Global Financial Systems
Chapter 11
Currency Markets. Part b

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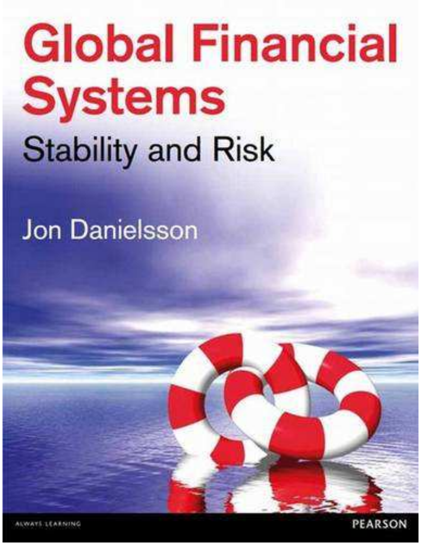
Book and slides



- Updated versions of the slides can be downloaded from the book web page www.globalfinancialsystems.org

Overvaluing

Overvaluing

it just happens

- Often because a country is fighting high inflation or has resorted to printing money to finance itself
- Fixing the exchange rate may be a way to fight inflation
- In the short run makes consumers, and hence voters, happy because it makes imported goods artificially cheap
- In the longer run it hurts exporters who are no longer competitive

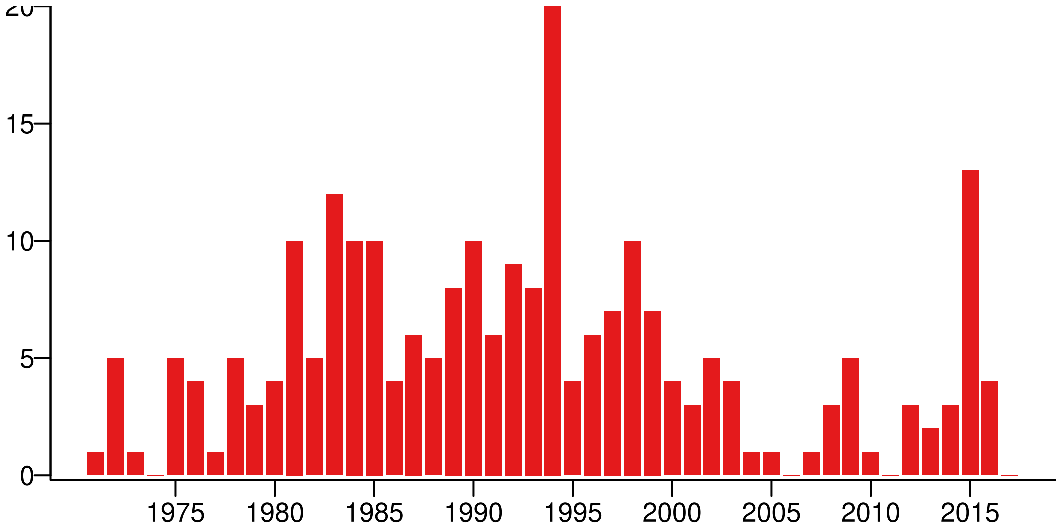
Often ends in speculative attacks

- Speculators, who usually are well connected local companies, observe this and seek to export the domestic currency
- In effect, speculating against the currency regime
- The government may give in or resort to capital controls or multiple exchange rates
- The latter two are often a recipe for corruption because those giving permission to import or buy currencies at cheaper rates will reap artificial profits
- All of this suggests that it is virtually impossible for government to maintain an artificially strong exchange rate for long without resorting to very costly measures

