# Foreign Exchange Reserve and its Impact on Currency Rate: Prospective of Indian Rupees

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Abstract: The Research titled "Foreign exchange reserve and its impact on currency rate: prospective of Indian Rupees" is the biggest learning from the research work as this helped me to understand the role of Foreign Reserves and its benefits in the today's world. This paper is primarily concerned with an analysis of the growth and trends in the foreign exchange reserves of India. It is based on secondary data and the data reliable for analysis are collected from handbook of statistics on Indian economy and the website of Reserve Bank of India. The study covers the period of 1 year that is 2020 - 21. The analysis of the data reveals that foreign exchange reserves have significantly changed over the years. All the indicators noticed notable growth rate during the period under review. From the overall analysis showed that India holds adequate level of foreign exchange reserves. The major task assigned during the research was as follows: To find Correlation between INR vs. Foreign Exchange Reserve.

Keywords: Foreign exchange reserve.

#### 1. Introduction

India has large foreign-exchange reserves; holdings of cash, bank deposits, bonds, and other financial assets denominated in currencies other than India's national currency, the Indian rupee. The reserves are managed by the Reserve Bank of India for the Indian government and the main component is foreign currency assets.

Foreign-exchange reserves act as the first line of defence for India in case of economic slowdown, but acquisition of reserves has its own costs. Foreign exchange reserves facilitate external trade and payment and promote orderly development and maintenance of foreign exchange market in India.

India's total foreign exchange (Forex) reserves stand at around US\$639642 Million on 17 September 2021, the highest ever, with the Foreign Exchange Assets (FCA) component at around US\$ 577986 Million, Gold Reserves at around US\$37103 Million, SDRs (Special Drawing Rights with the IMF) of around US\$ 19434 Million and around US\$ 5119 Million Reserve Position in the IMF, as per Reserve Bank of India's (RBI) weekly statistical supplement published on 17 September 2021. The Economic survey of India 2014-15 said India could target foreign exchange reserves of US\$750 Billion-US\$1 trillion

India's foreign exchange reserves are mainly composed of US dollar in the forms of US government bonds and

institutional bonds. with nearly 6.6% of forex reserves in gold. The FCAs also include investments in US Treasury bonds, bonds of other selected governments and deposits with foreign central and commercial banks. As of January 2021, India holds fourth largest foreign-exchange reserves in the world following Switzerland.

## 2. Composition

Reserve Bank of India Act and the Foreign Exchange Management Act, 1999 set the legal provisions for governing the foreign exchange reserves. Reserve Bank of India accumulates foreign currency reserves by purchasing from authorized dealers in open market operations. Foreign exchange reserves of India act as a cushion against rupee volatility once global interest rates start rising.

The Foreign exchange reserves of India consists of below four categories,

- 1. Foreign Currency Assets
- 2. Gold
- 3. Special Drawing Rights (SDRs) (1SDR=0.88gms GOLD) (1INR=0.009\*0.88)
- 4. Reserve Tranche Position

#### 3. Statistics

- In 1960, forex reserve covered just 8.6 weeks of imports.
- In 1980, India had foreign exchange reserves of over U\$7 billion, more than double the level (U\$2.55 billion) of what China had at that time.
- In 1990, forex reserve covered just 4.8 weeks of imports.
- Foreign exchange reserves of India reached milestone of \$100 billion mark only in 2004.
- India was forced to sell dollars to the extent of close to U\$35 billion in the spot markets in Financial Year 2009 due to 22% depreciation in rupee (against the dollar) in the same fiscal year 2009.
- In 2009, India purchased 200 tonnes of gold from the International Monetary Fund, worth US\$6.7bn (€4.57bn, £4.10bn).
- In June 2020 India for the first time crossed the 500 billion USD mark.
- The total forex reserves touched an all-time high of 642.453

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billion US\$ on 8 September 2021.

#### 4. How Foreign Exchange Reserves Work

Foreign exchange reserves can include banknotes, deposits, bonds, treasury bills and other government securities. These assets serve many purposes but are most significantly held to ensure that a central government agency has backup funds if their national currency rapidly devalues or becomes all together insolvent.

It is a common practice in countries around the world for their central bank to hold a significant number of reserves in their foreign exchange. Most of these reserves are held in the U.S. dollar since it is the most traded currency in the world. It is not uncommon for the foreign exchange reserves to be made up of the British pound (GBP), the euro (EUR), the Chinese yuan (CNY) or the Japanese yen (JPY) as well.

