

**The Global Financial Cycle and the Dollar,  
Euro and RMB**

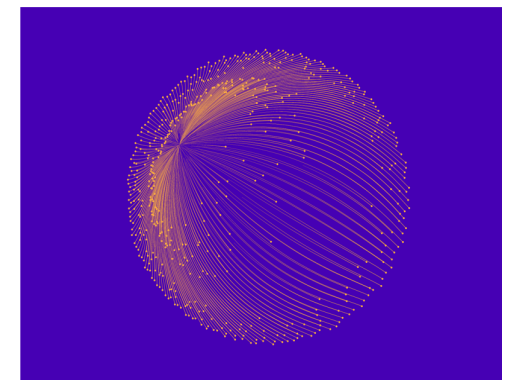
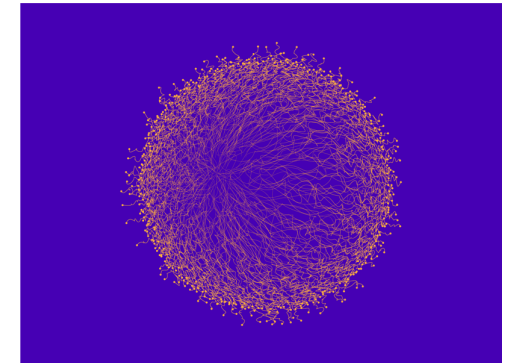
**Helsinki Graduate School of Economics  
5<sup>th</sup> Anniversary Seminar**

