

GLOBAL FOOTPRINTS OF MONETARY POLICIES

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POTENTIAL FOR INTERNATIONAL MONETARY POLICY TRANSMISSION

1. Classic

- Countries engage in bilateral trade
- Potency of transmission depends on CA balances
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2. Amplification through **Global Financial Cycle** [Rey (2013)]

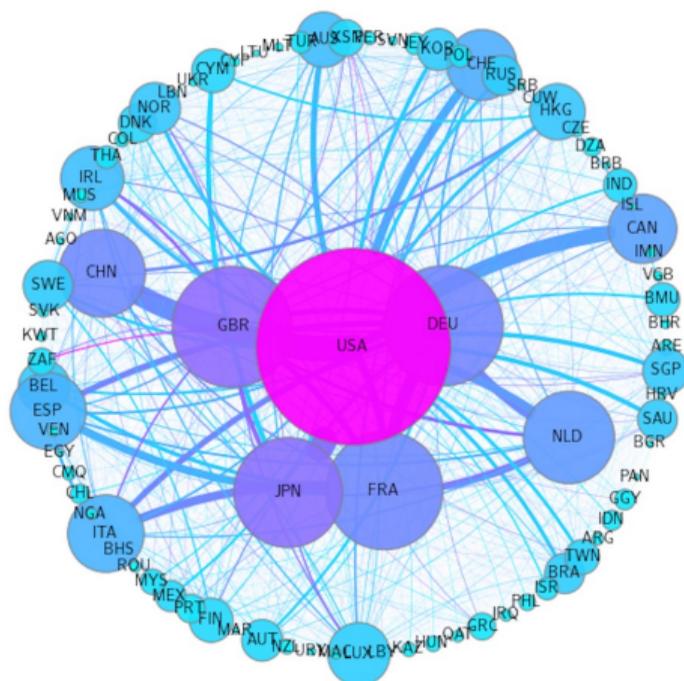
- Global fin'l aggregates comove to a very large extent
- MP influences common component ⇒ global spillovers
- Through fin'l conditions: risk, leverage, capital flows, asset prices
- FX only a partial shocks absorber

WHY TRADITIONALLY FOCUS ON US MP?

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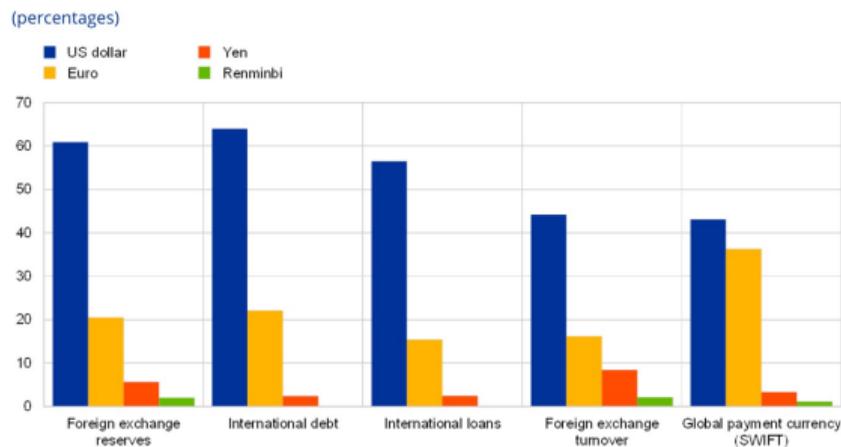
Note: Includes private & official cross-border investment in Eqy + Debt securities. Coppola, Maggiori, Neiman and Schreger (2021) + IMF's Coordinated Portfolio Investment Survey (CPIS), 2013

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Sources: BIS, IMF, SWIFT and ECB calculations. Note: The latest data are for the fourth quarter of 2019.

○ International financial transactions & trade invoicing

[Gopinath et al. (2019), Gopinath & Stein (2020), Maggiori, Neiman & Schreger (2020)]

○ Reserve/Anchor currency

[Gopinath (2015), Ilzetzki, Reinhart & Rogoff (2019, 2020), Eichengreen & Mathieson (2000), He, Krishnamurthy & Milbradt (2016), Farhi & Maggiori (2018)]

AVENUES FOR INTERNATIONAL MONETARY POLICY TRANSMISSION

1. Classic

2. Amplification through Global Financial Cycle

3. Amplification through Global Value Chains

- Additional transmission from integrated production
- Through supply/production constraints

Global Spillovers of US and Chinese Monetary Policy

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 - ▷ New data & new facts
 - ▷ Global Spillovers of US MP

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2. Global Trade & Commodity Cycle

- ▷ New data & new facts
- ▷ **Global Spillovers of Chinese MP**

DIMENSIONS OF GLOBAL COMOVEMENTS #1:
GLOBAL FINANCIAL CYCLE & US MP TRANSMISSION

DO GLOBAL RISKY ASSET PRICES CO-MOVE?

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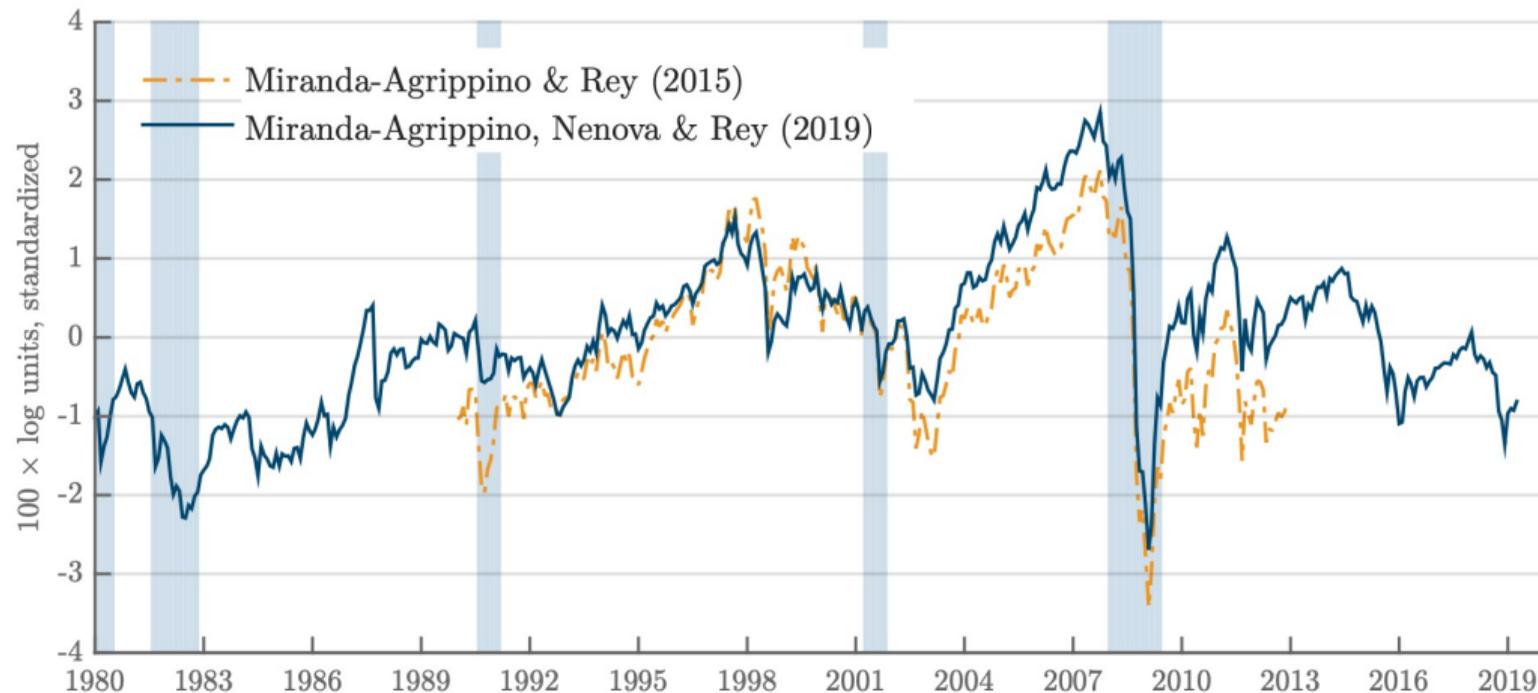
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- 1 factor in global risky asset prices
- Explains $\simeq 1/4$ of common variance ($n \simeq 1K$)

