

## Bretton Woods's system: did we throw the baby out with the bathwater ? Lessons for developing economies

By Mouhamadou M. LY

### Summary

The world economy has gone through several systems to determine a value between country's currencies. After the Second World War and the so-called gold standards, major world economies engaged into a system of fixed exchange rate of currencies against the dollar and, the whole system was backed by the value of USD against gold. After the end of that mechanism known as the Bretton Wood system in the 1970s, major world economies decided to liberalize the system of international exchange rate system. The common wisdom was to consider that the market dynamics were sufficient to maintain real alignment of currencies. However the current world economic situation, (with global imbalances, severe currencies misalignment etc.) calls to reform the system. Among the options to consider, the positive aspects of the late Bretton Wood system has not to be excluded.

### Introduction

The current stance state of world economic relationships, especially the ones between world powers, recalls the situation during the early twentieth century. The early 1900s was a period of trade tensions where, in many cases, implementing trade barriers was not enough and during which countries were resorting to disordered as well as competitive use of their exchange rates. And history has taught us that, to a large extent, non-coordination of policies between Nations has never given a positive and peaceful outcome for the world. After the First World War, several countries managed to return to the gold standard system. Indeed, until 1914, the gold standard system was the major determinant in the expansion of world trade

relationships. The system was quite ingenious and its mechanism simple. Every single currency had its value in terms of gold that was called the "mint price of gold". The nominal exchange rate between currencies was determined through their respective value in terms of gold and adding to that the relative price of shipping gold between frontiers. In theory, this system would allow the automatic adjustment of balance of payments toward a perfect equilibrium. For instance, if there were a current account deficit between two economies, the creditor country would receive gold paid by the debtor country. This gold received would allow an increase in money supply (more paper money backed by that gold) creating then inflation in domestic prices. Therefore, the creditor country would become relatively less competitive while the exact opposite happens in the debtor economy that

sees fall in price (following gold outflow) and competitive exports with higher price of imports from the creditor country. At the end of this process, both current accounts would naturally come to equilibrium. However, the system did not work so perfectly as adjustment did not occur immediately and there was very often a period of recession and unemployment in a country following gold outflows for debt payment. And governments during that period did not have the habit yet to intervene in the market to run appropriate policies to fasten the return towards balanced current accounts. The outbreak of the First World War in 1914 marked the (first) end of the gold standard system as countries decided to arbitrarily fix the value of their currencies.

After the world conflict, several economies managed to go back to gold standard system with very mild success. From Europe<sup>1</sup> to Latin America, several countries returned to the Gold standard system seeking higher stability and economic growth through trade development. Actually, this has had a clear positive impact on world trade and output (Federico & Tena-Junguito 2016).

For admirers of the gold standard system, the main advantage of such a mechanism is the price stability it creates and the automatic adjustment of current accounts between partner countries. Indeed, as quoted by Cooper (1982), price levels during the 1870-1914 period did not rise as much as over the period after 1944. However, things were not that straightforward since fixing money to gold is not a full guarantee against price fluctuations. The gold standard system ensures price stability only if the relative price of gold and other goods remains stable. Unfortunately, this sine qua none condition was not always met due to gold price fluctuations (caused by changes in the quantity of gold in the world market).

A second trusted advantage of the so-called gold standard is that the system allows an easy and automatic return to equilibrium of countries' current accounts. In fact, if a country decides to increase its money supply (buying domestic assets), this measure will cause a decrease in domestic interest rates making foreign assets more profitable for investors. Under the gold standard system, investors sell domestic currency for gold that will be invested abroad where yields are higher. The outflow of gold will continue inducing a decline in official reserves. Therefore, domestic money supply will also fall causing

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1. In Europe: United Kingdom, Germany, France, Austria, Italy, Netherlands, Sweden, Belgium, Denmark, Finland, and Norway. For Latin America: Argentina, Chile, Peru, and Venezuela.

domestic interest to rise, ending up with a progressive inflow of gold. This process will continue until domestic and foreign interest rates reach equilibrium.

