Centre international de formation européenne

NICE BERLIN BRUXELLES ISTANBUL

THE BALANCE OF PAYMENTS II
CURRENT ACCOUNT DEFICIT ADJUSTMENT

CIFE SEMINAR ROMA-BERLIN-NICE 2025

MICHEL-HENRY BOUCHET

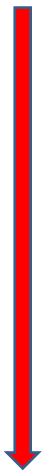
1

1

THE CURRENT ACCOUNT OF THE BALANCE OF PAYMENTS

From less liquid items toward more liquid items!

+	Export of goods f.o.b.
-	Imports of goods f.o.b.
=	**Trade balance**
+	Exports of non-financial services
-	Imports of non-financial services
+	Investment income (credit)
-	**Interest payments**
+	Private unrequited transfers
+	Official unrequited transfers
=	**Current account balance**



2

2

3

	US$
EXPORTS	5000
GDP	12500
TRADE	
SERVICE REVENUES	1200
TRANSFERS	285
CURRENT ACCOUNT	
INTEREST PAYMENTS	-750
CA/GDP %	
IMPORTS	-6500
TRADE OPENNESS	

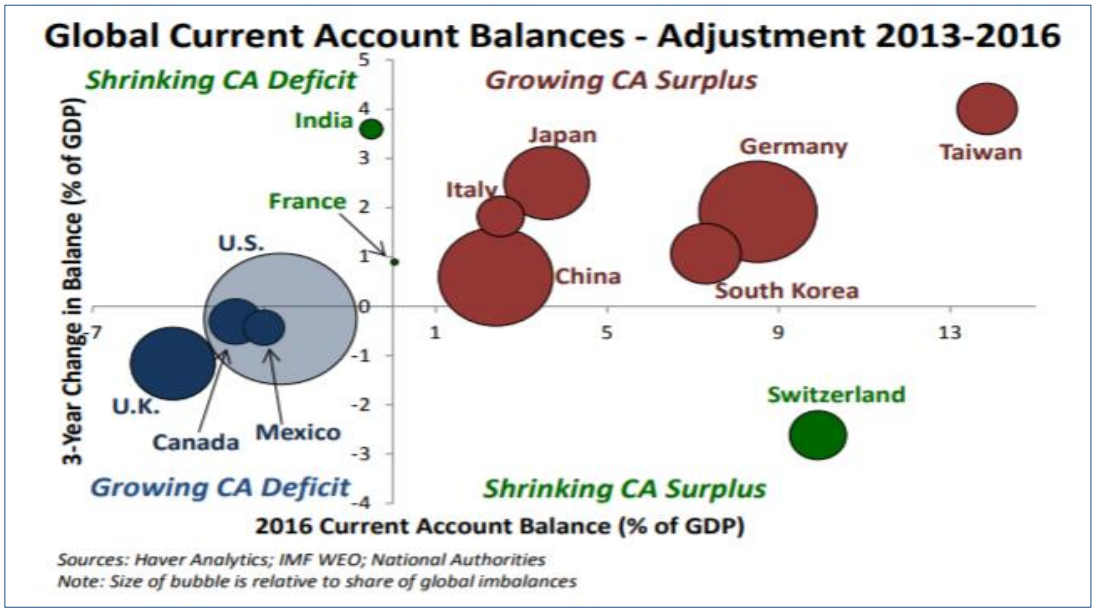
3

4

	US$
EXPORTS	5000
IMPORTS	-6500
TRADE BALANCE	-1500
SERVICE REVENUES	1200
INTEREST PAYMENTS	-750
TRANSFERS	285
CURRENT ACCOUNT	-765
GDP	12500
TRADE OPENNESS	92%
CA/GDP %	-6%

4

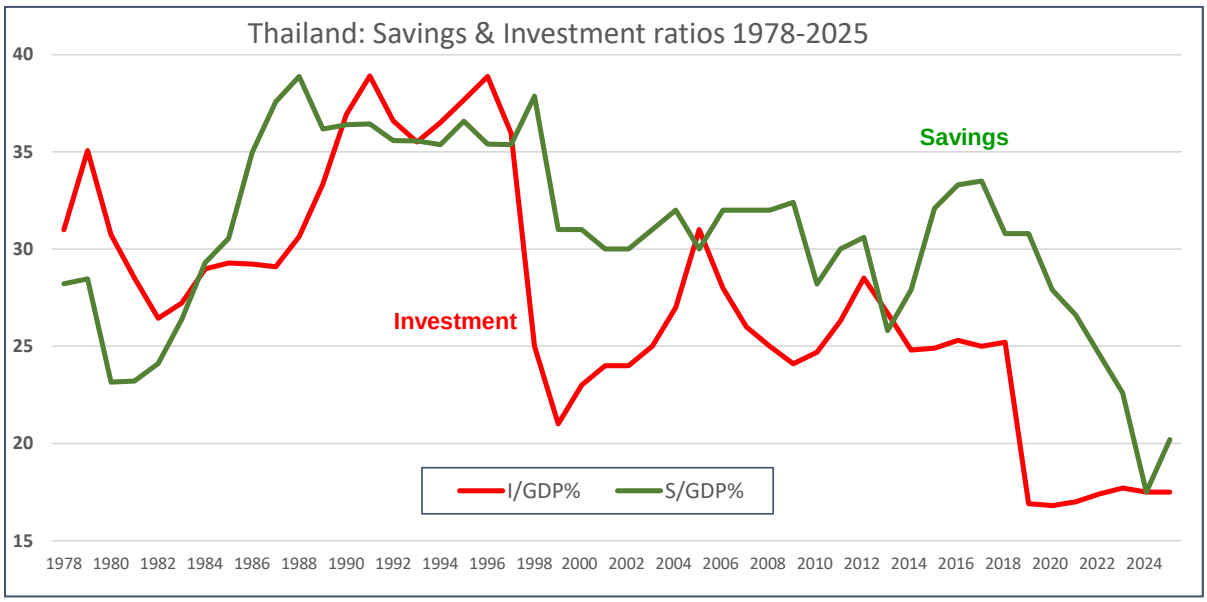
ADJUSTING CURRENT ACCOUNT IMBALANCES?



Source: US Treasury Report 2017

5

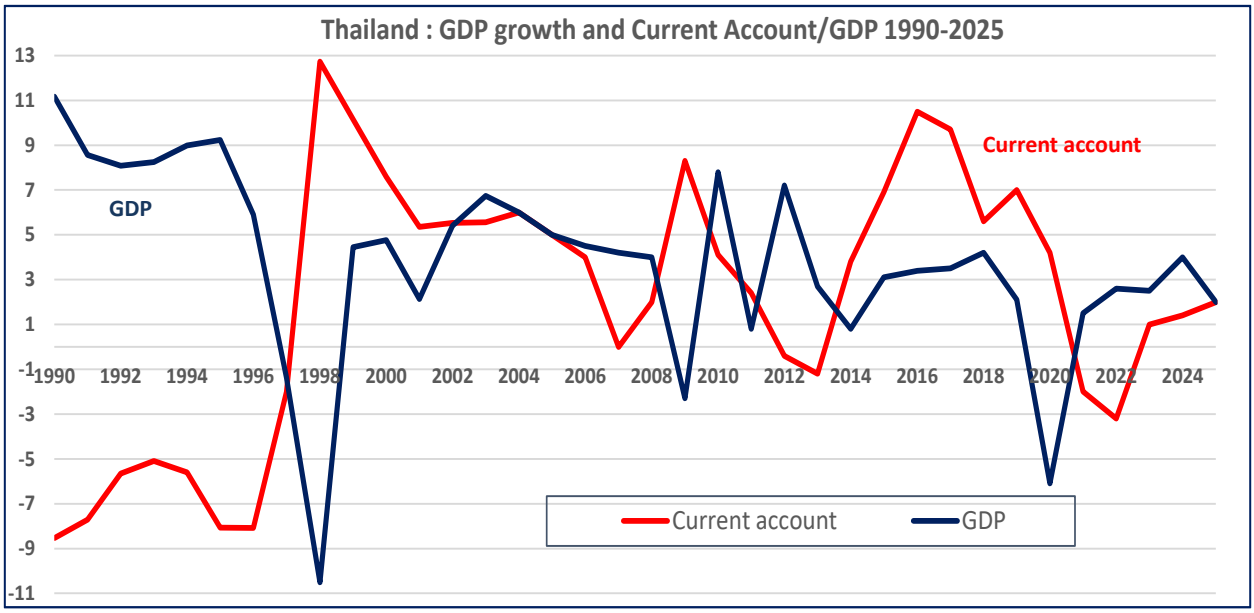
THAILAND: LONG-TERM DYNAMICS OF INVESTMENT AND NATIONAL SAVINGS



Source: WB and IMF 2025

6

THAILAND: LARGE GLOBAL TRADE DEPENDENCE = GDP VOLATILITY



7

POLICY TOOLS TO FIGHT A BOP DEFICIT?

- Cooling down the overheated economy

= Reducing absorption and boosting income with:

1. Tight monetary policy (higher interest rates and higher bank reserve requirements)
2. Exchange rate adjustment
3. Tight fiscal policy (taxes and spending cuts)
4. Reducing private consumption and shrinking public expenditures… (at the risk of killing growth?)
5. Boosting competitiveness and improving productivity?
6. Trade diversification and import substitution (Milei in Argentina?)

