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# AN ANALYTICAL STUDY ON THE INFLATION AND EXCHANGE RATE

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#### ABSTRACT

When the rate of growth of supply of money is greater than rate of growth of production it is called inflation. Inflation is the situation in which the prices of the goods and services increase and the money lose its purchasing power and in the developing economy it is a very common problem because they have a very little control on their money and the policy of government is as that creates inflation in the country because in the developing economy the pressure of population is very greater and for meeting their demand the government expenditure is very high and the revenue of the government is lower than its estimated expenditure and the gape filled by debts or issuing the currency which latter cause of inflation and the inflation affect the exchange rate of foreign currency because the purchasing power of the currency become decrease and its result that the excess INR will paid for obtaining one unit of the foreign currency. In countries with constant and high inflation, estimations made by using lower frequency data are not considered to be healthier than the monthly estimations. The financial decision units have very little information related to price conducts because of the ERPT's high level.

**KEYWORDS:** Inflation Targeting, Exchange Rate dynamics, Anti-inflationary.

#### INTRODUCTION

The Foreign exchange rate or exchange rate is the rate at which the currency of one country is exchanged for currency of another country. It means, it represents the price of one currency in terms of another currency. For example, the exchange rate between the Indian Rupee and the American Dollar refers to the numbers of rupees required to purchase a dollar and vice-versa. Thus, the exchange rate between the dollar and rupee from the India's viewpoint is expressed as \$1 = Rs. 48.7 and from US viewpoint as Rs.1 = \$0.02053.

The exchange rate in a free market will be determine with the help of relative forces of demand and supply of foreign currency and supply of foreign currency.

If we focus only on exchange rate of Indian Rupee and American Dollar, then we find that, once the dollar was traded for Rs. 47 or 48. It meant that the demand of American Dollar was high while its supply was not sufficient. But now Indian Rupee has moved to Rs. 54-55 per dollar. It indicate that supply of American Dollar is continuously decreasing in Indian economy.

Thus, the movement of exchange rate has several implications for the foreign trade of a country. Appreciation of a country's currency makes its export expensive while imports become cheaper. On the other hand, depreciation of a currency makes import expensive and export cheaper. Thus both imports and exports of

visible and invisibles is affected by exchange rate movements.

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Thirlwall (1979) 'Trade, Trade Liberalisation and Economic Growth: Theory and Evidence', Economic Research Papers, N. 63, African Development Bank". The balance of payments constrained growth model that owes its origins to Thirlwall (1979) takes a demand-induced view of growth. Thirlwall (1979) introduced a simple analytical model to show that a country's long-run rate of economic growth will be limited by its foreign trade performance, that is, by the size of the income elasticity of its imports relative to the pace of expansion of its exports. Export growth relaxes a balance of payments constraint on demand and allows all other components of aggregate demand, viz., consumption, investment and government expenditure, to grow at a faster pace. "Exports are unique as a growth-inducing force from the demand side because it is the only component of demand that provides foreign exchange to pay for the import requirements of growth".

Bhanumurthy (2006) 'Macroeconomic Fundamentals and Exchange Rate Dynamics in India Some Survey Results', Economic and Political Weekly, Vol.41 No.11, pp.1101-1107. The determinants of exchange rate depend crucially on the time horizon. examines the relative importance of macro vis-à-vis micro variables in

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determining the exchange rate movements over different time horizons with the help of primary information collected from the Indian foreign exchange dealers. The findings suggest that while speculation and central bank intervention are the major determinants of the intraday movements in the exchange rate, in the medium run and long run, economic fundamentals played a major role in determining the rate movement.

**Dr. Jayachandran (2013)** "Impact of foreign exchange rate and GDP of India a study of last four decade find" A doubling of real exchange rate volatility decrease trade in differentiated product by about two per cent. Developing countries export of manufactures may be much more affect due to combination of greater exchange rate volatility and greater sensitive of their exporter to the volatility and when any large economy liberalised and go for global economy this influence of the external sector, including exchange rate movements could become substantial transaction. F this paper also find that the exchange rate dynamics or volatility have a negative impact to the international trade.

# THE TRENDS OF EXCHANGE RATE

The determination of rate of exchange (under the floating exchange rate system) is on the point where the demand for foreign currency is equal to the supply of foreign currency. But generally it is not happened it can happened only this case where the Balance of Payment's debit and credit side of transaction is equal. As sometimes imports are greater than exports, and sometimes exports are greater than imports.

India is a developing country of the world. The import of goods and services of India is much higher than its exports means the Balance of Payment transaction of debit and credit side are not equal or we can say that the debit side transaction are greater than the credit side transactions. So due to this reason India can't find the point of equilibrium rate of exchange. So for filling this gap a country demand more foreign exchange and this increase the demand for foreign exchange in the international market. This led to going up of the exchange rate goes up in the international market and a country will have to pay more unites of currencies for obtaining one unit of foreign exchange.

The day to day exchange rate could fluctuates up and down around the equilibrium exchange rate. There is number of reason of the fluctuations in the foreign exchange rates i.e –

- ♦ The import propensity of country rises.
- ♦ Development planning

- ❖ Import content of investment expenditure may have rises
- Raising of import of goods and services due drought or any other natural uncertainty which cause the increase in the demand of foreign exchange.

