“Global Risk and the Dollar”
Georgios Georgiadis, Gernot J. Müller, Ben Schumann

Discussion by:
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What does this paper do?

- How does global risk impact real economy and financial markets?
- Examine systematically how **exogenous innovations to global risk** affect the economy and financial market (for both US and Rest of World “RoW”) in a VAR framework;
- Examine a counterfactual environment that **shuts down** the risk channel through the **dollar**.
Bayesian proxy structural VAR

- Following Arias, Rubio-Tamirez and Waggoner (forthcoming, *JoEconometrics*):

\[
\begin{bmatrix}
y_t' \\
m_t'
\end{bmatrix}
\tilde{A}_0 =
\begin{bmatrix}
y_{t-1}' \\
m_{t-1}'
\end{bmatrix}
\tilde{A}_1 + \tilde{\epsilon}_t, \\
E[m_t \epsilon_t^*'] = V \\
E[m_t \epsilon_t^0'] = 0
\]

(1) \(2) \(3)

**Endogenous variables** \(y\):
(1) US dollar nominal effective exchange rate (NEER)
(2) US IP, US CPI, RoW IP
(3) VXO, excess bond premium
(4) 1-year Tbill, RoW policy rates
(5) Integration channels: US real export, US real import, crossborder bank credit

*Additional*: EMBI spread, RoW Equity, other risky index...

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Exogenous instruments \( m \):
(1) Intradaily changes in price of gold (Piffer & Podstawski, 2018): percentage variation in the price of gold around uncertainty events (Bloom, 2009) when an event occurred; 0 otherwise
(2) “Pure” monetary policy surprises (Jarocinski & Karadi, 2020)
Main findings

- **A positive global risk shock:**
  1. US dollar nominal effective exchange rate (NEER) – Appreciation
  2. US IP, US CPI, RoW IP – Contraction
  3. VXO, excess bond premium – Increase
  4. 1-year Tbill, RoW policy rates – Decrease
  5.1 US real net import – Increase (expansionary)
  5.2 Cross-border bank credit – Decrease (contractionary)
Main findings

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- **Counterfactual environment with no “(1) global risk → dollar appreciation”**
  1. weak risk effect on real trade through dollar appreciation
  2. slightly stronger risk effect on financial channel through dollar appreciation
#1 Global risk shock proxy

- **Commonality in risky and safe asset prices**
  - Model-based, utilizes more information to generally define “risk”
  - Recent example: Miranda-Agrippino & Rey (2020)
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Advantages:
⇒ Focus on gold price movements only related with uncertainty/risk events

Potential disadvantages:
⇒ Less continuous; depend on the choice of “risk” events
⇒ Doesn’t really capture/allow for asymmetry
⇒ Strong assumption that “gold indeed behaves as safe” during risk episodes

(Figure 1, Piffer & Podstawski, 2018)
#2 “Gold is safe”: Conventional wisdom vs. Empirics

Cumulative value of $1 on 1/1/2000

Discussant: Nancy R. Xu (BC)
What might have been considered a safe haven in a market crisis might not be in the next, and it’s hard to know ex-ante which assets will behave as safe havens in future market crises. (What is a good risk proxy?)
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- Correlation among daily changes (2000-2021)

<table>
<thead>
<tr>
<th></th>
<th>US</th>
<th>EMU</th>
<th>IT</th>
<th>FR</th>
<th>Commodity</th>
<th>DOLLAR</th>
<th>USD to GBP</th>
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<tbody>
<tr>
<td>S&amp;P500</td>
<td>-0.010</td>
<td>-0.358</td>
<td>-0.227</td>
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<tr>
<td>VIX</td>
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<td>0.182</td>
<td>-0.102</td>
<td>0.095</td>
<td>-0.225</td>
<td>0.060</td>
</tr>
</tbody>
</table>

Rolling correlation (6m) between stock returns and safe asset returns
The BPSVAR model now includes VXO as a $y$ variable and event-based gold prices as the $m$ variable. One can also imagine doing the opposite, whereas volatility index may be viewed more of a “market risk gauge” by design.

Can the paper report some results on the MP shock? Is Global Financial Cycle in fact a Global Risk Cycle (Bekaert, Hoerova, Xu, 2021) or Global Policy Cycle (Miranda-Agrippino & Rey, 2020)?

Exhibition:

⇒ I feel that Section 3.4 (exogenous instrument) should come a bit earlier, as that is one of your contributions;

⇒ A time series plot of the risk and MP shock may be useful;

⇒ I agree that the choice of a risk shock and a MP shock are probably enough as exogenous shocks; BHX2021’s Appendix A derives a simple habit-based model to motivate this choice.
I highly recommend this paper! Great idea, intuitive findings, and the execution and the writing are very carefully done

My main comment:
When we think about “global risk”, its measuring is still an ongoing debate, and worth discussing and exploring a bit more options. Has gold really been exhibiting safe asset properties in the recent years?

Thank You!
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