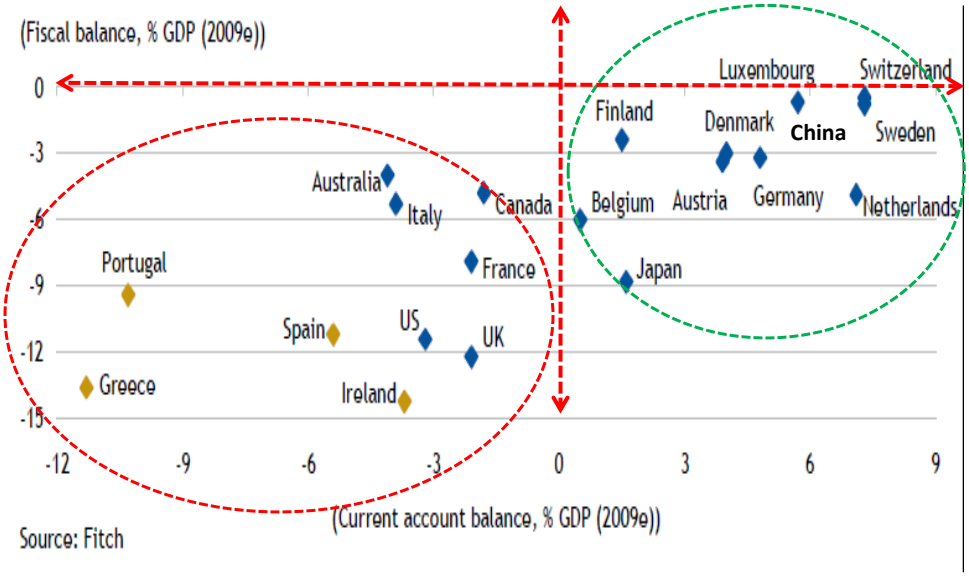
8

FACTORS AFFECTING A CURRENT ACCOUNT DEFICIT

- **1. National income variation: economic overheating**
  - growth/contraction relative to other countries
    - current account surplus decreases (deficit increases)
    - greater wealth implies greater demand of foreign goods (e.g. US econom growth)
- **2. Inflation and its impact on trade competitiveness: "CPI differentials"...**
    - Higher CPI leads to increased imports and decreased exports due to eroded competitiveness

9

LARGE DOMESTIC PRIVATE + PUBLIC CONSUMPTION= OVERHEATING= TWIN DEFICITS



10

FACTORS AFFECTING A CURRENT ACCOUNT

▶3. Government restrictions

- Import tariff (tax on imported goods)
  - increases prices & lowers demand on imported goods
  - increases current account of the country
  - US tariffs on apparel and farm products
  - "banana war": exports from European former colonies (Africa-Caribbean-Pacific): USA entitled to impose US$191 million sanctions on Europe

- Non-tariff barriers (health norms and regulations) and quotas:
- Export and loan Subsidies

11

FACTORS AFFECTING A CURRENT ACCOUNT

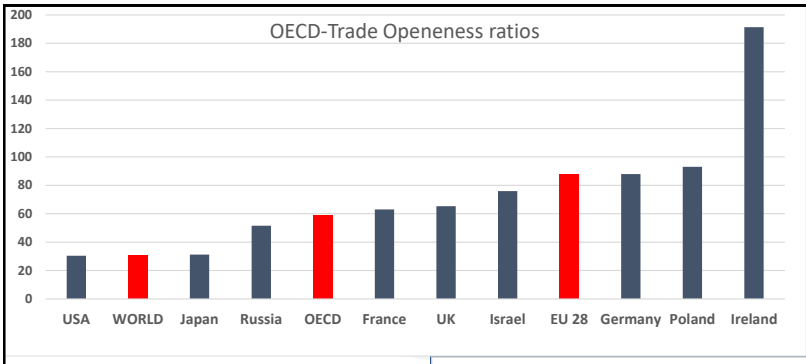
▶4. Exchange rates

= currency valued in terms of another currency

= stronger exchange rate (overvaluation) might lead to lower exports, decrease in current account surplus, or rising deficit

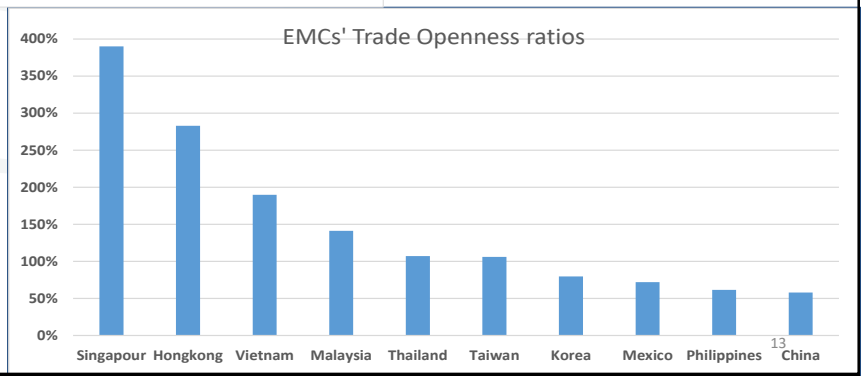
- exported goods would cost more for foreign importers, thus decreasing demand for the good
- assuming price-elastic goods (sensitive to price changes!?)
- Stronger Euro and weaker US$ throughout 2003-08 mean export-led recovery in the US and gloomy growth scope in Europe! Only advantage: no imported inflation due to rising oil prices
- Trump considers that the Yuan, the Yen and the Euro are too weak!

12



TRADE OPENNESS RATIO

(X+M/GDP%)



1. CORRECTING A TRADE DEFICIT?

- **Impact of domestic currency devaluation**
  - prices should increase for imports
    - foreign exporters may reduce price to maintain market share
  - other currencies may also weaken to stay competitive
    - no net gain from weaker domestic currency
  - international trade contracts create a lag effect
    - 18+ month lag in US
  - intra-company trade is resistant to currency fluctuations
    - 50% of all international trade
    - 60% of European exports are intra-European transactions

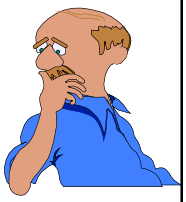
HOW TO SHRINK A TRADE DEFICIT?

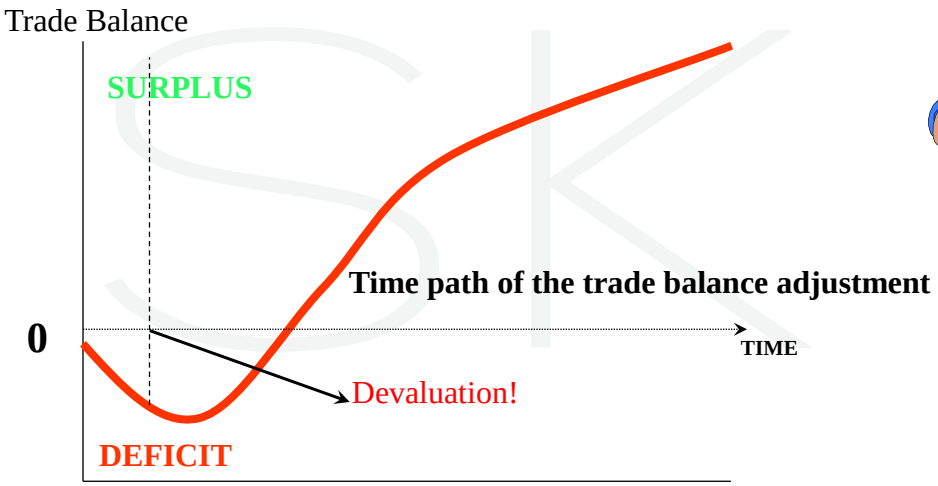
- **Boosting Exports?** depends on the price elasticity of foreign demand abroad but also on the supply elasticity of exported products at home

- **Reducing Imports**? depends on relative share of "incompressible" imports (foodstuffs, energy resources, capital goods, machinery, any import for re-export…), but also on the price elasticity of domestic demand

15

TIME LAGS, ELASTICITIES AND THE ADJUSTMENT MECHANISM: "J CURVE"





16

TRADE ELASTICITIES

What about the price effects of exchange rate changes on the BOP?

- **Import demand elasticity** to prices =

$$\Delta MD / \Delta P\$ < 0$$

- **Export elasticity** to exchange rate change =

$$\Delta X / \Delta P\$ > 0$$

- **Supply elasticity** to increased export demand =

$$\Delta S / \Delta XD > 0?$$

This elasticity depends on the availability of finance, equipment, (imported) inputs, labor...

- Terms of trade (deterioration post devaluation): it takes more units of Exports to buy x units of imports

17

DEVALUATION: THE DAY AFTER ?

KEY ROLE OF ELASTICITIES = RATIO OF TWO VARIATIONS

Supply elasticities

$$\frac{\Delta + \text{Domestic production}}{\Delta + \text{Foreign demand}}$$

Demand elasticities

$$\frac{\Delta - \text{Domestic consumption}}{\Delta + \text{Import prices}}$$

$$\frac{\Delta + \text{Foreign demand}}{\Delta - \text{Export prices}}$$

18

REDUCING THE TRADE DEFICIT?