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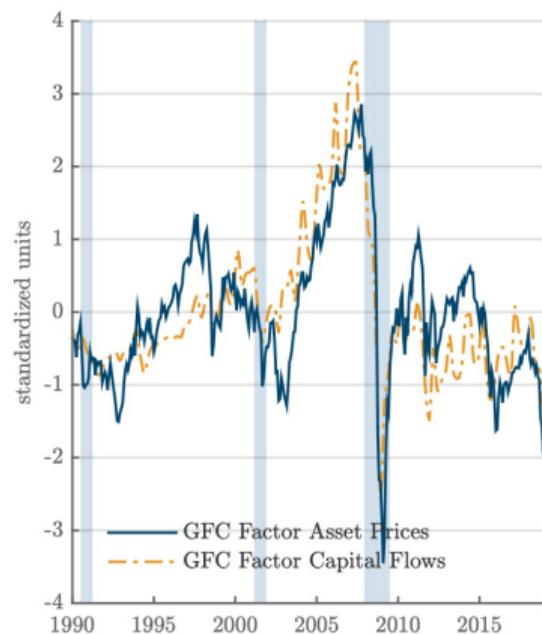
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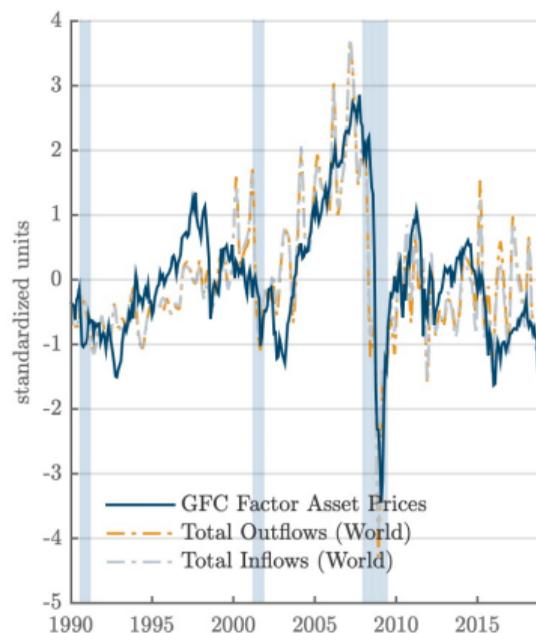
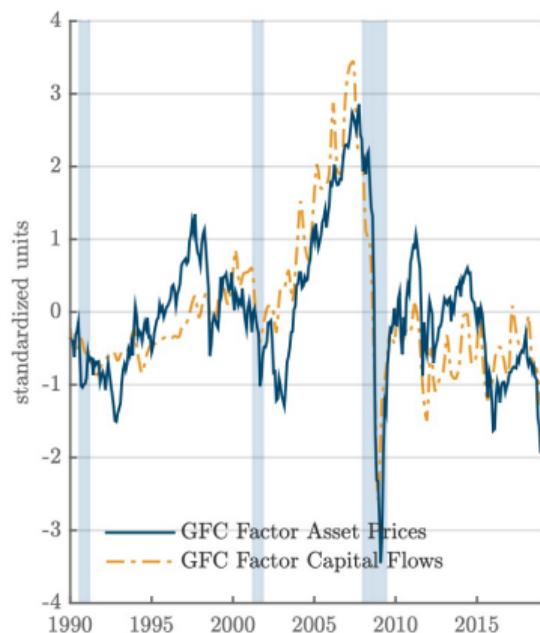
CO-MOVEMENT EXTENDS TO QUANTITIES

1. **Between asset prices and capital flows (corr \simeq 80%)**
2. Between inflows & outflows
3. And across flows types (FDIs less so)



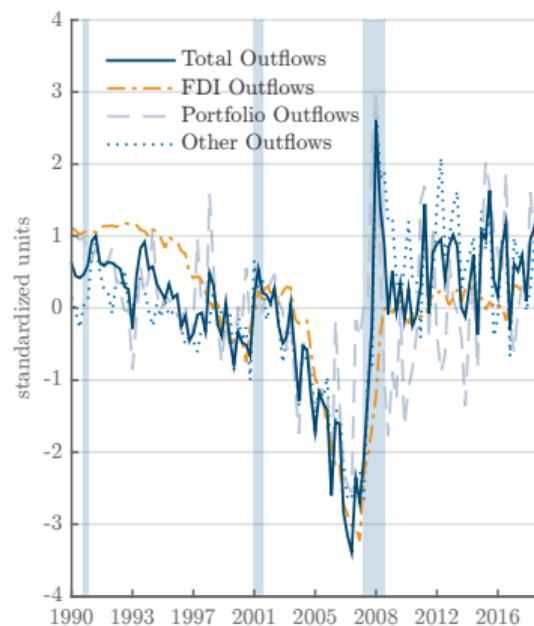
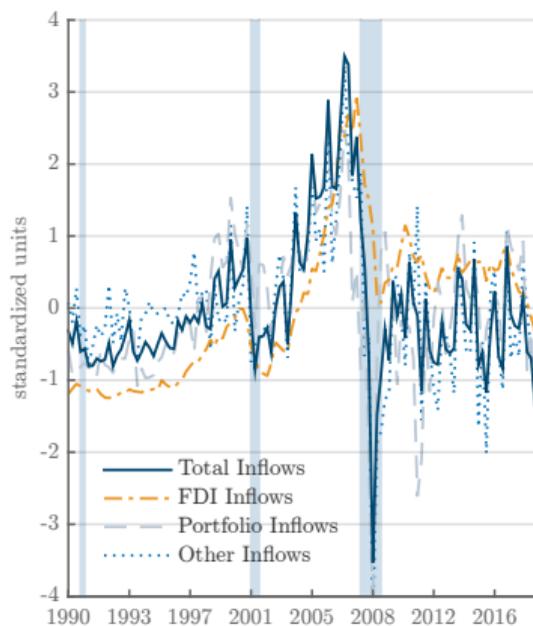
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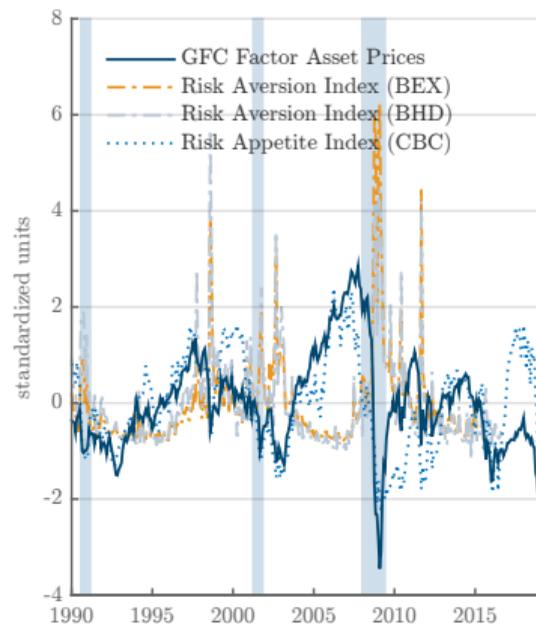
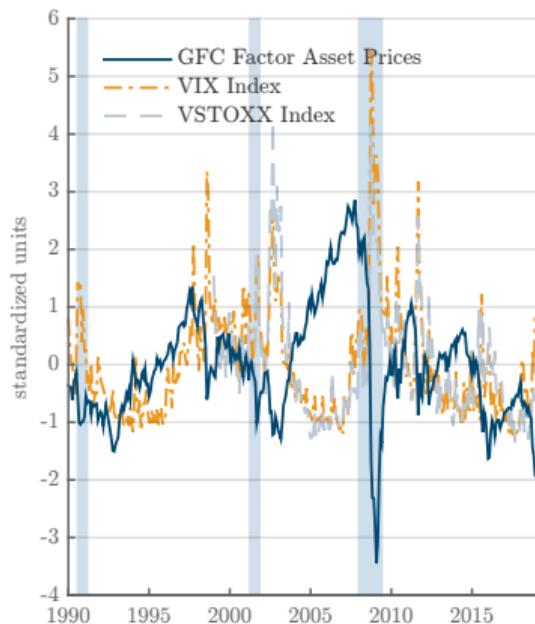
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- **Common component** = $f(\text{time-varying aggregate risk aversion})$

