

# **CURRENCY DEVALUATION: A CRITICAL ANALYSIS ACROSS COUNTRIES**

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### ABSTRACT

Currency devaluation is resorted to by various countries from time to time. This causes ripples across the world because of the inter-connectedness that exists in today's world. Thus it is essential that devaluation ought to be taken seriously; particularly by planners of countries. This paper discusses the emergence of various models and discusses few examples in this regard. The causes and the concluding thought process is also mentioned at length.

**KEYWORDS:** Balance of Payments, Currency Devaluation, Currency Devaluation across Countries, Models of Currency Devaluation

### **INTRODUCTION**

Devaluation of currency refers to the lowering of the value of a country's currency within a fixed exchange rate system, by which the monetary authority (central bank of the country) formally sets a new fixed rate with respect to a foreign reference currency.

While devaluating a currency can seem like an attractive option for a country, it can have negative ramifications for the devaluating nation as per past experience in various countries. Some of these shall be discussed in the course of this paper. By making imports more expensive, it protects domestic industries who may then become less efficient without the pressure of competition. Higher exports relative to imports can also increase aggregate demand, which can lead to inflation as per conventional economics.

A devaluation exercise undertaken by a country for promoting exports may encourage other countries with similar import-export phenomenon to undertake a similar exercise. This paper details out the nuances of Currency Devaluation, the reasons, the models and examples undertaken across various countries.

# REASONS

#### **Improve Exports**

In an integrated world economy, goods and services of one country shall necessary have to compete with the similar and same offerings from other countries? Car makers of Japan have to compete with the makers from USA in Europe. If the value of the euro decreases against the dollar, the price of the cars sold by European manufacturers in America, in dollars, will be effectively less expensive than they were before. On the other hand, a more valuable currency makes exports relatively more expensive for purchase in foreign markets.

In other words, exporters become more competitive in a global market. Exports are encouraged while imports are discouraged. There should be some caution, however, for two reasons. First, as the demand for a country's exported goods increases worldwide, the price will begin to rise, thus countering the effects / benefits of currency devaluation. The second is that as other countries see this effect at work, they will be incentivized to devalue their own currencies in kind in a

so-called rat race.

#### **Shrinking of Trade Deficits**

Exports will increase and imports will decrease due to exports becoming cheaper and imports more expensive for the country undertaking devaluation. This favours an improved BoP as exports increase and imports decrease, shrinking trade deficits. Persistent deficits are not uncommon today, with the United States and many other nations running persistent imbalances year after year. Prudent Economics however suggests that ongoing deficits are unsustainable in the long run and can lead to dangerous levels of debt which could cripple the economy of a nation in the long term haul.

In this regard, it may be noted: Devaluation increases the debt burden of foreign-denominated loans when priced in the home currency. This is a big problem for a developing country like India or Argentina which hold lots of dollar- and euro-denominated debt. These foreign debts become more difficult to service, reducing confidence among the people in their domestic currency.

#### **Reduction in Sovereign Debt Burdens**

A government may be incentivized to encourage a weak currency policy if it has a lot of government issued sovereign debt to service on a regular basis. If debt payments are fixed, a weaker currency makes these payments effectively less expensive over time.

# MODELS AROUND CURRENCY DEVALUATION

### First Model: KFG Model

According to that explanation, currency crises have a fundamental cause. They are not the result of ill-luck or market speculation but of *bad policy*. Here is how the story goes: The government pursues two policies at the same time namely

- Maintain a fixed foreign-exchange rate regime and
- Print money to run large budget deficits

The problem with countries is that these two policies are inconsistent with each other and both cannot be maintained for long. Printing money leads to high inflation which makes domestic products less competitive compared to imports. The country begins to run large trade deficits.

The initial models consider the theories generated around foreign reserves by *Krugman* and *Flood & Garber*. It describes an economy in which a Central Bank maintains a fixed exchange rate but, at the same time, finances the government deficit. Consumers have a demand for real balances that depends negatively on the cost associated with holding domestic currency. Eventually, the Central Bank runs out of international reserves and the benchmark is abandoned. The model shows *when* and *how* this crisis takes place. In other words, foreign exchange rate linked or pegged to another currency should be abandoned if the country's international currency reserves to which the domestic currency is linked are depleted.

Krugman primarily argued that Currency crisis are consequential to 'weak fundamentals 'of economy and fiscal policies and monetary policies have failed and that they have resulted in continuous loss of international reserves which

forced governments to abandon parity rate.

