



STUDY OF EXCHANGE RATE DETERMINATION IN INDIA

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ABSTRACT :

Exchange Rates- Currency Board- Full Float- Managed Exchange Rates- Exchange Rate convertibility- Appreciation of the Rupee- Depreciation and Devaluation- Reserve Bank of India.

KEYWORDS : *Exchange Rates- Crawling Exchange Rates- USD- RBI- LERMS- FEDAI- Managed Exchange Rates- NRI Deposits- Appreciation of Rupee.*

EXCHANGE RATE DETERMINATION



INTRODUCTION

Exchange rates are playing key role in Foreign Trade dealing with International Transactions. Exchange rates are nothing but the rate at which home currency is exchanged for a foreign currency or how much of home currency for a foreign currency or how much is a foreign currency worth or equivalent to a home currency. Why is one currency exchanged differently with another. It is about the demand and supply of a currency arising out of relative differentials in income levels, share in world trade, differences in purchasing power and relative differences in cost of production, or it could be even the central bank of the home country deciding on the worth of foreign currency in the home country.

Exchange rates become important for economies pursuing open policies as it increases the intermingling of foreign currencies with home currency necessitating their conversion for use in the domestic economy or the other way around, which is conversion of domestic to foreign currency for example, in meeting import requirements or overseas investment.

As long as economies remain closed, there is little relevance for exchange rate as there is little interface with the rest of the world, as an inward looking economy with predominance of the home currency and relatively lesser need for foreign currency except for the need to cover essential imports.

DETERMINATION OF EXCHANGE RATES:-

It may be mentioned that in certain economies, there is no necessity to exchange foreign currencies as there is little role for the home currency and foreign currency circulates parallel and predominantly for all transaction related purposes. Such economies are also known as 'dollarized economies'. They are relatively very small economies, dependant on the US. Examples are such as Panama, El Salvador, Ecuador, etc.

For other economies, exchange rate determination is either as pegged/fixed exchange rates or market determined exchange rates. Pegged or fixed exchange rates are determined as a direct intervention of the central bank in deciding on the exchange rates. There are certain variants to such intervention like.

(1) Currency Board:- The central bank of country pegs the home currency to stronger currency on a 1:1 or on a different ratio, as pegged exchange rate. that is, home currency in circulation would depend on the available, inflow of foreign currency. This is also referred to as the 'currency board' system,

advocated for economies experiencing uncontrollable inflation of very high levels. It is believed to impose strict monetary discipline and takes away monetary independence. Common examples of currency board system are Argentina, Hong Kong, etc.

- (2) Crawling /Pegged Exchange Rates:- This is similar to fixed exchange rate but with the central bank of that country having the flexibility of letting the exchange rate to float in a small band with 'ceiling and a floor'. Examples are China, Russia, etc.

Market- determined exchange rates are as follows:-

- (1) Full Float:- The exchange rate in such economies is market determined by the forces of demand and supply of foreign currency in the home country with no role of the central bank in exchange rate determination. Most economies such as the US, EU are full float economies.
- (2) 'Managed' Exchange Rate:- This is of recent origin especially by countries like India where even though the exchange rate is market determined, there is active indirect intervention by the central bank, to bring the exchange rate closer to its own perception, but without actually directly tinkering with the exchange rate as under a fixed exchange rate system.

This is referred as 'dirty floating', which is interference of the central bank in free markets to influence exchange rates. However, in India, given its impact on the domestic economy, it is known as 'managed' market-determined exchange rate.

Which can be said to be the best way to determination of exchange rates. It is difficult to say as each economy has different sets of challenges, their own internal priorities and a lot also depends on how it affects the domestic economy.

However, as economies pursue greater openness, larger role for capital inflows and outflows and in the long-term, they would be better off, in moving to a market determined exchange rate which allows for testing of strength of the home currency in relation to a foreign currency and movement in exchange rates can be useful for policy makers. Just a thermometer for the foreign exchange market.

However, more importantly, market determined exchange rates are seen as a maturity of economies with strong macro-economic fundamentals, their relative ability to be globally competitive. Large size economies such as the US, EU, UK and Japan with the sizeable global trade can be said to have hard currencies first, in respect of the volumes of trade. Secondly, their exchange rates are market-determined and third, having 'widest global acceptability' for various kinds of transactions.