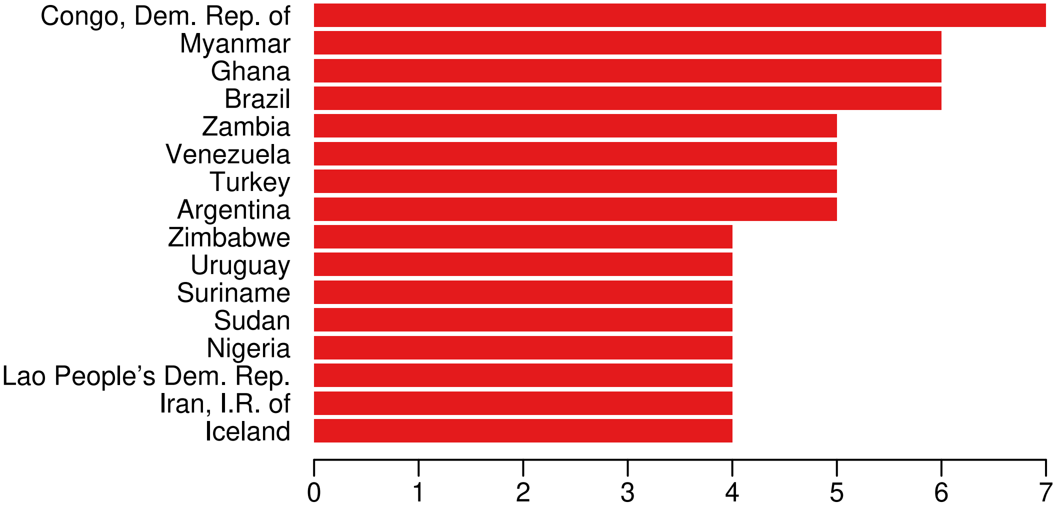
Asian crisis 1998

- Chapter 6 of book
- The then PM of Malaysia blamed foreign speculators for attacking its currency
- Similar was said in Korea, Indonesia, Thailand
- But data shows it was the well connected local families who attacked first
- While foreign speculators stuck with currency

Currency crisis data — Laeven and Valencia (2018)



Currency crisis data (4 or more crises)



The aftermath — Currency crises

- 3 years after a currency crisis, the level of GDP is between *2% and 6%* lower than if there had been no crisis
- The losses tend to materialize *before* the currency collapses
- Output growth tends to slow down *prior to* and in the year of the currency crisis
- After the currency collapse, *positive growth rates* seem to be the norm
- The economic costs of a currency collapse do not appear to arise from the collapse of the currency itself but from *negative fundamentals*
- But the government is often thrown out of power

Governments' Undervaluation of Foreign Exchange

Undervaluing — "Beggar thy neighbor"

- Attempt to make other countries subsidize your industry
- "*Beggar thy neighbor*" policies
- Uses domestic money to buy foreign currency
  - a country overvaluing will run out of money
  - a country undervaluing can, at least in theory, intervene indefinitely
- The effects of undervaluing the currency in the short run are to make imports more expensive and exports cheaper
- Subsidy given to exporters and foreign consumers paid for by domestic consumers and foreign competitor industry

Costs of undervaluing

- Makes other countries very unhappy
- Can lead to competitive devaluations, where countries, in turn, devalue their currencies
- High inflation and huge disruption to domestic industries
- A country not engaging in such practices may end up being the strongest at the end
- Can also lead to restrictions on trade
- This can then spiral out of control

The Great Depression is a cautionary tale

Direct domestic effects

- Because industries are developed in a deliberately low-cost environment
- Companies adjust to this in their strategies, which may hamper their long-term competitiveness
- If a country is forced to revalue its currency, it then would be very costly
- It would have been better for the industry to develop in an appropriate exchange environment
- Hard to control credit
- Finally, such a policy can create hidden inflation that, down the road, makes a realignment a necessity

Compatibility of other policies

- Need to consider the compatibility of FX policy with other policy areas,
    - monetary policy
    - fiscal policy
    - financial stability

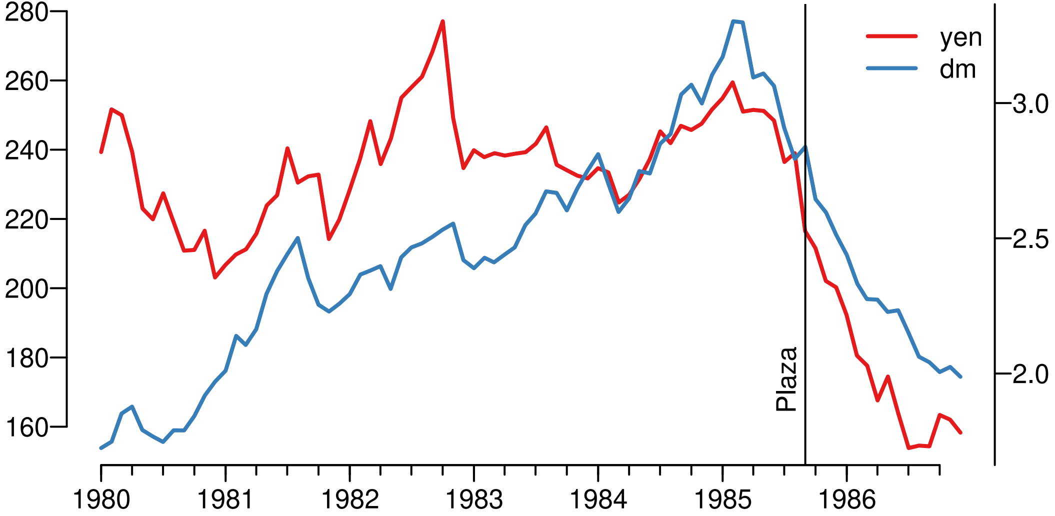
Currency war

- Deliberate policies of manipulating exchange rates downwards to increase domestic competitiveness have recently been given the name "*currency wars*"
- Relates to *reserve currencies*