In a nutshell, this model explains that a currency crisis will result if the government has huge deficits and there is a fixed exchange rate. If expectations start to build that government will be unable to finance the deficit and could monetize the deficit. The monetization could result in high inflation. This could lead to foreign outflows and a speculative attack on the domestic currency. The attack could initially be defended by Forex reserves. But if the attack grows and central bank is unable to defend the currency and does not have adequate reserves, it could result in devaluation. A sudden devaluation of a fixed exchange rate leads to collapse of the exchange rate system and leads to a crisis

## Second Model

The above model could not explain the contagious currency crisis. For instance, we saw South East Asian crisis becoming a contagious crisis spreading from one region to the other. The second generation model takes cognizance of this factor and these events via trade channel or via neighbouring trade partners or via having similar macroeconomic attributes or via financial channel.

These models underlines one primary fact i.e. interaction (read collaboration) of private sector and government w.r.t. maintenance of equilibrium in the economy.

So-called second-generation models (famously presented by Obstfeld's model of devaluation in 1994), require three ingredients:

- There must be a reason why the government would like to abandon its fixed exchange regime.
- There must be a reason why the government would like to defend the exchange rate so that there is a tension between these motives.
- In order to create the logic that drives a crisis, the cost of defending a fixed rate must itself increase when people expect that the rate might be changed.

Why might a government have a motive to allow its currency to depreciate? In order for a government to have a real incentive to change the exchange rate, something must be awkwardly fixed in domestic currency. One obvious possibility is a large debt burden denominated in domestic currency, a burden that a government might be tempted to inflate away, but cannot as long as it is committed to a fixed exchange rate. Another possibility is that the country suffers from unemployment due to downwardly rigid nominal wage rate, and would like to adopt a more expansionary monetary policy, but cannot as long as it is committed to a fixed exchange rate.

The second-generation models emphasize the importance of multiple equilibria and mainly relates to doubts that may arise about the willingness of the government to keep the exchange rate fixed, so these doubts can result in multiple equilibria and currency crisis. As elaborated by Feridun (2004), in these models the policy is less mechanical, i.e. it is up to the government to decide on defending or not a pegged exchange rate by making a tradeoff between short-run macroeconomic flexibility and longer-term credibility. Obstfeld's models in 1994, requires three ingredients. First, there must be a reason why the government would like to abandon its fixed exchange rate. Second, there must be a reason why the government would like to defend the exchange rate - so that there is a tension between these motives. Finally, in order to create the circular logic that drives a crisis, the cost of defending a fixed rate must itself increase when people expect

(or at least suspect) that the rate might be abandoned.

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### Third Model

The first two generation models did not include policy prescriptions. Typical prescription for a currency crisis is to raise interest rates and prevent capital outflows. However, the next set of model says a currency crisis leads to number of problems in the economy and higher interest rates would create more damage to the economy. The third generation models instead suggest to keep real interest rates low and keep financial system functioning in the crisis (make banks and lending institutions pump more credit to the system et al).

In the third generation model of currency crises, the problem is liquidity. The economy is working well without large deficits and high inflation. However, it has accumulated substantial amounts of foreign debt. Even worse, it has accumulated a lot of short-term foreign debt, i.e. debt that matures in one year or less (typical to some countries though). If foreign creditors demand immediate repayment on these credits, the country does not have enough foreign exchange to pay them off. A scenario happened in the post Greece complications where the cross-holding between countries came up to the glare. The weaker nations had no where withals to honour the claims made by other countries. If the reserves are less than the short-term debt, then the country would not be able to pay its obligations if creditors pull out.

The third generation models of currency crisis explore how rapid deterioration of balance sheet coupled with movements in the price of assets including exchange rate may lead to a currency crisis. Main inspiration for these models is found at Asian crises during1990s, where we observe that large discrepancies in the balance sheet of the financial sector and corporates promote the emergence of currency crises. Thus, the third-generation models are classified into three different groups such as herd-behavior, contagion, and moral hazard. A more detailed elaboration of the currency crisis in Asian countries is also found in the paper of Jeanne (2000) where except the balance sheet discrepancies, uncontrolled capital flows, etc., the author highlights the effect of "putting in one basket" all investors from the region because of the individual countries (for example because of the Thailand then the whole region has been assessed as fragile).

When speaking about the causes and ways of forecasting the currency crisis, Pistelli (2006) in his work challenges the model known as early warning system developed by Kaminsky et al (1998) and provides his own distinct model known as aggregate index of the crisis to which he states, that, although with less individual indicators it provides better capacity both in terms of accuracy and in terms of its anticipation, and, above all this index is motivated in economic theory and as such represents a version of unified approach against the currency crisis - an approach that highlights the role of inconsistent macroeconomic policies as an explanation of the currency crisis, i. e. an approach that highlights the role of exchanges between decisions of policy makers as the main cause of the currency crisis.

