Discussion of "A Model of U.S. Monetary Policy and the Global Financial Cycle" by Rohan Kekre and Moritz Lenel

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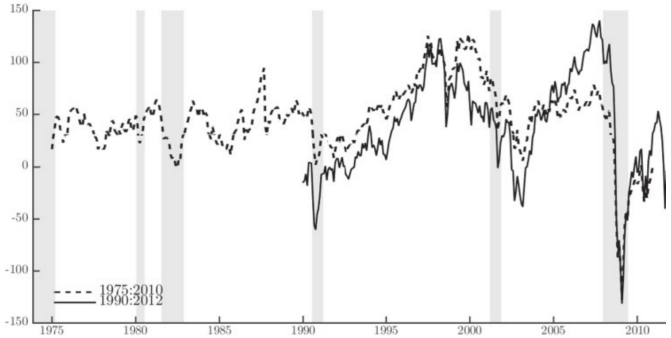
Outline

Global Financial Cycle: One Factor Moves Risky Assets in the World

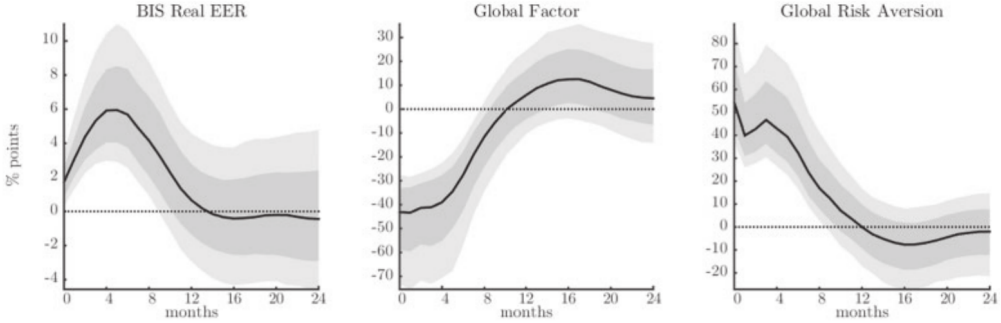


The global factor in world risky asset prices. NBER recessions shaded.

Source: Miranda-Agrippino & Rey (2020, *REStud*), Fig. 1.

- Take **858 risky-asset prices** from *every continent* — equities, corporate bonds, commodities (1990–2012).
- **One** common factor explains $> 20\%$ of their joint variation.
- That single line *is* the "global financial cycle."
- It moves like the **VIX** — read it as the world's price of risk.

U.S. Monetary Policy Moves the Cycle: Price of Risk ↑



Price of risk: dollar ↑6%, global factor (risky assets) ↓40% on impact, **risk aversion ↑50% above trend** *(Fig. 6)*

Source: Miranda-Agrippino & Rey (2020, *REStud*), Fig. 6. Responses to a 1% U.S. contractionary monetary policy shock, identified with a high-frequency external instrument.

This Paper: A Tractable Multi-Country Framework for U.S. MP Spillovers

- Takes **exactly one essential ingredient** from each — and supplies what each was missing:
  - **Gabaix-Maggiori (2015, QJE)** — the financier with Γ/W_a risk-bearing capacity. *Was: two-period, partial equilibrium.*
  - **Itskhoki-Mukhin (2021, JPE)** — the multi-country GE NK with segmented markets; the small-σ perturbation that keeps risk premia first-order. *Was: exchange-rate disconnect, not U.S. MP transmission.*
  - **Kekre-Lenel (2022, ECMA)** — the wealth-revaluation channel of monetary policy. *Was: closed economy.*

- **This paper** = GE NK $\times$ multi-country $\times$ global arbitrageurs $\times$ wealth revaluation, with the **Markowitz inversion** (Eq. 7) as the new identification device.

- A very nice tractable multi-country macro-finance framework for U.S. monetary spillovers that deals with portfolio choice, risk premia, and the global price of risk in a unified way.

