

**Kick-Off meetings of the Jean Monnet Crisis  
network “Crisis - Equity – Democracy”  
for Europe and Latin America**

***The signification today of the Triffin Dilemma  
or the built-in global destabilizer***

**Christian Ghymers**

**President of IRELAC/ICHEC-Brussels Management School  
Vice-President of Robert Triffin International  
UCL-Louvain University  
Belgium**



**Egmont Palace, Brussels  
6 June 2017**



*Robert Triffin International*

# INDICE/synthesis

## Part 1: What is Triffin Dilemma ? Why is it necessary and urgent to move towards a multilateral currency?

1. Definition of the Triffin Dilemma: \$ cannot ensure 2 functions
2. What is our Global Financial Architecture (GFA)?
3. The GFA relies upon an IMS (International Monetary System): what is an efficient IMS ?
4. The present IMS is flawed for relying upon the use of a national currency - the US \$ - as the main international one
5. From “Triffin dilemma” to “Triffin built-in destabilizer”
6. ...and its systemic pyramid of monetary asymmetries
7. removing these asymmetries exposes to a systemic risk of deflationary bias which could be prevented by creating a multilateral CB issuing a (n+1th) currency
8. A multilateral currency collegially managed by a multilateral CB is an accessible win-win game since it doesn't require additional loss of national sovereignty

# INDICE/Synthesis

## Part 2: HOW to move in three steps from the existing IMF and SDR to a multilateral Central Bank issuing a multilateral reserve currency?

1. Existing SDR offers the ideal catalyst for achieving a true GFA reform
2. Main advantages of the SDR
3. Main obstacles to the SDR use
4. What is feasible in the short-run?
5. First step: making official SDR more attractive and promoting private SDRT
6. Second step: linking official SDR to private SDR and allowing IMF to issue directly SDR against national assets
7. Final step: eradicating the remaining asymmetries and the exorbitant privilege through rules
8. Annexes: analytical scheme of the issuance of Multilateral Reserve Currency by the Multilateral Central Bank and Charts

# WHAT is Triffin Dilemma?

- Triffin dilemma (TD) merely transposes a reality for any currency issuer => at national level, private banks issuing nationally failed and it was necessary to create national Central Banks (CB) as a neutral additional agent issuing its own debt.
- Formally, TD shows the logical contradiction between being a stable domestic currency and being the main international one, since by definition a currency is a debt-at-sight; the raising needs of international reserves means raising external debt for the issuer out of proportion with domestic interests
- The problem comes from the  $n-1$  degrees of freedom among “ $n$ ” currencies (or “ $n$ ” competing private banks at national level), the only logical solution is to add a “ $n+1$ th” agent issuing a “ $n+1$ th” currency in function of stability needs: globally (IMF) as well as nationally (CB) and not national or private one
- Gold used to be the “ $n+1$ th” currency but too rigid (geology)

- As a consequence a national sovereign Central Bank (Fed) could not ensure both domestic and international stability; risk of too much or too few global liquidities for meeting international needs, the “n+1th” must be created at multilateral level
- = True whatever exchange-rate regime (not only in fixed-Bretton Woods regime) since pure floating does never exist (currencies are not equivalent for technical needs for a “nth” single vehicle) => floating increases the demand for reserves from “n-1” CB
- Any stable monetary system - national or international – requires a “n+1th” bank dedicated to make compatible the “n” others by issuing or withdrawing its own liabilities for ensuring macroeconomic stability
- Without this LOLR function through a “n+1th” currency (used as Monetary base) => banking over-indebtedness and crisis (national level) or global macroeconomic imbalances (international level) preventing adequate liquidity management

# I. WHY ? 1. The global Financial Architecture

The hypothesis of a causal link between the asymmetry in the present IMS based upon the US \$ as the main reserve currency and the global crisis should deserve more attention: credit booms and capital flows were key-aspects of the global crisis.