Plaza Accord

- 1980 to 1985 dollar had appreciated against yen and mark (next slide)
- France, West Germany, Japan, United States, United Kingdom
- Depreciate the dollar to yen and mark
- Signed in 1985 at the Plaza Hotel in NYC

Yen and DM to USD



UK and France in 1920s and 1930s

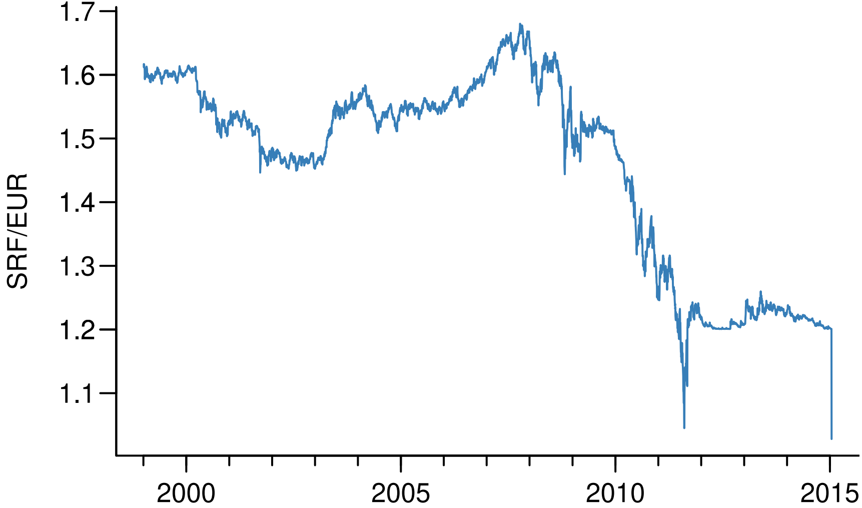
- In 1925, the UK went back to the gold standard at pre-war rates
- France restored convertibility in 1926 at a devalued rate — an undervaluation of 15–20%
- France
  - export boom in France
  - gold flowed to France
- UK
  - balance of payments problems
  - recession
- Considerable friction between France and the UK
- France became increasingly uncompetitive, adjusted to a weak currency, and found it difficult to re-adjust when over, causing significant political instability

The case of Switzerland

Daníelsson (2015)

- Until the crisis the € exchange rate was about 1.6
- Then, Switzerland was seen as a safe haven, and money flowed in
- Tried to fix the FX in 2011
- Gave in in January 201

CHF/€



Why

- If one considers who owns the Swiss National Bank
- And some factors, perhaps
  - SNB dividend payments
  - Money supply
  - Reserves
  - Government bonds outstanding
- Loss to the SNB about CHF 50 million
- SNB has now $750 billion in stocks, bonds and cash
- $2.7 billion in Apple
- The SNB's profit in 2016 was SNB 24.5 billion (3,000 per Swiss resident)

Does it make sense to manipulate?

- The larger the country, the less foreign markets matter
- Most consumption is domestic, and because part of that is local
- Considerable empirical evidence that FX is not all that important for larger countries
    - Case study Brexit
- For a small country, the pass-through from FX to domestic prices can be very rapid
- Undermining benefits of manipulating FX
- While creating instability

Government can have reserves but private sector be indebted

- Recall the figure on foreign holding of US debt
- A lot of governments hold a large amount of foreign currency reserves
- While their corporates have also borrowed extensively in foreign currency
- The net position of the country might be good
- But it is unlikely the government will be using its reserves to bail out the corporate
- So, the gross position signals imbalances and vulnerability

Where to invest and borrow

- Often best if savers invest in their own country and currency
  - Eliminates currency risk (e.g. hot money and sudden stop)
- But at least three reasons not to
  1. Diversification for savers
     - Why many EMEs simultaneously export and import capital
  2. Cost of borrowing
  3. Amount of credit

Who borrows

- Matters whether the borrower is an exporter, earning in foreign currency
- Not advisable for domestically oriented firms or households to borrow abroad
  - whether directly in foreign currency from banks
  - or in domestic currency from domestic banks who borrow abroad
- Think of Asia in 1998 and several European countries (e.g. Poland) before 2008
  - households and very small SMEs would borrow in foreign currency
  - caused significant pain for them and their banks in the crisis

