



Foreign Exchange Reserves, A Mirror To India's Economy

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Abstract: Foreign exchange reserves are the surplus of freely convertible foreign currency (generally denominated in USD, but can also be denominated in Pounds, Euros, etc..) maintained by any country's central bank. Foreign exchange reserves are maintained as a means to regulate the economy by controlling the level of such reserves and also acting as a source of buffer or backing of country's funds in case of an economic crisis or currency rate fluctuation. This study aims at analysing the impact of the accumulation of foreign exchange reserves on the economy of India. The authors have utilized secondary data for the purpose of this research paper. The geographic limitation of this study is India. Some of the factors which influence the accumulation of foreign reserve holdings are the need for foreign direct investments (FDIs), liquidity and security during an economic crisis. India has witnessed a huge leap in the foreign exchange reserves when compared to 1960. This has enabled India to be the fifth largest foreign reserve holding country in the world. The United States being the global economic leader is in the 20th position. This implies that the amount of foreign reserve holdings held by a country does not determine its economic stability, whereas it depends on the nation's demands.

Index Terms - Foreign Reserve Holdings, Special Drawing Rights (SDR), Reserve Tranche Position (RTP), The Reserve Bank of India (RBI), Liquidity and Opportunity cost.

I. INTRODUCTION

Foreign exchange reserves are the surplus of freely convertible foreign currency (generally denominated in USD, but can also be denominated in Pounds, Euros, etc..) maintained by any country's central bank. Foreign exchange reserves are maintained as a means to regulate the economy by controlling the level of such reserves and also acting as a source of buffer or backing of country's funds in case of an economic crisis or currency rate fluctuation and to gain the confidence of investors. (Hargrave, 2020)

In India, there are two acts that govern the foreign exchange reserves. They are, The Reserve Bank of India Act, 1934 and the Foreign Exchange Management Act, 1999. The legal structure for the classification of reserves in various foreign currency assets as well as gold reserves is presented at the Reserve Bank of India which is within the parameters of counterparties, issuers, instruments, and currencies. Approximately, Sixty Four percent of the foreign currency reserves are made up of securities such as Treasury bills of foreign countries. ("Reserve Bank of India- Publications ", 2017).

The main objective of the FEMA was to consolidate and amend the laws relating to the foreign reserve holdings and for the maintenance of its market in India. FEMA is applied in transactions, where one party is an Indian citizen and another party, is not an Indian citizen. ("Foreign Exchange Management Act- FEMA ", 2020)

The four components constituting the foreign reserve holdings of India are:

Foreign Currency Assets (FCA): this is the most important component and the largest component of the foreign reserve holdings. This majorly includes currency in a denomination other than that of the currency of that particular country. It also includes banknotes, deposits, bonds, inventory, fixed assets, treasury bills and other government securities held in foreign currency. (Hargrave, 2020)

Gold: India is the largest gold consuming nation. Despite this fact, India's gold reserves are much lesser than those of the developed nations. When compared to the period before liberalization and now, the amount of gold reserves in the foreign reserve holdings has seen a drastic decrease from 78 percent to 5.4 percent. ("India Forex Reserves | Gold reserves|Analysis|1990- 2020|Charts ", 2020).

Special Drawing Rights (SDR): Special Drawing Rights (SDR) was created by the International Monetary Fund (IMF) in the year 1969. SDR is a monetary reserve of an international type. The main reason to create it was to settle international accounts when concerns rose about the limitations of dollars and gold. For member countries, this acts as a supplement to their existing money reserves. The IMF reviews the SDR value every five years. The value depends on the factors of key international currencies. ("Special Drawing Right (SDR)", 2020).

Reserve Tranche Position (RTP): The Basic mode for financing in the IMF can be done using the members' quotas. A quota (membership fee) is assigned to each member of the IMF. A part of the reserve tranche position is payable in SDRs. Reserve Tranche Position is defined as the difference between the quota a member has and the IMF's holdings of the country's currency. ("India's Foreign Exchange touches all time high of 457.468 Billion USD- Current Affairs Today ", 2020).

India's foreign reserve holdings have increased from 5800 million USD in March 1991 to US 534568 million USD in July 2020. India is the world's fifth largest country in terms of foreign reserve holdings. The foreign reserve holdings of India was 534568 million USD with FCA at around 490829 million USD, Gold at 37625 million USD, SDRs at 1475 million USD and Reserve tranche position at 4639 million USD as per the weekly statistical supplement published by The Reserve Bank of India on July 31, 2020. ("Reserve Bank of India- Weekly Statistical Supplement", n.d.)

The Significant increase in the foreign exchange reserve relieves the RBI and the Government of India in managing both financial internal and external issues. The latest foreign exchange reserve balance is considered enough to cover India's import bills for one year. The rupee value has strengthened against the dollar value due to the increase in the foreign exchange reserves. Thus, the ratio of exchange reserves to GDP is 15 percent. Reserve does supply a sense of support in the trade through which a country can encounter its external obligations, demonstrate the backing of domestic currency by external assets and help the country in accomplishing its needs with regards to the external debts. It also helps to maintain a reserve to utilize in times of economic crisis or national disasters. (Mathew, 2020).

The main objective of this research study is to analyse the adequacy of foreign reserve holdings held by India taking into consideration its import demands and whether there should be a rule of thumb with regards to the reserve levels. This study aims at analysing the factors affecting the foreign exchange reserve accumulation, accumulation costs and opportunity costs involved in foreign exchange reserves and the growth of the Indian economy due to the reserves. This study also aims at studying how the foreign reserve holdings are managed.

Henceforth in this research paper, foreign exchange reserves will also be referred to as foreign reserve holdings.