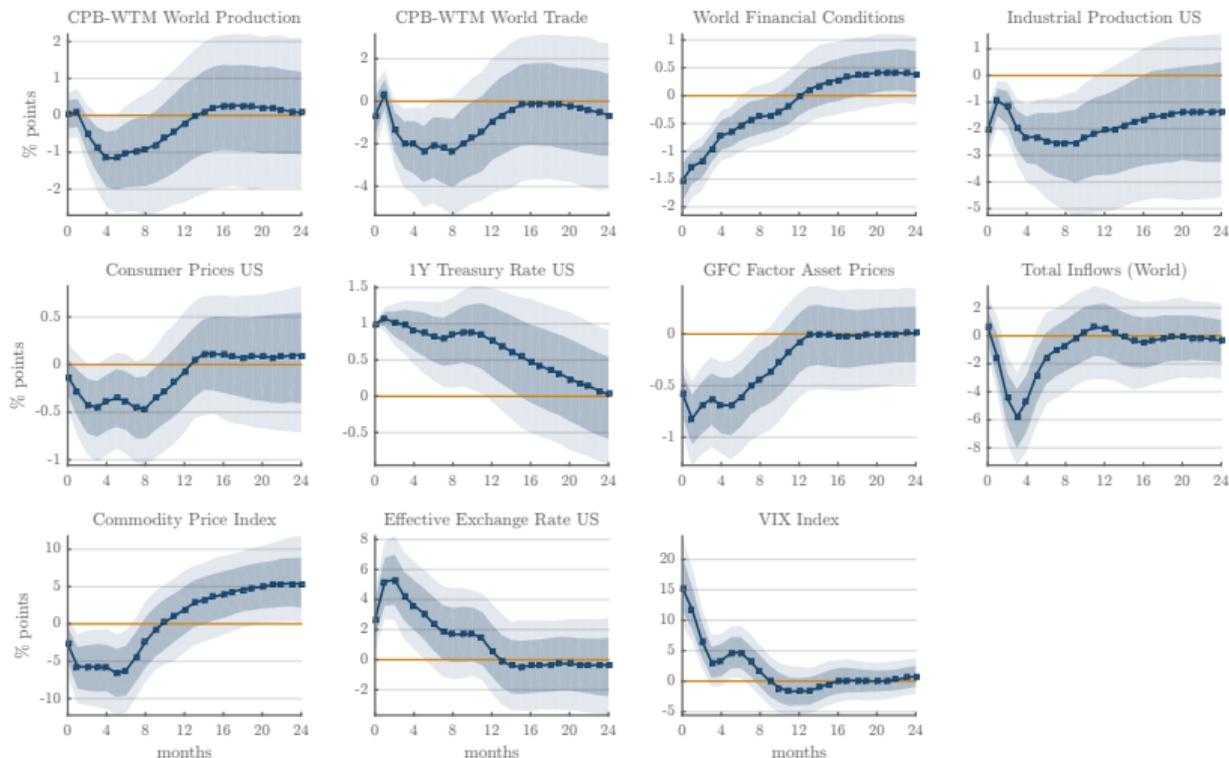
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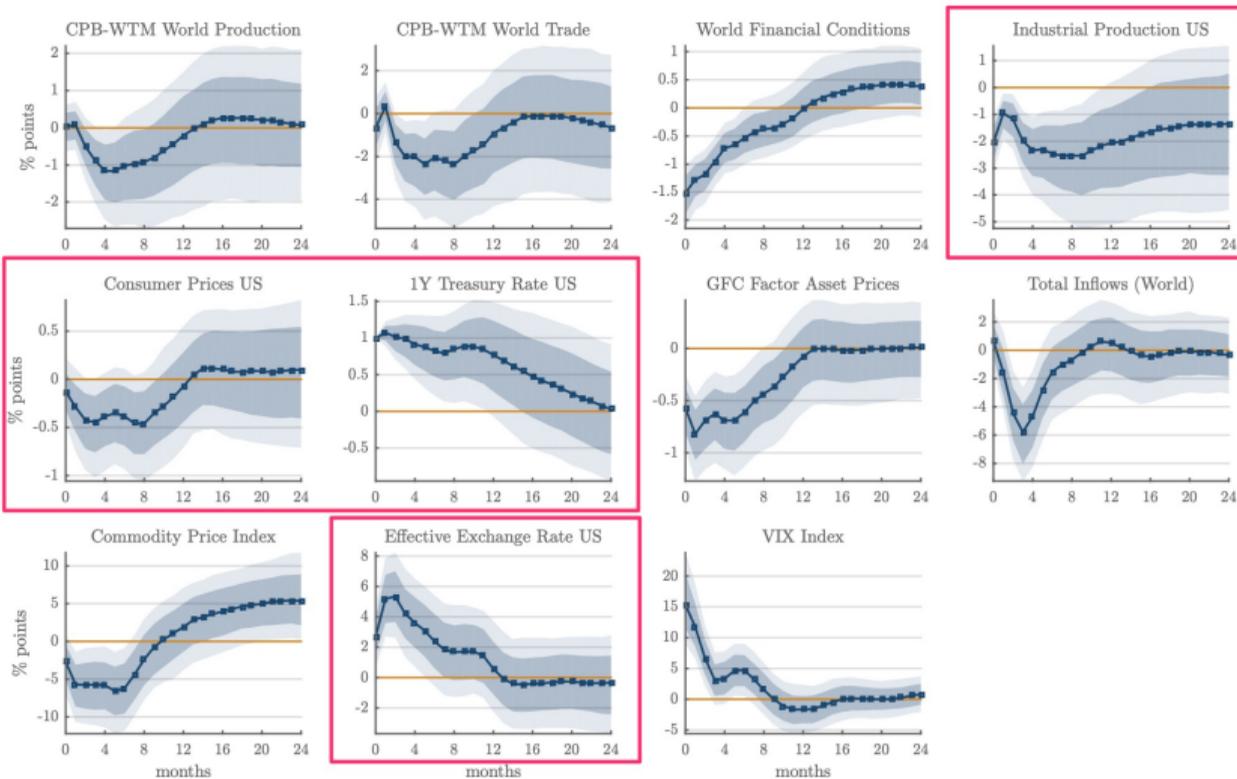
Specific role for MP: Coimbra & Rey (forth.)

GLOBAL TRANSMISSION OF US MP



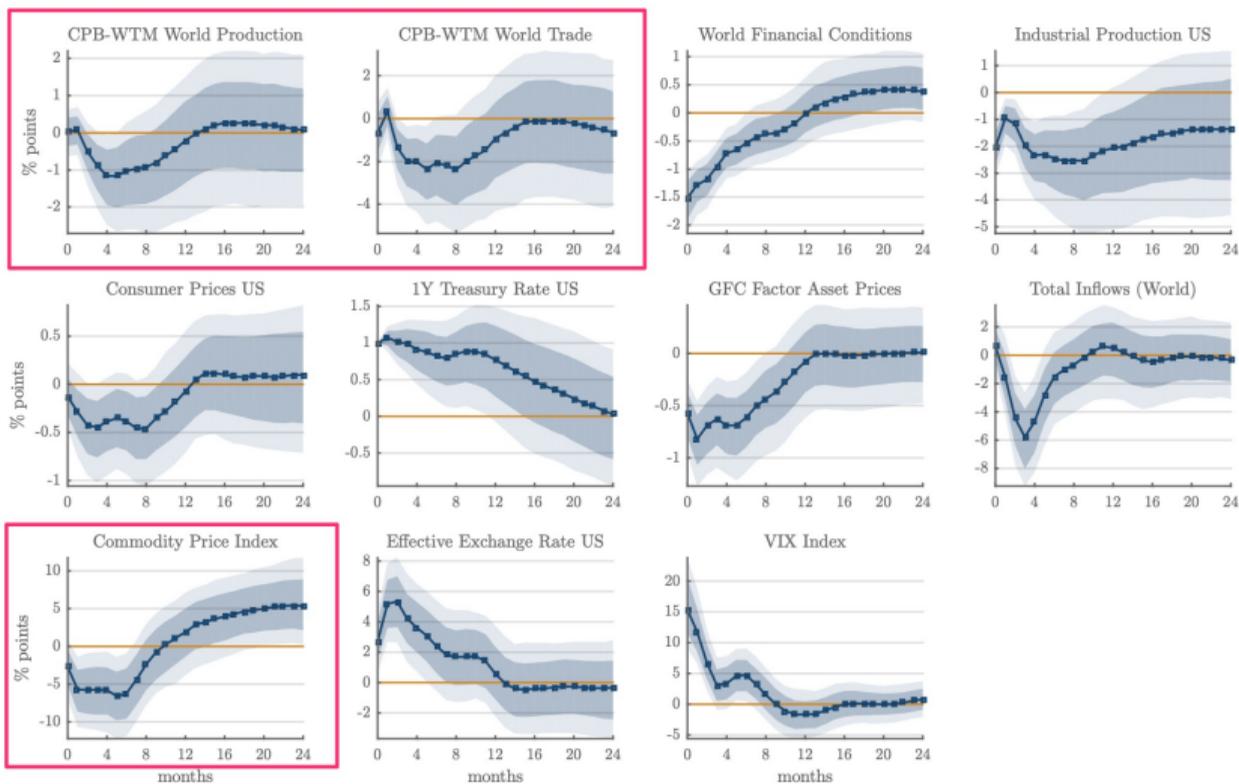
Median IRFs, 68% & 90% posterior credible sets, 1991:2018.