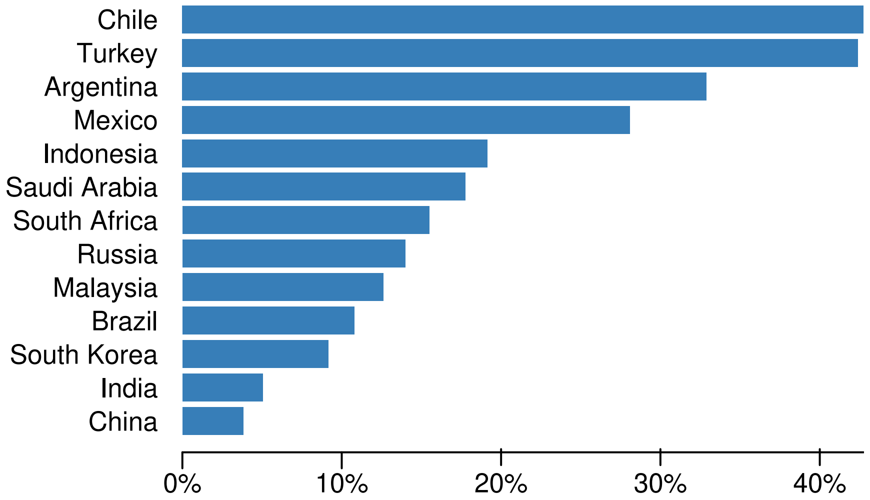
Global bank retrenchment

- The inflow mechanism has changed since the crises
- Before banks were the primary intermediary
  - e.g. NYC banks lending to domestic banks who lent to domestic agents
- But there has been a major retrenchment of global banks
- They have been leaving countries and reducing their operations
- And when not, may be required to establish separately capitalized subsidiaries

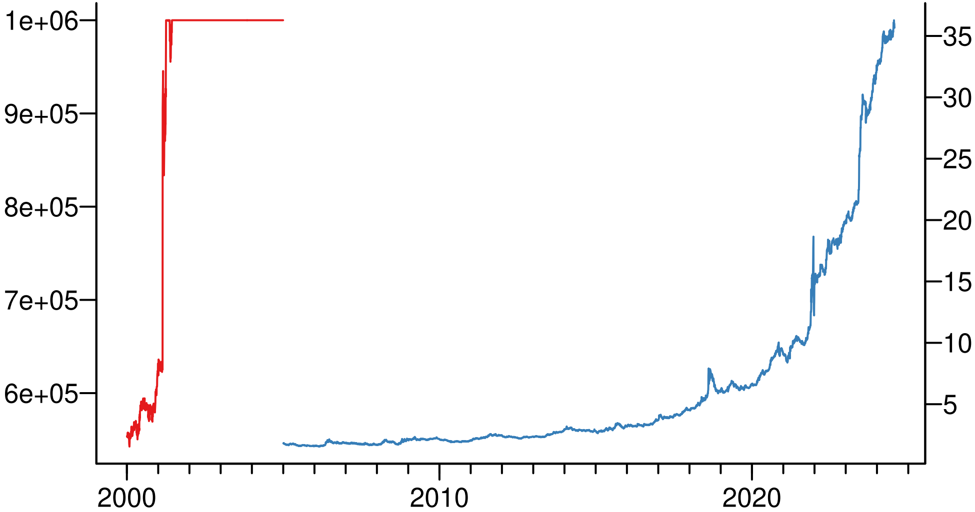
Financing from debt securities issuance

- Borrowers in EMEs have easier access to international capital markets than before
- Consequently, the debt issuance of EME corporate in offshore financial centres (like NYC) has increased rapidly
  1. Lower interest rates
  2. Positive feedback between inflows and FX appreciation
  3. Lower administrative, legal and tax costs
  4. Offshore markets are also more developed for sub-investment grade bonds
  5. Preferential tax system for foreign investors