- Import elasticity of domestic economic growth

△M/ △Y = Income elasticity of demand for imports: percentage of (induced) change in imports divided by the percentage of change in income:

if M double while Y is growing 50%, **the value of income elasticity = 2**

19

TIME LAGS, ELASTICITIES AND THE ADJUSTMENT MECHANISM

The J-Curve and **Marshall-Lerner** conditions:

- A devaluation will improve the trade balance if the **sum** of price elasticities of imports and exports is > 1

- In the long-term, if goods exported are elastic to price, export revenue will increase if foreign export demand increases proportionately more than the decrease in price. If goods imported are elastic, total import expenditure will decrease. Both will improve the trade balance!

20

To boost export competitiveness, what should a country's central bank depreciate?

The nominal exchange rate or

the real effective exchange rate?

21

REAL EXCHANGE RATES

- The RER is the product of the nominal exchange rate between two currencies and the ratio of prices

$$RER = NR \times \frac{Px}{Py}$$

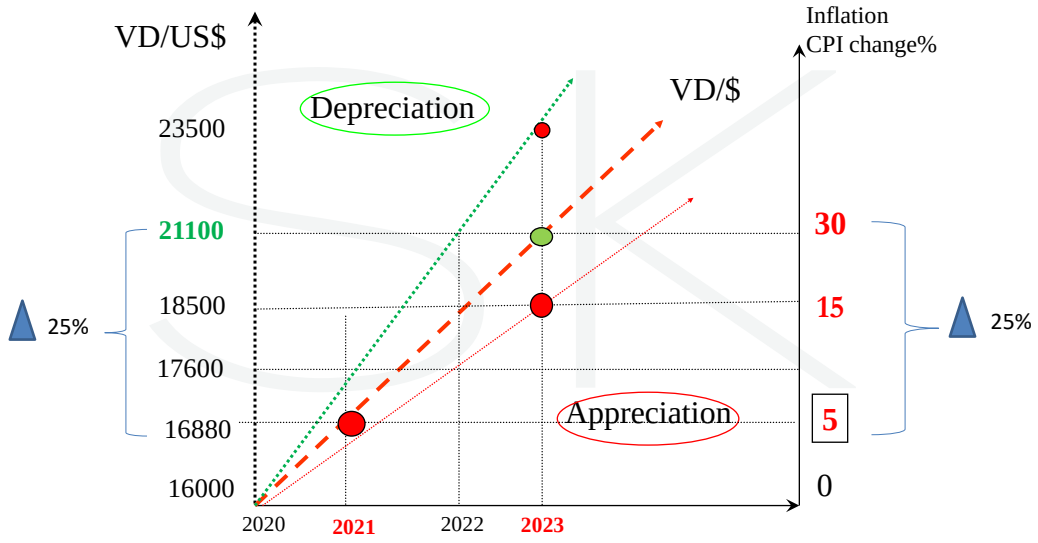
If the €/$ exchange rate is 1€= 1,5 $, and if average prices for the same basket of goods are 2,5 € in the EU and 3,70$ in the US, then the **RER = 1**

RER €/$= 1,5 * (2,5/3,7)

See: Finance & Development, September 2007, pp. 46-47.

22

NOMINAL AND REAL EXCHANGE RATES



23

MEASURING COUNTRY COMPETITIVENESS? NOMINAL AND REAL EFFECTIVE EXCHANGE RATES

- **Nominal EERs**= geometric weighted averages of bilateral exchange rates (weighted by trading shares)
- **Real EERs** = weighted averages of bilateral exchange rates adjusted by **relative prices.**

$$REER_{\text{country i}} = \sum_{j=1}^{N} \text{trade weight (country j)} \times \text{Real Exchange Rate (country j)}$$

country j=1,2,...N are country i's trading partners, exchange rates in natural logarithms (geometric averages)

24

REAL EFFECTIVE EXCHANGE RATES

- **Real**: inflation- adjusted exchange rate

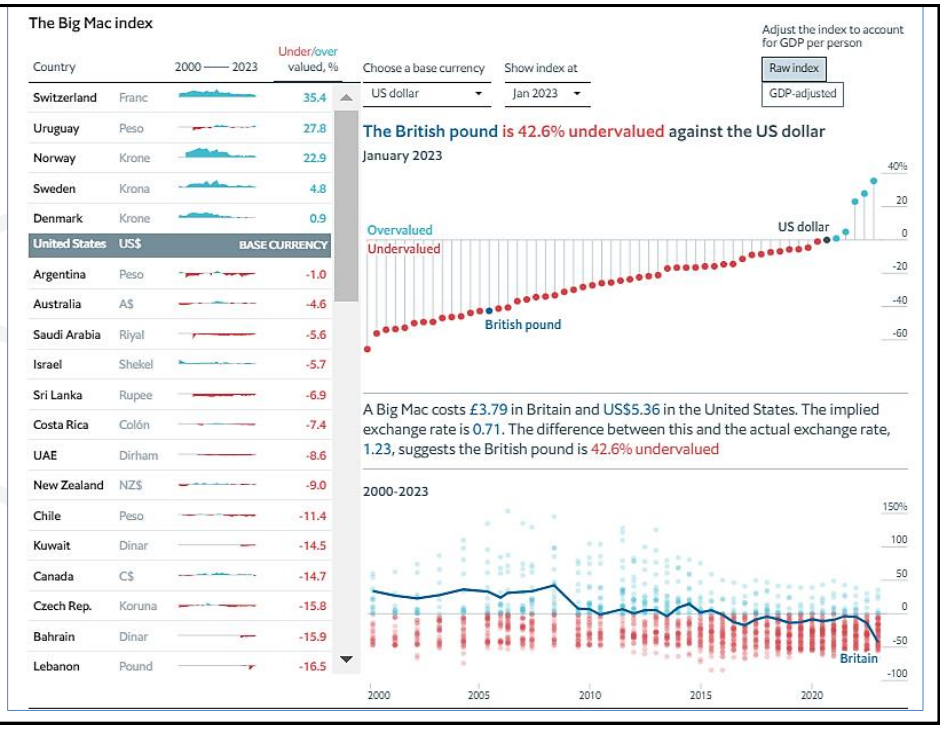
  ex.: will the devaluation fully offset inflation in country x?

- **Real Effective**: exchange rate adjusted for inflation-differential with **major trading partners**: a tool of exchange rate management policy (e.g. Mexico)

25

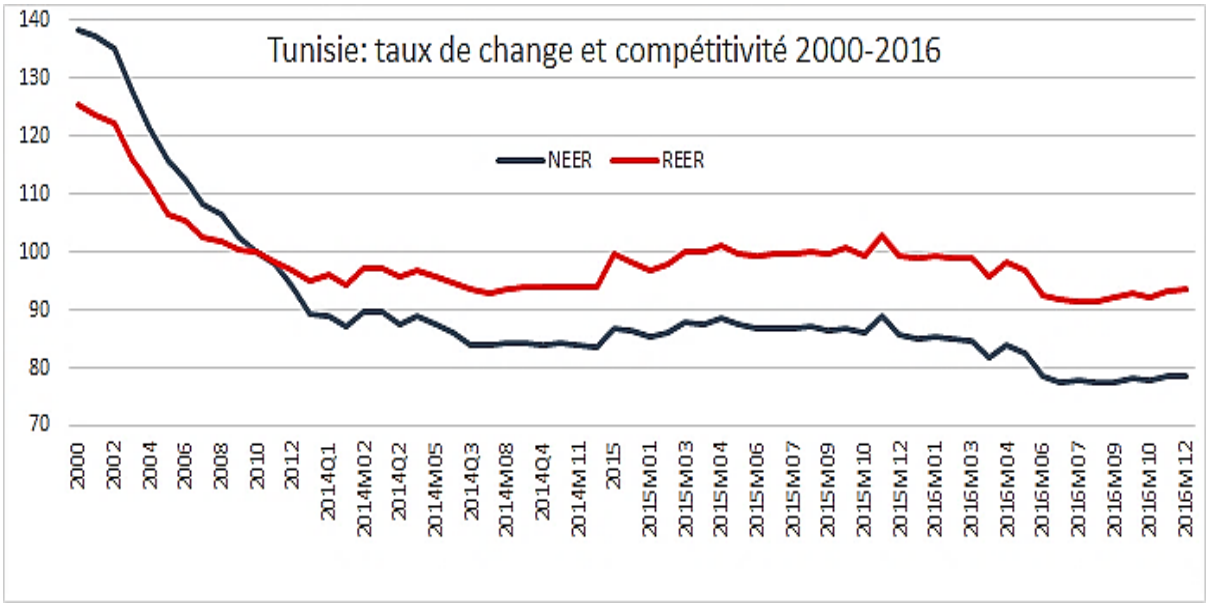
MEASURING UNDER/OVERVALUATION THE BIG MAC INDEX

Burgernomics : purchasing-power parity states that in the long run exchange rates should move towards the rate that would equalise the prices of an identical basket of goods and services in any two countries.

