Framework equations can be better connected to regression equations
[Take 1]

- Take **exact** UIP with imperfect asset substitutability (**multiplicative** risk premium)

- Country level

$$1 + i = (1 + i^*)(1 + \hat{E}^e)\,\rho$$

- Firm level

$$1 + i_f = (1 + i^*)(1 + \hat{E}^e)\,\rho\,\rho_f$$

- Logs

$$log(1 + i_f) = log(1 + i^*) + log(1 + \hat{E}^e) + log\,\rho + log\,\rho_f$$

What is risk premium?

- Risk premium = quantity of credit risk * price of risk
- Quantity is country- or firm-level variable
- Price of risk is affected by VIX (the "crust part", assume linearly)
- => $\rho = VIX * \alpha$

$$log(1 + i_f) = log(1 + i^*) + log(1 + \hat{E}^e) + 2logVIX + log\alpha + log\alpha_f$$

- close to what is estimated, but not quite ("2"; no interactions)

Matters for magnitude interpretation   unless $\rho = \alpha^{VIX}$

Conceptual Framework equations can be better connected to regression equations
[Take 2]

- Take **approximate** UIP with imperfect asset substitutability (**additive** risk premium)

- Country level

$$i = i^* + \hat{E}^e + \rho$$

- Firm level

$$i_f = i^* + \hat{E}^e + \rho + \rho_f$$

- Logs

$$i_f = i^* + \hat{E}^e + VIX * \alpha + VIX * \alpha_f$$

- Also not exactly what was estimated – no logs, but interactions

FILLING

¾ pound cooked and stoned prunes
¾ cupful sugar
1 tablespoonful S. D. Cake Flour
1 teaspoonful butter
½ teaspoonful salt
Juice ½ lemon
Prune juice

Identification is good

- I think IV regression is solid
- Heterogeneity allows for sufficient fixed effects to fully control for demand factors
- I find econometric results quite convincing

A few questions/comments

- Most analysis is done for loan volume and borrowing cost as two independent regressions, but the argument is about loan supply – can it be recast in terms of Demand-Supply system and estimated with 3SLS?
  - Firm*time FEs can be demand instruments
  - VIX is already used as supply instrument
- Are there cross-border loans or only local?
- Can you provide more detail on capital inflow variable (also keep its name consistent across tables)?

Summary

- Great paper!
- Highly recommend for everyone to read
- Message can be sharpened