Soft currency would be that of economies which have limited global trade restrictions on their exchange rate determination and have lesser acceptability globally for different kinds of transactions. The Indian Rupee and to some extent the Chinese Yuan can be said to be presently as soft currencies. Why are exchange rates important in open economies. The exchange rates have high sensitivity to influencing inflows and outflows, exports and imports into and out of the country. Besides, too much of volatility can be fundamentally destabilizing and have the potential to create crises in economies as witnessed in the past especially SE Asian economics.

EXCHANGE RATE AND CONVERTIBILITY:-

Very often market determined exchange rates and convertibility are first, 'wrongly' seen as interchangeable to mean the same thing and the second, both again wrongly seen, as logical extension of each other. It needs to be understood that 'exchange rate determination' and 'convertibility' are two separate and distinct issues, not dependent on each other, not logical extension of each other and all permutations and combinations are possible.

- (1) Full float and full convertibility (US.)
- (2) Pegged exchange rates and full convertibility. (Thailand)
- (3) Pegged exchange rate and no convertibility (China)
- (4) Currency boards and full convertibility (Argentina)
- (5) Managed exchange rate and no convertibility or no CAC (as in India)
- (6) Managed exchange rate and complete convertibility (Brazil)

That is, to say that if an economy has full convertibility it does not necessarily imply that it will have to have market determined exchange rate and vice versa as can be seen from above. However, both have a common denominator in terms of their impact on both inflows as well as outflows. The role played both by the exchange rate as well as convertibility responsible for crises in open economies will be discussed later.

EXCHANGE RATE IN INDIA:-

Exchange rate determination has truly evolved in India post-Independence and transition points to the evolution are as follows:-

- (1) Post-Independence India adopted a fixed exchange rate mechanism, with rupee exchanged to pound sterling and vice versa, at a fixed rate as determined by the RBI, being the central bank of country.
- (2) After gradually shaking off the cloak of the colonial rule and more broad based trade, even though restrictive and widening of trading partners, the RBI switched to a basket of currencies, but still on a fixed exchange rate system and on exchange rates as determined by the RBI.
- (3) With the emergence of USD as a major currency and the relative decline of the pounds sterling in relation to USD, RBI adopted USD as its 'intervention and reserve currency'.
 - That is, all the foreign currencies would be denominated in USD including the exchange rate for official statistics and their reporting.
 - The RBI thus had an exchange rate for dollars and rates of other currencies could be derived from this rate.

The first mark of getting off the fixed exchange rate came in the nineties with the liberalized exchange rate management system (LERMS) which allowed for exchange of dollars, 40 per cent at a fixed rate by RBI known as the 'official' rate.

- The remaining 60 per cent could be exchanged at a 'market rate' determined by the market. This is also referred to as dual exchange rate (40-60) in India.
 - This also saw the setting up of foreign exchange dealers association of India (FEDAI), outside the government, to arrive at the market rate of USD based on demand and supply conditions.
- (4) Towards the end of nineties, the RBI announced discontinuance of the official rate and only FEDAI determined market exchange rate to prevail, abandoning completely the fixed exchange rate system.
 - (5) As trade reforms gathered momentum in the last decade, large inflows, necessitated the RBI to intervene in the foreign exchange market, what is now referred to as managed exchange rate in India in an otherwise market determined exchange rate system.

MANAGED EXCHANGE RATE IN INDIA:-

How does the RBI intervene in a market determined exchange rate. Before understanding RBI intervention, let us first understand how exchange rates are market determined. It is well known that market mechanics, in general, comprises of demand and supply known as market forces.

Who are the people who demand USD or any foreign currency in India. It will be the importers who will have to pay in foreign currency for their imports, outward tourists, overseas sales promotion, government, those going abroad for education or for health purposes, etc. That is, at any given point of time there will be a demand for USD in India.

How is the demand and exchange rate related. If more rupees is to be offered to get USD, demand will generally be less. People may feel it is too high a rate to get USD and resultantly the demand is going to be comparatively 'lesser'. If one was to reflect it graphically, typically it would be downward sloping curve. In the same way, there is a continuous stream of USD and other foreign currencies coming into India from sources such as remittances, foreign investment, NRI deposits, ECBs, inward tourists, etc. This implies there is also a supply of USD.