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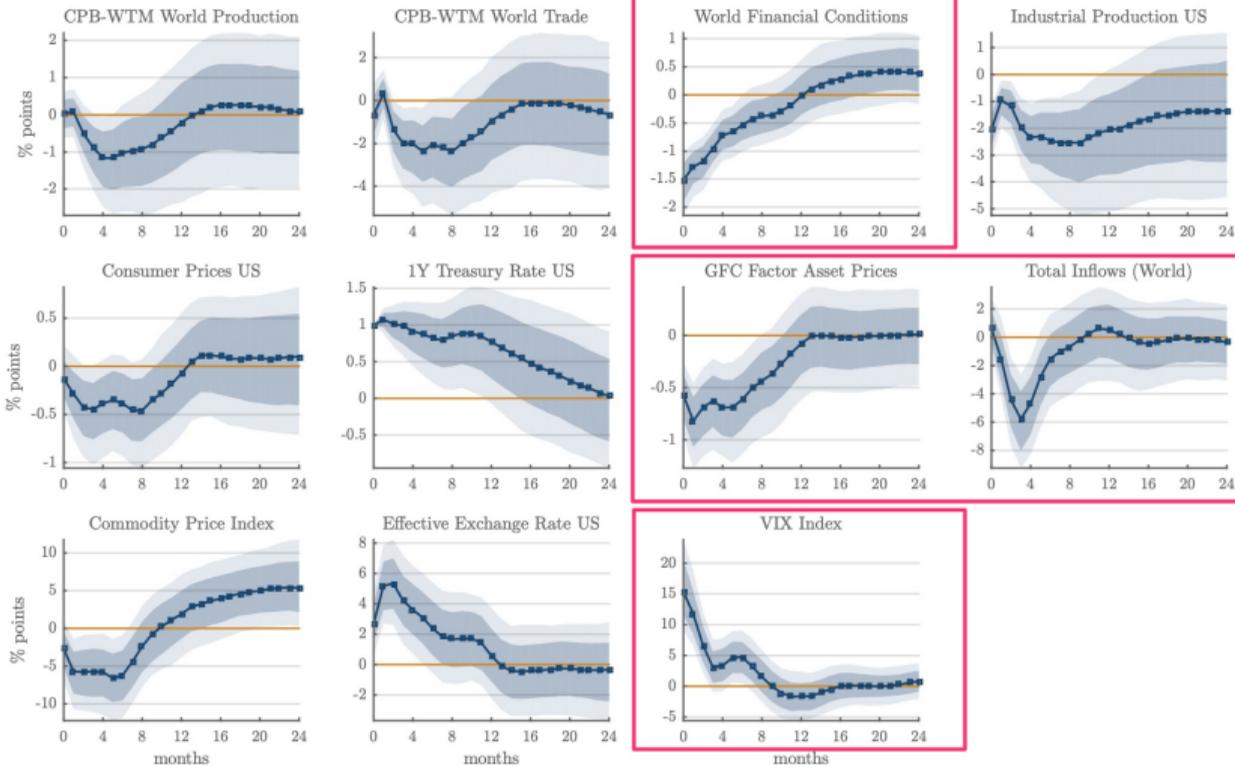
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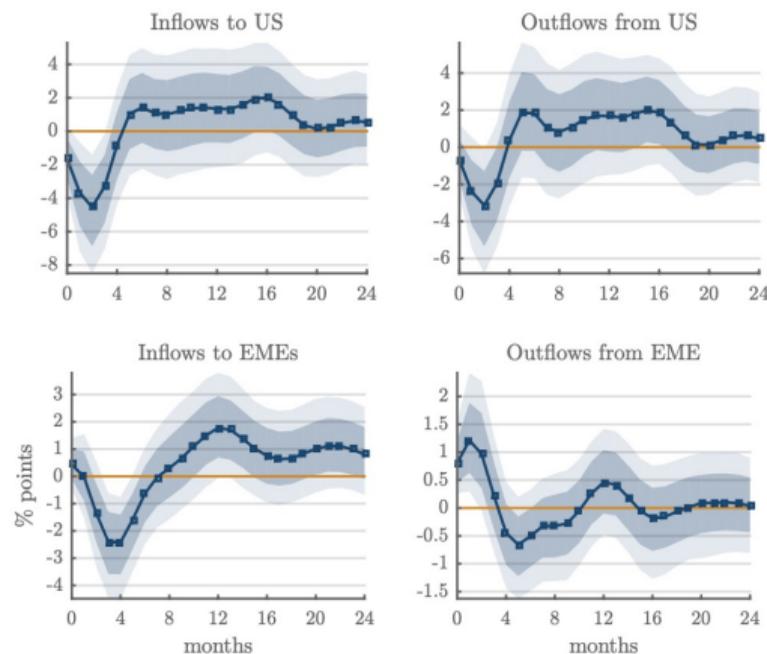
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- And additional vulnerabilities for EMEs



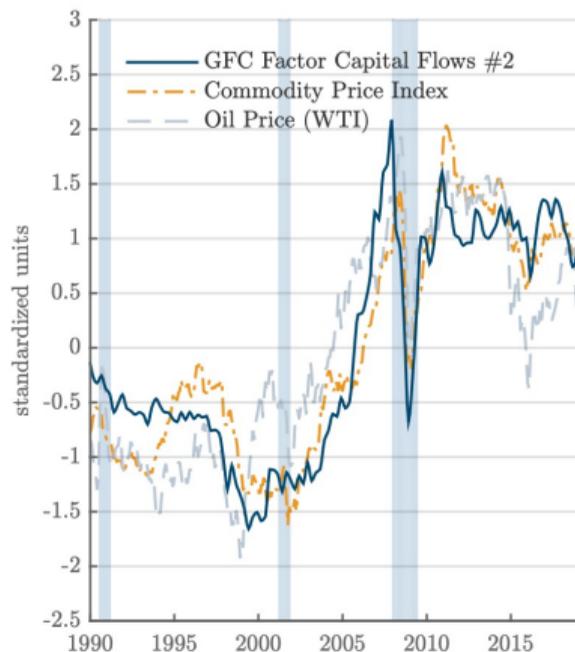
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DIMENSIONS OF GLOBAL COMOVEMENTS #2:
GLOBAL TRADE/COMMODITY CYCLE & CHINESE MP TRANSMISSION

GFC IS NOT THE ONLY GLOBAL CYCLE

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1. **Large commonality between capital flows, cmdy prices, global trade** [Davis et al. (2019)]
2. Emergence of China



EVOLUTION OF THE PBoC's MP

- ▶ **Objectives:** stable inflation, growth/employment, currency [Ma & He (2020), Wu & Li (2016)]
- ▶ **Achieved through price and quantity policy instruments** [Huang, Ge & Wang (2020)]
- ▶ From central planning to interest rate liberalisation:
 - Bank loans quota, benchmark lending and deposit rates prior to 2000
 - Official shift to M2 growth in 2000
 - Market rates after the GF Crisis, SHIBOR and interbank repo [Fernald, Spiegel & Swanson (2014)]
 - PBoC's loan prime rates (LPR) from 2019