Hélène Rey

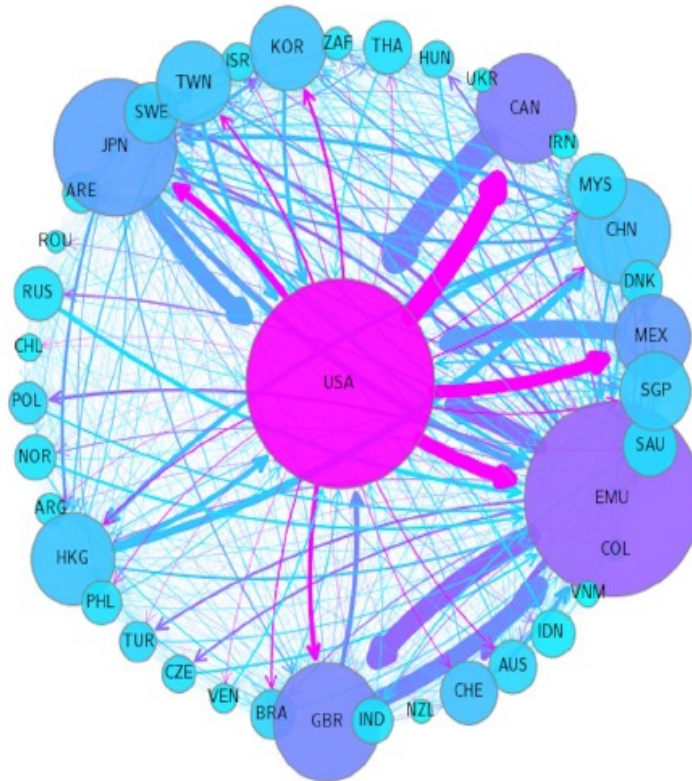
London Business School and CEPR

## This Talk

1. World Networks and Dollar, Euro and RMB
2. The Global Financial Cycle
3. Central Banks' Influences

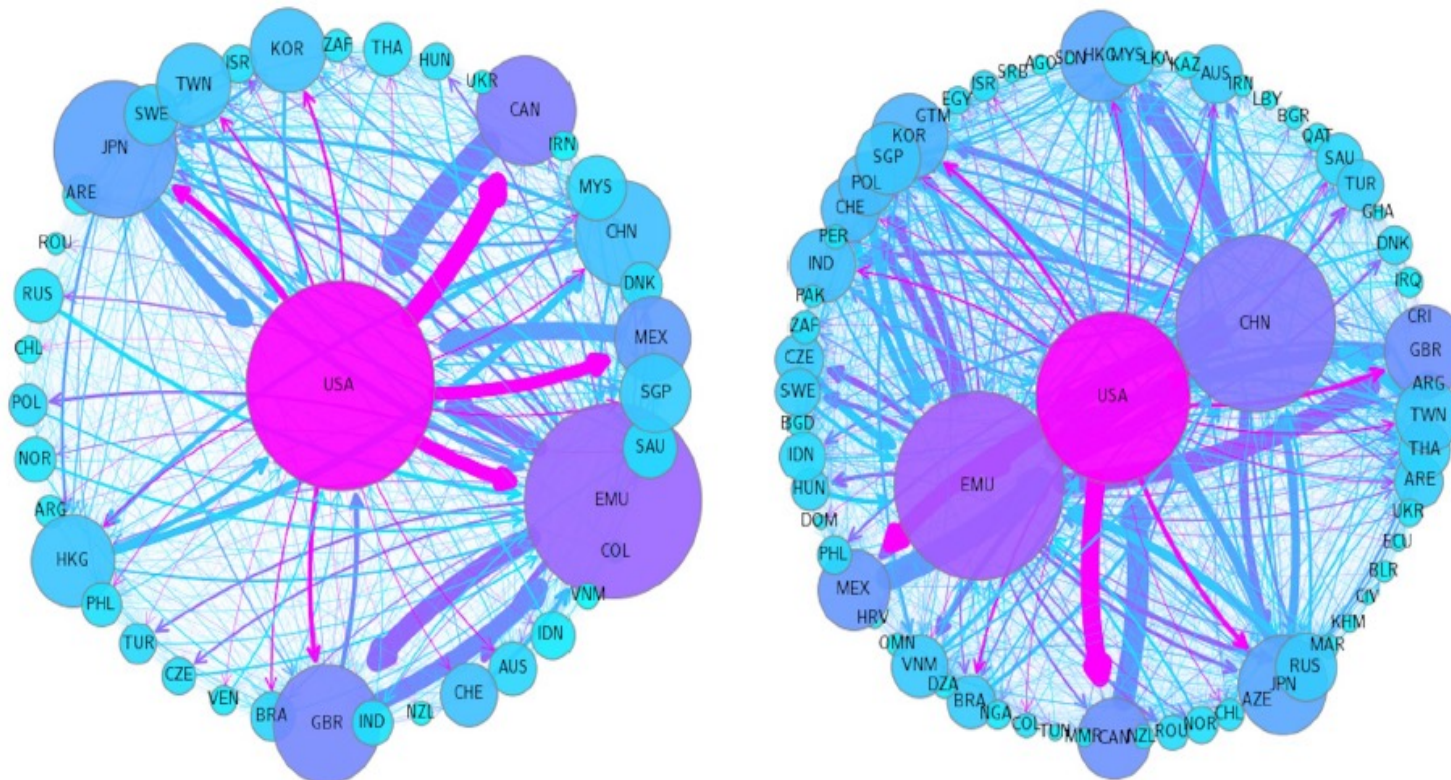


## TIME VARIATION IN NETWORKS: TRADE (EXPORTS), 2000 vs 2019



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

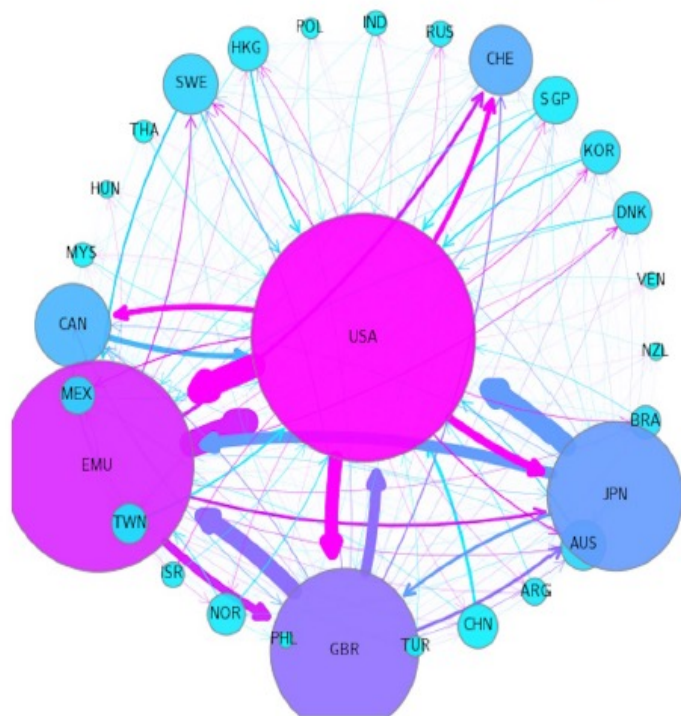
## TIME VARIATION IN NETWORKS: TRADE (EXPORTS), 2000 vs 2019



➤ Tripolar

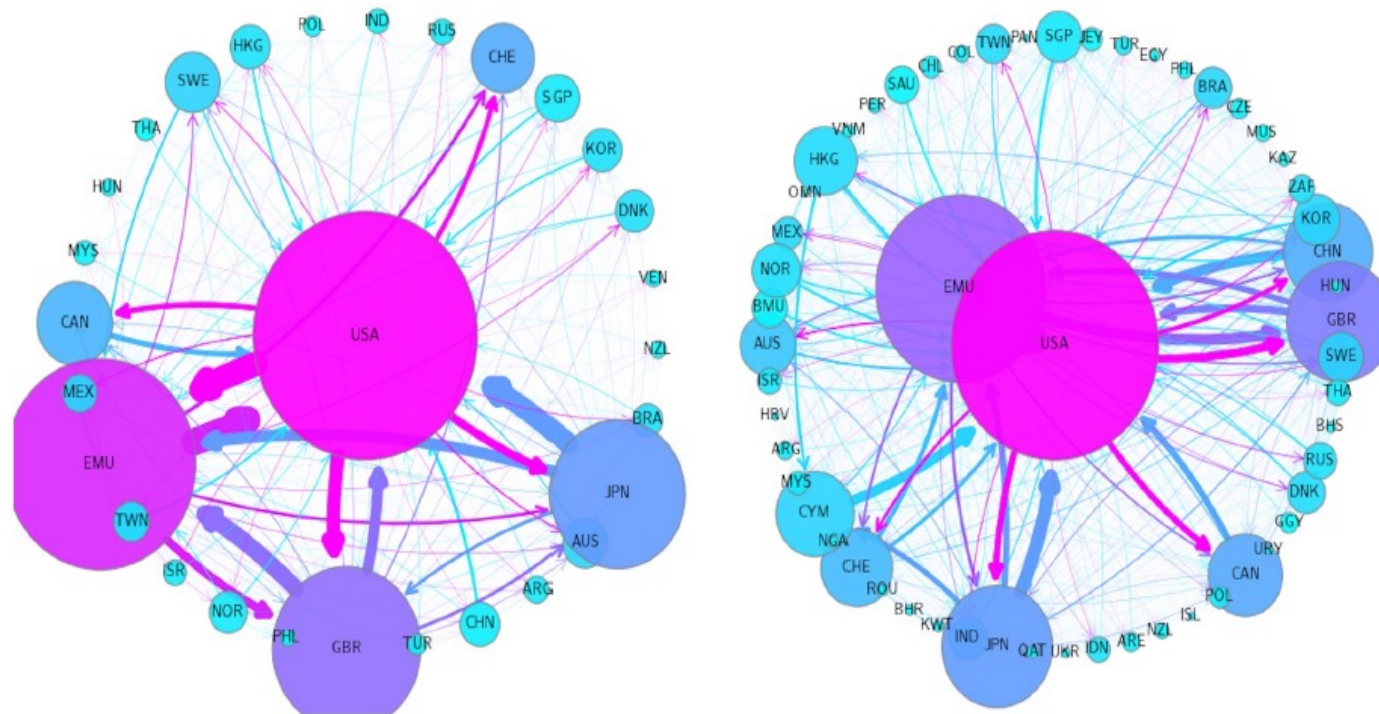
- Merchandise trade, excludes services
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## TIME VARIATION IN NETWORKS: FINANCE (PF ASSETS), 2000 vs 2018



