"Corporate Credit Risk and Capital Flows in Emerging Market Economies" by Tatjana Schulze

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Motivation

Large increase in capital flows to emerging market economies (EMEs)

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"Push" factors play central role in the literature:

- Capital flows to EMEs explained mostly by a global financial cycle (see, e.g., Rey (2015))
  1. Interest rates in center country (US monetary policy)
  2. Global uncertainty and risk aversion (VIX)

This paper

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Three contributions:

1. Collects extensive high-frequency data on:
   - USD-denominated bonds for firms in EMEs (spreads, duration, volume, etc.)
   - Firms' expected default frequencies
   - Capital net flows based on changes in country allocations of large investors
2. Estimates *causal* effect of higher credit risk on capital flows using granular instrument variables (GIVs)
3. Includes offshore borrowing of firms

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1. A small share of firms make up most of the bond issuance
2. Firms are subject to (sizable) idiosyncratic shocks

The instrument is based on these idiosyncratic shocks and is

1. Uncorrelated both with common shocks across firms and aggregate shocks to capital flows (*instrument exogeneity*)
2. Likely to affect aggregate credit risk because the weight is high on firms with large bond issuance (*instrument relevance*)

Results

"Static" regressions

- Higher credit spreads lead to higher capital inflow, in particular in "good" times
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Taken together

- Offers a complementary "pull" story to our understanding of international capital flows

Overall comments

- Very nice paper
- It makes sense: Capital should not travel blindly, but also be guided by local opportunities in EMEs
- Detailed and novel data set
- Creative way to find a causal relationship
- Discusses strengths and weaknesses to a great extent

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- It makes sense: Capital should not travel blindly, but also be guided by local opportunities in EMEs
- Detailed and novel data set
- Creative way to find a causal relationship
- Discusses strengths and weaknesses to a great extent
- My remaining comments mostly on the "static" analysis and build on insights from:
  1. Gilchrist and Zakrajšek (2012)
  2. Rey (2015)
  3. Gabaix and Koijen (2020)

Gilchrist and Zakrajšek (2012): The role of credit supply

Key results (for the US):

- Increased credit spreads of non-financial firms forecast lower economic activity
- The *excess premium* (spread not explained by default risk and bond characteristics) is the key predictor
- Credit risk in financial intermediaries comoves strongly with the excess premium

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Relevant takeaways for our purposes

1. Credit supply from financial sector key driver of bond spreads
2. No strong case for higher spread $\Rightarrow$ more flows to corporations

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Gabaix and Koijen (2020): One of the most important threats is that we do not control properly for common factors

Gilchrist and Zakrajšek (2012): The role of credit supply II

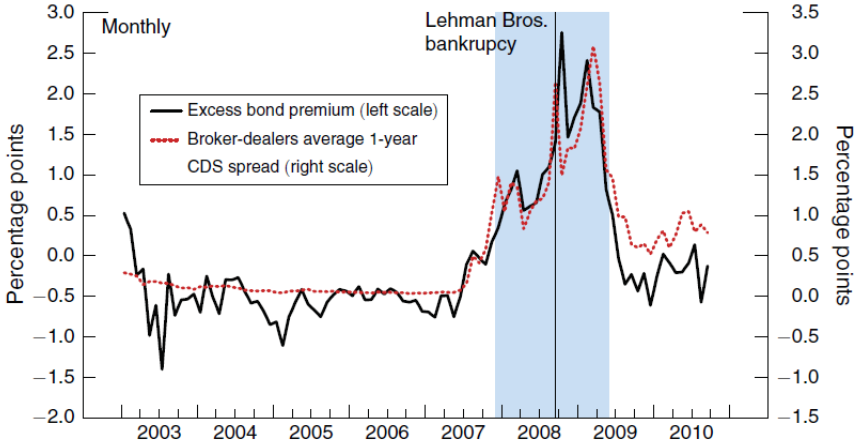

FIGURE 8. THE EXCESS BOND PREMIUM AND FINANCIAL INTERMEDIARY CDS SPREADS

Gilchrist and Zakrajšek (2012): The role of credit supply III

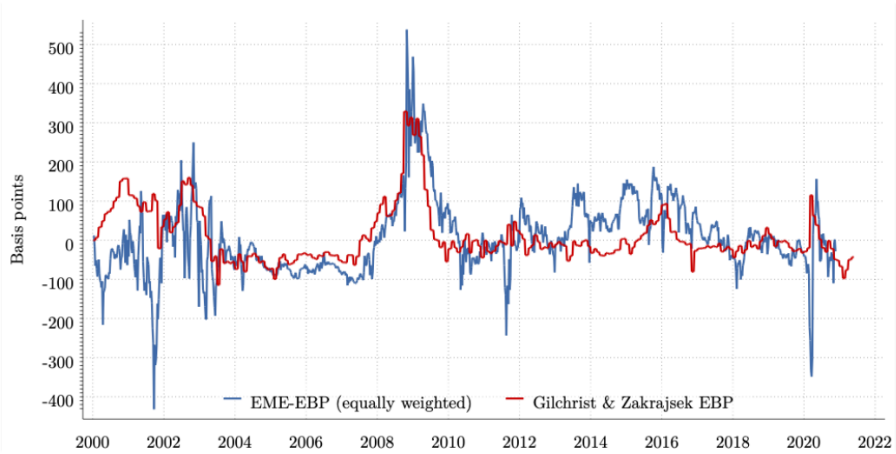

Figure 5: The Excess Bond Premium of Emerging Market Economies and the EBP of Gilchrist and Zakrajšek (2012).

Gilchrist and Zakrajšek (2012): The role of credit supply IV

- Looks as if credit supply may play a role in explaining the excess bond premium in EMEs
- But we want to have truly idiosyncratic firm shocks
- Possible remedy: Use high frequency CDS data for financial intermediary in the US

Rey (2015): The global financial cycle

Insights relevant to our context:

- There is a global financial cycle of *gross* capital flows, asset prices, and credit growth
- The global cycle comoves strongly with the VIX and is driven by monetary policy in the center country
- Monetary policy affects VIX with a lag, which in turn affects capital flows with a lag

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Relation to Schulze

- In Schulze (2022), net capital flows are used. But in Rey (2015), there is no clear sign of a global financial cycle with respect to net flows
- Why not interact the credit spread with the VIX to account for differences in "risk-on" and "risk-off" periods?
- Why not use lags of VIX and monetary policy in the empirical analysis? Now all controls and capital flows are at time t.

Gabaix and Koijen (2020): Can we learn more about the idiosyncratic shocks?

It would be useful to do some of the sensitivity checks suggested in Gabaix and Koijen (2020)

- "Narrative approach": Do the largest shocks look like they are idiosyncratic? Are they good shocks? Are they bad shocks?
- Omit dates that may be exceptional
- Omit certain special countries
- Herfindahl indices for each country to get a measure of concentration?

Conclusion

- Takes important steps to increase our understanding of the determinants of capital flows
- Ambitious and novel approach and data
- Already in good shape, but some additional robustness analyses warranted

Extra slides

References I

Gabaix, X. and R. S. Koijen (2020). Granular instrumental variables. Technical report, National Bureau of Economic Research.

Gilchrist, S. and E. Zakrajšek (2012). Credit spreads and business cycle fluctuations. *American economic review 102*(4), 1692–1720.

Mendoza, E. G. (2010). Sudden stops, financial crises, and leverage. *American Economic Review 100*(5), 1941–66.

Rey, H. (2015). Dilemma not trilemma: the global financial cycle and monetary policy independence. Technical report, National Bureau of Economic Research.