What This Paper Does

- **Model:** multi-country NK, sticky prices, global arbitrageurs facing a mean-variance trade-off with effective risk aversion $\Gamma / W_{a,t}$.
- **Identification:** arbitrageurs' FOC:

$$\frac{1}{w_a}(\boldsymbol{q}^{-1}\boldsymbol{b}_a) \;=\; \frac{1}{\Gamma}\,\boldsymbol{C}^{-1}\,\boldsymbol{ex} \tag{7}$$

- **Findings:**
  - Arbitrageurs are dollar-short, EM-currency long.
  - Cross-section of FX and bond responses to FOMC surprises lines up with the model implication.
- **Counterfactuals:** Fed-vs-ECB asymmetry, FX intervention in Brazil, a future with higher dollar rates.

How U.S. MP Spillovers Work: The Channel (Eq. 5)

Impact response of currency j (and its bond price $\hat{q}_{j,t}$) to a U.S. tightening $d\nu_{1,t} > 0$:

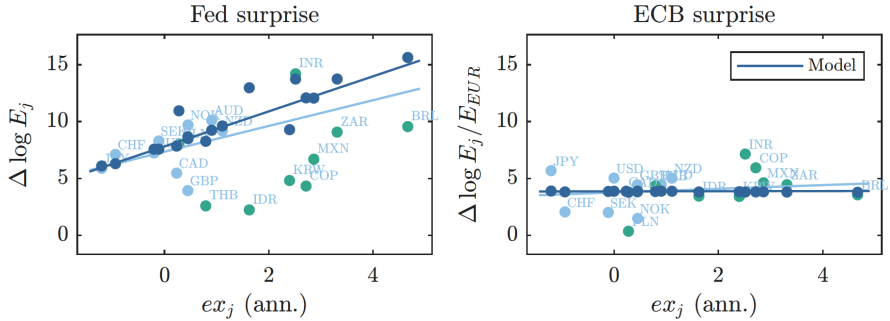
$$\underbrace{\hat{E}_{j,t}}_{\substack{\text{fgn. currency}\\ \text{per \$}}} / d\nu_{1,t} = \underbrace{\kappa_1}_{\substack{\textbf{(1) uniform}\\ \textbf{depreciation}}} + \underbrace{\kappa_2 \frac{1-\xi}{\xi} \frac{\sum_k q_k^{-1} b_{ak}}{w_a}}_{\substack{\text{wealth persistence} \times \textbf{leverage}}} \cdot ex_j - \underbrace{\kappa_3 \frac{\Gamma}{w_a} \mathrm{Cov}\left(ex_j, \sum_k \eta_{1k}\, ex_k\right)}_{\textbf{(3) dollar beta}}$$

- **(1) The textbook part — everyone depreciates together.** A Fed tightening raises the dollar against *all* currencies, symmetrically. Baseline result without arbitrageur.
- **(2) The key: wealth revaluation reprices risk.** Arbitrageurs are **long foreign currency, funded in dollars**. Dollar ↑ ⇒ net worth ↓ ⇒ effective risk aversion Γ/w_a ↑. They now demand more for currency risk: **high-carry currencies** ($ex_j > 0$) **depreciate more**, safe ones appreciate.
- **(3) The dollar beta — a household-preference result.** Linked to EIS and household consumption.

Constants $\kappa_1, \kappa_2, \kappa_3 > 0$ collect discounting/IES terms (masked). Line (2) leverage statistic $\sum_k q_k^{-1} b_{ak}/w_a \approx 25$ in main exercise.

This Mechanism Nicely Generates the Fed vs. ECB Asymmetry

- The model implies that a country's central-bank power over the global financial cycle depends on the arbitrageurs' funding/investment share in that currency.
- The U.S. is dominant, while the ECB, despite its size, has a much smaller share in global funding and investment.