# **CASE STUDIES**

#### India

On 6 June 1966, the rupee was devalued dramatically in response to the first significant balance of payments crisis faced by independent India. The economy, still finding its feet (with only 20 years of independence), had limited access to foreign exchange. Foreign institutional investments were very low and exports were very less. The corresponding trade deficits were thus very high. War was another issue. Military spending skyrocketed, putting further pressure on the Indian government's finances. At the same time, countries such as the US, which were in those days aligned with Pakistan, withdrew aid to India.

With limited options, the Indira Gandhi-led government that assumed office in 1966 resorted to a steep devaluation of the rupee, a decision that was widely criticized. The rupee in those days was still pegged to the pound which, in turn, was pegged to the dollar. The devaluation meant that the effective value of the rupee went from 4.76 against the dollar to 7.50 per dollar. That worked out to a devaluation of 57%. The 1966 devaluation, however, was a stand-alone event and failed to do much good for the economy.

### Zimbawe

In 2008, Zimbabwe had the highest rate of inflation in the world, with estimates for February of 2008 showing inflation in the African nation running at 165,000% a year. By May of that year, the inflation rate had gone up by some estimates to as high as *1.8 million %*.

The Zimbabwe dollar, perhaps needless to say, could buy very little, and plenty of Zimbabwean dollars were needed with the exchange rate at 60, 000.000.000, 000,000 to one U.S. Dollar. In order to deal with this massive inflation, the Zimbabwean government decided to devalue its currency by knocking off 13 of its 17 zeros, effectively making the exchange rate 6,000 to one U.S. Dollar.

### Turkey

Because of the chronic inflation experienced in Turkey from the 1970s through to the 1990s, the old lira experienced severe depreciation. Turkey has had high inflation rates compared to developed countries and suffered hyperinflation. From an average of 9 lira per U.S. dollar in the late 1960s, the currency came to trade at approximately 1.65 new liras per U.S. dollar in late 2001. This represented an average inflation of about 38% per year. Prime Minister RecepTayyip called this problem a "national shame". With the revaluation of the Turkish old lira, the Romanian leu (also revalued in July 2005) briefly became the world's least valued currency unit.

- 1966 1 U.S. dollar = 9 lira (TL)
- 1980 1 U.S. dollar =10,000 lira (TL)
- 2001 1 U.S. dollar = 1.65 lira (TL)

In late December 2003, the Grand National Assembly of Turkey passed a law that allowed for the removal of six zeroes from the currency, and the creation of the new lira. It was introduced on 1 January 2005, replacing the previous lira (which remained valid in circulation until the end of 2005) at a rate of 1 new lira = 1,000,000 old lira.

# China

In Aug 2015, People's Bank of China (PBOC) surprised markets with three consecutive devaluations of the yuan, knocking over 3% off its value. Since 2005, China's currency had appreciated 33% against the US dollar and the first devaluation on August 11 marked the largest single drop in 20 years. While the move was unexpected and believed by many to be a desperate attempt by China to boost exports in support of an economy that is growing at its slowest rate in a quarter century, the Central bank of China claimed that the devaluation was part of its reforms to move towards a more market-oriented economy.

This signaled the first tremors of the forthcoming issues in the fundamentals of the Red economy. It was just short of indirectly declaring to the world that since there were fundamental issues, the country was resorting to this artificial manner of fostering exports.

This list of cases and countries are just few of the many countries which have incorporated devaluation in their currencies. Some have done it in a phased manner over time and some have done it abruptly. But the idea that is common is that each of the nations had different reasons for incorporating the same.

### CONCLUSIONS

Currency devaluations can be used by countries to achieve economic policy. Having a weaker currency relative to the rest of the world can help boost exports, shrink trade deficits and reduce the cost of interest payments on its outstanding government debts. There are, however, some negative effects of devaluations. They create uncertainty in global markets that can cause asset markets to fall or spur recessions. Countries might be tempted to enter a tit for tat currency war, devaluing their own currency back and forth in a race to the bottom. This can be a very dangerous and vicious cycle leading to much more harm than good.

Despite many models and learning in place, it remains with the policy makers to decide as and when to devaluate or not-to-devaluate at all. With many countries developing their own competencies over time, the currency is supposed to be pegged against various currencies which become stringer with passage of time. Scenarios hitherto unknown are coming to the foreplay. Who would have expected Chinese Yuan to be that strong or who would have dreamt of a scenario when China as a country would have excess balance of payments with most of the countries across the globe. India as a major software exporter; the idea would have been dismissed even just 20 years back.

As such, let us not forget that the rate of foreign exchange is a function of time and the activities happening over a period. Any tweaking with the same is like playing with nature; the consequences shall have long term ramifications not just in the economic space but also in the socio-economic and polito-economic spheres as well.

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