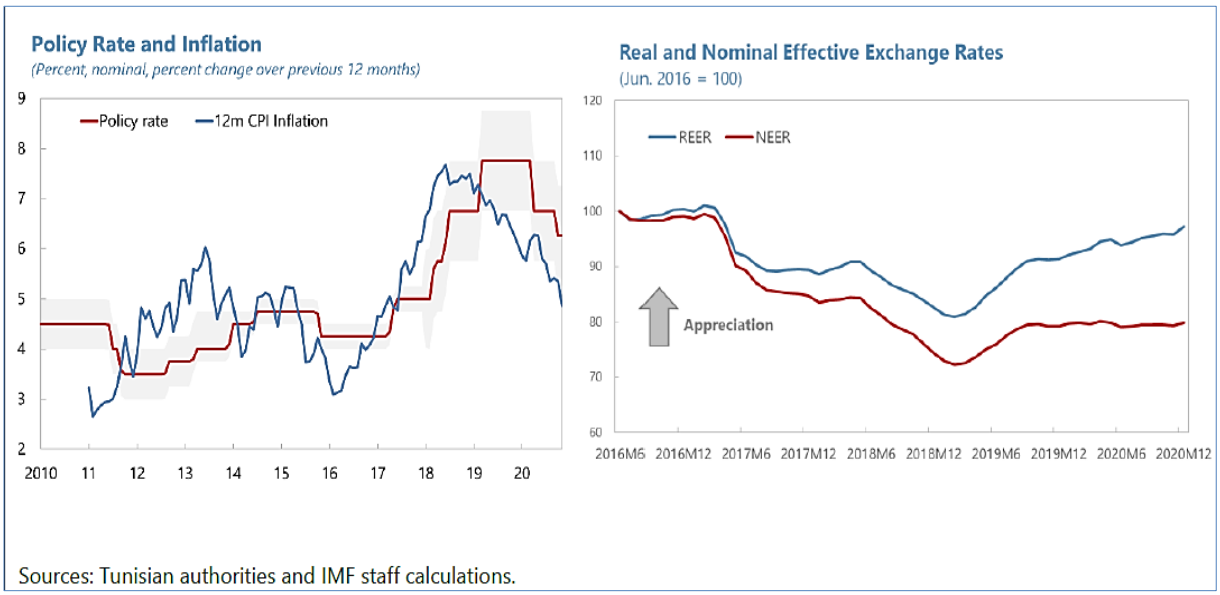


26

TUNISIA: NOMINAL AND REAL EFFECTIVE EXCHANGE RATES

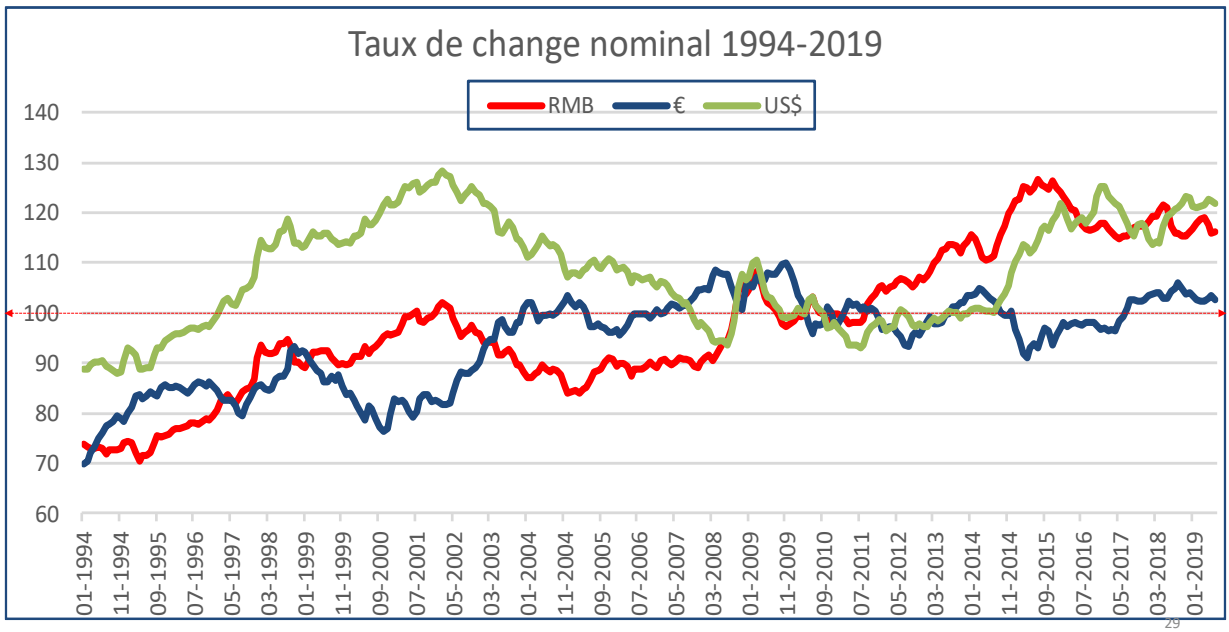


TUNISIA: EXCHANGE RATE DEPRECIATION?



http://data.imf.org/regular.aspx?key=60998108

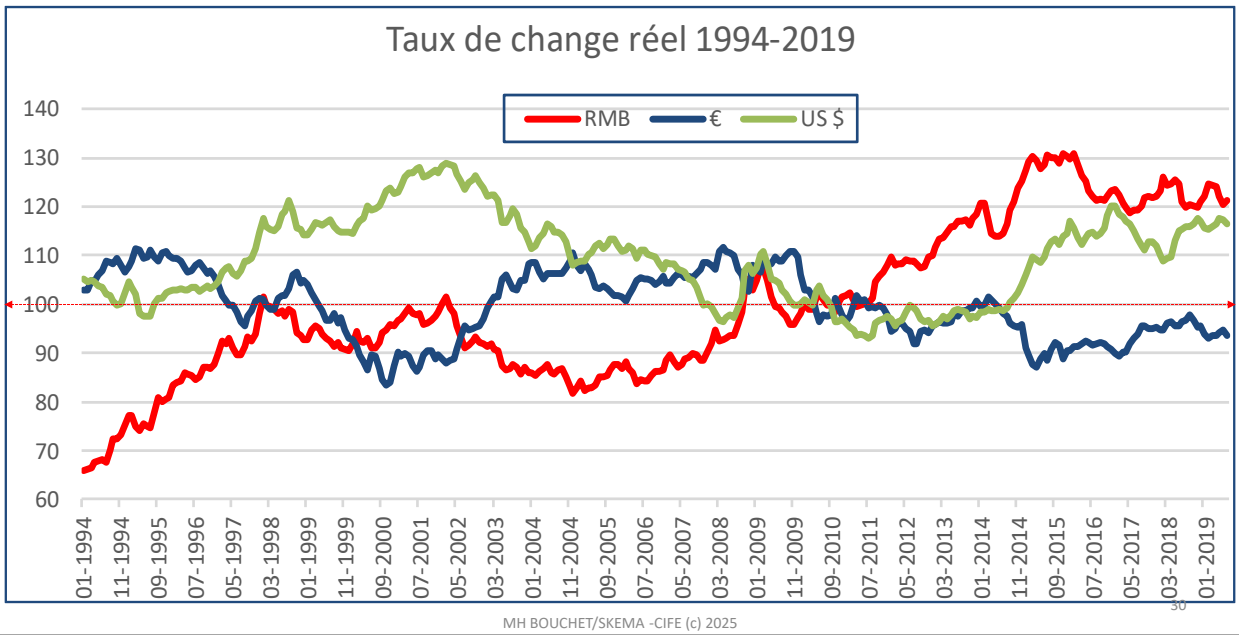
YUAN, €, $ = NOMINAL EXCHANGE RATE EVOLUTION