Foreign currency debt exposure to GDP in 2019



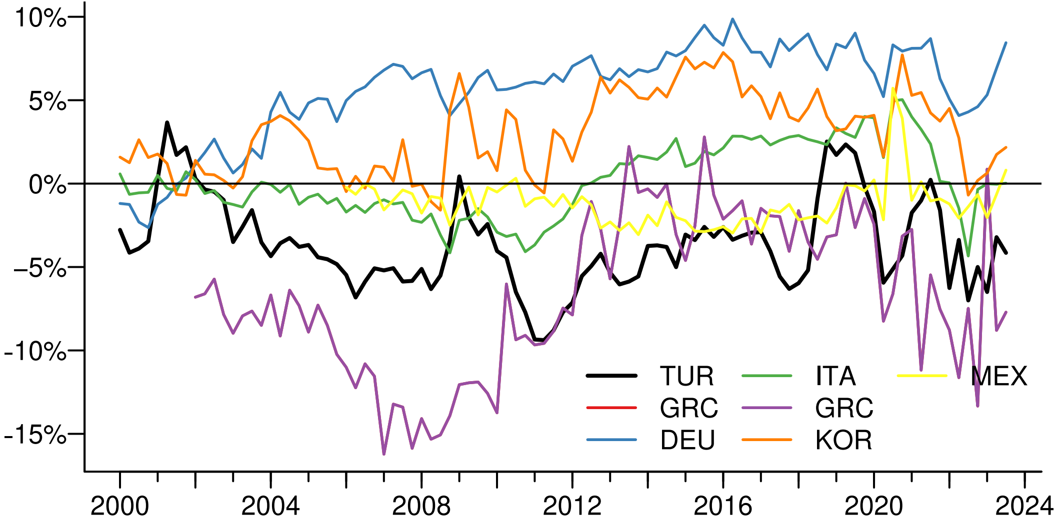
Turkish lira/Euro



Current account balance

- Net trade in goods and services, net earnings on cross-border investments, and net transfer payments
- Positive current account balance: a net lender to the rest of the world
- Negative current account balance: a net borrower from the rest of the world

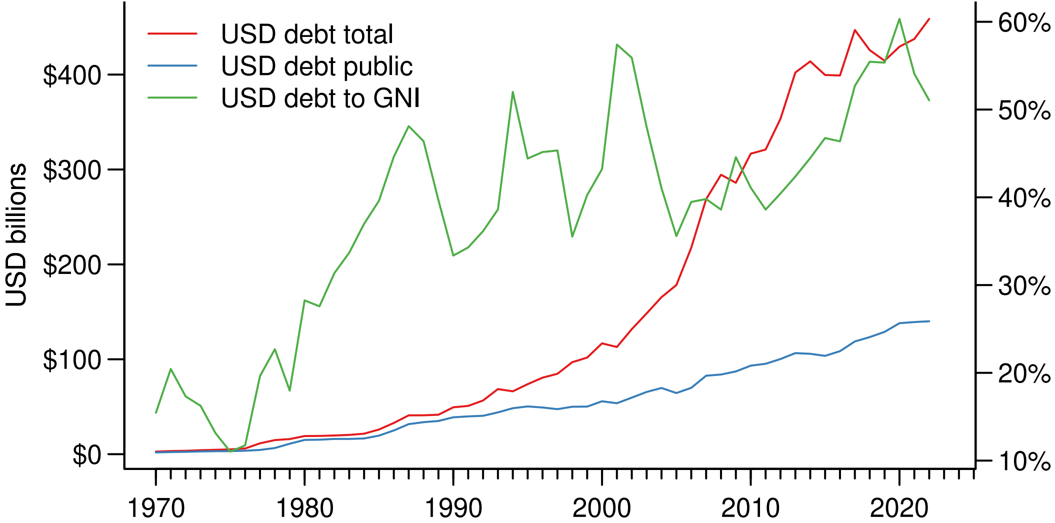
Current account balance/GDP



Recent policies

- Credit is increasingly directed
- Policy rate is very low as it is believed that high interest rates are inflationary
- Government and financial sector USD exposure rapidly increasing
- Vulnerability to FX

Turkey FX debt exposure



SWIFT

- Messaging system banks use to send instructions
- Banks receiving messages debit and credit customer accounts
- Headquartered and incorporated in Belgium
    1. USD 41.8% of value
    2. Euro 34.7%
    3. Sterling 6.3%,
    4. Yen 3.1%,
    5. Renminbi 2.1%
- SWIFT can be used to harvest geopolitically sensitive intelligence
- And as a vehicle for geopolitical objectives

Banning banks from SWIFT?