Outline

Directly Testing the Central Mechanism with Holdings Data

- "Arbitrageurs are short the dollar and long EM currencies" (Table 1) is the paper's key empirical statement.
  - It is derived by *inverting* the Markowitz first-order condition.
- Need to directly confront with holdings data. FX market is ideal: the dealers are observable, and CLS data cover >50% of global FX volume.
- Top-ten dealers account for 2/3 of global volume (Euromoney FX Survey 2021): JPMorgan, UBS, Deutsche Bank, XTX, Citi, Jump Trading, Goldman Sachs, BofA, State Street, HSBC.

Arbitrageur Leverage

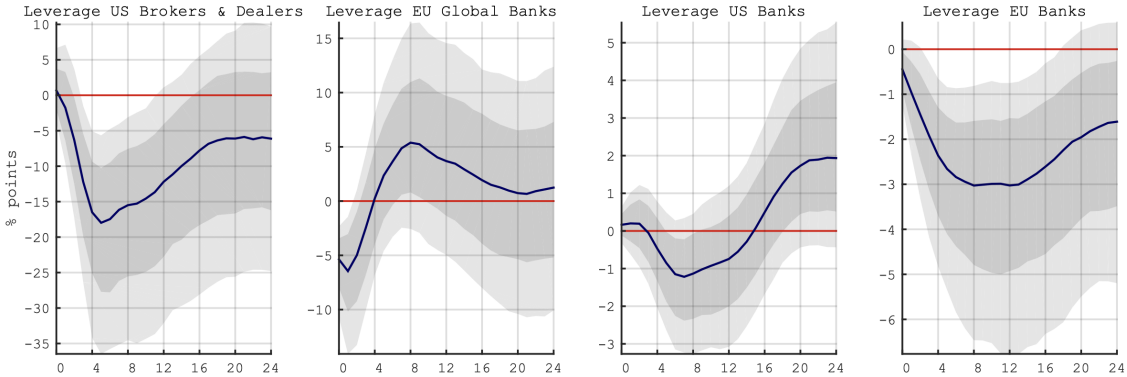
Arbitrageur leverage in non-dollar bonds, baseline calibration: $\frac{\sum_{k=2}^{n} q_k^{-1}(b_{ak} + b_{ak}^{\delta})}{w_a} \approx 25$

- When U.S. monetary policy tightens, wealth w_a drops and leverage spikes.
- EM exchange rate vol is 3% monthly. The probability that an arbitrageur goes bankrupt each month is enormous.
- Authors show a way out: the VaR extension (Figure 4) brings leverage down to 3.6 when value-at-risk arbitrageurs hold 95% of wealth.

Value-at-Risk Constraint Should Be the Main Building Block

- In the model, intermediaries' leverage *increases* in response to monetary tightening (wealth in the denominator falls).
- This goes against the empirical evidence from Miranda-Agrippino & Rey (2020), where U.S. broker-dealers' leverage **declines** sharply.

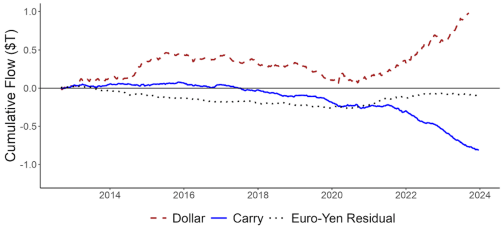
Impulse response of various bank leverage to a 1% U.S. monetary policy shock. Miranda-Agrippino & Rey (2020), Fig. 8.



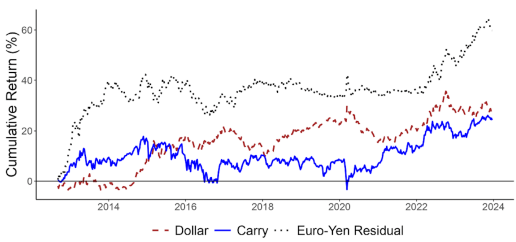
Observable Factor Structure in Currency Volume and Returns

- FX returns and trading follow a strong factor structure, consistent with the paper's mean-variance perspective.
- An and Huber (2026): the dollar factor explains 60% of return variation, followed by carry that adds 15%. Binds flows and returns together to discipline the elasticity.
- Can we directly test if Fed tightening reduces realized portfolio returns – the paper's key mechanism?