These reasons of fluctuation leads to the Deficit in the Balance of payment and this situation there is no government intervention would prevails the exchange rate of currency will go up and the foreign exchange is overvalued in the international market and domestic currency get undervalued i.e no more domestic currency would be payable for obtaining one unit of foreign exchange.

It may also be possible that the rate of foreign exchange would fall. The number of factors also working behind it

- \* Decrease import propensity of country rises.
- Country adopt the import substitutions strategy or
- \* Country adopted the foreign exchange rate control policy.

This ultimate result decrease in the foreign exchange rate would takes place and the domestic currency is over valuated in the international market.

The exchange rate determines the selling price of any product for the buyer country, and thus it will affect the demand. If the exports are highly elastic then, the appreciation of the exchange rate will bring down the export drastically where as if the exports are inelastic then it will have limited impact to appreciation in the exchange rate. However, there may be goods where a large portion of its components are imported. In such a case exchange rate changes will have mixed effect.

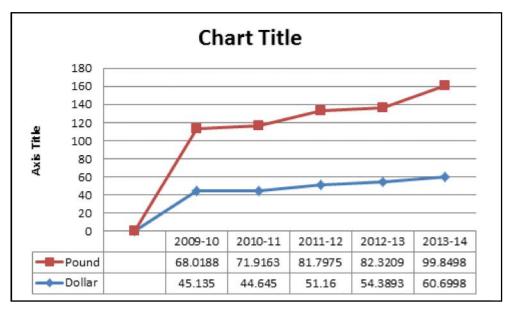
**Exchange rate in INR** 

YEAR	Dollar INR	Pound Sterling
2009-10	45.1350	68.0188
2010-11	44.6450	71.9163
2011-12	51.1600	81.7975
2012-13	54.3893	82.3209
2013-14	60.6998	99.8498

Source: RBI Handbook of Statistics 2013-2014.

We can see the in the year of 2011-2012 there are huge changes has been recorded in the exchange rate of India with the context of dollar and pound both it means the demand of dollar and pound both are increases in this year because the import of goods in India increases and after 2011-12 the rate of increase in the foreign exchange rate are falling.

#### **EXCHANGE RATE OF INDIA INR**



We can see in this chart that the foreign exchange rate growth is very high in the year of 2011-12 and the line is still increasing but the rate of increasing is become falling and in the year 2011-12 there are 6.51INR

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in dollar and 9.88 INR in pound are recorded increasing. But in next year the growth of dollar was only 3.22 INR and pound was 0.5234 INR only.

# THE TRENDS OF INFLATION IN INDIA

The WPI price index in India was first developed in 1930. Since then many changes have been made in it with regards to the composition of product and their weight age. The weightage of manufacturing products have progressively increased while those primary articles have decline to reflect the changing structure of the economy.

The government of India constituted expert-working group looking, into the feasibilities of switching WPI to PPI. In PPI only prices are use for compilation, while taxes, trade margins and transport cost are excluded PPIs a part from their use for measure of Inflation are used as defeaters in the compilation of GDP.

The following data are based on the WPI:

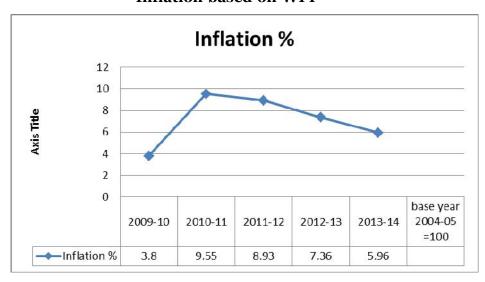
# Wholesale Price Index - Annual Average

YEAR	INFLATION %	Index value
2009-10	3.8	130.8
2010-11	9.55	143.3
2011-12	8.93	156.1
2012-13	7.36	167.6
2013-14	5.96	177.6

Sources: Source: RBI Handbook of Statistics 2013-2014.

We find that although the index number is constantly increasing every year, but when we see the inflation rate in % it show a falling trends. In 2009-10 where the index value is 130.8 and in the 2010-11 it was 143.3 means there was 12.5 value of indexes increases and the inflation rate increase 5.75% but in 2011-2012 there are 12.8 % value of index increases records but keeping according to the pervious one the inflation rate should also increase but it recorded decrease.

# **Inflation based on WPI**



We can see with the help of this chart that in the year of 2010-11 the rate of inflation was 9.55 % but after it was falling continuously and year after year the rate of inflation falling down the index value of all commodities prices are increasing.

# **CONCLUSIONS**

For this study it is a very clear evidence that there is a very strong impact of exchange rate dynamics on the domestic prices of India because we can see that when the exchange rate of dollar and pound become start increasing than the inflation rate also increase and after it the rate of increasing in the exchange rate become start falling than the rate of inflation is starts falling while the value of index countenousily increasing. In the year of 2011-12 and the line is still increasing but the rate of increasing is become falling and in the year 2011-12 there are 6.51INR in dollar and 9.88 INR inflation rate increase

5.75% but in 2011-2012. But in next year the growth of dollar was only 3.22 INR and pound was 0.5234 INR only after it was falling continuously and year after year the rate of inflation falling down the index value of all commodities prices are increasing.

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