- Need alternatives, which cost more, are less secure, slower, require more time and effort to verify payment information and complete a transfer
- Iran was still able to engage in cross-border transactions when disconnected from SWIFT in 2012
- Russian banks pay high costs to send secure payment instructions to Chinese banks
- China continues to use SWIFT when messaging payment instructions across borders, even to its own foreign bank branches and subsidiaries — SWIFT messaging now supports Chinese characters
- There is no technological obstacle to building an alternative messaging system
- But no guarantee other banks will participate
- Highlights risk of being disconnected from SWIFT

US Clearing House Interbank Payments System

- US CHIPS and foreign counterparts (like UK CHAPS and EU Target) move money between accounts. Bypassing them is more difficult than finding a way around SWIFT
- Around 50 financial institutions participate in CHIPS — US banks and US branches of foreign banks, 4 Chinese banks
- Participating banks clear payments among themselves and on behalf of other financial institutions
- US *can* prohibit US banks from using CHIPS to transfer funds to banks of a foreign country
- Help sustain the dollar's dominant role in cross-border transactions
- Others may try to set up their own clearinghouse
- Will foreign counterparties accept payment in that currency?

2015 PBOC Cross-Border Interbank Payments System (CIPS)

- Participant identities not disclosed
- China maintains capital controls, so its clearinghouse links to its RMB internationalization efforts — Participating banks are required to ensure that payments comply with capital controls
- PBOC seeks to provide liquidity for trades of the renminbi to yen, Sterling, NZD, Swiss franc, ringgit, rand, dirham, forint, DKR, SKR, Mexican peso
- 80 % of payments through CIPS use SWIFT messaging.
- CIPS is not (yet) a serious challenge to Western clearinghouses
- CHIPS has ten times # participants — March 2022, daily volume on CIPS was 385 billion yuan ($45.6 billion), compared to $1.8 trillion on CHIPS
- Russia accepts renminbi in payment for oil and coal exports to China, presumably through CIPS.

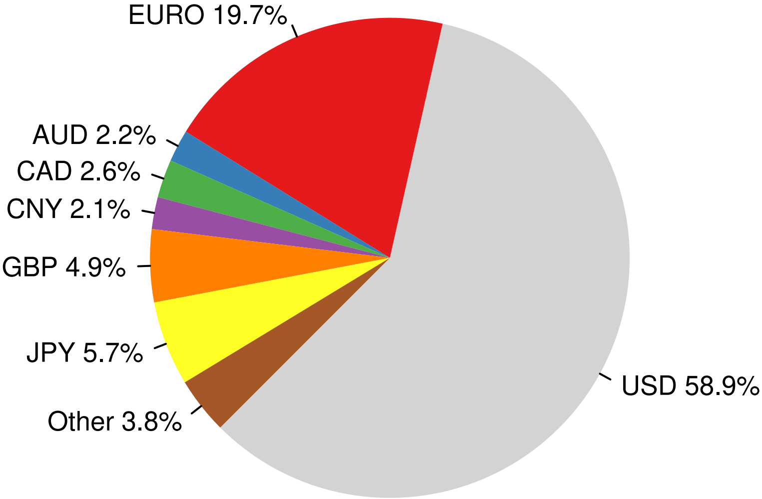
CBDCs — eCNY

- A CBDC is a direct liability of the central bank
- Eliminates the need to send instructions to banks and settle transactions through clearinghouses.
- Just swap tokens on the CB ledger
- No need for the services of CHIPS, CIPS, SWIFT, etc.
- PBOC done more than other large counties
- Digital renminbi (eCNY) in 10 Chinese regions in 2021
- Used for the Belt and Road initiative

Reserve currency

- The currency in which global transactions take place
- And the one countries hold as reserves
- Efficiency dictates it must be a single currency
- Was gold and sterling
- Now US dollar
- Will it be Renmimbi, Euro or bitcoin?
- Data: IMF — Currency Composition of Official Foreign Exchange Reserves