As stated earlier, after World War I, several economies returned to the gold standard system in an attempt to escape from macroeconomic instability after 1918. However, the 1929 market crash in New York, known as the Great Depression, marked the end of that monetary system. Several authors (e.g. Choudhri & Kochin 1980) consider the gold standard as the main culprit of the expansion of the crisis. Indeed, Central banks willing to keep their reserves in gold avoided providing the necessary support to their banking system under stress. In other words, expansionary monetary policy was difficult, or even impossible, for countries fearing to lose gold reserves.

Later in 1944, after crucial negotiations on the new structure of the international monetary system between the British and Americans, Harry White's plan was adopted. The dollar as reserve currency was born.

This contribution is to present, briefly, the main recent evolutions in the international monetary system architecture and its implication for developing countries in terms of financial and macroeconomic stability. The outcome is to drive a recommendation for future (unavoidable) reforms given the fact that severe disequilibrium is being nurtured by the current system of market-determined price of currencies.

## Section 1: The Bretton Woods system

After the Second World War, the economic prosperity in the US, compared to the fragile situation in the UK and in other European economies, was a decisive asset in the adoption of Harry White's plan. In 1944, the USA held roughly a bit more than 66% of world total gold reserves, for the same period that US GDP per capita was the highest in the world with 12333 USD while this was 6907 USD in the UK and only 2422 USD for France. Therefore, in such a situation, and remembering the trade war and competitive devaluations during the first three decades of the 20th century, it was important for the US to provide the world with a stable and reliable international exchange system. Such a system that would help keep their economic advantage and competitiveness of their external sectors without any threat from partner

countries in terms of exchange rates used as trade barriers.

The Bretton Woods system, willing to learn from painful past experiences, established a core of two main principles. The first principle concerns the guaranteed convertibility of national currencies between member countries. Convertibility meaning that each country accepts to buy back its own currency from other central banks against gold or requesting the country's currency. In addition, a country signing the agreement would have to accept not putting any restriction on the free movement of its currency.

The second principle, an important idea in the remaining of this analysis, is the framework allowing a greater stability among currencies. Namely, each value of a given currency should be clearly expressed in terms of gold or against US dollars (as valued on the 1st July 1944). Consequently, Central banks were informally authorised to intervene in the money market (or in the gold market) to make sure that currencies were kept inside the +/- 1% bands. The assigned mission to all other Central banks, under the Bretton-Woods system, was to keep a stable exchange rate against the US dollar and, for the FED to keep dollar's value fix in terms of gold (35 USD per ounce in 1944).

The most interesting feature of the Bretton Woods system is, despite the fixity of the exchange rates, the possibility for countries to adjust in case of deep misalignment. Indeed, after getting clearance from the IMF, a country can change the parity of its currency against the US dollar.

This system of fixed exchange rate policy has worked pretty well during the first two decades after its adoption. This period was the one of sound economic policies in the US but that reality would soon change.

## Challenges of Bretton Woods agreement

As recalled above, despite the system of global fixed exchange rates, currency devaluation was permitted in the IMF Articles of Agreement in case of "fundamental misalignment." Namely, when a country is experiencing current account deficit (surplus), investors anticipating a devaluation could sell off that currency against other notes (buy massively that currency if investors bet on a future appreciation of a given currency). In the first situation where a country experiences deep current

account deficits, as was the case for the UK and France in the 1960s and early 1970s, the first action of the Central Bank is usually to try to keep the peg stable by selling foreign asset for local currency that might erode international reserves (with the risk of not being able to stand against future crisis). In the inverse situation, Germany in 1969 for instance, countries with persistent current account surplus are subject to huge capital inflows increasing money supply and ending up with inflation. Therefore, the main challenge under the Bretton Woods system was the quasi-impossibility for countries to maintain simultaneously internal and external balance. The most determinant element in the collapse of that global fixed exchange rate system will be the fiscal and monetary stance in the US during the mid-1960s. Between 1965 and 1966, US public spending grew by nearly 15% while the taxes remained almost unchanged (due to the important military engagement in Vietnam). This fiscal expansion combined with a progressive easing monetary policy created a (wide) current account deficit accompanied with rising price levels. Investors logically expected a parity change (devaluation) between the US dollar and gold in addition to engaging in massive gold buying. This situation worsened in 1970 when the American economy officially entered in recession and a real depreciation was inevitable in order to restore growth and employment. The first political measure in 1971 was to end the convertibility of US dollar in gold and the dollar was devaluated against foreign currencies. However, speculative attacks have continued and a second and third devaluation of the dollar were adopted in later 1971 and February 1973 but these measures had extremely mild effects on speculative attacks against the dollar. Finally, a temporary solution was for major currencies to agree (e.g. European and Japanese) to float against the US dollar. The so-called Bretton Woods system ended in such circumstance leaving the IMF that survives on it.