Our thesis: the inability of IMS to provide and regulate adequate degree of global liquidities => global credit-boom due to spillovers => excess of leverage and debts => global crisis => de-leverage => no growth => need for a GFA reform able to ensure a more symmetrical IMS through more collegial regulation of global liquidities = easier than policy coordination (self-interest)

This thesis is just how to get rid of Triffin Dilemma developed untiringly as soon as the 1950s, inclusive in the US (White House), at IMF (creation of the SDR and Art. VII), at Yale and Louvain Universities and in many international tribunes...but...

Amazingly Triffin's analysis showing a feasible Global "win-win game" through a better GFA has generally remained perceived as utopic by Central Bankers, except by Governors Zhou (2009, PB of China) and Camdessus/de Larosière (ex-IMF & France).

## WHY? 2. The GFA relies upon an IMS (International Monetary System): what is an efficient IMS ?

“System” means an agreed and structured way for organizing international payments between “n” competing currencies.

= it implies collective actions for creating this public good ensuring 3 linked “*coordinating*” functions:

- 1) providing adequate liquidity for fluctuating levels of trade (i.e. preventing international waves of excess or scarcity of international currency)
- 2) providing means or tools for correcting global imbalances without net contraction in global demand and preventing conflicting practices (unfair protections damaging trade and capital movements);
- 3) Issuing a set of coherent rules, tools, institutions for warranting a minimum of coordination for preserving the public good of stable monetary and economic conditions

# **WHY? 3. But the present IMS is flawed for using the US \$ as its main reserve currency**

- Triffin dilemma shows that with a national currency used as the dominant international reserve, an increase in demand for reserves implies growing external indebtedness of issuer; in consequence risk of too much or too few global liquidities
- = True whatever exchange-rate regime (not only in fixed-Bretton Woods regime) since floating increases the demand for reserves
- Any stable monetary system - national or international – requires a n+1th bank dedicated to make compatible the n others by issuing or withdrawing its own liabilities for ensuring macroeconomic stability
- Without this LOLR function through a n+1th currency (Monetary base) => banking over-indebtedness and crisis (national level) or global macroeconomic imbalances (international level) preventing adequate liquidity management

## WHY? 4. From « Triffin Dilemma » to « Triffin built-in destabilizer » ...

- \$-based-IMS creates 3 destabilizing mechanisms : 1) the softening of the external constraint for the US resulting from the “automatic loans” by the (n-1) demands for reserves => global imbalances (de-saving => US becomes the “*consumer/borrower of last resort*”); 2) the US monetary stance generates automatic liquidity spillover: multiplication abroad, any excess of US monetary base is duplicated by (n-1) CB as they re-inject it in US economy, (not deposited on the FED accounts since they buy US T-Bills and CD on the market); 3) pro-cyclical movement in bank flows, leverages and spreads (as a result of the dramatic increase in the gross cross-border operations of banks combined to pre-eminent technical role that the US dollar plays in global banking): depreciation of the US \$ increases leverage outside and vice-versa (Shin Hyun Song 2012, 2014), therefore creating a new channel of transmission of FED monetary stance even when exchange rates are purely floating (Hélène Rey, 2013,2015)

# WHY? 5. ...and its systemic pyramid of asymmetries

- These channels are inter-related, forming a vicious circle:
  - Demand for \$ reserves => lower US interest-rate => less fiscal discipline => excess of absorption => global imbalances
  - => less US jobs => FED must react and apply Keynesian stimulates => multiplication abroad => + demand for reserves for resisting \$ depreciation & growing financial risks: FED feeds imbalances and the excess of saving by some emerging economies
  - => + imbalances => + demand for US Keynesian policies => + liquidity creation (FED feeds the imbalances) => + demand for reserves
- => pyramid of asymmetries: in external constraint as far as growing demand of US \$ assets, in policy stances: can sustain longer Keynesian impulses with current account deficits, in cost of financing fiscal/ external deficits, in exchange-rate risks (invoicing and borrowing in \$ shift the burden to Foreigners), in yields and valuation effects: excess return on US assets over US liabilities and in resource transfer to the US

