

“Global Risk and the Dollar”

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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*):

$$\begin{bmatrix} y'_t \\ m'_t \end{bmatrix} \tilde{A}_0 = \begin{bmatrix} y'_{t-1} \\ m'_{t-1} \end{bmatrix} \tilde{A}_1 + \tilde{\epsilon}'_t, \quad (1)$$

$$E[m_t \epsilon_t^{*'}] = V \quad (2)$$

$$E[m_t \epsilon_t^{0'}] = 0 \quad (3)$$

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...

Exogenous instruments m :

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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)

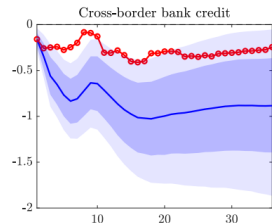
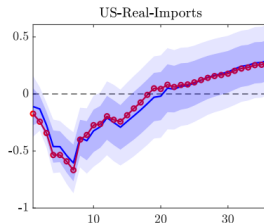
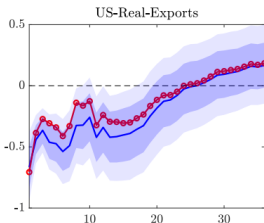
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▶ Counterfactual environment with no “(1) global risk → dollar appreciation”

- (1) weak risk effect on real trade through dollar appreciation
- (2) slightly stronger risk effect on financial channel through dollar appreciation



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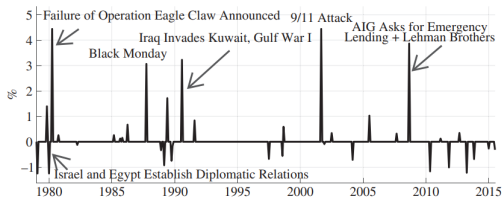
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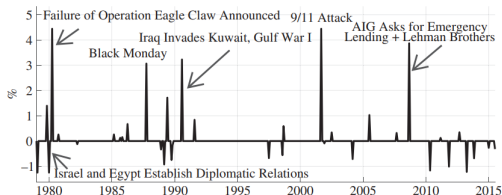
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(Figure 1, Piffer & Podstawski, 2018)

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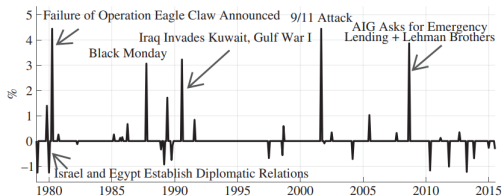
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Advantages:

⇒ Focus on gold price movements only related with uncertainty/risk events

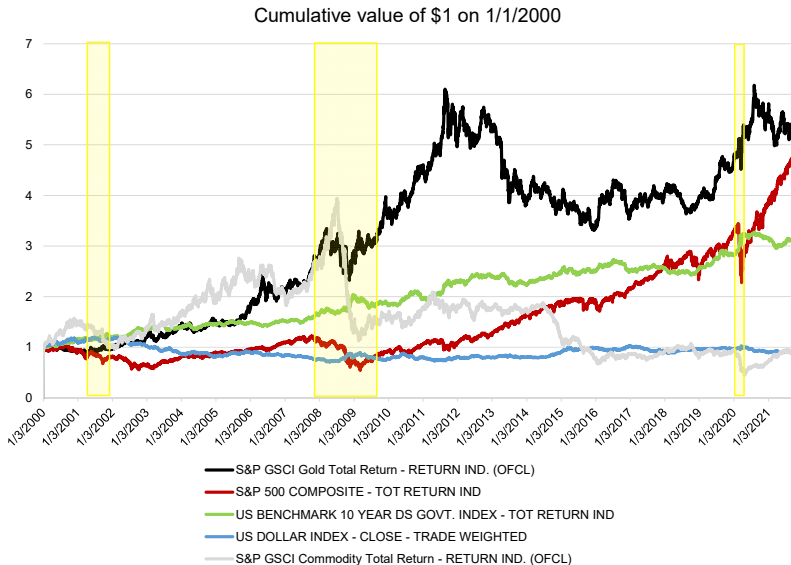
Potential disadvantages:

⇒ 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

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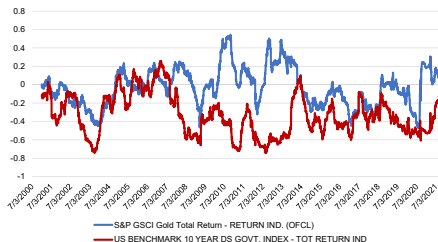
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- ▶ Correlation among daily changes (2000-2021)

	Gold	US	EMU	IT	FR	Commodity	DOLLAR	USD to GBP
S&P500	-0.010	-0.358	-0.227	0.063	-0.157	0.272	-0.085	0.128
VIX	0.011	0.279	0.182	-0.102	0.095	-0.225	0.060	-0.092

Rolling correlation (6m) between stock returns and safe asset returns



#3 Microscope comments

- ▶ 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.

Conclusion

- ▶ **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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