Economists theorize that it is better to hold the foreign exchange reserves in a currency that is not directly connected to the country's own currency in order to provide a barrier should there be a market shock. However, this practice has become more difficult as currencies have become more intertwined as global trading has become easier.

## 5. Why Hold Forex Reserves?

Technically, it is possible to consider three motives i.e., transaction, speculative and precautionary motives for holding reserves. International trade gives rise to currency flows, which are assumed to be handled by private banks driven by the transaction motive. Similarly, speculative motive is left to individual or corporates. Central bank reserves, however, are characterised primarily as a last resort stock of foreign currency for unpredictable flows, which is consistent with precautionary motive for holding foreign assets. Precautionary motive for holding foreign currency, like the demand for money, can be positively related to wealth and the cost of covering unplanned deficit, and negatively related to the return from alternative assets. From a policy perspective, it is clear that the country benefits through economies of scale by pooling the transaction reserves, while subserving the precautionary motive of keeping official reserves as a 'war chest'. Furthermore, forex reserves are instruments to maintain or manage the exchange rate, while enabling orderly absorption of international money and capital flows. In brief, official reserves are held for precautionary and transaction motives keeping in view the aggregate of national interests, to achieve balance between demand for and supply of foreign currencies, for intervention, and to preserve confidence in the country's ability to carry out external transactions.

Reserve assets could be defined with respect to assets of monetary authority as the custodian, or of sovereign Government as the principal. For the monetary authority, the motives for holding reserves may not deviate from the monetary policy objectives, while for Government, the objectives of holding reserves may go beyond that of the monetary authorities. In other words, the final expression of the objective of holding reserve assets would be influenced by the reconciliation of objectives of the monetary authority as the

custodian and the Government as principal. There are cases, however, when reserves are used as a convenient mechanism for Government purchases of goods and services, servicing foreign currency debt of Government, insurance against emergencies, and in respect of a few, as a source of income.

What are the dominant policy objectives in regard to forex reserves in India? It is difficult to lay down objectives in very precise terms, nor is it possible to order all relevant objectives by order of precedence in view of emerging situations which are described later. For the present, a list of objectives in broader terms may be encapsulated viz.,

- a) Maintaining confidence in monetary and exchange rate policies,
- b) Enhancing capacity to intervene in forex markets,
- Limiting external vulnerability by maintaining foreign currency liquidity to absorb shocks during times of crisis including national disasters or emergencies;
- d) Providing confidence to the markets especially credit rating agencies that external obligations can always be met, thus reducing the overall costs at which forex resources are available to all the market participants, and
- e) Incidentally adding to the comfort of the market participants, by demonstrating the backing of domestic currency by external assets.

At a formal level, the objective of reserve management in India could be found in the RBI Act, where the relevant part of the preamble reads as 'to use the currency system to the country's advantage and with a view to securing monetary stability'.

This statement may be interpreted to hold that monetary stability means internal as well as external stability; implying stable exchange rate as the overall objective of the reserve management policy. While internal stability implies that reserve management cannot be isolated from domestic macroeconomic stability and economic growth, the phrase 'to use the currency system to the country's advantage' implies that maximum gains for the country as a whole or economy in general could be derived in the process of reserve management, which not only provides for considerable flexibility to reserve management practice, but also warrants a very dynamic view of what the country needs and how best to meet the requirements.

In other words, the financial return or trade-off between financial costs and benefits of holding and maintaining reserves is not the only or the predominant objective in management of reserves.

# 6. Exchange Rate Policy

India moved to a market-determined exchange rate system in March 1993. Under the new system, the rupee's exchange rate against other currencies is determined largely by market demand and supply. The Reserve Bank of India intervenes occasionally, only for maintaining orderly conditions in the market by curbing excessive volatility.

### 7. Market Microstructure

The Indian foreign exchange market has exhibited significant growth over the last decade, with average daily turnover recording a quantum jump from US\$6 billion a year in 2000 to US\$60 billion in recent times. The major market participants in the domestic foreign exchange market now include banks, corporates and foreign institutional investors (FIIs). Besides having an active over-the-counter market, India also has an exchange-traded currency futures and options market that has shown reasonable growth since its inception in 2008.