The believed advantage of a purely floating system is that it makes countries immune to speculative attacks, while allowing currency risk sharing between States (Central Banks) and private speculators. As the market determines the value of a currency, it will automatically adjust without calling for an intervention of Central Banks and deep currency misalignment, thus making global imbalances theoretically impossible. In reference to the Mundell's "trilemma," a fully floating regime could allow governments to use monetary policy for economic policy, while preventing Central Banks from being obliged to hold reserves dedicated to defend its currency.

After the collapse of the Bretton Woods' fixed system, several economies have tried to keep a certain stability of their currencies through a fixed or controlled exchange rate framework. For instance, this was the case for eleven European countries in the "European Monetary System" aimed at affording higher stability between European currencies<sup>2</sup>. But more globally after 1973, the world entered a new era where fully floating exchange rates were the rule.

The architecture of the world economy has deeply changed since the 1970s and new economic giants have emerged in the international scene bringing new types of challenges to the world. Indeed, in the early 1990s, emerging markets start experiencing such never seen economic, financial and monetary turmoils.

## Section 2: A new global financial architecture is born

After a debt crisis in developing countries, certain countries mainly responded with simply debt rescheduling and/or minor structural changes (privatization of public firms). This is illustrated, for instance, in the 1994 Mexican crisis, which confirmed that developing markets are also vulnerable and also displayed to what extent the choice of the exchange rate system is important.

Indeed, the so-called emerging markets learnt lessons from past experiences and had implemented deep structural reforms with important results in terms of soundness of the macroeconomic environment in those countries. However, for Mexico and East Asian countries, in 1994 and 1997 respectively, despite relatively low levels of inflation, fiscal deficit and accelerating growth rates, foreign investors' behaviour abruptly changed leading to a huge capital outflow, currency depreciation, surges in both public and private debt etc. A new element, different from traditional macroeconomic management, seems to have emerged: international capital flows. As this will be developed in the remaining of this paper, the question of the international financial system framework holds a higher interest for developing economies with the international mobility of capital.

The main causes or triggering factors of the crises in both the East Asian and Mexican cases can be cited as

the following: immature financial markets, currency mismatches, real-estate overvaluations, etc... However, one of the most important factors is believed to be (Martinez, 1998) the fixed exchange rate regime that is very vulnerable to speculative attacks, especially when foreign investors perceive the current account balance unsustainable.

In response to this, Mexico adopted a floating regime as early as on December 22nd 1994 and this type of regime has become very common among developing economies. If one relies on the latest data available on exchange rate classification (IMF, 2016), it appears that after the 1990's and early 2000's crises in the developing world, several emerging markets have opted for a more flexible exchange rate system (Table 1). Despite some comments that tend to nuance the idea of a "post Bretton Woods era" (e.g. Ilzetzki & al. 2017), this does not impact the roots of this paper's idea, as it will be shown later. Ilzetzki & al. 2017 simply underlines the reality that the Bretton Woods System has not completely disappeared since exchange rate regimes with limited flexibility are the majority. However, the system under which the world is now cannot be considered as fully identical to the Bretton Woods one system since a fundamental difference remains. Even if some developing countries' currency is (officially or de facto) pegged to the USD, the stable link between the USD and a stable anchor (as gold) is now missing.

**Table 1: Exchange rate regime for selected countries.**

Country	Exchange rate regime
Argentina	Managed floating (freely falling)
Brazil	Managed floating
China	Managed floating
India	De facto crawling band
Korea	De facto moving band
Malaysia	Managed floating
Mexico	De facto moving band
Nigeria	floating
Philippines	De facto crawling band
Russia	De facto crawling band
Saudi Arabia	De facto peg
South Africa	De facto moving band

Sources: Ilzetzki & al. (2017).