IDENTIFYING CHINESE MONETARY POLICY SHOCKS

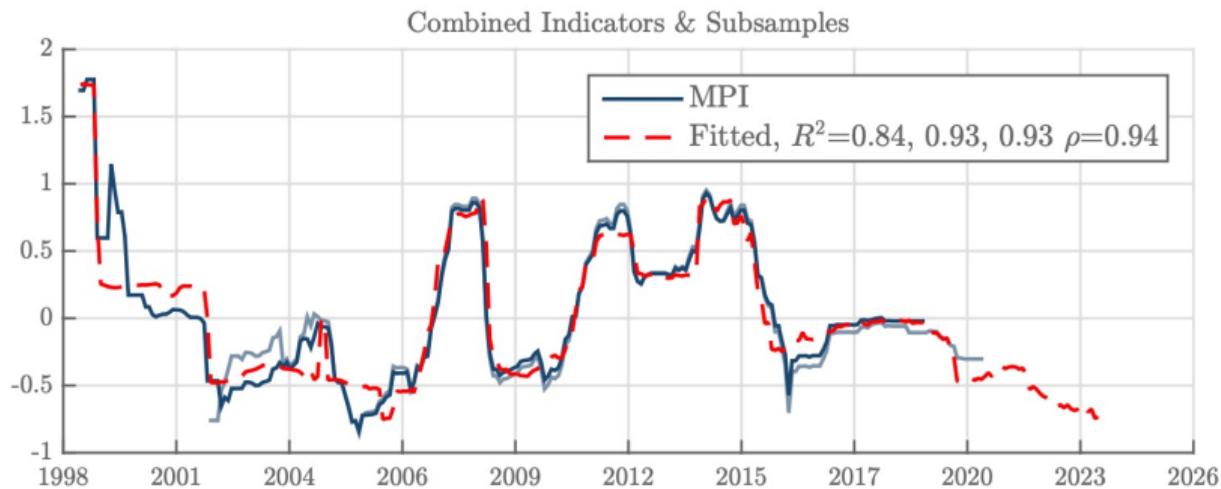
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- Combines prices & quantities (loans, M2, loan & deposit rates with time-varying weights)
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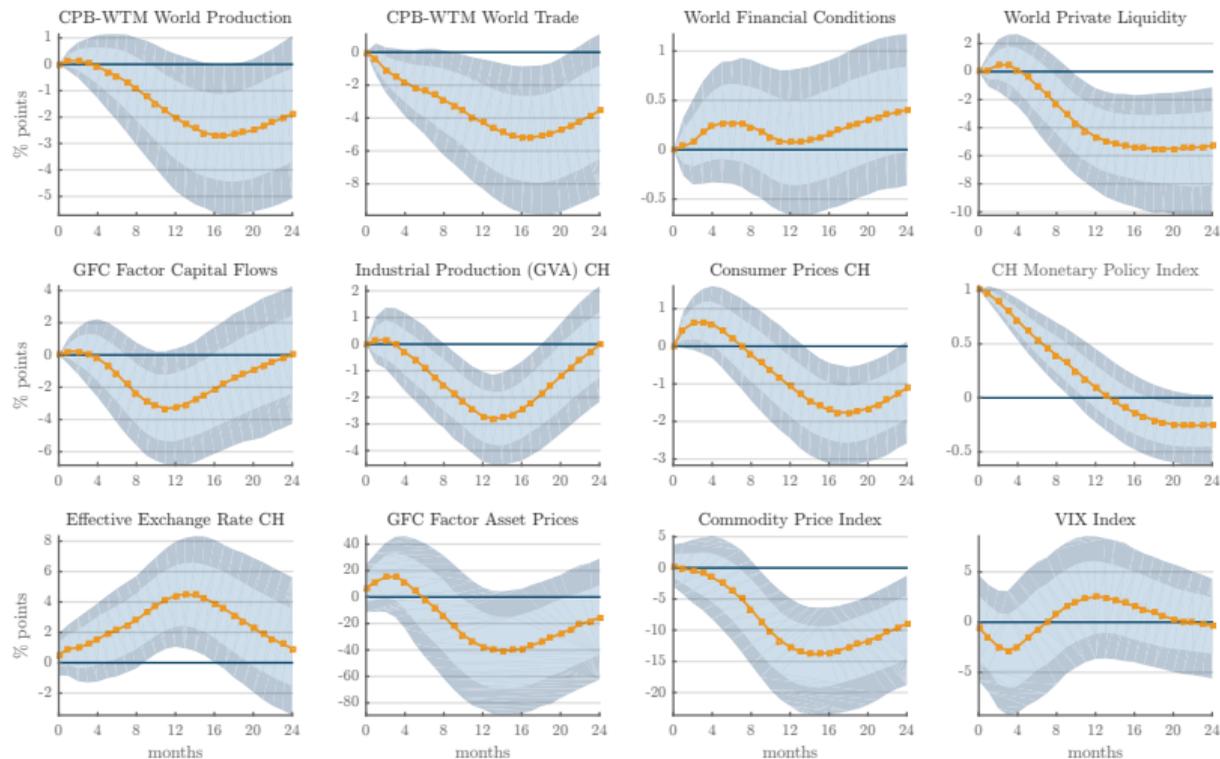
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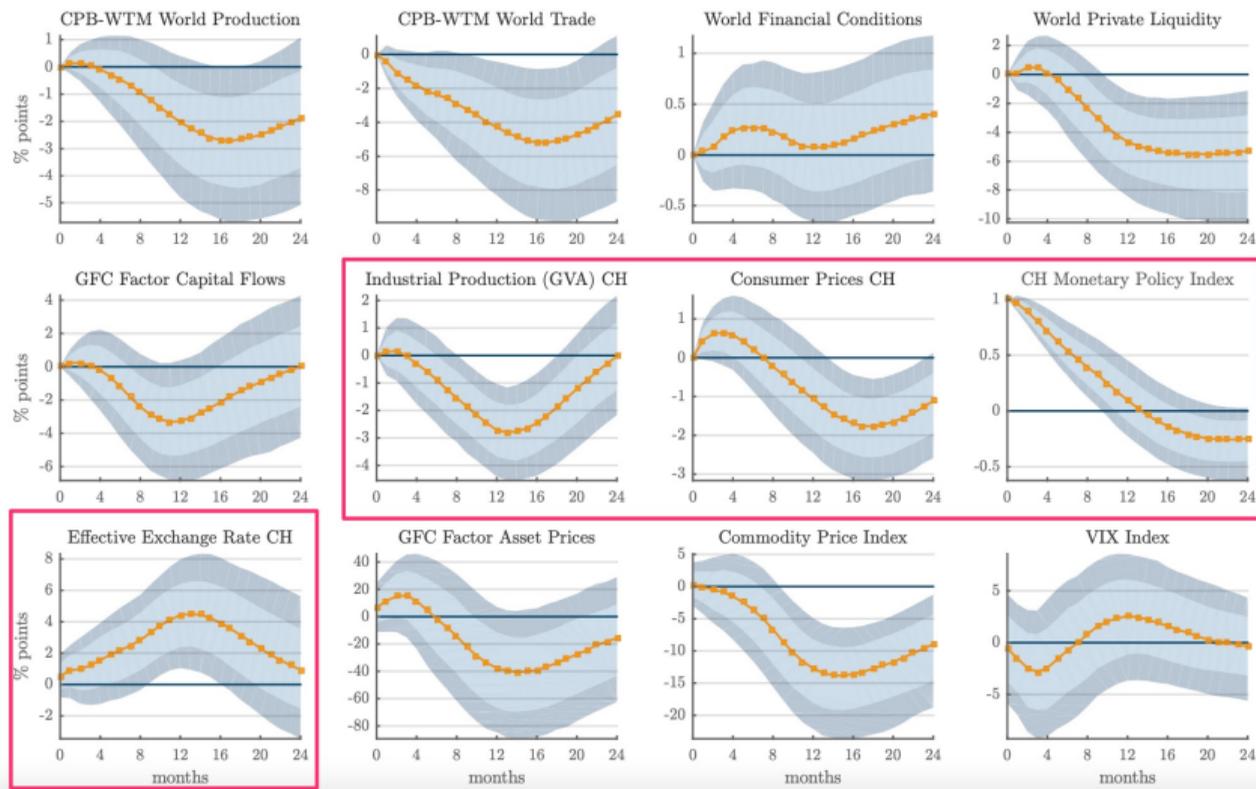