(a) **Cumulative Flow**



(b) **Cumulative Return**



Mechanism: Wealth Channel vs. Quantity-of-Risk Channel

$$ex_t = \lambda_t C \cdot b_{a,t}, \qquad \lambda_t = \Gamma / w_{a,t}.$$

Paper's wealth channel:

monetary shock increases price of risks: $\quad d\lambda_t > 0, \qquad db_{a,t} = 0$

$$d(ex_t) = d\lambda_t C b_{a,t} = \frac{d\lambda_t}{\lambda_t} ex_t.$$

Alternative quantity channel:

monetary shock increases quantity of risks: $\quad d\lambda_t = 0, \qquad db_{a,t} = \kappa b_{a,t}$

$$dex_t = \lambda_t C db_{a,t} = \kappa \lambda_t C b_{a,t} = \kappa ex_t.$$

$\lambda_t \uparrow$ is observationally close to $b_{a,t} \uparrow$ proportionally.

In the data, quantities are even more volatile than prices in FX. In An and Huber (2026), a constant price of risk with changing quantities seems to do well (although with additional evidence for a time-varying price of risk).

Outline

Origin of the FX Risk/Return Structure That Gives U.S. MP the Power

- A key input to the channel is the "carry" that makes it advantageous to borrow in dollars.
  - This gives U.S. MP the power to reprice risk and generate a cross-section of responses.
- Why does the carry exist? Because firms, banks, and foreign governments treat U.S. dollar assets as the world's **safe haven** with a stable financial system, and they accept low expected returns.
  - This is the input taken as given.
- However, Fed policy stance can change the safe-haven premium.
- Thus, the risk/return structure itself rests on Fed independence from fiscal pressure and geopolitical restraint in dollar access.
  - Lucas critique for policy evaluations!
  - Not biting yet, but becomes more relevant as U.S. global status weakens and fiscal condition worsens.

Safe Government Assets and the Global Financial Cycle

- The global financial cycle *is* also the time-varying **convenience yield on dollar safe assets** (U.S. Treasuries), driven largely by foreign investors.
  - Jiang–Krishnamurthy–Lustig (2024), "Dollar Safety and the Global Financial Cycle."
- Foreign investor demand is **inelastic but responsive to macro conditions** such as inflation, a hallmark of safe-asset demand.
  - Jansen-Li-Schmid (2026), "Granular Treasury Demand with Arbitrageurs".
- **The link to monetary policy:** Monetary policy changes convenience yields (Nagel 2016). A Fed tightening increases convenience yield, boosts dollar value, and tightens global financial conditions.

Fed as the Foundation of U.S. Government Debt Safety

- Li and Merkel (2026): long-term government debt sustainability hinges on the Fed's remaining capacity to stabilize the government debt market.
- Accommodative monetary policy may erode this central-bank capacity and worsen long-term debt sustainability.
- U.S. government debt safety (and by extension, the centrality of the U.S. in the global financial cycle) relies on its sustainability, which is affected by the Fed.

Outline

Summary

- **Great paper!** A tractable multi-country framework that links the FX cross-section to how U.S. MP drives the global financial cycle. The model is remarkably potent at matching many facts, including the Fed-vs-ECB asymmetry.

- **Comments:**
  - **Test with holdings:** "dollar-short, EM-long" is not measured. Need CLS / top-dealer data.
  - **VaR as the main block:** baseline leverage ≈ 25 is too high and shoots up in a tightening cycle; a VaR arbitrageur is more appropriate.
  - **Price vs. quantity:** monetary policy can affect the global financial cycle via either the price of risk or the quantity of risk (i.e., flows). Need more direct tests/separation.

- **Broader implication — the carry is endogenous in the long run:**
  - ***ex*** exists because the world treats U.S. assets as the safe haven, resting on Fed independence, fiscal sustainability etc.
  - Fed can affect the risk-return properties of U.S. currency. Fed-government debt interaction is the key!