# **WHY? 6. removing these asymmetries exposes to a systemic risk of deflationary bias which could be prevented by creating a multilateral CB issuing a (n+1th) currency**

- The basic reason for an additional (n+1th) bank/currency above the others is to make easier a regulation of liquidity supply since the n+1th allows for preventing to do it becoming a net debtor: at national level the n+1th agent = national Central Bank, as well as at international level the n+1th = an IMF as Global CB, both should issue their own liabilities against equivalent claims upon the n national agents or upon the n economies of the IMS = no net debt for the CB or for the IMF = LOLR functions
- In the past, precious metals were used as an imperfect rigid n+1th agent (currency) able to impose some anchorage to n agents (economies), although geologically dependent (but exogenous to n national agents)

# **WHY? 7. Multilateral currency collegially managed by multilateral CB is an accessible win-win game since it does not require additional loss of national sovereignty**

- GFA status-quo exposes to very high global risks and costs
- Challenging monetary spillovers is only possible through collective actions
- What are the options? Policy coordination would be technically possible but politically (and constitutionally) utopian, capital controls would be technically difficult and also politically utopian, strengthening multilateral surveillance...
- In fact, moving to a SDR-based global reserve system (= genuine multilateral currency managed by an IMF upgraded to Multilateral CB) is the less costly in political economy terms: no additional loss of sovereignty, big progress in global stability, positive effects fairly shared, all economies better off, including the US.

## **II. HOW? 1. Existing SDR offers the ideal catalyst for achieving a true GFA reform**

- SDR was consensually created for becoming this multilateral reserve upon which the GFA would be based (see Art. 7), still to be applied
- This embryo of the desired global currency was however marginalized for a combination of logical and contextual reasons, reaching only <1% of total reserves and 4% after the countercyclical creation of SDR decided by G-20 in 2009, but annual flows <\$ 20 bn
- The crisis context, the global shortage of « safe assets » cutting excessively risk premium, the higher weight of emerging economies, the RMB adhesion to the SDR, and the urgent need for a systemic solution should make easier the development of both public and private uses of SDR leading gradually to building-up the needed global consensus around a change in IMF and SDR status
- This is the RTI proposal: using present SDR -which is not a national liability and is managed at the multilateral level - as a lever towards the win-win game solution of SDR-based global reserve system

## **HOW? 2. Main advantages of the SDR**

- SDR is the only multilateral monetary instrument
- SDR enjoys already universal acceptance by conventional officials and central bankers for being the official mean of payment across Central Bank, IMF and some IFIs
- SDR is the only existing instrument which can be issued without being a direct liability of any single economy
- SDR is the only component of global liquidity that can be subject to collective decision-making along existing procedures for direct countercyclical actions
- SDR is the easiest and most rational channel for providing alternative reserves to central banks especially for precautionary reason
- Reducing the Triffin dilemma and the asymmetries, introducing some external constraint on the US economy
- SDR has been a much better monetary standard in terms of long-term store of value and short-term stability than the US \$, being immune to the impact of floating exchange rates, saving so hedging costs

## HOW? 3. Main obstacles to the SDR use

- SDR is *“SDR is neither a currency, nor a claim on the IMF....Rather, it is a potential claim on the freely usable currencies of IMF members”* (IMF 2009) the conversion of which has to be bargained and administrated, and limited use between only Central Banks, IMF and a very few other IFIs.
- IMF cannot issue directly SDR as a LOLR but only as “helicopter money”
- SDR has no market for exchanging it procedure is slow , volume too narrow
- IMF does not even use it for its General Account Department
- SDR interest rates are unattractive for holding official reserves (not market-based but calculated from official short-term rates)
- Periodical revision of the basket could provoke uncertainties and costs
- Procedure of SDR allocation are too rigidly linked to quotas (LDCs penalized)
- Absence of clear signal from authorities for making it the effective mayor reserve instrument and failure to set a substitution account for increasing its share while smoothing exchange-rate fluctuation of the US \$ affected the interest for developing its parallel private use