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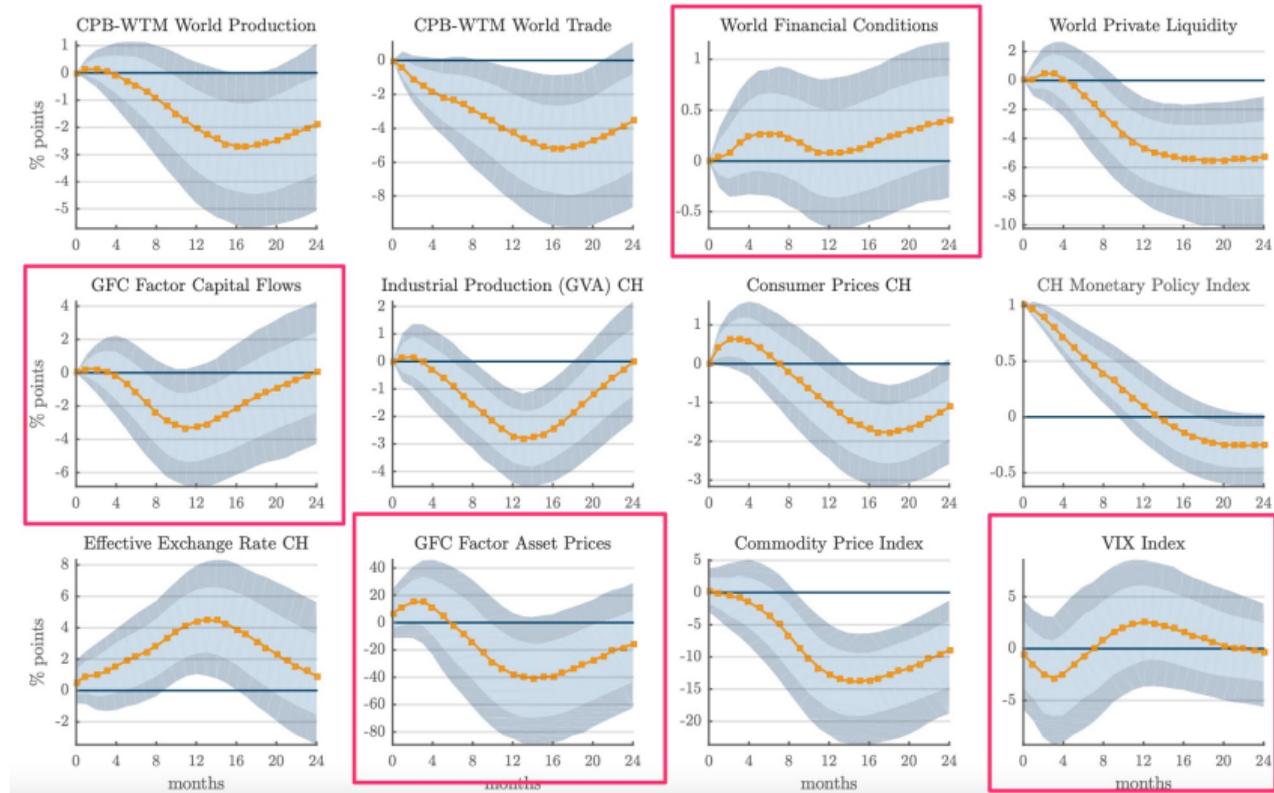
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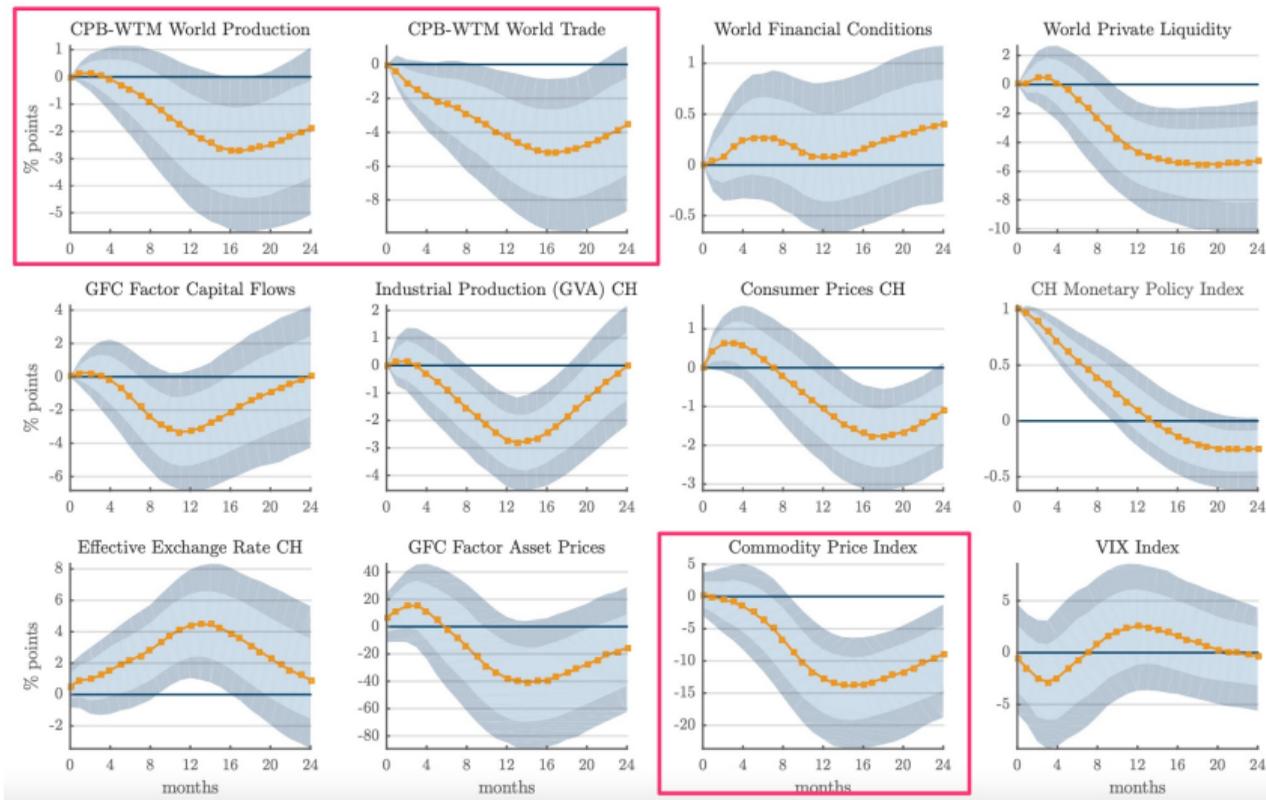
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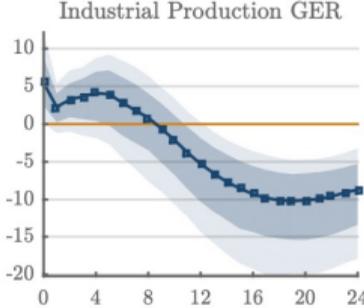
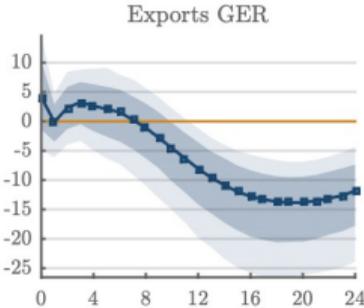
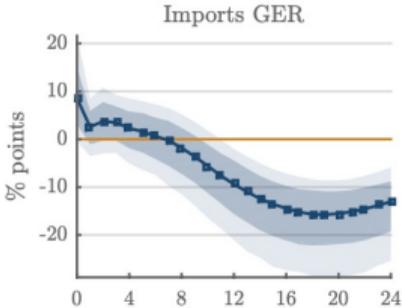


