"Global Fund Flows and Emerging Market Tail Risk" Anusha Chari, Karlye Dilts Stedman, Christian Lundblad

> Discussion by: Nancy R. Xu

> > Boston College

SFS Cavalcade, TX Austin

May 23, 2023

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Main empirical advantages

↔ Observe precise flow details from the weekly EPFR dataset,

- ↔ Examine the effects across the entire distribution rather than an average effect
- ↔ Observe several heterogeneities.

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- Introduce global risk and risk aversion shocks:
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 - 2. Use quantile regressions to examine the relationship between global risk shocks on EM returns and changes in flows:

$$\begin{aligned} R_{it}^{(q)} &= \alpha_i^{(q)} + \delta_l^{(q)} + \frac{\beta_1^{(q)}}{\beta_1^{(q)}} Ris_t + \frac{\beta_2^{(q)}}{\beta_2^{(q)}} RA_t + \gamma_1^{(q)} PUSH_{t-1}^R + \gamma_2^{(q)} PULL_{i,t-1}^R + \epsilon_{i,t} \end{aligned} (2) \\ k_{it}^{(q)} &= \alpha_i^{(q)} + \delta_t^{(q)} + \rho k_{it-1}^{(q)} + \frac{\beta_1^{(q)}}{\beta_1^{(q)}} Ris_t + \frac{\beta_2^{(q)}}{\beta_2^{(q)}} RA_t + \gamma_1^{(q)} PUSH_{t-1}^k + \gamma_2^{(q)} PULL_{i,t-1}^k + \epsilon_{i,t} \end{aligned} (3)$$

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(1): Quantile regression estimates and allows a different set of coefficients for each specified quantile, and demonstrates the relationship between predictors and response variable changes across different parts of the distribution.
 (2): The magnitude of the coefficient indicates how much the estimated quantile of the dependent variable will change with a one-unit increase in the independent variable.

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Nice paper!

- Novel and constructive insights: (1) Use Quantile Regression methodology to examine the effects of global risk shocks on the entire distribution of EM asset flows and returns. (2) Use high-frequency data note that weekly and daily at such a representative scale is considered "high-frequency." (3) Consider an interesting and under-explored area of topic the nexus between EM and Dev markets in a more modern view.
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My comments & suggestions today:

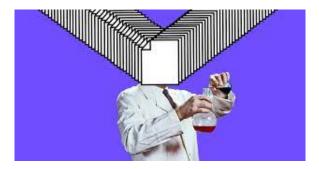
- 1. Big picture messaging
- 2. Interpretations, interpretations, interpretations
- 3. What was BEX2022 challenged by back then?
- 4. A finite number of minor points

- Let me start with a typical referee comment for a high-tech paper: Research question & messaging.
 - ⇒ Current paper starts from the role of foreign institutional investors in generating price impacts
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 - ⇒ (3): The line of asset return analysis in the paper isn't exactly just reflecting this foreign institutional investor perspective. [Fund flows have more granularity. Results are sometimes conflicting...]



The two lines of analysis in the paper (on returns, and on flows) to discuss the role of foreign institutional investors.

Suggestions:

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 - ⇒ Think about the core empirical design:
 (1) Flows from foreign institutional investors positive predict contemporaneous changes in asset price:

$$R_{i,t} = \alpha_i + \frac{\beta}{M_{i,t-1}} + \gamma_1 PUSH_{t-1} + \gamma_2 PULL_{i,t-1} + \delta_t + \epsilon_{i,t}$$
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♀ If this (the role of foreign institutional investors) is the objective of interest, why don't we look beyond global risk shocks? I think US or Euro Area Monetary Policy or political shocks are ideal shocks too (i.e., exogenous from EM conditions; regular and economically sizable).

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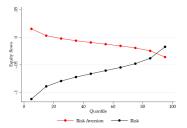
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3: Results with global risk (quantity of risk) are what one would expect (tail effects).

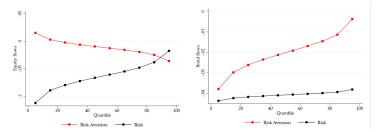


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Results with bond flows are expected.

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When a risk shock arrives: Lengthens the left tail \Leftrightarrow stronger capital outflows; When a risk aversion shock arrives: Lengthens the left tail of bond, but not equity.

We can summarize Figure 9: returns

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- ⇒ Clarify: what explains RA being associated with smaller equity downside risk? what explains why bond flow results are inconsistent with bond return results when a RA shock arrives?
- ⇒ The bond-risk shock story throughout the paper is consistent with a nice risk interpretation, which makes sense as the shocks are filtered from "risk" variables (e.g., high risk perception or risk aversion, bigger decrease in capital net flows, larger downside risk, longer lower tail, as long-term bond contains a risk premium component).