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

## TIME VARIATION IN NETWORKS: FINANCE (PF ASSETS), 2000 vs 2018

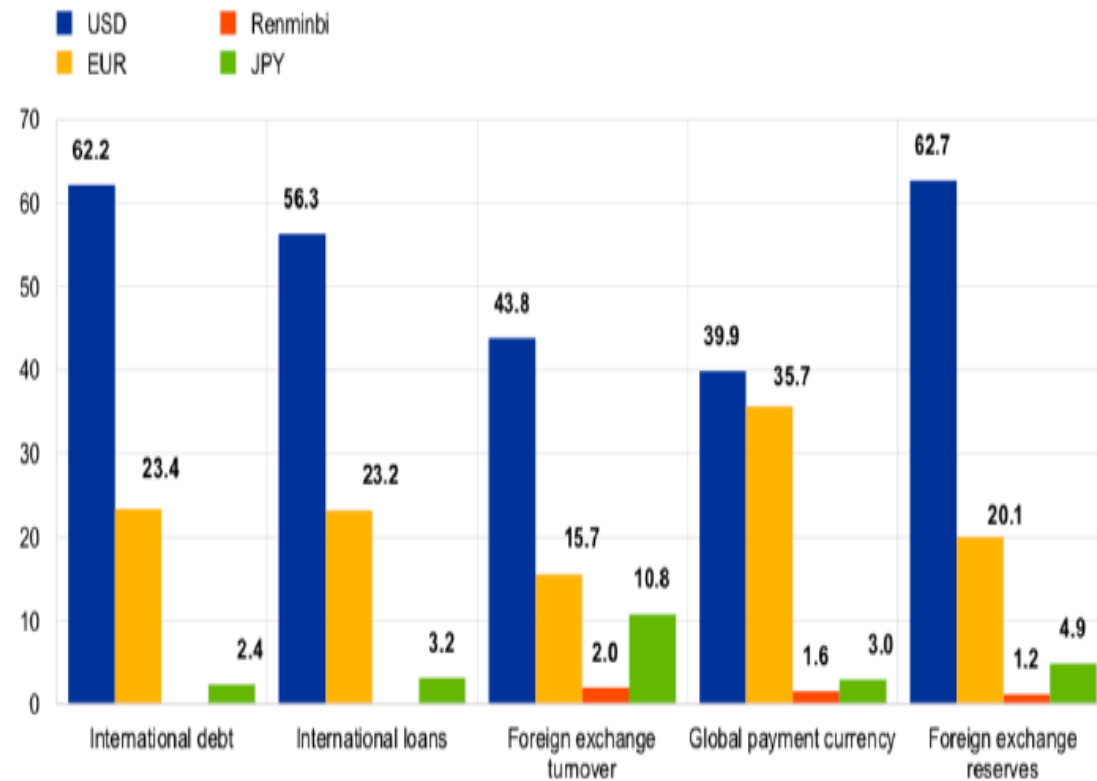


➤ Unipolar

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

# Dollar Hegemony, Euro Regional Currency

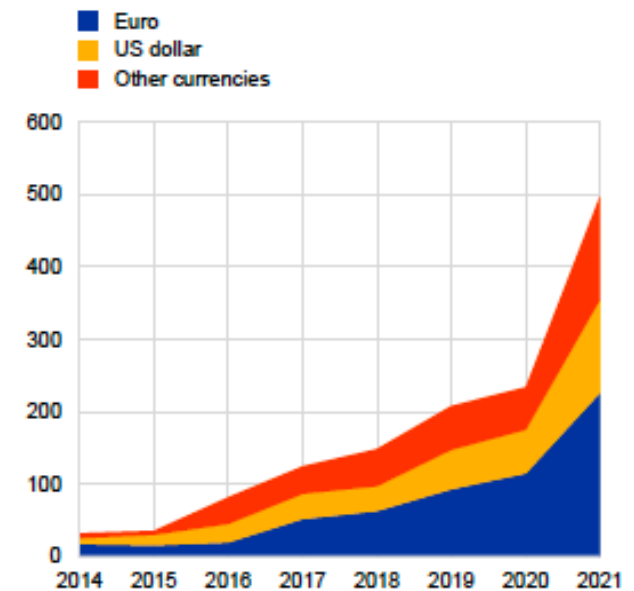
(percentages)



Source: Gourinchas, Rey and Sauzet (2019)

A (small) exception:  
Green bonds (Euros)

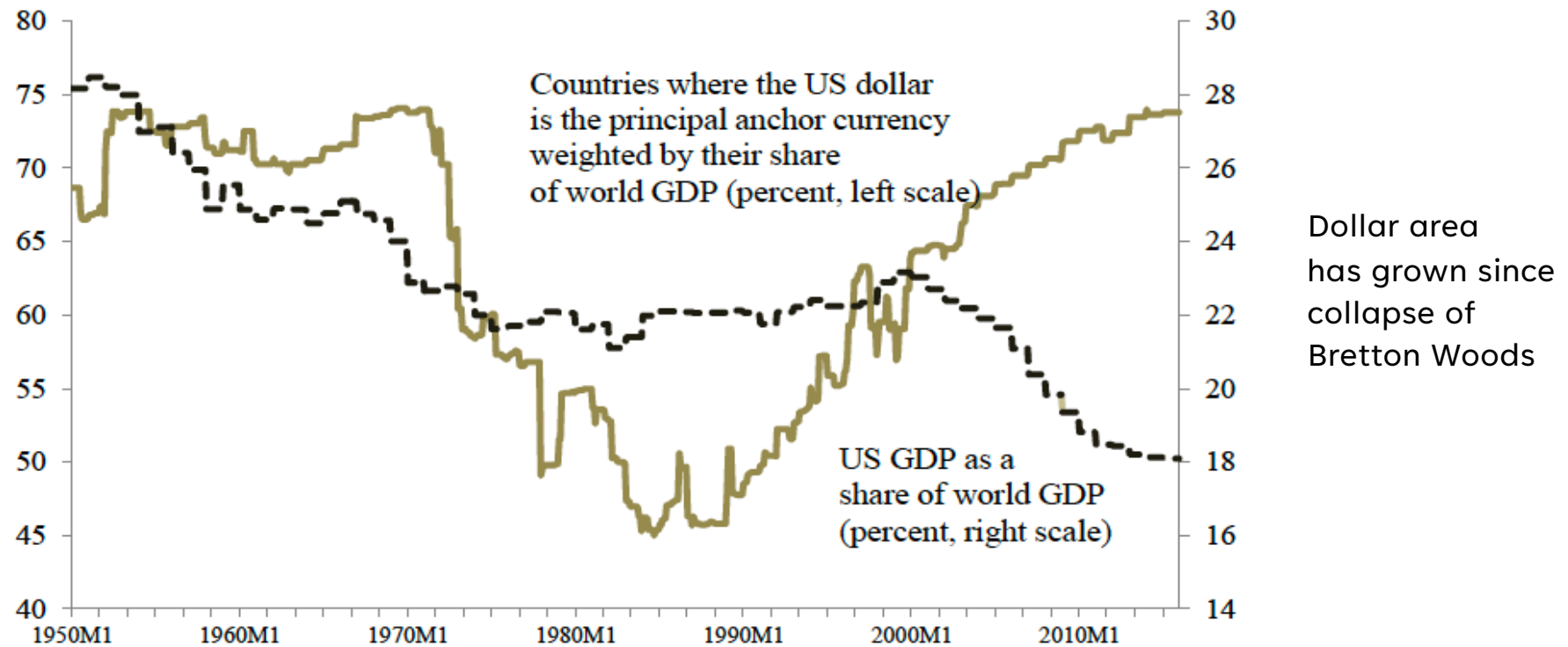
(USD billions)