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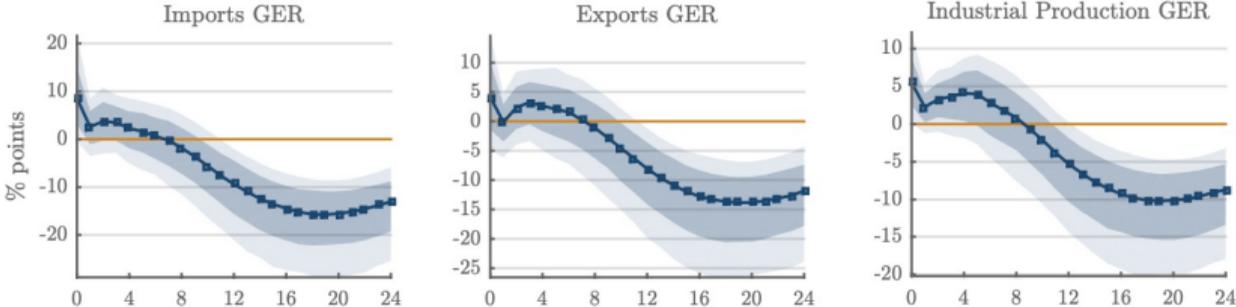
SPECIAL EXPOSURE

- AE with important manufacturing sector

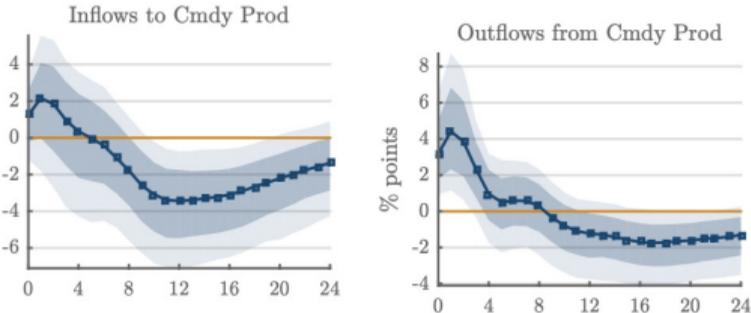


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- Fin'l conditions of commodity producers



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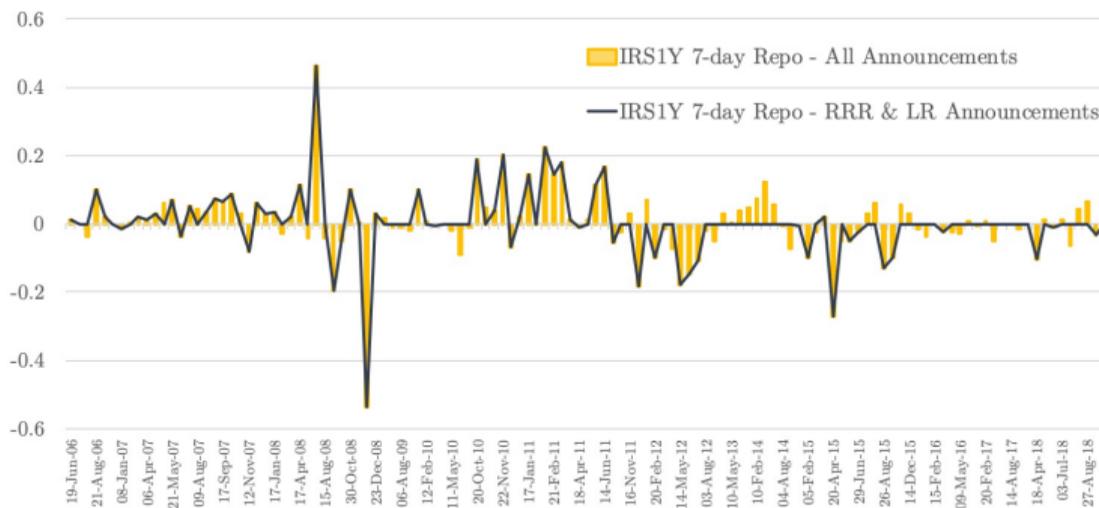
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- Daily changes in 1-year interest rate swap (IRS) on interbank 7-day repo
- Announcements: lending rates (LR), reserve requirements (RRR), FX, MPR

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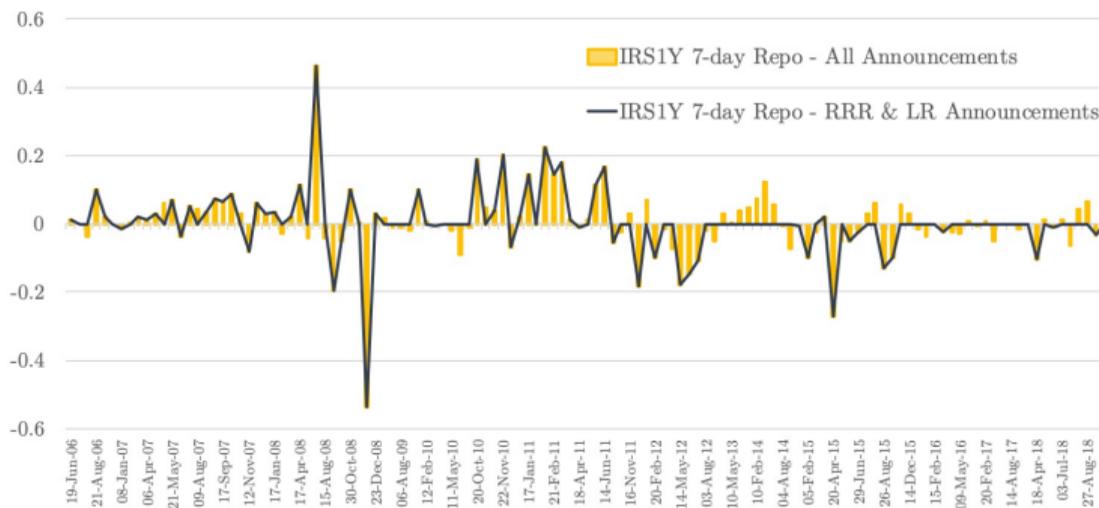
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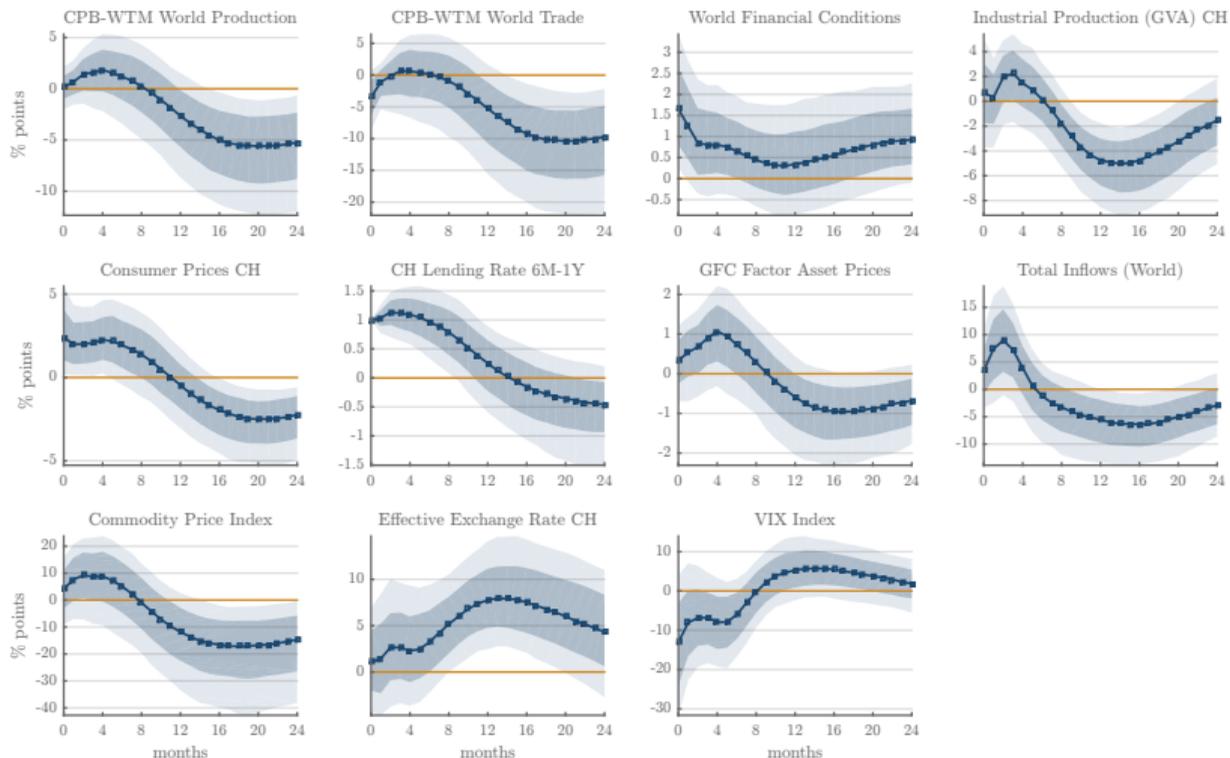
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- Largely predictable, still many caveats...