# HOW? 4. What is feasible now ?

- Operationally, an IMF Substitution Account would be a necessary step: = appropriate instrument to diversify reserves into SDRs, without exposing the world economy to risky tensions in foreign exchange markets. No change requires in the IMF statute. Allows for a consensual shift away from the dollar as reserve-currency while maintaining the network externalities necessary for ensuring no breakdown in its role as a day-to-day transaction-currency; Conflictual issue about exchange-rate risks is solved allowing the account to exist indefinitely (**Icard**: i.e. preventing any exchange-rate loss to be realized by the IMF since the conversion rate is definite once and for all in bookkeeping terms and the SDR is the eventual permanent reserve currency of the IMS)
- However, for being successful this soft rebalancing in reserve composition requires parallel actions: providing legal certainty, and continuity, increasing rapidly depth, liquidity and volume of the SDR market, supporting the market infrastructures for developing a private SDR market (interbank clearing arrangement).

# HOW? 5. First step: making official SDR more attractive and promoting private SDR

- Enhancing the use of official SDR and developing private use of SDR basket are mutually supportive. For the private SDR market to develop, a strong signal is first needed from the official side: Without need to change the IMF's Articles : 1) Deciding SDR allocation each year \$ 100-400 bn according to global needs 2) IMF, World Bank and the other multilateral or regional development banks should generalize the use of SDR and issue SDR denominated liabilities (supplying requested safe assets on the markets); the latter could promote SDR denominated loans. 3) National Treasuries and private borrowers will follow issuing SDR denominated debt once the transaction costs will be competitive.
- The existence of a liquid private SDR market will allow Central banks to hold reserves in private SDR and to use them for exchange market interventions.
- In parallel, public sector should promote multilateral clearing in SDR with private banks and do the necessary for ensuring the legal continuity and making predictable SDR composition (cfr ECU => € experience)

# HOW? 6. Second step: linking official SDR to private SDR and allowing IMF to issue directly SDR against national assets

- With changes in the IMF Articles, private banks could hold SDRs on IMF accounts while Central Banks could use their official SDRs on private markets, allowing interventions directly in SDR. In particular, Central Banks could operate on the interbank Clearing House with both official and private SDRs and swap operations could ensure liquidity and yield curve
- Articles should also adapt SDR allocations to satisfy better the real demand for reserve as LDCs reveals a much higher need than developed economies (9 times higher in 2000-2010 in % GDP ! Ocampo 2015)
- Overall, the key step is to allow IMF status issuing directly SDR against eligible domestic earning assets from the “n” economies, transforming IMF into a “Multilateral Central Bank”-MCB and SDR into a genuine “Multilateral Reserve Currency”- MRC (at par with SDR value). This will allow for adjusting global monetary base under strict technical criteria and collegial decision by the Board, making possible a rational management of global liquidities, and meeting cyclical and crisis liquidity adjustment (counter-cyclical or emergency LOLR actions)

# HOW? 7. Final step: eradicating the remaining asymmetries and the exorbitant privilege through rules

- IMF is now a MCB managing monetary base with 2 issuing modalities: exogenously in buying or selling national bonds (according to global liquidity needs), and endogenously through an overdraft facility (in % of quota) for national CB (national adjustment needs).
- Adjustment burden becomes manageable according to the global cycle: if negative output gap, adjustment bears more on surplus economies and the contrary in case of inflation tensions.
- But each economy faces eventually the same degree of scarcity of the international liquidity (after the temporary flexibility of the multilateral overdraft facility)
- This requires an additional condition: to regulate sterilized interventions for preventing to resist durably to the symmetric movement in monetary bases of deficit/surplus economies
- Ex: PB of China substitutes (stable) MDR for (unstable) US \$ T-bills; it sells T-bills on the market, shifts the \$ from its US bank to its account at the FED (US monetary base is cut), exchanges at the MCB its \$ deposits for MDR

# **HOW? 7. Final step: eradicating the remaining asymmetries and the exorbitant privilege through rules**

- The MRC amount is taken from the FED deposit (or the FED overdraft) and increases the MRC deposits of the PB of China: no increase in global monetary base (as far as no sterilization in the US by increasing domestic assets of the FED), the US faces a debt in MRC and China accumulates MRC but increases its own monetary base = perfect symmetry balancing the adjustment between surplus and deficit economies, no deflationary bias.