Currency composition of global green bond issuance in 2021

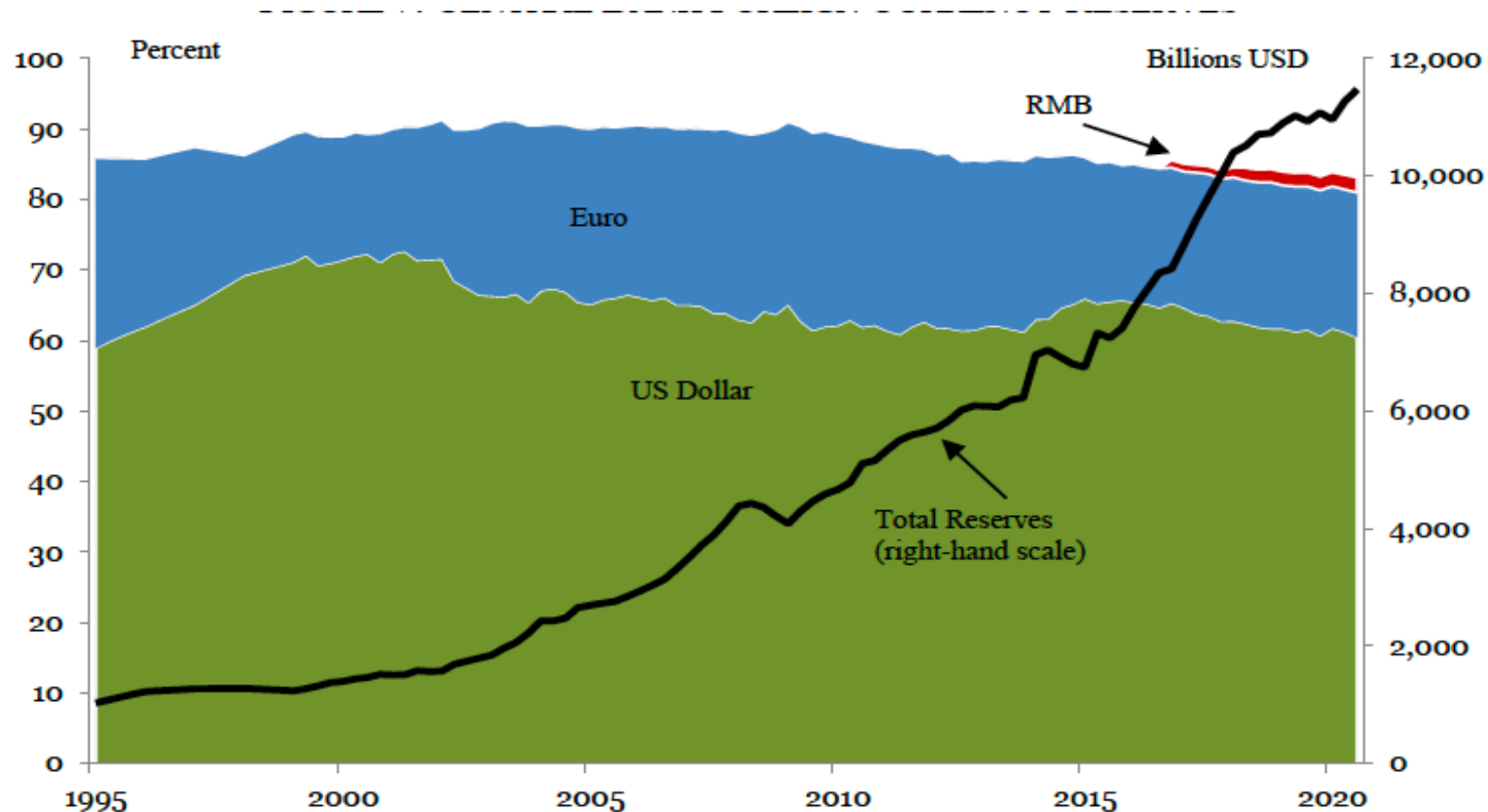
Source: ECB

## Dollar Area: Countries fixing their exchange rates to the \$



Source: Ilztekhi, Reinhart and Rogoff (2018)

## Central banks: Dollar Reserves, Euro Reserves

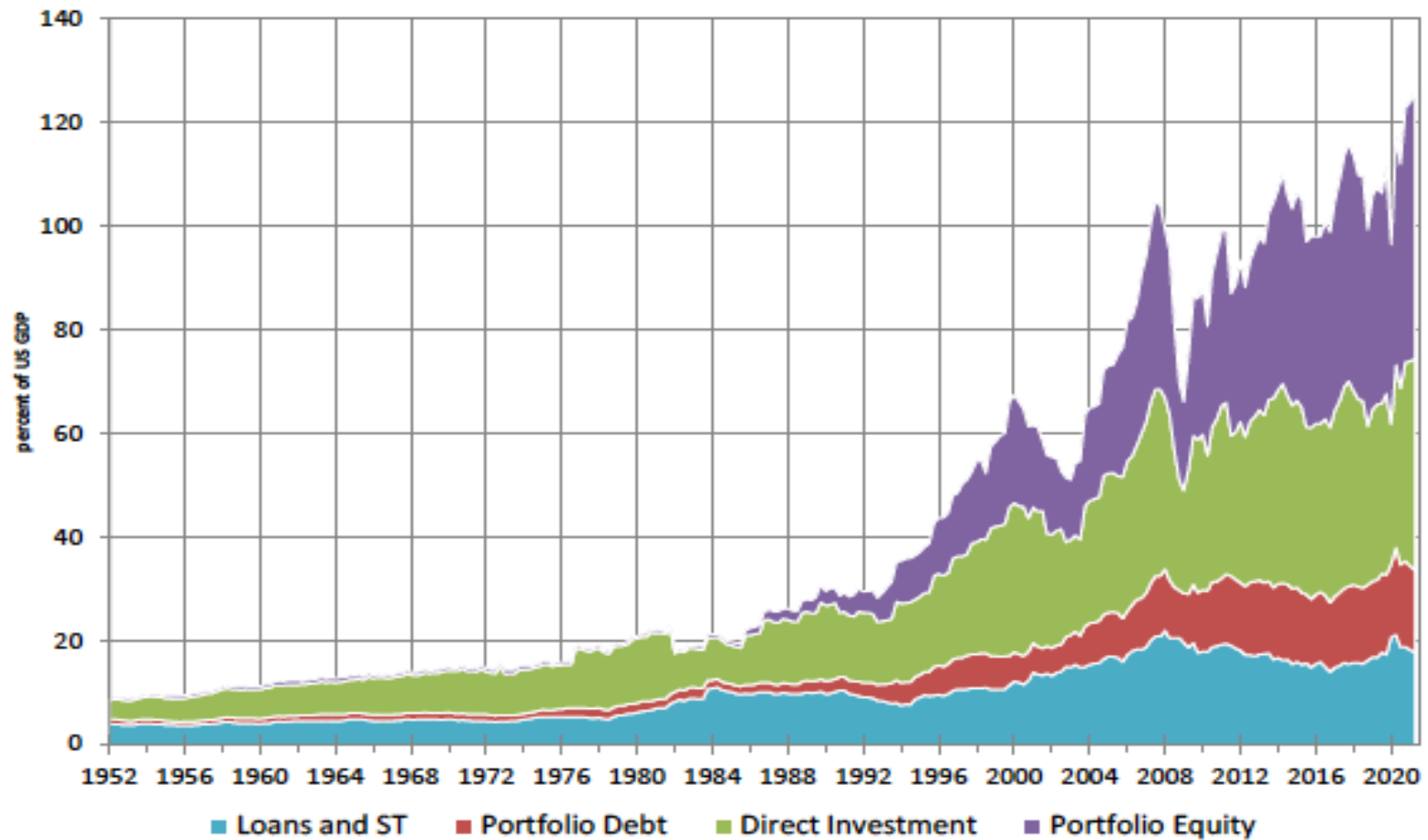


Note: The solid line shows the total stock of world central bank reserves in billions of US dollars (right-hand scale). The shaded areas show the share of central bank reserves by currency denomination in percent of total (left-hand scale). Sources: Ilzetzi, Reinhart and Rogoff (2020a), IMF Cofer and the authors.