As a holder of foreign currency, your tendency would be to exchange the foreign currency if you are getting 'more' rupees. That is, to say that 'more' USD would be offered for exchange when 'more' rupees are being received and vice versa. Thus, the supply curve would be upward sloping. This when

superimposed along with the demand curve will give an intersection point which will determine the exchange rate of USD with respect to rupees.

Appreciation of the Rupee:-

So what is the meaning of this. On account of increased supply of USD in relation to what is being demanded, now 'lesser' rupees would be offered than earlier to USD, or differently rupees now gets 'more' USD than earlier. This is what is meant by 'currency appreciation' or rupee has appreciated against the dollar. This can also be seen as the USD now getting 'lesser' rupees than earlier, or that to get the same rupees 'more' USD is required. This is referred as depreciation of the currency, or the dollar has depreciated against the rupees.

Appreciation or depreciation is not in isolation but always in respect to another currency. If we say rupee has appreciated then it is also implied that USD has depreciated. What is the impact on exports from India. With rupee appreciating implies that India's exportable would now become more expensive in the international market and make our exports price uncompetitive, resulting in declining the value of exports.

So an appreciating currency adversely hits exports. Similarly, imports would tend to get cheaper, as lesser rupees are required to get USD. It will also balloon the current account deficit. This is the rationale of RBI intervention which is to prevent appreciation of the rupee to maintain price competitiveness of Indian exports and keeping the CAD under check.

How does the RBI intervene RBI initiates buying USD from the market, by creating an artificial demand for USD, absorbing increased excess USD in the economy and the exchange rate going back to what it was before the increased supply.

However, there is a flip side to this, which is, any act of purchase of USD by the RBI would release rupee in the system and increase the liquidity which can become inflationary. Hence, maintaining export price competitiveness comes at a price of inflation in the domestic economy.

To prevent inflationary impact, the RBI simultaneously goes for absorption of the excess rupee by going in for 'reserve repo auction' and soaking up the excess liquidity of rupee in the domestic market, which gets created on account of purchase of USD by RBI. This is referred as 'sterilization of the economy'.

Thus, if the RBI is able to 'completely' soak the excess rupees from the market or that it does not lead to inflationary pressures, it is said to have 'sterilized the economy'. If not, then the RBI has to make a 'choice' between export competitiveness and inflation, which is also referred as the 'prisoner's dilemma', of being able to manage one of them, but not both.

The other way to intervene is to discourage short-term inflows by imposition of tax, referred previously as Tobin tax. However, the issue is that such a tax will be on 'all' kinds of inflows and cannot be discretionary.

This is what is meant by intervention of the RBI in a market-driven exchange rate and the meaning of managed exchange rate.

However is managed exchange rate justified in market determined exchange rates. Market-determined exchange rate as a concept implies letting exchange rate to be determined outside central bank level and once market determined it becomes a variable, fluctuating and economy 'accepting' the exchange rate. Exchange rates should always be witnessed as a macro tool benefiting the economy at large rather than being used as a myopic tool for micro-management. Export is only one of the sectors of the economy and that too contributing not more than 20 per cent of the GDP.

An aspect gone completely unnoticed is the impact of an appreciating currency on imports into India. Imports become cheaper, and given our basket comprising of crude petroleum, fertilizers, capital goods, etc. all of which will get cheaper and provide cushioning effect to inflation.

In the section on Exports, the aspect of exports has been discussed that it should not be seen as a function of exchange rates but should become neutral to exchange rate fluctuations. This can be done by moving up in terms of value addition, quality and degrees of sophistication.

More importantly export promotion as part of open policies is to achieve global competitiveness, long-term sustainable growth in exports, for which price competitiveness is necessary but not a sufficient condition.

The exports and the exporters have to be sensitized about market-determined exchange rates being known for their uncertainties, fluctuations and volatility and exports have to outgrow and achieve maturity by taking it as a variable and accounted accordingly.

Rather than intervention, India should look at markets other than the dollar denominated, like the Afro-Asian markets which offer a great opportunity to diversify and reduce sensitivity of Indian exports towards exchange rate.