2. Similar arrangement for the CFA zone in Central and West Africa, currency boards adopted in some countries (1991 until 2002).

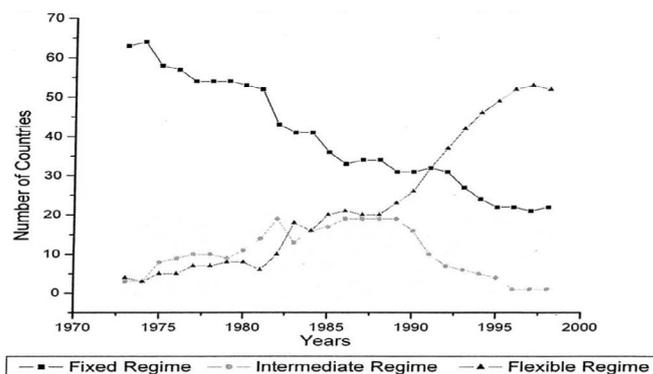
## Section 3: Exchange rate flexibility and macroeconomic prosperity: promises and facts.

Compared to peg system, flexible regimes have been perceived as an effective “automatic stabilizer” as they help domestic economy to insulate from the effects of both internal and external shocks. For instance, Genber (1989) developed a model to demonstrate that fixed exchange rate is most of the time sub-optimal in providing automatic stabilization to domestic output after a real shock<sup>3</sup>. On the same vain, some authors such as Martin (2016), Ghosh et al (2010 and 2013), and Mu & Ye (2013) found that a flexible regime allows a swifter adjustment of current account balances in developing economies therefore and as suggested by Friedman (1953), flexible regimes are an efficient tool against global imbalances. Broda (2004) reinforce these results as he found that fixed regimes are associated with a higher loss in terms of GDP growth after a terms-of-trade shock.

However, this “consensus” among analysts on the virtues of flexible exchange rate regimes might be regarded in a different angle and analysed taking into account a certain number of facts characterizing the 21st century global economy. Cushman & De Vita (2017) found (a very boldly) a result that says that developing countries under fixed regimes encourage more Foreign Direct Investment (FDI) compared with those under flexible policies. However, the global economy’s current context is deeply challenging the Friedman’s (1953) (and Harry Johnson<sup>4</sup>) arguments in favour for freely floating exchange rates system.

Indeed as Figure-1 shows, since mid-1970 the number of countries with fixed regimes (whether de jure or de facto) has significantly decreased since countries are seeking monetary policy independence in a world where movements of capital are free<sup>5</sup>.

Figure 1: Evolution of exchange rate regimes for developing countries 1973–1998.



Sources : Broda, 2004

Since 2008, after the onset of the financial crisis, developing countries’ currencies have experienced large swings. For example, as shown in Figure 3, from 2009 up to early 2013, the Renminbi and the Rupee has strongly appreciated compared to the USD. This was the simple consequence from capital outflows towards emerging market economies. As shown by Tillman (2016), the FED’s quantitative easing policy in response to the 2008 crisis has caused asset price booms and exchange rate appreciation in emerging markets creating a risky boom-burst cycle. This mechanism is a kind of confirmation of the dominance of the so-called “push factors” meaning that the economic conditions in developed countries explain the flows of capital toward developing economies (e.g. Agénor 1998).

As said earlier, from 2008-2009 up to 2013 when the FED starts its unwinding, emerging economies’ currencies normally appreciated (in both nominal and real terms). If one has a simultaneous look at figures 2 & 5, we see that as soon as the FED changes its policy rate from (around) 2015, both nominal and real exchange rates start depreciating and, this being a result of capital outflow from developing economies. This deep dependency towards mature markets, and learning from past painful experiences, has incited developing economies to continuously increase their foreign exchange reserves. Several authors (e.g. Rancière & Jeanne 2006, Arranz & Zavadjil 2008) have underlined that the main reason for developing economies to hold such sub-normal amount of foreign exchange reserves (see figure 6 from Arranz & Zavadjil 2008) is to protect themselves from a sudden stop of capital and to smooth domestic absorption against (external) disruptions. After summing up all of the above – the emerging market currencies being still vulnerable to monetary conditions in advanced countries