## A SPECIAL ROLE FOR THE US DOLLAR

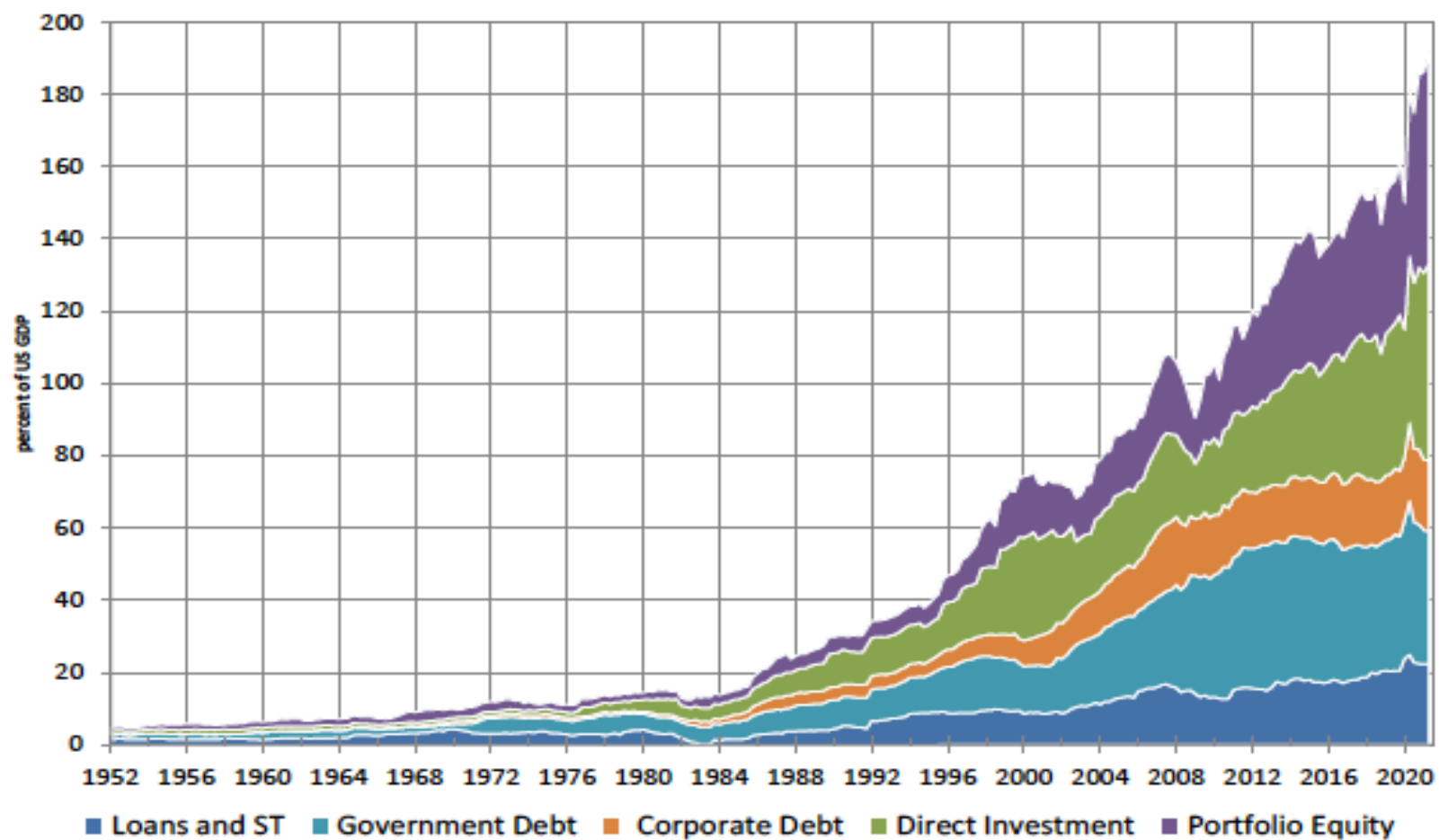
- **Dominance of the USD in International Monetary & Financial Systems**
  - **Anchor currency**
  - **International financial transactions and trade invoicing**
  - **Reserve currency and safe asset**
- **Euro area does not have a “safe asset” [doom loops]**

## US external assets: 1952-2022



Source: Gourinchas Rey and Sauzet (2020)

## US external liabilities: 1952-2022



Source: Gourinchas Rey and Sauzet (2020)

## A SPECIAL ROLE FOR THE US DOLLAR

- Dominance of the USD in International Monetary & Financial Systems
  - US as world banker and insurer
  - European [French] views
  - “Exorbitant Privilege” [De Gaulle in the 1960s]

Geopolitics



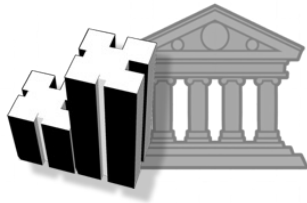
## THE GLOBAL FINANCIAL CYCLE

Strong **co-movement of financial aggregates on a global scale**: asset prices, capital inflows and outflows, credit, leverage, risk appetite co-move (Rey (2013)).

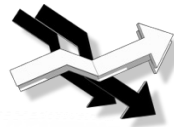
### Why does it matter?

- **Financial Stability**: Historically, and across countries, excessive credit and leverage growth are among the strongest predictor of financial crises
- **Global Growth**: Financial conditions matter for growth prospects, particularly the distribution of risks around expected growth
- **Dilemma vs Trilemma**: FX regimes alone may not be enough to insulate countries from foreign shocks if monetary policy of large Central Banks is transmitted globally through financial conditions
- Need for **Macroprudential Policies** opening some space for monetary policy

## DOLLAR DOMINANCE AND GLOBAL FINANCIAL CYCLE



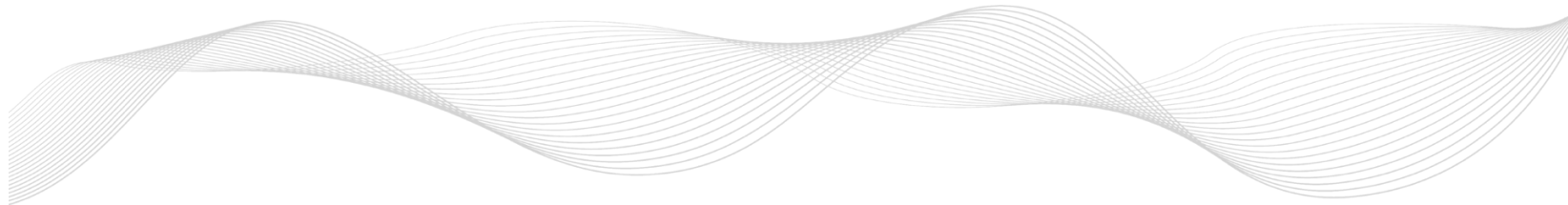
- Growth of credit and of leverage of large banks are synchronised across main financial areas