# CONCLUSIONS

## Time and conditions to adapt the GFA to a multipolar world are met

- **The exorbitant irrationality of the present system based upon national reserve currencies is obsolete and too risky**
- **The temporarily coinciding incentives of the polarized creditor and debtor countries for maintaining status-quo are shifting toward shared interests for improving stability and governance through a soft and progressive set of reforms making the best from existing institutional procedures i.e. SDR and IMF.**
- **Any short-term actions or proposals should be assessed according to the long-term goal of making the SDR the main reserve currency for Central Banks**
- **Strengthening the IMF up to making it the needed Multilateral Central Bank issuing the SDR as the multilateral Reserve Currency is the most respectful option of national sovereignties since it internalize better the monetary spillovers than any other options.**

# Annexes

- Balance-sheet presentation of the final stage of the Multilateral Central Bank issuing Multilateral Reserve Currency
- Charts

# **Analytic Scheme: Balance-sheet of the Multilateral Central Bank (MCB = IMF+) in MRC (=SDR+)**

## **ASSETS**

**A1 + A2 = total claims upon  
“n” economies:**

**A1. National Bonds in “n”  
national currencies  
converted in MRC (=**  
**SDR+)** (=valorized at daily market-  
rates against the MRC (“Multilateral  
Reserve Currency”) basket

**A1.1 Swapped Bonds**

**A1.2 Bought Bonds**

**+ A2. Overdraft Facility in  
MRC (SDR+) to National**

## **LIABILITIES**

**= Global Monetary Base**

**P1+P2 = total liquid  
liabilities**

**L1. Deposits in MRC from  
« n » Central Banks as  
counterparts for « n »  
national Bonds sold to MCB**

(countervalue changing all days but assets  
= liabilities, no exchange-rate risks)

**P1.1 = counterpart of swapped Bonds**

**P1.2 = net issuance of MRC (=**  
exogenous variation in Global Monetary  
Base according to global needs)

**+L2. Reserve Deposits in  
MRC (SDR+) from National**

# Comments to the analytic scheme of the issuance of MRC (SDR+) in the MCB (IMF+) Balance-sheet

**A1.1 Swap between MCB and « n » national CB for 20% (for example) of their national assets backing their national monetary base (registered at current exchange-rate in MRC: such a swap does not create any new liquidity (substitution inside global monetary base)**

**A1.2 The MCB buys national Bonds for increasing Global Monetary Base (and sells for cutting it)**

**A2 The MCB opens an Overdraft Facility to national CB of deficit economies, usable according to objective rules (% of quotas) and after approval by Board qualified**