An appreciating rupee reflects strengthening of the currency against a hard currency which should be good in the long run.

If the Indian Government is not comfortable to the volatility or the fact that our exports would always be price sensitive then moving to a market determined exchange rate was a wrong decision and India, maybe would have been better off, under a pegged exchange rate, like China.

So can we conclude that intervention by RBI is totally unjustified in market determined exchange rates. The only justification for RBI intervention is when the inflows are witnessed as short-term, reversible, as portfolio investment or for speculation purposes arising out of global imbalances likely to correct over a period of time.

It should be as a last resort, in exceptional circumstances, of it being seen as destabilizing the domestic economy, creating asset bubbles and fueling speculation in the economy. Such kind of managing exchange rates during late 2010, by many economies such as Brazil, S. Korea, Russia and Japan have triggered a 'currency war', with each economy trying to maintain the exchange rates to preserve their export competitiveness in the wake of increased capital inflows.

Such currency wars are self-destructive in nature and rightfully India has refrained from intervening or managing the exchange rate and has taken a lead in cautioning other economies of the implications of such currency wars.

Every economy has to understand the basic fundamental or increasing exports which is triggered by being price competitive in the short-term, but will not provide for long-term global competitiveness. The other is market-determined exchange rate will always be a variable and exports cannot do piggy back riding on exchange rate for long, but will have to establish their standing in the export market for their long-term sustainability, beyond exchange rates.

DEPRECIATION AND DEVALUATION:-

So far our concern has been with the capital inflows, appreciating currency and impact on exports but then there could be yet another situation of capital outflows or the reversal of capital outflows or even a sudden spurt in the demand for example, USD or any foreign currency. This is completely opposite to when rupee appreciates on account of inflows. In this case, demand for USD is far more than what is coming to inflows. More rupees would now have to be offered for the same dollar, or the same amount of rupees would get 'lesser' USD which implies that rupee would start depreciating. At the same time, the USD would appreciate as it is now getting 'more' rupees than earlier or that 'lesser' USD is required for the same amount of rupees.

Let us take our earlier exchange rate of USD 1 = Rs. 40 and with depreciation of the rupees there would be a new exchange rate of say USD 1 = Rs. 42. A reference can be made to the graphical illustration given earlier, with either now the supply curve shifting inwards or demand curve shifting outwards.

Now what happens to exports and imports. This implies that exports have become cheaper in the international market as the same USD is getting more rupees now. And imports become more expensive as more rupees are required to purchase the USD for addressing imports. This should be good both for our exports as well as reduce imports and current account deficit. But unfortunately for India, our imports comprise of essentials such as crude oil, import of machineries, etc. This would imply a higher value to existing volume of imports, widening CAD and fears of importing inflation.

A depreciating currency is never seen as a way to promote exports because of largest implications. In a market-determined exchange rate a depreciating home currency has deep fallouts. This has the potential of creating a 'currency crises' or a 'free fall' situation, of an every depreciating home currency making a complete erosion of faith in the home currency.

This would require the central bank to intervene by selling USD in the market, from its foreign exchange reserves, to augment the supply which is fine, if there is abundance of foreign currency with the central bank, but that would choke liquidity, as rupee would be sucked out from the system, pushing it into a recessionary phase, calling for an expansionary monetary policy to counter the choking liquidity arising out of sale of USD in the market.

But there have been instances in the SE Asian economics, of selling foreign currency to stem depreciation of their currency only precipitated further depreciation plunging them into a currency crises.

CONCLUSION:-

Depreciation of the currency in market-determined exchange rates, is never seen as a way to increase exports and central banks in market-determined exchange rates, keeps a close watch especially if the home currency is seen depreciating continuously. However, under the fixed exchange rate system, the central bank 'deliberately' changes the exchange rate by offering 'more' home currency to a foreign currency referred to as 'devaluation' of the currency to promote exports. Even in India, RBI resorted to devaluation in the late sixties and also in early nineties with the same objective and also with a view to test its readiness to move towards market-determined exchange rates and also to discourage imports and making exports price competitive. So 'devaluation' is deliberate by the central bank, under a fixed or pegged exchange rate, while 'depreciation' is under market-determined exchange rate, arising out of surge of demand or in circumstances of outflows or a decline in inflows of foreign currency.

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