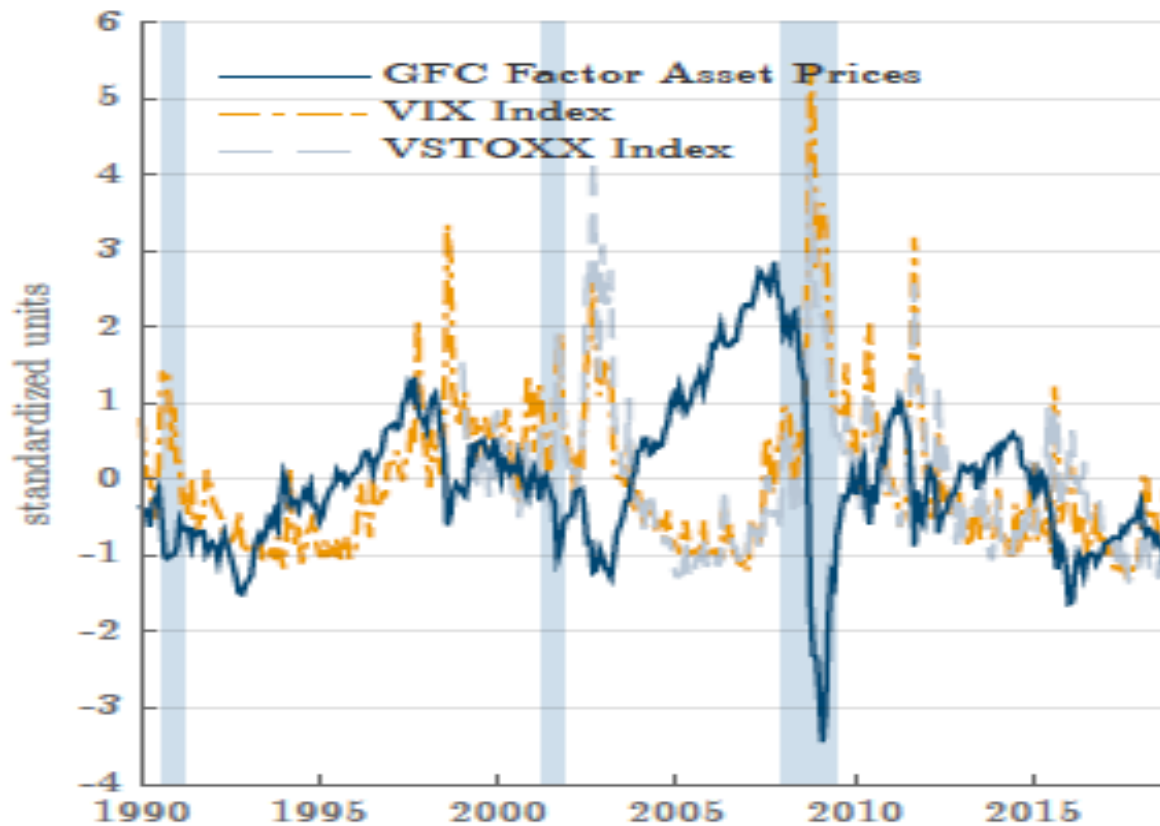
- Risky asset prices move up and down together



- Gross financial flows move together into and out of countries.

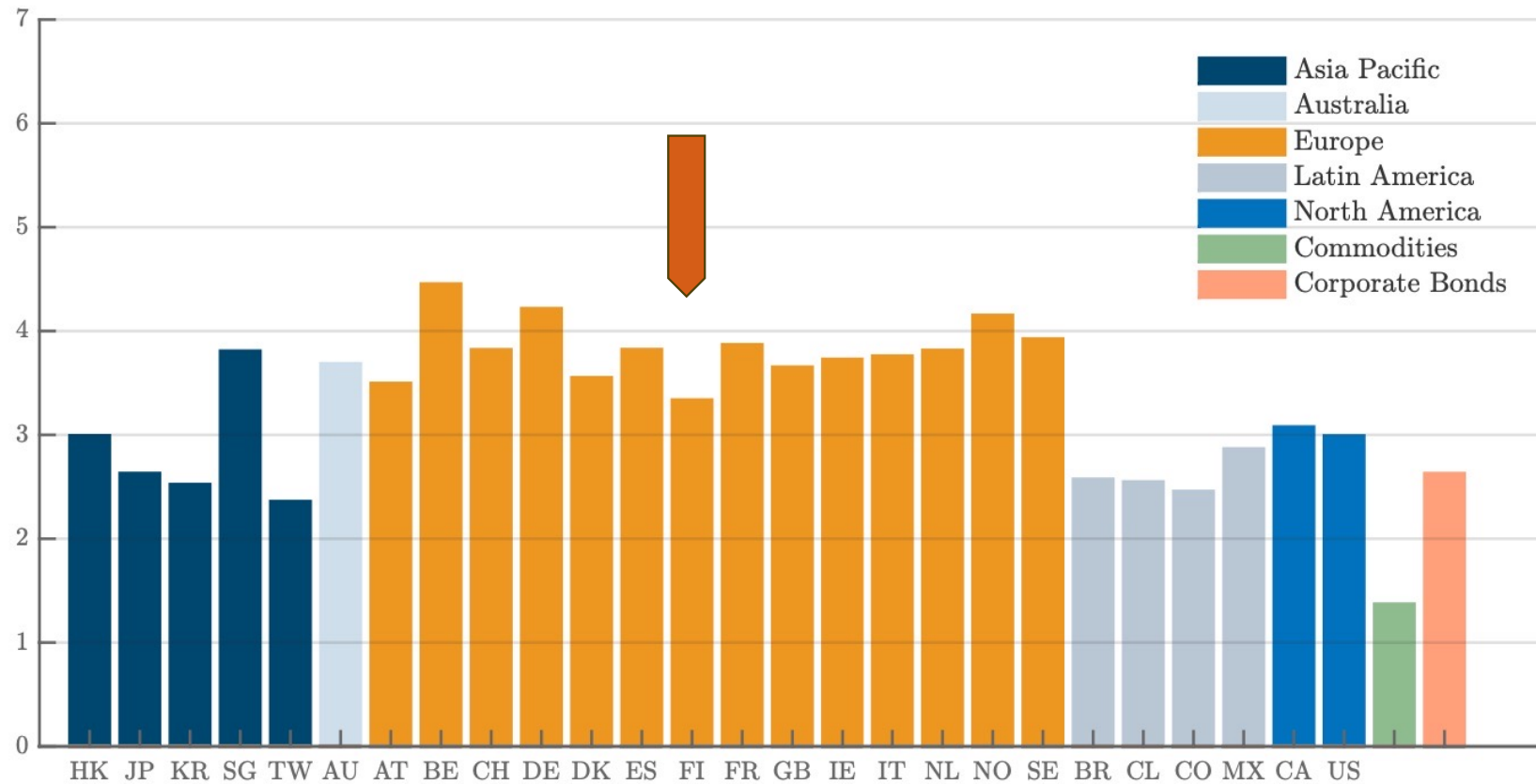


Global component in asset prices goes down with risk aversion and volatility



VIX and VSTOXX  
reflect  
volatility and risk  
(when high,  
risk aversion is high)

## Similar Sensitivity of Countries to the Global Component



*Notes:* Average factor loadings (×100) across countries and asset classes. Estimation sample: 1980:2019.