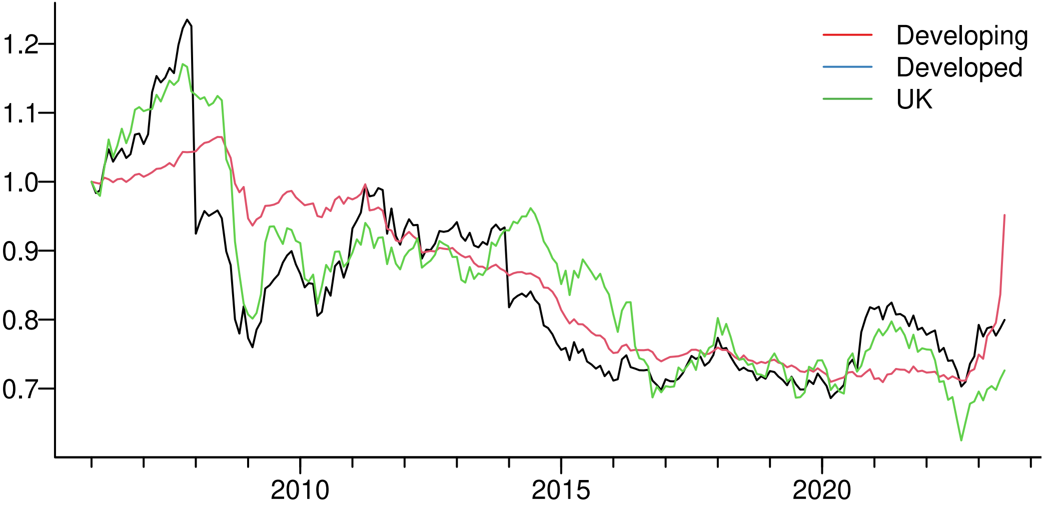
Relative FX reserves in Q1 2023



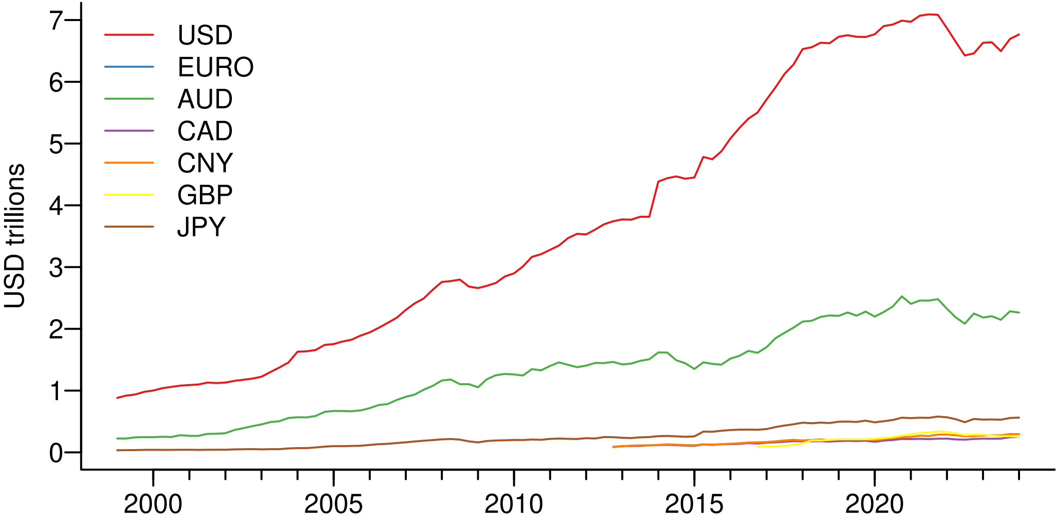
Changes in reserve status

- USD proportion of global reserves from 72% in 1999 to 59% now
- Dollar still dominates debt markets
- Volume of dollars held overseas growing rapidly
- USD near record strength
- USD swap lines will strengthen the global dollar system and its network effects

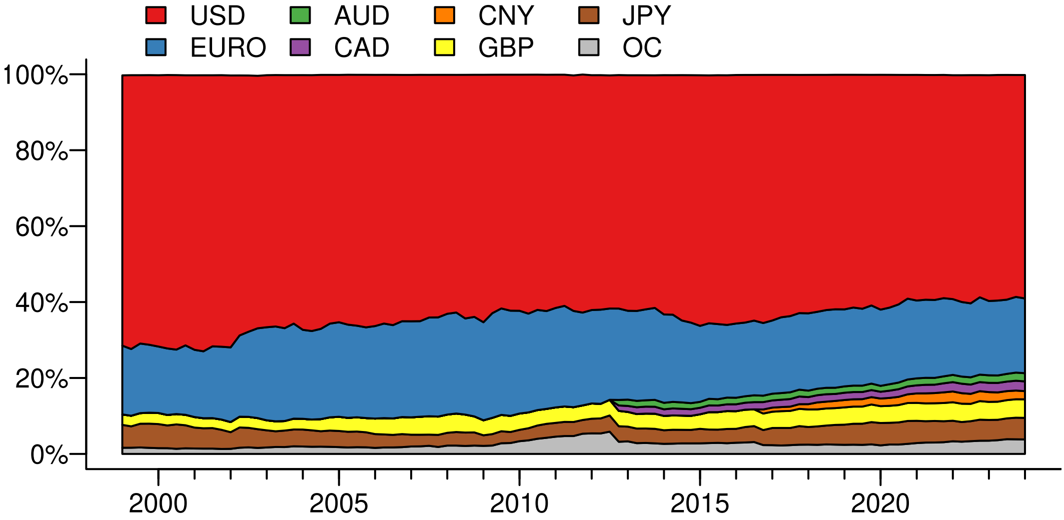
Relative FX to USD. High numbers are weak USD