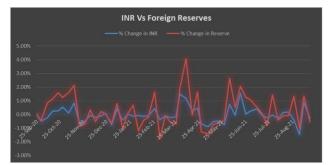


Fig. 1. INR vs. Foreign reserves

INR vs. Foreign Exchange Reserve's

Trade Date	% Change in INR	INR(Rs.)	% Change in Reserve	Reserve (in Cr.)
25-Sep-20	0.00%	73.7297	0.00%	3989568
01-Oct-20	-0.47%	73.3834	0.03%	3990840
09-Oct-20	-0.24%	73.2103	1.08%	4034267
16-Oct-20	0.24%	73.383	0.92%	4071872
23-Oct-20	0.27%	73.578	1.31%	4126040
29-Oct-20	0.53%	73.9732	0.70%	4155181
06-Nov-20	0.11%	74.0535	1.51%	4218823
13-Nov-20	0.83%	74.6713	1.29%	4274151
20-Nov-20	-0.69%	74.1598	-0.19%	4266200
27-Nov-20	-0.49%	73.7983	-0.21%	4257257
04-Dec-20	-0.08%	73.7413	0.42%	4275361
11-Dec-20	-0.20%	73.5914	-0.33%	4261092
18-Dec-20	-0.10%	73.5146	0.32%	4274948
24-Dec-20	0.09%	73.5838	-0.06%	4272332
01-Jan-21	-0.75%	73.0328	0.11%	4276976
08-Jan-21	0.41%	73.3344	0.37%	4293062
15-Jan-21	-0.42%	73.0243	-0.56%	4269145
22-Jan-21	0.02%	73.038	0.06%	4271528
29-Jan-21	-0.12%	72.9519	0.80%	4306005
05-Feb-21	-0.07%	72.8986	-1.11%	4258725
12-Feb-21	-0.14%	72.7998	-0.28%	4246990
18-Feb-21	-0.09%	72.7327	-0.11%	4242355
26-Feb-21	0.42%	73.0408	1.21%	4294511
05-Mar-21	-0.39%	72.7572	-1.37%	4236665
12-Mar-21	-0.10%	72.6845	0.01%	4236881
19-Mar-21	-0.23%	72.5155	-0.33%	4222759
26-Mar-21	-0.15%	72.4046	-0.53%	4200668
31-Mar-21	1.50%	73.5047	0.41%	4218115
08-Apr-21	1.16%	74.37	2.89%	4343833
16-Apr-21	0.26%	74.5607	-0.32%	4330087
23-Apr-21	0.47%	74.9144	1.18%	4381700
28-Apr-21	-0.69%	74.4042	-0.59%	4355951
07-May-21	-0.89%	73.7443	-0.52%	4333343
14-May-21	-0.51%	73.3721	-0.20%	4324574
21-May-21	-0.48%	73.0233	-0.13%	4318817
28-May-21	-0.75%	72.4767	0.34%	4333464
04-Jun-21	0.75%	73.0266	1.89%	4417018
11-Jun-21	-0.06%	72.9844	0.56%	4442085
18-Jun-21	1.56%	74.1442	0.49%	4464016
25-Jun-21	0.05%	74.179	1.22%	4519253
30-Jun-21	0.22%	74.3456	0.88%	4559356
09-Jul-21	0.40%	74.6446	0.17%	4566920
16-Jul-21	-0.03%	74.6232	0.11%	4572099
23-Jul-21	-0.26%	74.4262	-0.50%	4549373
30-Jul-21	-0.05%	74.3871	1.47%	4617303
06-Aug-21	-0.27%	74.1888	-0.16%	4610155
13-Aug-21	0.15%	74.2971	-0.23%	4599392
20-Aug-21	0.18%	74.4275	-0.24%	4588475
27-Aug-21	-0.40%	74.1332	1.73%	4669426
03-Sep-21	-1.46%	73.0651	0.46%	4690783
09-Sep-21	0.85%	73.6887	0.50%	4714298
17-Sep-21	-0.27%	73.4927	-0.28%	4701267
17 DOP 21	0.2770	13.1721	0.2070	1701207

# 8. Objectives of the Project

- To perform analysis of foreign exchange reserves in India.
- To gain aspects of exchange rate policy.
- To analyze working of foreign exchange reserves.
- To find correlation between INR and foreign exchanges reserves.
- To see if rupee appreciates with increase in foreign reserves.

# 9. Tasks Performed

- What is foreign exchange reserve
- How they work in India
- Data Collection for 1 year
- What is SDR
- Exchange rate policy
- Market microstructure
- Find Correlation of INR Vs Foreign Exchange Reserve

# 10. Takeaways and Learnings

- Working of foreign reserves in India
- Composition & Statistics
- Market structure
- RBI data forms
- Different ups and downs in past years in exchange reserves
- Different factors about INR & Foreign Reserves

### 11. Conclusion

From the chart we can conclude that rupee appreciates as there is increase in foreign reserves.

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