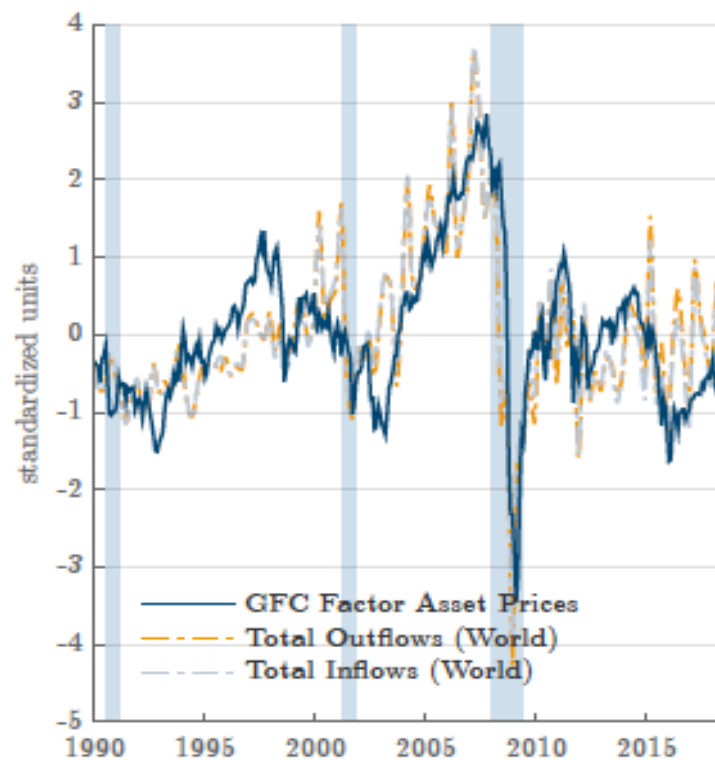
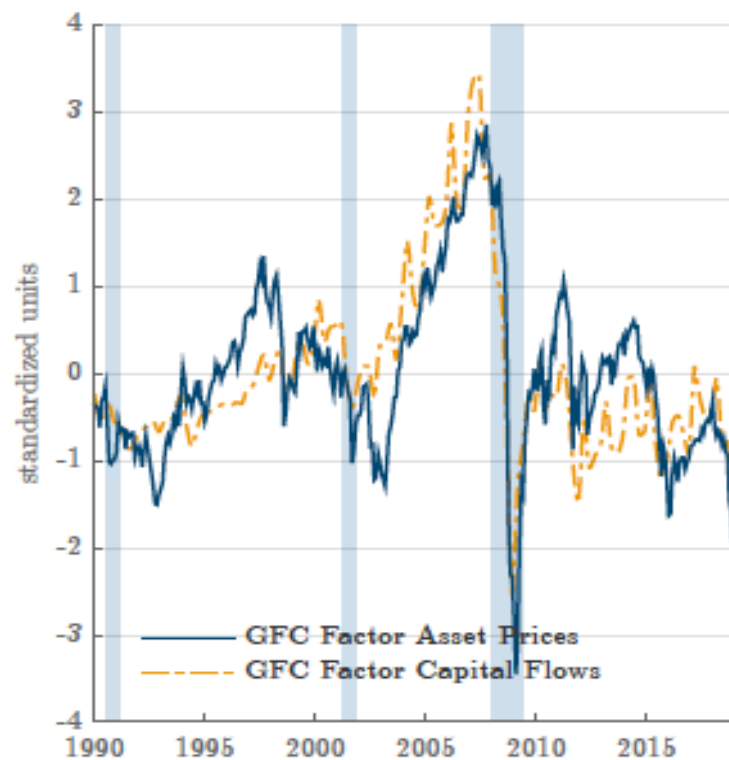
## GLOBAL FINANCIAL CYCLE: STYLISTED FACTS

### **FACT I: RISKY ASSET PRICES**

- **One global factor in world risky asset prices**
- Correlated with global risk appetite
- Explains about a quarter of the variance of risky asset prices traded globally



Global factor in asset prices and First Global Factor in flows are highly correlated



## Global Financial Cycle

Source: Miranda-Agrippino and Rey (2022)

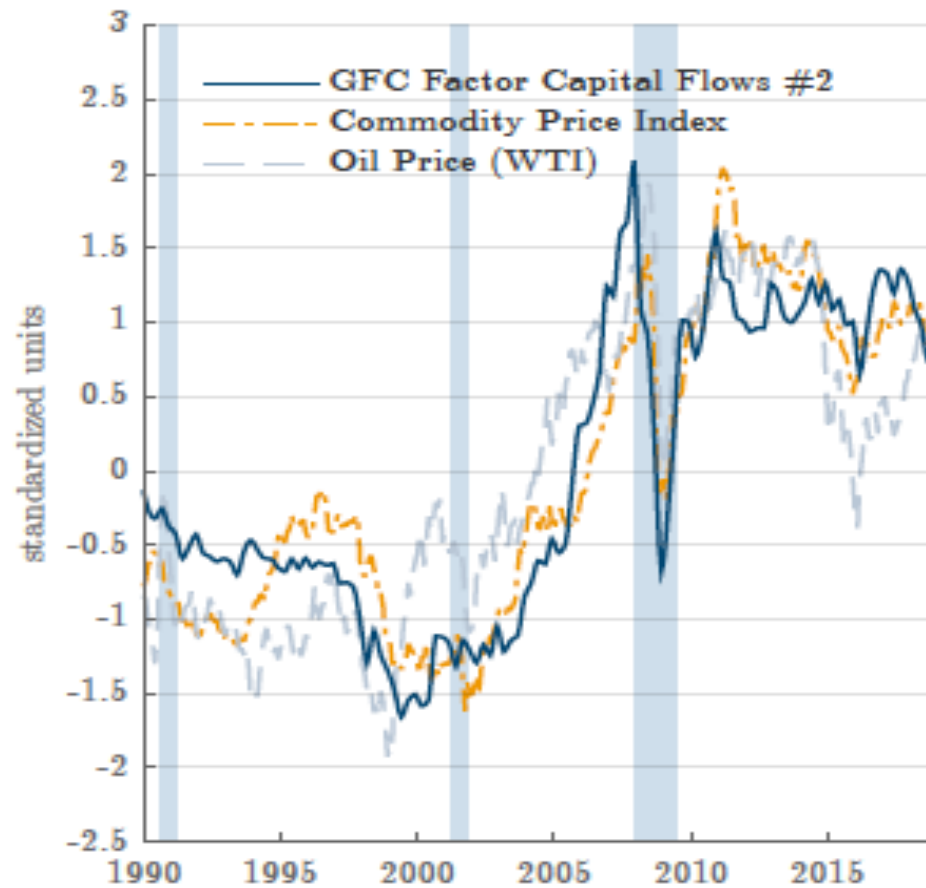
## GLOBAL FINANCIAL CYCLE: STYLISTED FACTS