Reserves in USD



Relative reserves



Advantages to the owner

- Major products priced in your own currency — eliminating currency risk
- *This does not matter*, contrary to popular belief
- Foreigners hold it as reserves — exchanging real goods for paper
- Firms (now in the US) borrow from global markets in local currency
- Global transactions cleared via your systems (next slide)

The power of clearing

- All USD transactions are cleared via NY (CHIPS)
  - If Iran sells oil to China in USD, funds travel via NYC
- Denial of New York clearing a powerful tool
- Europe and India, amongst others, have called for alternatives

What other countries think

- Transfers power to the reserve currency country
- Misbehavior like inflation or QE is a tax on other countries' reserves
- But also expect the reserve currency country to behave transparently, credibly and fairly (see next slide)

FX swaps

- Important because the US dollar is the reserve currency
- And because so many governments and corporations globally have borrowed in dollars
- Swap lines allow some central banks access to almost unlimited US dollars
- To meet the US dollar liquidity needs of their domestic entities
- Especially important in crisis when entities in foreign countries clamour for currency — the US dollar
- Helps calm global liquidity crisis
- The US did this without question in 2008 and 2020
- Key credibility test on competing reserve currencies

PBOC RMB swap lines

- RMB 109 bn. ($15.6 bn.) end of March 2023
- 19% yearly growth
- Finance BRI (belt and road) Projects — Pakistan, Sri Lanka, Argentina, Laos

Dollar as reserve currency

- Is it inevitable to have a single reserve currency, and does it have to be the dollar?
- Trade deficit
- If the US did not have a reserve currency
  - it would likely experience a sharp depreciation in its currency
  - stimulating exporters and correcting the trade balance

- Because of the reserve status, this is not happening
- Foreign countries directly intervene in the FX markets to build up reserves and maintain the dollar rate of exchange
- So, global imbalances build up, other countries accumulate vast reserves, and the dollar remains artificially high
- For the US, however, there is a way out of this — inflation
  1. depreciating its currency — stimulate exports
  2. reducing the real value of its debt — make the foreigners pay
- No wonder countries like China grumble at QE, but there is not much they can do

Power

- Does holding US government debt give the Japanese, Chinese, Brazilians, and Russians as creditors power over the US?
- No
- The US gets the power
- It can deflate the debt when it wants
- The other countries cannot sell without encouraging very large losses
- Which would not hurt the US much

Euro

- It is the currency of the biggest economic unit in the world
- With the recent difficulties facing the euro, it is unlikely to happen anytime soon
- Future of the euro no longer certain
- The European authorities have shown themselves to be poor stewards of a currency and, therefore, unreliable as the owners of the future reserve currency

Cryptocurrencies

- The characteristics of Bitcoin prevent it from becoming a reserve currency
- See later discussion

The Chinese renminbi

- Reserve status of the dollar facilitates the Chinese undervaluation of the renminbi
- China bristles at other countries exercising control over it
- For this reason, it is no surprise that the biggest champion of alternative reserve currencies in China
- With China the second largest economy in the world, if it were to surpass the United States, shouldn't the RMB become the next reserve currency?
- China has made small moves in that direction (CIPS, swaps)

What prevents RMB from becoming the reserve currency?

- Chinese capital controls prevent the widespread global use of the renminbi
- It would have to abolish capital controls and currency interventions
- Which would facilitate the transmission of global shocks to China
- It would have to become credible — seen as a fair and unquestioning steward of the reserve currency
- It is Unlikely that the renminbi will become reserve currency any time soon

Remimbi as partial reserve currency today

- Strong renminbi is an objective of the Belt and Road initiative
- So, some elements of a reserve currency
- A parallel system, remember used in belt countries (loans to developing countries and the like, under Chinese law and regulations)

Bibliography I

Daníelsson, Jón. 2015. "What the Swiss FX shock says about risk models." Http://www.voxeu.org/article/what-swiss-fx-shock-says-about-risk-models, *VoxEU.org*, http://www.voxeu.org/article/what-swiss-fx-shock-says-about-risk-models.

Laeven, Luc, and Fabian Valencia. 2018. "Systemic Banking Crises Revisited." *IMF Working Paper No. 18/206*, https://www.imf.org/en/Publications/WP/Issues/2018/09/14/Systemic-Banking-Crises-Revisited-46232.