GLOBAL TRANSMISSION OF CHINESE MP

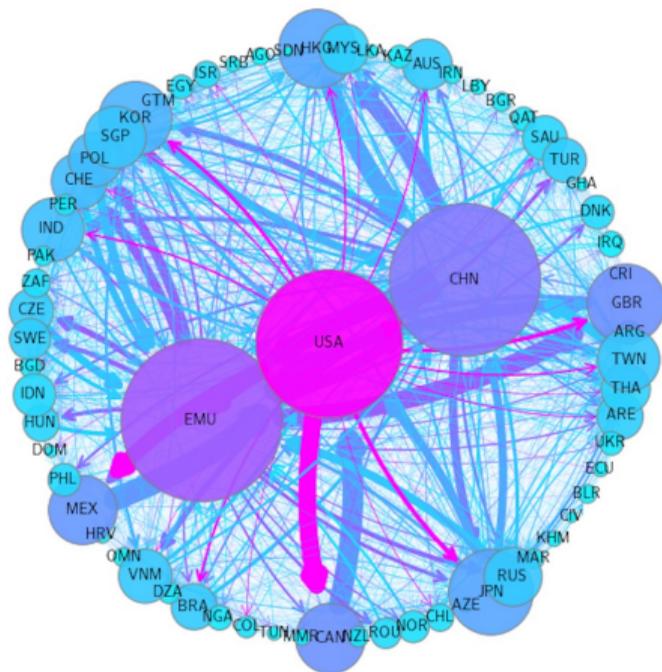
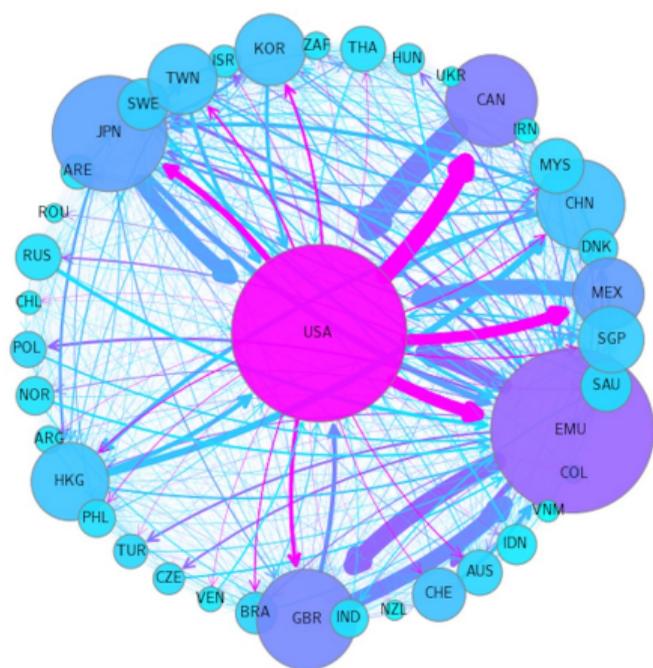


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CONCLUSIONS

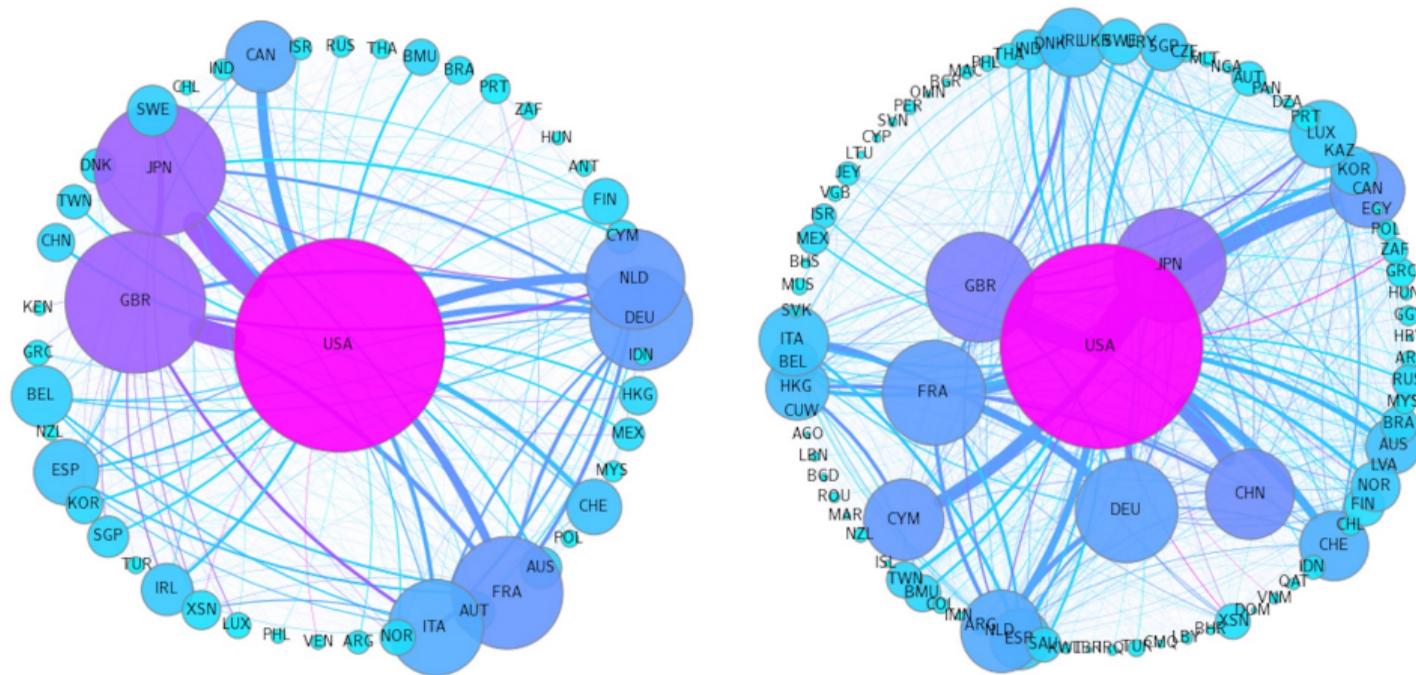
- ▶ Global comovements enable and amplify int'l transmission of MP shocks
 1. **Global Financial Cycle:** asset prices, capital flows, risk, leverage
 2. **Global Trade & Cmdy Cycle:** commodity prices, capital flows, trade
- ▶ US MP most powerful at influencing global financial conditions
- ▶ Integrated production networks & GVC new pieces on the chessboard
 - Different channels, equivalent broad reach
 - Rising influence of Chinese policies
- ▶ **Coming Next..**
 - Integrated empirical framework for joint dynamics: GVAR [Cesa-Bianchi, Pesaran & Rebucci (2012); Dees and Galesi (2019)] Networks in VARs [Mlikota (2023)]
 - Account for evolution of network structures

GOING FORWARD: EVOLUTION OF NETWORKS: EXPORTS, 2000 vs 2019



- Merchandise trade, excludes services
- IMF's Direction of Trade Statistics (DOTS)

GOING FORWARD: EVOLUTION OF NETWORKS: PF A + L, 2000 vs 2018



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- Coppola, Maggiori, Neiman & Schreger (2021) + IMF's Coordinated Portfolio Investment Survey (CPIS)