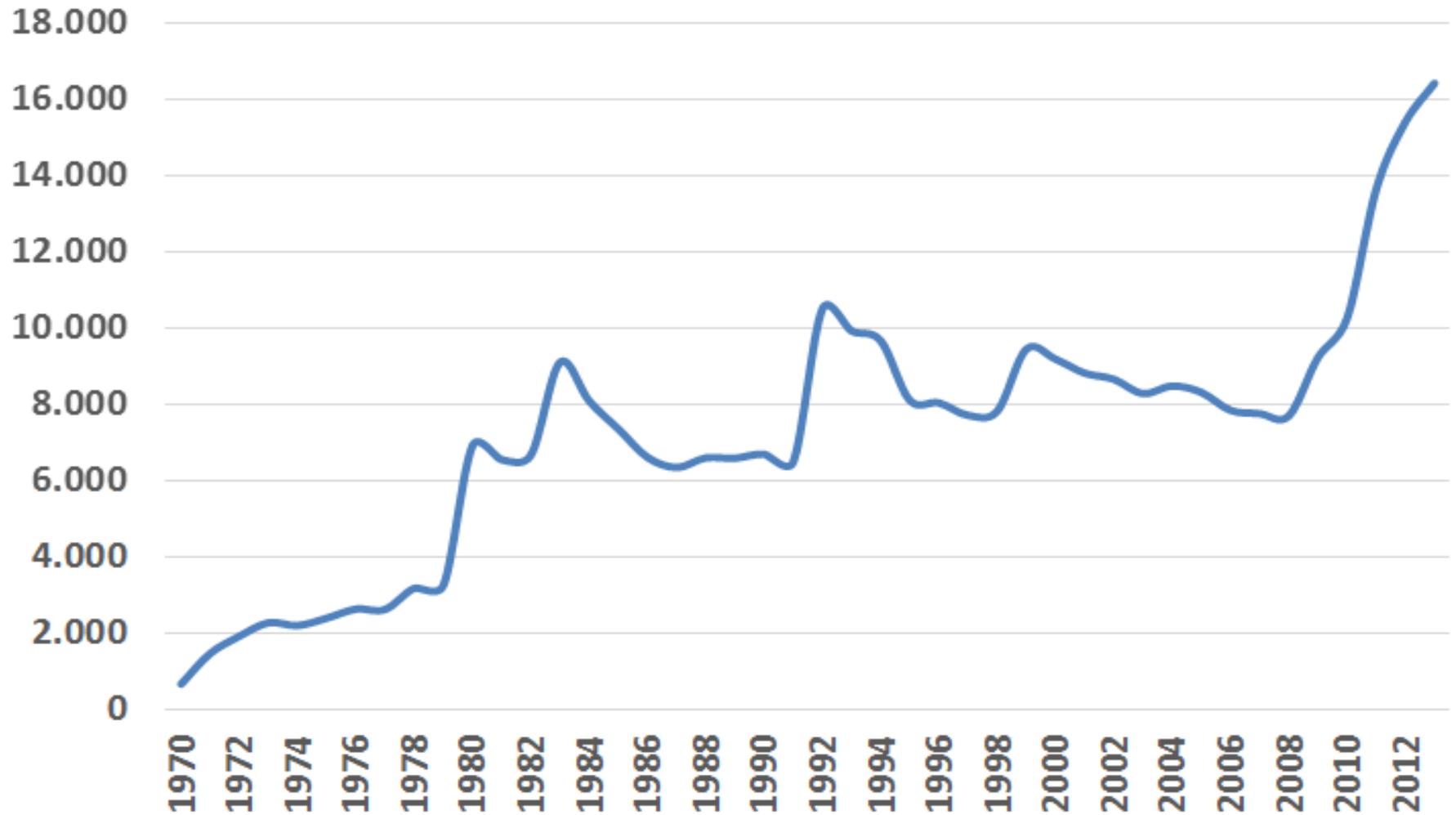
**L1.1 In counterpart of 20% of assets swapped by the « n » CB the MCB issues MRC (SDR+) on the respective accounts of these CB usable between CB. If exhausted, possibility to borrow with the overdraft facility below (L2)**

**L1.2 Exogenous net issuance of MRC making IMF a genuine Global Central Bank able to change Global Monetary Base and SDR becoming a full international currency**

**L2 MRC issued as counterpart of overdraft uses: deficit economies pay to surplus economies by shifting MRC from their accounts to the surplus economies accounts deficit**