Source: BRI

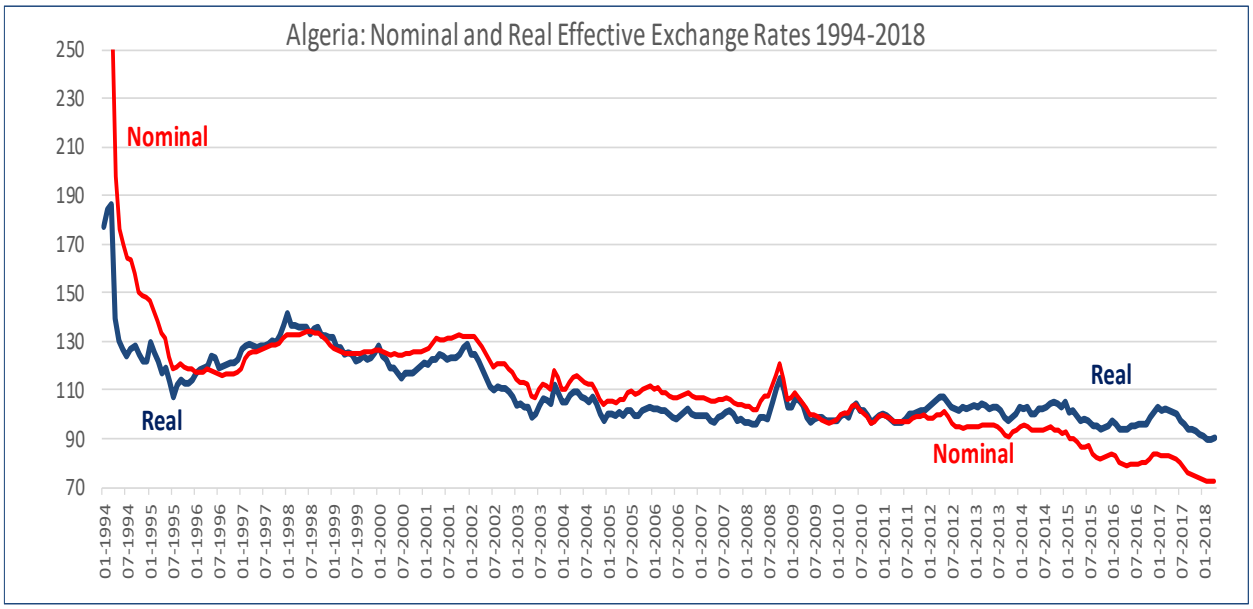
29

YUAN, €, $ = REAL EXCHANGE RATE EVOLUTION



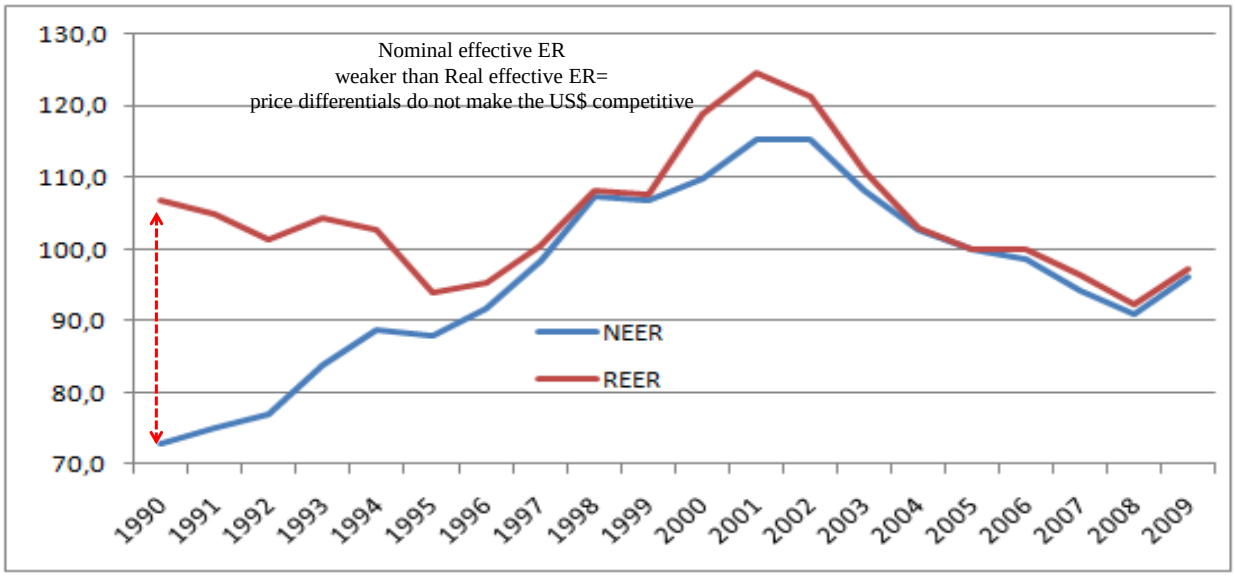
30

NOMINAL AND REAL EFFECTIVE EXCHANGE RATES



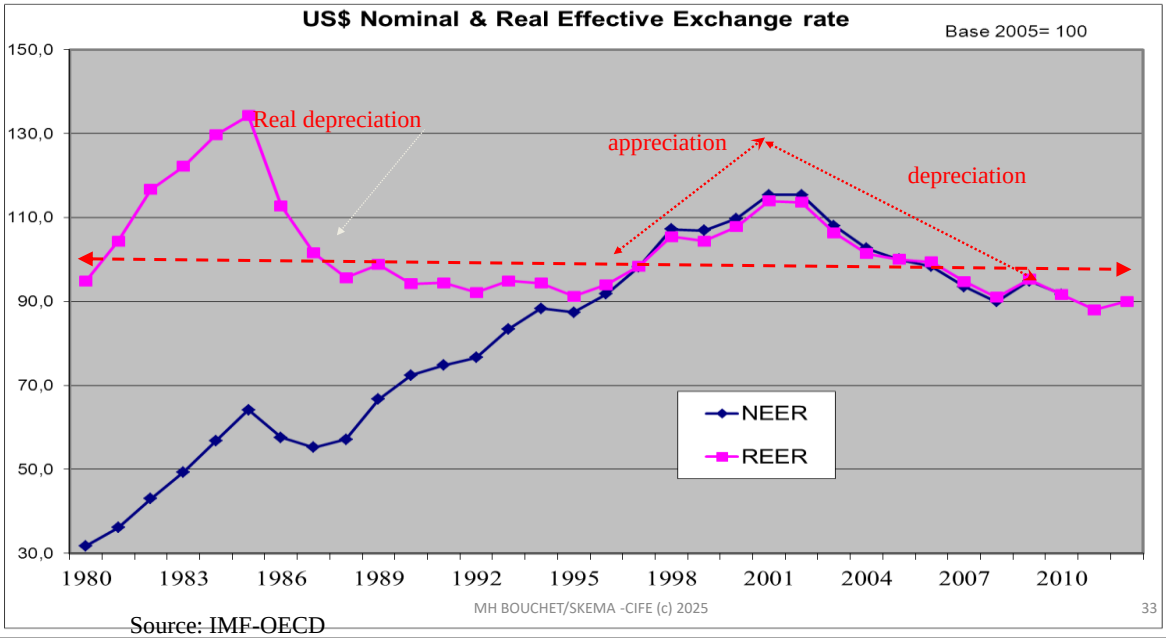
31

US $ NOMINAL/REAL EFFECTIVE EXCHANGE RATES
1990-2010



32

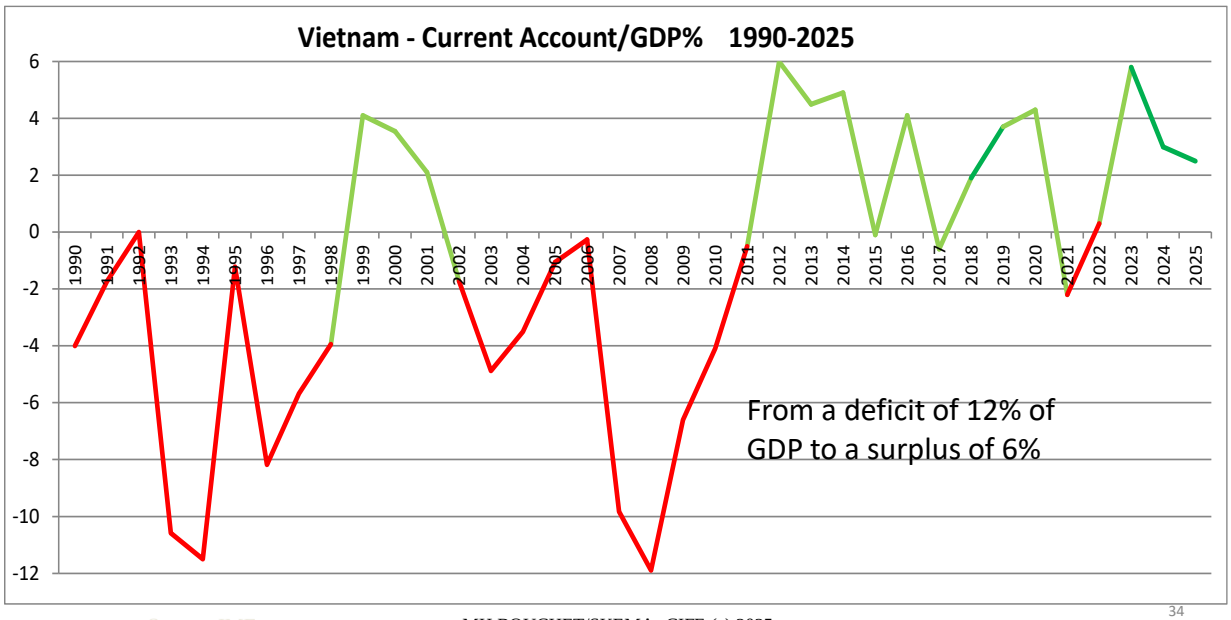
THE US$ EXCHANGE RATE OVER THE LONG-TERM