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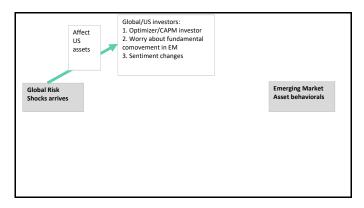
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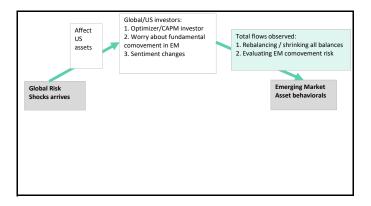
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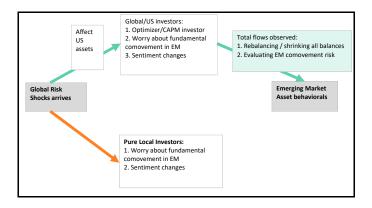
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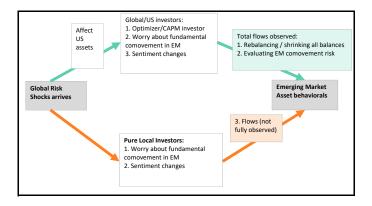
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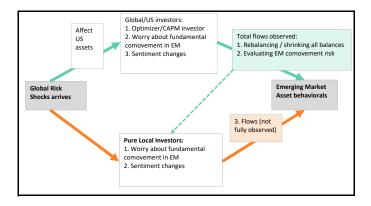
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- ⇒ This is another indication that Equation (2) with "returns" in the paper might be tricky to interpret and work with. (Returns are not as direct as flows to start with.)

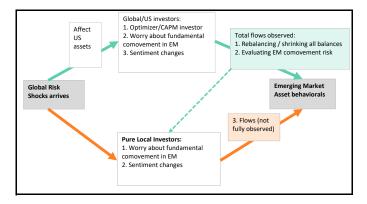




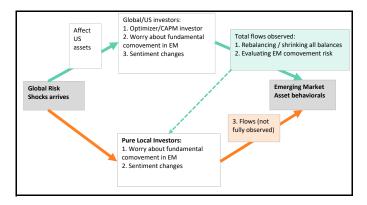




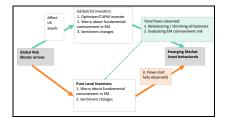




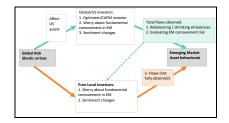
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- Figure 8 (dynamic effect over a 12-week course) is one of my favorite plots in the paper – I wish the authors could spend more time – because dynamics contain rich information about the economics of channels. {continue next page}

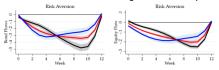


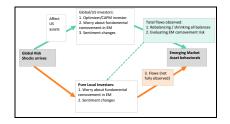
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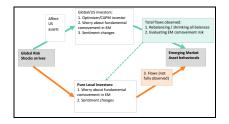
⇒ The persistence in the flows seem to indicate it is a shrink-all/CAPM story versus a risk premium story (in a RP story, one would expect strong outflows during the same week "0" of the global risk shock, as investors demand a higher compensation, but more inflows in the following weeks as expected returns increase.)





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- \Rightarrow This diagram indicates again returns cannot separate the green versus orange.

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 "Risk and risk aversion levels comove with a mild correlation, but I thought your goal is to separate the two."

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(2): "How to interpret the risk aversion index?"

↔ We responded by correlating it with 16 sentiment/confidence/RA animals out there, and realized that it is a very nice indicator summarizing sentiment in particular, and comoves with real-time development in early COVID-19 crisis cases quite well.
 ↔ Then, the question for CDL2023 is, can we utilize this point to separate responses to risk versus risk aversion shocks a little clearer? For instance, Huang and Xu (2022) identifies pure RA events that come up abnormal changes in RA shocks but normal changes in UC shocks; give news narratives; and then study international propagation. One can potentially use a similar idea to conduct event studies (more direct).

Discussant: Nancy R. Xu (BC)

Minor points

- Page 14 and Page 15 should be better explained, and I don't think all variables are introduced in a self-contained fashion on these two pages. For instance, it is confusing that *t* means both daily and weekly; I also don't think *q* was formally explained; I would go faster and explain what *i* includes in this part too, for a smoother read.
- On the return analysis, we use daily return data. I probably missed this point in the paper, but how are the time-zone differences being coordinated? This might matter in the interpretation of the dynamic effects.
- 3. I have been suggesting to de-emphasize the analysis using returns, but emphasize more on the analysis using flows. There, decreases in net flows can come in increases in outflows and decreases in inflows (.. not an expert in EPFR, not sure if they have this granuality, feel free to ignore); I think most story is coming from the outflows dynamics, and probably that would be a useful addition to disentangle inflow and outflows to help with interpretation.
- 4. Terminology in the paper to drop or unify (read too casual): "tails-on," "tails-in," "compress," "lengthening," "a risk-off shock," "elongating tails," "risk sentiment" etc.

Conclusion

- Highly recommend!
- My comments:
 - 1. Big picture messaging
 - 2. Interpretations to be more consistent
 - 3. BEX2022 extensions

Thank You!

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