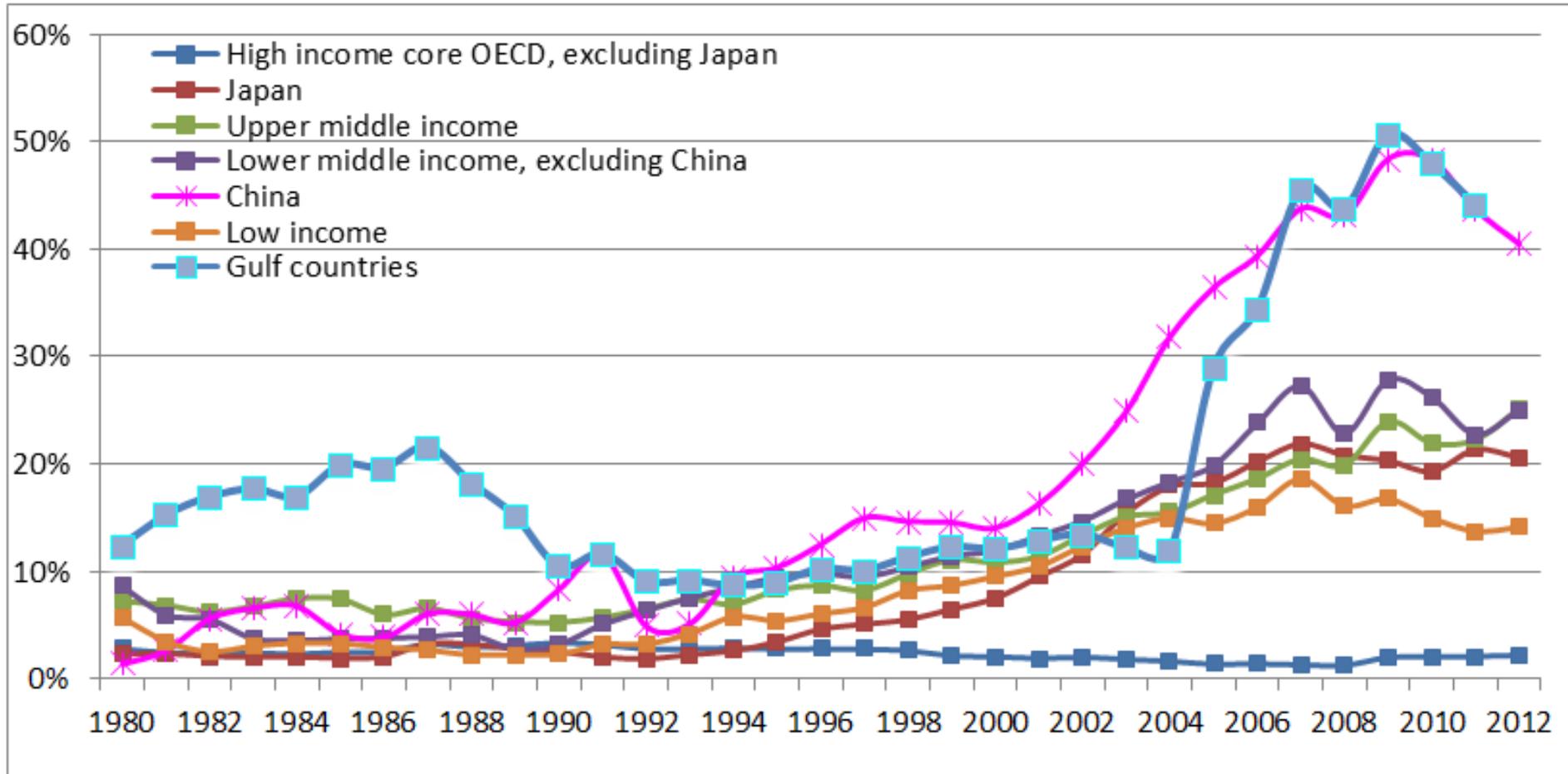
# TOTAL NET DRAWINGS OF SDRs in millions of SDRs

(Source: B. Erten and J-A. Ocampo 2015)



# International Reserves by Level of Development (% of GDP)

(Source: B. Erten and J-A. Ocampo 2015)



**Robert Triffin (1911-1993) in  
University of Louvain-La-Neuve  
Belgium 1984**



**RT**