Source: IMF-OECD

33

AN EXAMPLE OF SUCCESSFUL EXTERNAL ACCOUNT ADJUSTMENT

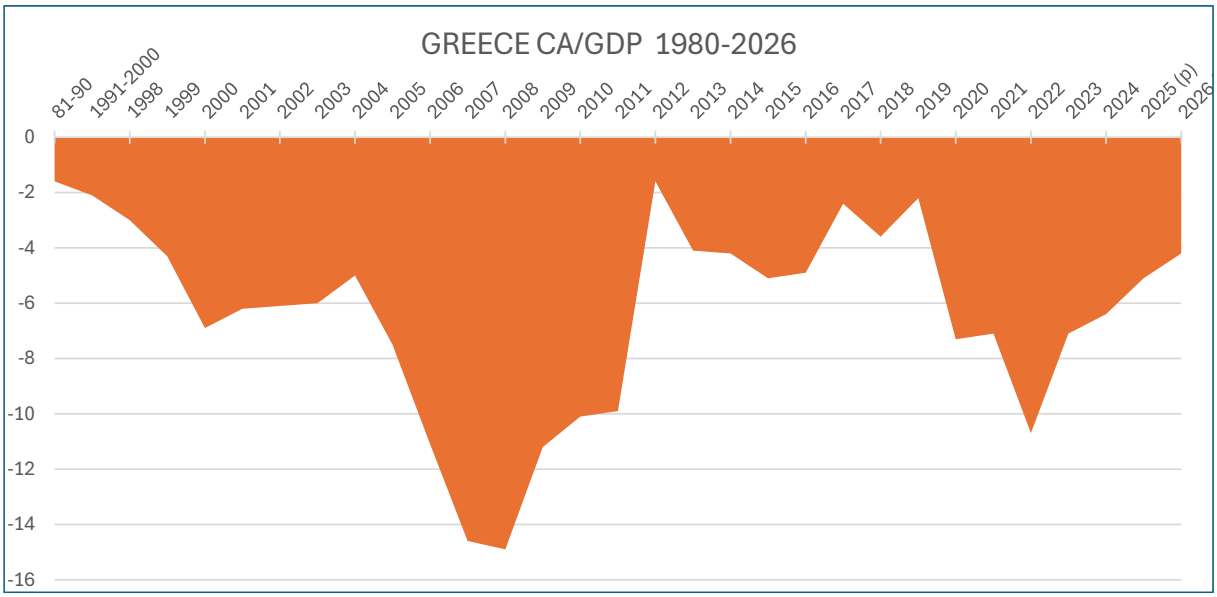


Source: IMF

MH BOUCHET/SKEMA -CIFE (c) 2025

34

GREECE: CURRENT ACCOUNT/GDP % 1981-2026



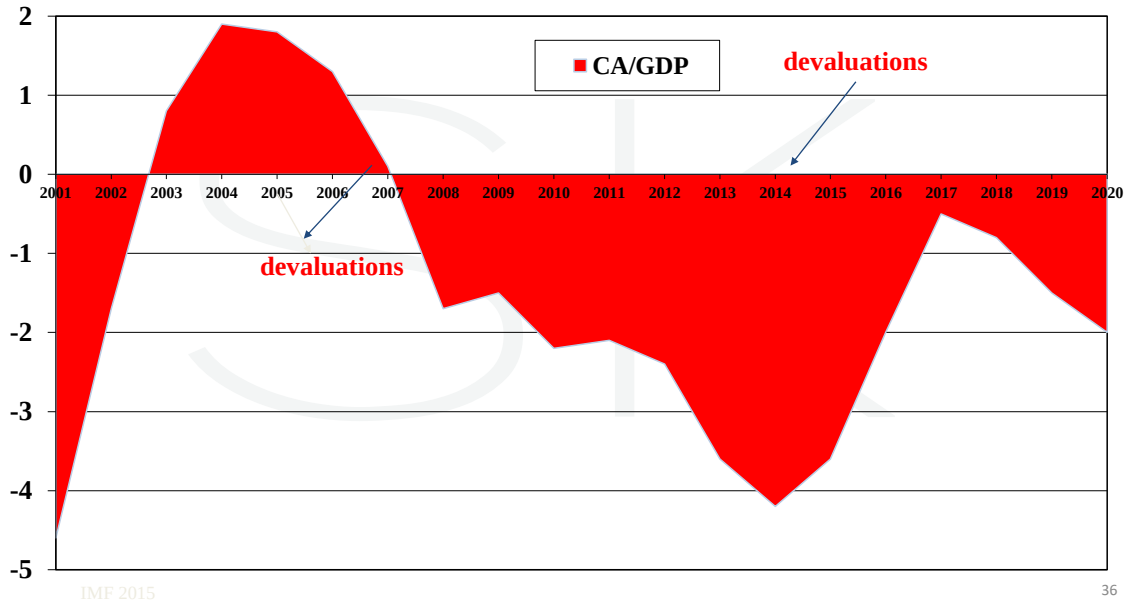
Source IMF-2025

MH BOUCHET/SKEMA -CIFE (c) 2025

35

35

BRAZIL: CURRENT ACCOUNT/GDP IN %



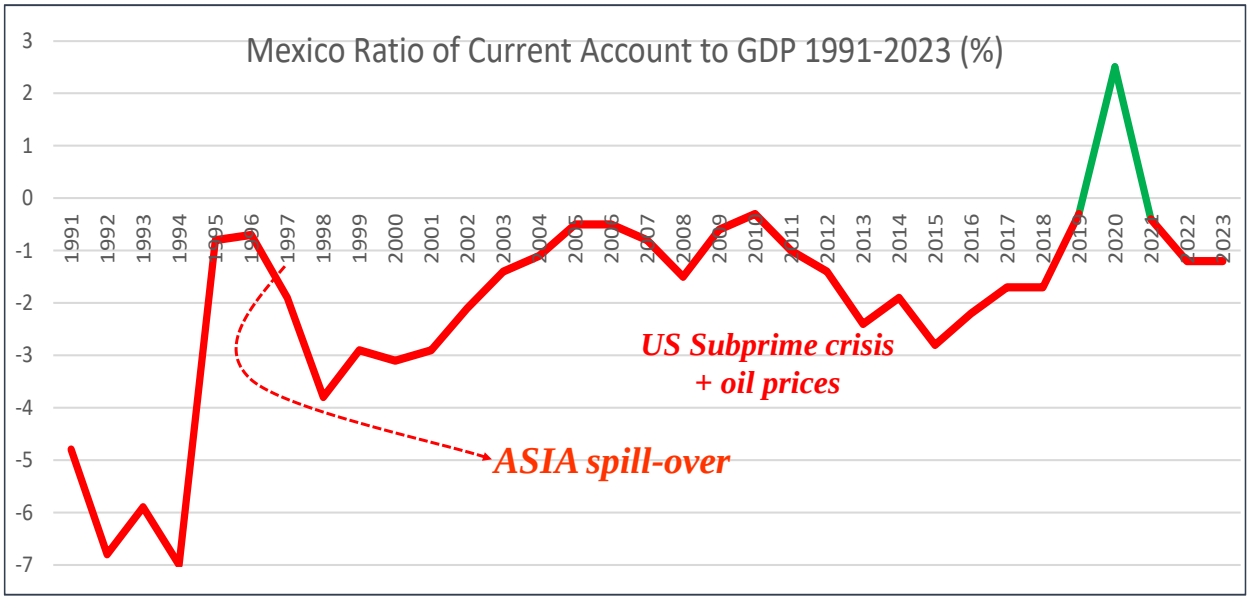
IMF 2015

MH BOUCHET/SKEMA -CIFE (c) 2025

36

36

MEXICO : CURRENT ACCOUNT BALANCE/GDP RATIO % 1990-2023

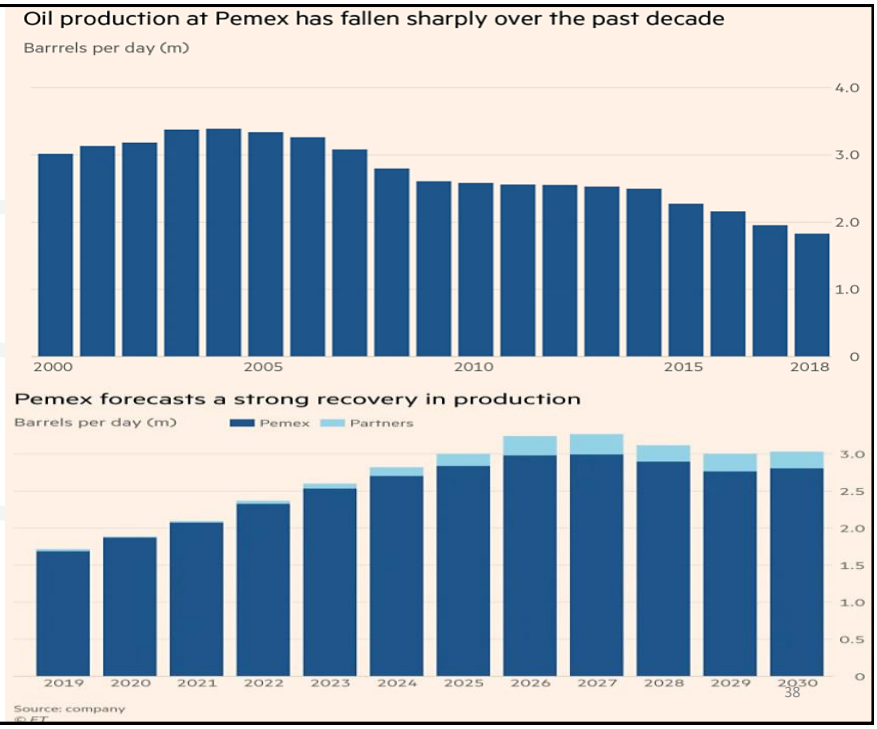


Source: IMF & IIF 2016

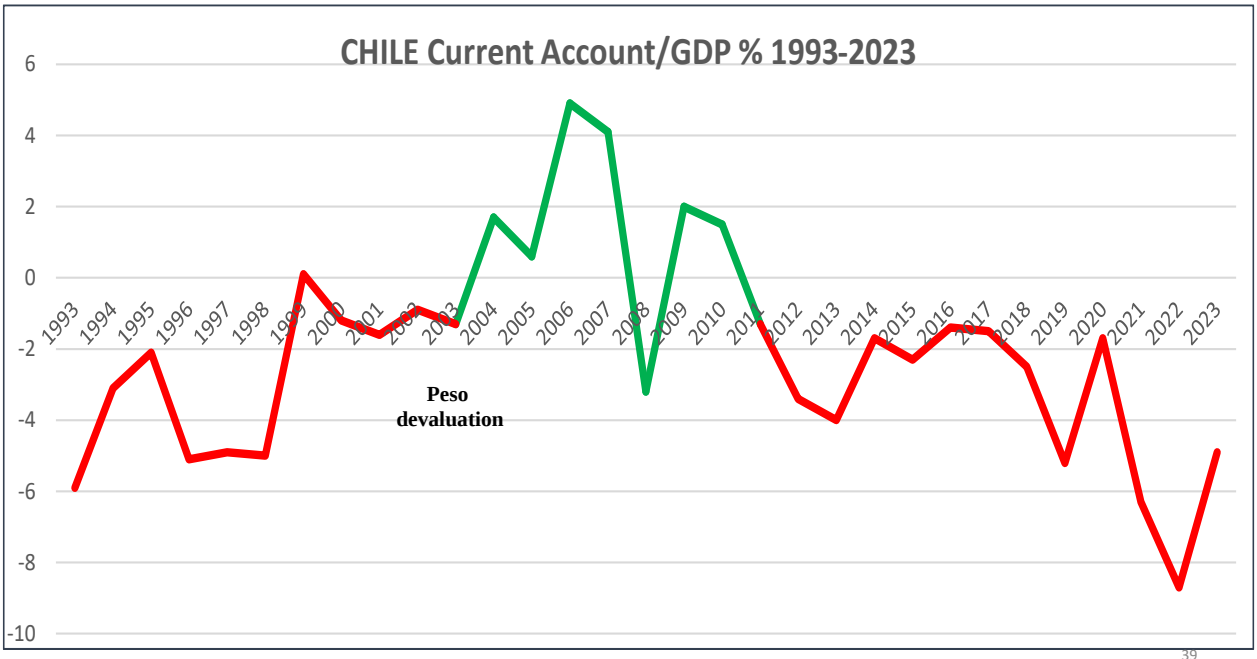
37

MEXICO'S OIL PRODUCTION, EXPORT REVENUE PROSPECTS AND CURRENT ACCOUNT DEFICIT

(Oil = 20% of budget revenues and 8% only of export receipts)



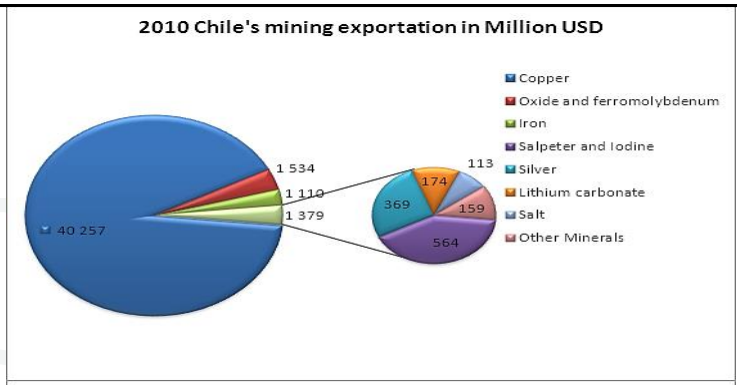
38

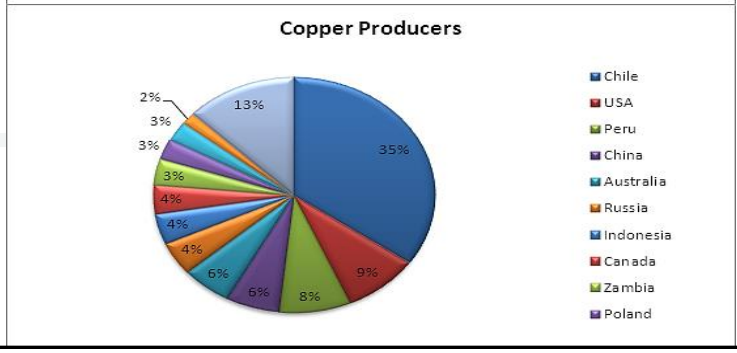


Source: IMF 2023

39

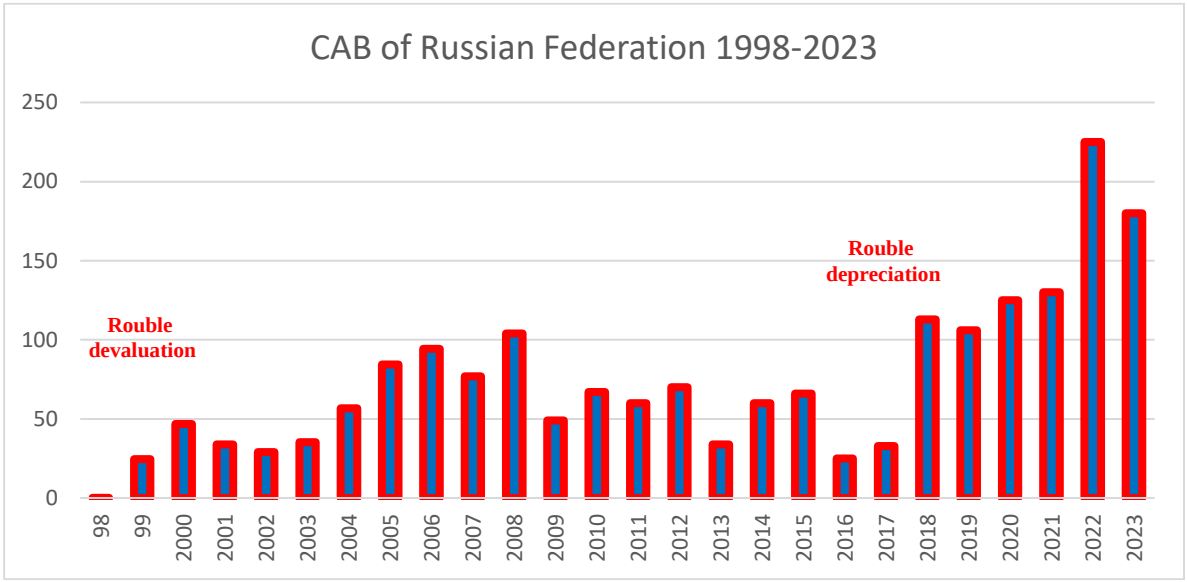
CHILE'S TRADE BALANCE: STRUCTURAL DEPENDENCE ON COMMODITIES





40

RUSSIA: CURRENT ACCOUNT BALANCE *(US$ BILLION)*



Source: IMF & IIF

41

Table 3. Tunisia: Balance of Payments, 2017–25 1/

(In millions of U.S. dollars, unless otherwise indicated)

TUNISIA'S BOP 2017-2025

(IMF 2021 ART.IV)

	2017	2018	2019	2020 Proj.	2021 Proj.	2022	2023 Proj.	2024	2025
Current account balance	**-4,080**	**-4,443**	**-3,288**	**-2,697**	**-4,210**	**-4,396**	**-4,493**	**-4,608**	**-4,717**
Trade balance	**-5,308**	**-5,950**	**-5,428**	**-3,711**	**-6,312**	**-6,101**	**-5,986**	**-6,243**	**-6,434**
Exports	14,231	15,485	14,945	13,646	15,913	16,928	17,761	18,503	19,160
Energy	846	880	824	774	910	977	1,057	1,164	1,292
Non-energy	13,384	14,605	14,121	12,872	15,003	15,951	16,704	17,339	17,868