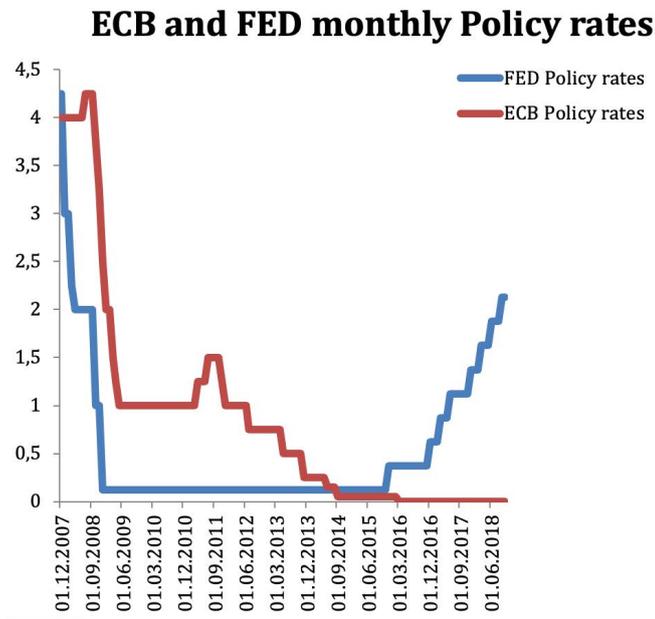
3. It is theoretically well known that fixed regime is only relevant when an economy mainly faces money market shocks.

4. Harry G. Johnson in « Essays in Monetary Economics », 1969, 2nd Ed. Cambridge: Harvard University Press.

5. In reference to the impossible trinity of Mundell.

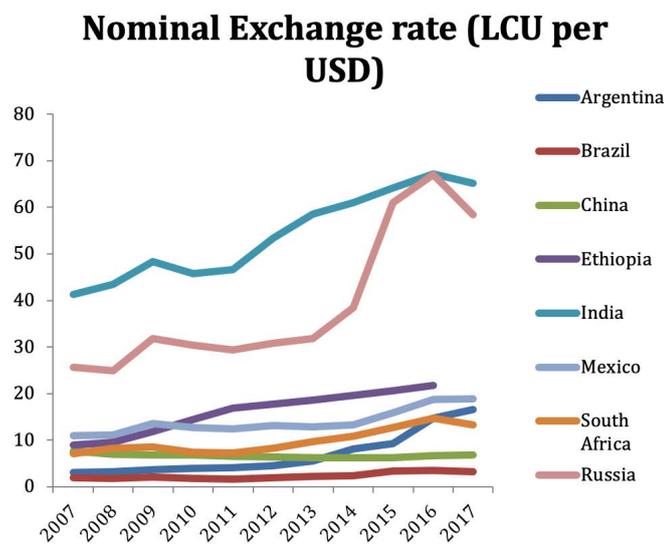
despite the growing popularity of floating exchange rates and the accumulation of huge amounts of international reserves – two direct consequences can be underlined.

**Figure 2: Policy rates in advanced economies.**



Sources: Basel Committee database.

**Figure 3: Nominal exchange rates (LCU per USD) for selected countries**



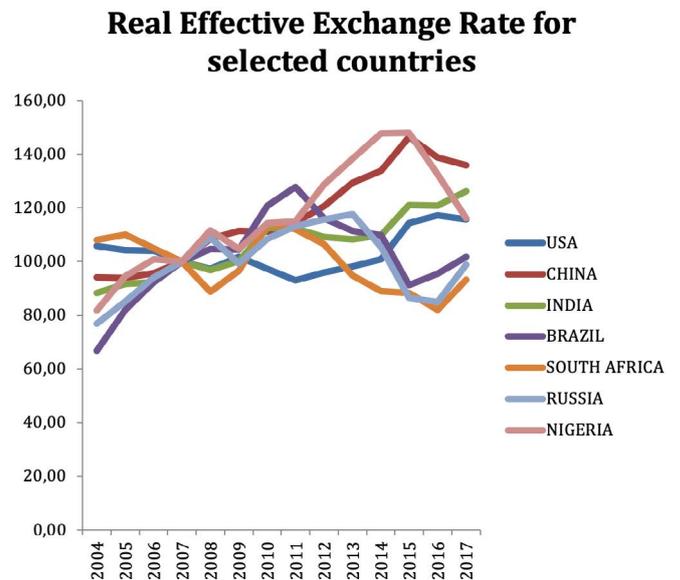
Sources: World Bank database.