### FACT II: CAPITAL FLOWS

- **Two global factors in gross capital flows**
- The two factors account for about thirty five percent of the variance of the data
- **Factor Flow 1 is highly correlated with the global factor in asset prices**
- *Global Financial Cycle: Asset prices, capital flows, aggregate time-varying risk-appetite move together.*



## Second Global Factor in Capital Flows



**Correlated with commodity prices and trade**

Source: Miranda-Agrippino and Rey (2022)

## GLOBAL TRADE AND COMMODITY CYCLE: STYLISTED FACTS

### FACT III

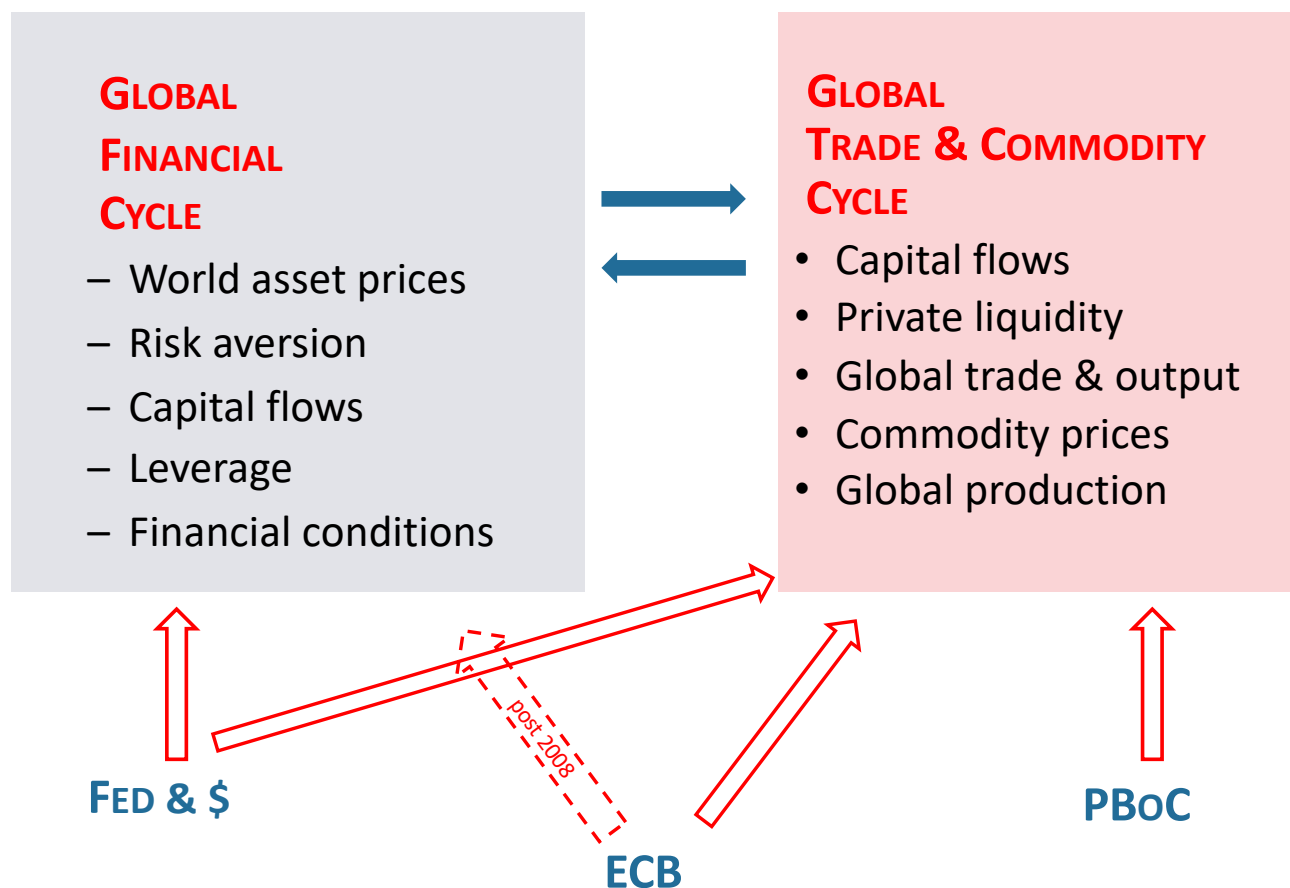
- The second factor in capital flows is highly correlated with commodity price indices and with international trade and world output
- Global Trade and Commodity Cycle: capital flows, private liquidity, global commodities and trade



# What drives the Global Financial Cycle and the Commodity Trade Cycle?

- **US monetary policy** is a key driver of « **global risk appetite** » and of the global financial cycle (Miranda-Agrippino and Rey (2020))
- US monetary policy affects **leverage** of US broker-dealers *and* of large Euro area and UK banks.
- When the Federal Funds rate (US monetary policy rate) goes down, the **VIX falls**, banks' leverage goes up.
- None of this happens for **People's Bank of China's** Monetary Policy.
- PBoC affects massively **trade flows, industrial production** and **commodity markets**
- **For the ECB**: some evidence for both types of transmission

## CENTRAL BANKS HAVE DIFFERENT GLOBAL FOOTPRINTS



## Taking stock

1. US Dollar still at the centre of the international financial network
2. There is a Global Financial Cycle: asset prices and flows co-move
3. Other global factor in flows co-moves with commodities & trade
4. Heterogeneous Global Footprints of Monetary Policies of the Fed, the ECB, the PBoC.

## Open Questions

1. US Dollar still at the centre of the international financial network.

*But the networks are changing: “de-risking”, geopolitical risk...*

2. There is a Global Financial Cycle: asset prices and flows co-move

*How much is that link to international currency role of the \$? Crypto flows?*

3. Other global factor in flows co-moves with commodities & trade.

*How much will that change with the Green transition?*

4. Very Different Global Footprints of Monetary Policies of the Fed, the ECB, the PBoC.

*International roles evolving with geopolitics?*

Clearly more work to be done...

Some of it at the Helsinki GSE I hope!

**HAPPY 5th ANNIVERSARY!**