of which: non-food	11,844	12,561	12,516	10,964	12,716	13,569	14,237	14,788	15,233
Imports	-19,538	-21,435	-20,373	-17,357	-22,225	-23,028	-23,748	-24,745	-25,594
Energy	-2,513	-3,214	-3,467	-2,424	-3,903	-3,999	-4,136	-4,285	-4,446
Non-energy	-17,025	-18,220	-16,906	-14,933	-18,322	-19,030	-19,612	-20,460	-21,148
of which: non-food	-15,100	-16,195	-14,981	-12,914	-15,748	-16,422	-17,034	-17,861	-18,529
Services and transfers (net)	**1,228**	**1,506**	**2,140**	**1,014**	**2,102**	**1,705**	**1,493**	**1,634**	**1,717**
Services	305	717	1,182	6	1,105	898	799	970	972
of which: tourism exports	1,170	1,565	1,918	740	1,295	1,750	1,887	1,974	2,042
Transfers (net)	923	790	958	1,008	997	807	694	664	745
of which: workers' remittances	1,861	1,875	2,023	2,249	2,322	2,386	2,468	2,461	2,492
of which: interest payments on external debt	-607	-725	-795	-787	-986	-1,236	-1,498	-1,590	-1,500
Capital and financial account	**4,079**	**5,068**	**5,066**	**4,255**	**3,690**	**3,715**	**4,098**	**4,165**	**4,307**
Capital account balance	184	128	137	419	92	72	80	89	99
Financial account balance	3,895	4,940	4,928	3,836	3,598	3,644	4,018	4,076	4,208
Direct investment and portfolio (net)	747	948	823	647	767	930	982	999	1,025
Medium- and long-term loans (net)	2,281	1,143	1,104	-474	1,709	1,035	1,634	2,029	2,249
Disbursements	4,266	2,631	3,231	1,668	4,915	3,665	4,350	5,102	4,673
Amortization	-1,986	-1,487	-2,127	-2,141	-3,205	-2,630	-2,716	-3,072	-2,424
ST debt and other capital flows (net)	868	2,848	3,001	3,662	1,122	1,678	1,401	1,047	934
Overall balance	**-1**	**624**	**1,778**	**1,559**	**-520**	**-680**	**-395**	**-444**	**-410**
Errors and omissions	-341	-1,251	589	-563	0	0	0	0	0