**Figure 4: current account (%GDP) for selected countries**



Sources: World Bank database.

**Figure 5: Real Effective Exchange rate for selected countries**



**Figure 6: levels of Foreign Reserves in selected countries.**

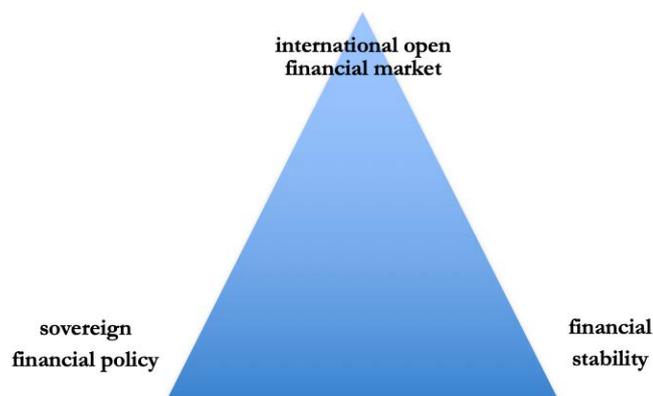
	Optimal (in percent of GDP)	2007	2006	Above optimal since
China	26	47	40	2004
Hong Kong SAR	66	75	70	2001
India	16	22	20	2003
Indonesia	17	14	11	...
Korea	26	28	27	2004
Malaysia	25	57	53	1998
Philippines	21	22	17	...
Singapore	102	98	103	...
Taiwan POC	43	71	73	2002
Thailand	29	37	32	2005

Sources: Arranz & Zavadjil 2008.

The first consequence is the worsening of global imbalances as the direct result of the holding by EMEs of important public and private US securities. Therefore the gap between current accounts (industrial versus developing) will continue to worsen unless an unexpected “macroeconomic big bang” occurs. The second consequence, and not the least important, is the unintentional depreciation of emerging country currencies causing tension with trade partners and sometimes obliging Central banks to resort to foreign reserves in order to prevent severe depreciations (e.g. according to Bloomberg<sup>6</sup> in mid-2016 China’s official reserves shrunk by USD 99.5 billion a low level never seen since 2012).

As underlined by Obstfeld (2016), recent large swings in capital flows between advanced and developing economies has seriously challenged the believed stabilizing properties of a free-floating regime. The “financial trilemma” argument developed by Schoenmaker (2013) underlines the shortcomings of the current system.

### Figure 7: The Financial Trilemma



Sources: Schoenmaker (2013)

The financial trilemma stresses the unavoidable spillover effects under a floating exchange rate system. The floating system, by the fact that it directly encourages international free movement of capital, is incompatible with having a sound financial system and being able to run sovereign financial policies (Obstfeld, 2016). Only two elements could be reached simultaneously. For example, a country seeking greater financial stability by running stricter regulation could draw in foreign (hot) capital (especially under free floating exchange rates)

6. <https://www.bloomberg.com/news/articles/2015-09-02/pboc-seen-quitting-yuan-support-by-end-2015-as-reserves-shrink>

and finally that economy could experience a currency appreciation in total disconnection with macroeconomic fundamentals.

The recent and ongoing trade tensions can be understood as an eloquent illustration of the above. Developing economies, like China, have accumulated international reserves to face possible outflows of capital (Asian crisis during late 1990’s) and on another side, the FED tapering has created a depreciation of the Renminbi. As a result, this depreciation of the Renminbi has provided the Chinese economy with an “accidental” competitiveness, thus reviving tensions already at their peaks.

What conclusions and recommendations could be drawn for a better international monetary system?

If the question is whether the free-floating system is working, the answer can be yes. A positive answer is simply due to the fact that the exchange rates respond very normally to the market mechanisms of supply and demand. But the question is whether this system is the best one; of course it can be significantly improved. How? This post Bretton Wood architecture cannot be viewed as the optimal system, particularly in regards to emerging markets; exchange rates are sometimes disconnected and do not respond to relevant macroeconomic variables (e.g. productivity, money supply, inflation, labor cost). The system for most emerging markets (going toward or already under the free-floating system) is very similar to a regime of hard peg to the USD since they do not fully enjoy an independent monetary policy nor a stable financial system. Thus, the question must be posed, were the world leaders right to dismantle the Bretton Woods system? Or, at least, should some of the Bretton Woods mechanisms be kept?

## Section 4: International monetary system: revive good practices from our past

The Bretton Woods system has the great advantage of providing a credible and readable anchor to monetary policies: the US dollar. The US dollar value was backed to the gold’s one (see supra) and any envy of devaluation was discussed and agreed between countries under the leadership of the International Monetary Fund. This paper does not recommend that the world go back to that system, but simply to imagine a way emerging

countries' currencies could be less dependent and vulnerable to monetary conditions in advanced markets. My proposition is drawn simply from the fact that the fully free-floating system did not hold its promises in providing independent monetary policy, financial stability and (qualitative) free movement of capital.

Instead of running under de facto peg to US dollar (or Euro) or market-determined exchange rates, countries labelled as emerging (and even low-income countries) could experience a different system that could be built on the positive aspect of the former Bretton Woods. For example Renminbi, Rupee, Baht, Rand, Ruble, Real, and Naira could be valued against a basket of international currencies and a set of relevant commodities. That basket of reference can be a mix of the US dollar, Euro, Yen, crude oil, and gold.

This system could create less incentive for hot capital inflows in EMEs that are simply determined by "Carry Trade" motives, since the value of the Rupee, while still linked to the dollar, is partly determined by the condition on the bullion and oil markets.

## Conclusion

The objective has been to show that the market determined exchange rate is not forcefully "la panacée" and improvements have to be made since the world is running at the edge with the rising trade dispute threatening peace and stability.

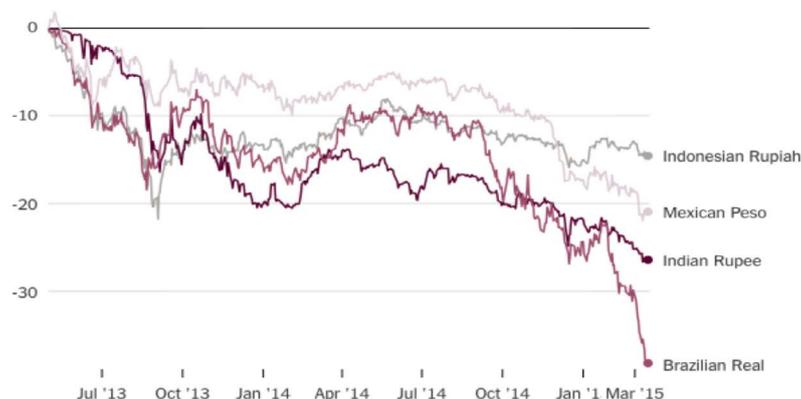
I do not propose a return to the Bretton Woods system since the rigidity of that system was one of its main limits and causes of demise. But it has one positive aspect that deserves to be considered, which was the regulation; meaning that the market cannot alone efficiently regulate exchange rates. Reaching simultaneously internal and external balance for developing countries under the floating system is something hard to achieve. Uncontrollable movement of capital (carry trade), spillovers of monetary policies in industrial markets, or the "obligation" to keep holding important amounts of international reserves are some of the causes that prevent developing markets to enjoy stable financial markets and independent monetary policies.

The G20, the IMF or any other pertinent institution can be the actors to take the leadership of the necessary reform of the current system. That basket of reference (dollar, euro, yen, oil, gold) has the great advantage to allow a macroeconomic adjustment of developing countries to both monetary policies changes in advanced economies as well as swing in the commodities markets.

## Figure 8: Selected currencies against USD after announcement of FEDs tapering

### Emerging Market Currencies Have Fallen Versus the Dollar

Percent change from May 1, 2013, versus United States dollar



Source: Bloomberg

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