42

2. CUTTING INFLATION AND SLOWING DOWN OVERHEATING ECONOMY WITH EXCHANGE RATE APPRECIATION?

Principle:

- 1. A currency appreciation would cut the cost of imported goods and services, as well as import commodities (gasoline, machinery, production materials), hence helping to reduce the CPI.
- 2. Lowering imported costs will make them cheaper and more competitive, forcing local producers to lower prices to maintain their market share (?)

ADJUSTMENT WITH EXCHANGE RATE APPRECIATION?

- 3. Improbable trio: a central bank cannot stabilize the exchange rate and liberalize the capital account while implementing an independent monetary policy to control inflation. Floating rate frees the central bank from the need to buy foreign exchange and to increase the money supply.
- 4. Appreciating exchange rate leads people to wish to hold the currency and to own assets priced in this currency, hence reducing the demand pressure and the CPI. (and reducing capital flight!)

- All in all, can appreciation of the local currency help control inflation?

Much depends on the composition of imports and the « pass through » between importers and consumers!

US CURRENT ACCOUNT, IMPORT PRICES AND DOLLAR EXCHANGE RATE

- Key: Rate of exchange rate « **pass through** » = degree to which a change in the value of a country's currency induces a change in the price of the country's imports and exports
- Pass-through is always incomplete: in the OCDE countries import prices have become progressively less responsive to changes in exchange rates over the past decade or so
- The dollar's depreciation has had little impact on import prices and on the reduction of the US current account deficit (about 50% of the cumulative change in the $ has been transmitted to higher US import prices over 2002-05)

Source: Fed RBNY Current Issues 09/2006 and June 2007

45

US CURRENT ACCOUNT, IMPORT PRICES AND DOLLAR EXCHANGE RATE IN 2020-21?

Weaker $ = Lower US demand? Weaker EU exports?

- The European exporter must decide what share of the dollar depreciation to absorb in his profit margin and what share to pass on to US consumers to maintain Competitiveness!!

46

US CURRENT ACCOUNT, IMPORT PRICES AND DOLLAR EXCHANGE RATE

- Why will a weaker $ boost foreign demand for US exports but with little impact on lower US imports, hence is unlikely to close the US trade deficit?

1. Special role of the US$ in invoicing international trade transactions = insensitivity of import prices to exchange rates
2. Competitive market share concerns of foreign exporters
3. High US marketing and distribution costs that form part of the final consumption prices of imported goods. All these costs reduce the share of the final price that is affected by exchange rates movements.

47

The History of the U.S. Balance of Payments

Stage I: The U.S. is a *young debtor nation* (1770-1870) -Current account deficit due to the need to import most goods and inability to produce many goods for export. -Capital account surplus due to a great deal of foreign investment in the U.S. in the areas of roads, farming, cattle ranches, railroads, and canals.
Stage II: The U.S. is a *mature debtor nation* (1870-1920) - Current account deficit due to large investment income being paid back to foreign investors based on the investment of stage I. Merchandise account in surplus -- exports > imports.
Stage III: The U.S. is a *young creditor nation* (1920-1945) -Huge surplus in the current account due to large volume of postwar (WWI) exports. -Capital account in deficit due to a great deal of U.S. investment in Europe for postwar reconstruction.

Source: http://www.digitaleconomist.com/bop_4020.html

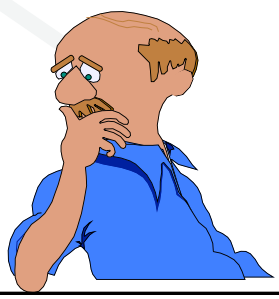
48

Stage IV: The U.S. is a *mature creditor nation* (1945-1980) -Merchandise deficit -- *exports < imports* but an investment income surplus with a slight net surplus overall. -Capital account is in deficit largely due to postwar (WW II) reconstruction in Europe and Japan.

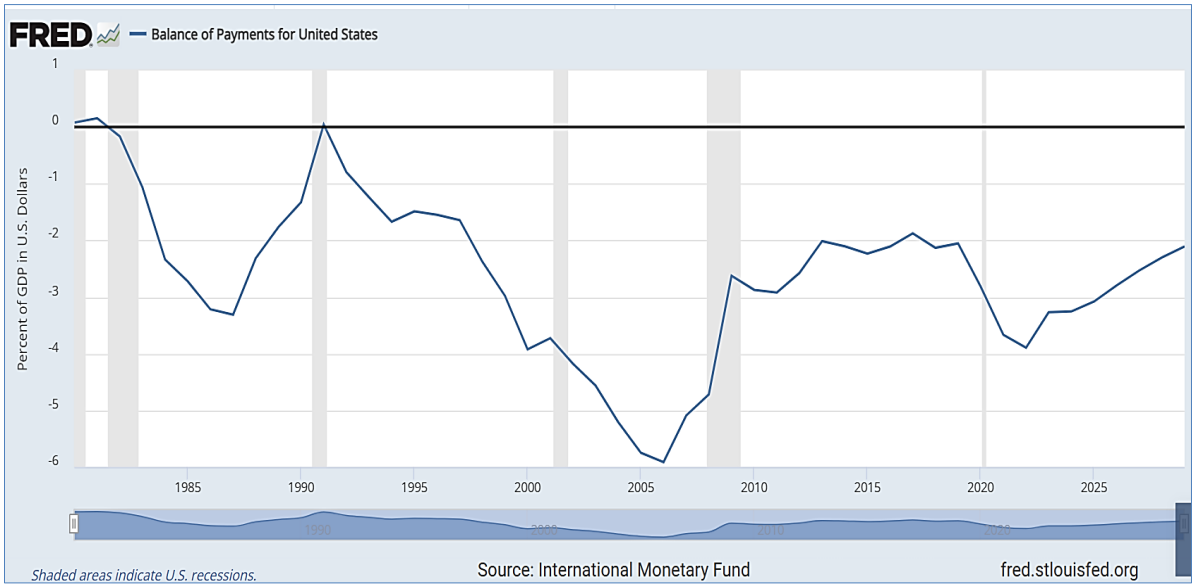
Stage V: (1980-2021) -Large (and growing) deficit in the merchandise accounts (Trade Deficit) and slight surplus in the investment income accounts. -Large surplus in the capital account partially to finance the above merchandise deficit (foreign individuals and banks lending money to individuals in the U.S.)
Additionally, since the U.S. has had a low inflation rate since 1982 and consistent economic growth, the U.S. has been a good place to invest relative to the rest of the world. However the current inflow of capital investment could eventually lead to large investment income payments in the future. The investment income surplus may soon be eroded thus worsening the current account deficit.

THE US CURRENT ACCOUNT DEFICIT DILEMMA

- Shrinking the deficit requires a weaker $
- Financing the deficit requires a strong $ by attracting US$2 billion/day foreign capital inflows



INVESTMENT > SAVINGS = US BOP DEFICIT 1980-2025



FRBSF March 2024

51

FINANCING THE US CAD?

- Morgan Stanley : Why is the dollar not (yet) crashing?

  The runaway CAD against Asian nations is not unduly worrying as long as Asia continues to park its capital surpluses in US assets (**60%** of the CAD is run against Asia and **bulk** of the US external deficit funded by Asian central banks)

  « As long as Asia stays in the dollar zone, the dollar cannot **crash**»

- But mounting risk over the funding of the structural deficit leading to repatriation flows by foreign investors

52

FINANCING THE US CA DEFICIT IN 2021-23?

Record US CA deficit in 2003-2008 >7% of GDP

and 5% of GDP in 2009-2019

- How to finance it? By importing K inflows from outside the US economy: need for >0 real interest rates and/or strong US$ currency, or pressure on surplus countries (China, Korea, Japan and Germany)!
- Damocles' sword: Japanese investors massively withdraw their investments in US$ assets and UST bills and repatriate their funds in Japan. Meanwhile, nearly 50% of US securities remain in foreign hands. Declining share of China
- US and Japan compete to lower their exchange rates to gain competitive trade advantage!
- **Covid19 Pandemic crisis and large monetary and fiscal stimulus might put pressure on the US$ … though the $ remains a "flight to quality" currency compared with the €**