II. REVIEW OF LITERATURE

This paper suggests that the marginal return on accumulation is very low if the countries exceed the precautionary levels of foreign reserve holdings. The reason being, the cost involved in accumulating additional reserves is high. The countries which hold large reserves is as a precautionary measure to support its economy (Green & Torgerson, 2007).

This study states that India's demand for long-run reserves is considered as a function of current account vulnerability, opportunity cost of holding reserves, exchange rate flexibility, and capital account vulnerability. The research reveals that the collection of foreign exchange reserves in India is less attentive to its opportunity cost. Moreover, the measure of exchange rate flexibility importantly does not affect the reserve holdings. Evidence suggests that Reserves in India is held as a precautionary measure against capital account and current account vulnerability (kp, 2007).

This study explains that foreign-exchange reserve is an important measure to reimburse the debt, to govern credit ratings of nations. According to this study, European central banks and the US Fed holds more than 60% of Gold reserves. Due to the volatility of the dollar, Gold is reviewed as a stabilizing reserve currency. Gold price is inverse to dollar value that resulted in Chinese central banks investing in the yellow metal (Arunachalam, 2010).

This research paper explains that the increase in the foreign reserve holdings affects the import demands of a country in both long term and short term because this will result in an increase in the funds available to the importers. It also suggests that import demands can be explained by a country's real income (Arize & Malindretos, 2012).

Research suggests a significant relationship existing among the positive impact of foreign exchange reserves on stock market capitalization. The granger causality test reveals that the stock market capitalization (SMC) does not Granger any Cause on the foreign exchange reserve (FOREX), Which means to say that the causality is unidirectional which moves from foreign exchange reserve to stock market capitalization but not in the opposite direction, which is foreign exchange reserve (FOREX) Granger Causes stock market capitalization (SMC). (Ray, 2012).

This research paper suggests that there is no relationship existing between accumulation of foreign reserve holdings and fluctuations in the exchange rate of a particular currency. Whereas, countries accumulate foreign reserve holdings to guard their economy during the times of global economic crisis (S Gokhale & Ramana Raju, 2013).

This research paper suggests that the increase in the foreign reserve holdings results in the growth of the Gross Domestic Product (GDP). On the other hand, the study has not proved whether the decline in the growth of GDP is caused due to the decrease in the accumulation of foreign reserve holdings. This paper also suggests that if the rate of accumulation of foreign reserves is equal to the rate of growth of the economy, then it does not lead to inflation. (Krušković & Maričić, 2015).

This paper analyses that the foreign exchange reserves had significantly increased to 57 percent. Even though, Gold and Reserve tranche position has fallen. Special Drawing Rights and foreign currency holdings stand at a percentage share of 1.16 percent and 92.88 percent, showing that foreign currency reserves are assisting our foreign exchange reserves (Abid & Jhavar, 2017).

In this paper, the authors have explained that globally emerging countries are competing with the developed countries for the acquisition of foreign reserves. Those reserves are used to protect against economic turmoil. The various macroeconomic variables caused by the Foreign Reserves holdings during the past decade in India had more impact on various integrative aspects. Thus, the reserves holding can be productive, if given notice (Poongothai & Kalai priya, 2017).

This study suggests that the exchange reserves have changed remarkably for years. All the components were said to be in high volatility excluding the foreign currency assets during the under review period. Moreover, as a whole, it was noticed that the degree of stability slightly increased for Forex reserves in India over the years and also holds a sufficient level of Forex reserves. (Kuppusamy, Prasad & R, 2019).

III. RESEARCH METHODOLOGY

For the purpose of this study, the authors have utilized secondary data. The data was collected by several articles, journals and websites including the official website of the RBI and the IMF. A Descriptive study was employed for this study. For the purpose of this research study, the authors have made use of qualitative data to study and analyse the impact that foreign reserve holdings has on the Indian economy, growth of the economy, adequacy of reserves held and costs involved in the accumulation process. The chronological data of sixty years related to the foreign reserve holdings from the year 1960 to 2020 is utilized to study and interpret the growth and trends of foreign reserve holdings in India. This research study was conducted in Bangalore, Karnataka, India during the period of June 2020 to August 2020. The demographic limitation of this study is India. The authors have tried to cover the research gap by analysing the secondary information collected.

IV. ANALYSIS AND INTERPRETATION

The central bank or the federal bank of a country (which is the Reserve Bank of India, in India's case), is responsible for amassing and maintaining the country's foreign reserve holdings. There are certain factors that influence the accumulation of foreign reserve holdings. Any country would hold foreign exchange reserves primarily due to two reasons. The first and foremost reason for holding foreign exchange reserves is that it acts as a precautionary measure in times of an economic crisis by shielding the economy in the face of rising demand for such foreign currency. Another reason for holding foreign exchange reserves is to support international trade purposes of the country. When a person exports goods from India to a foreign country, such exporter would be receiving the payment for such goods exported in foreign currency. However, since the exporter is ultimately interested in receiving Indian Rupees, he shall therefore exchange such foreign currency received for Indian Rupees from the local banks. Such foreign currency acquired by the local banks would later be transferred to the Reserve Bank of India. This would lead to increased flow of money and increase in liquidity thereby amounting to inflation. To curb such inflation,

the Reserve Bank of India buys bonds using US Dollars. Consequently, the exchange rates are kept under control while also increasing the foreign exchange reserves. ("How can a country increase foreign exchange reserves held in the form of USD ?-Quora", 2017).

There are certain factors that influence the amassing of foreign reserve holdings. For the purpose of maintaining a fixed and stable currency exchange rate, it is necessary to have foreign exchange reserves. The reason for having such stability in a country's exchange rate is that the importers in such country are benefitted from appreciation of the local currency whereas the exporters gain from the depreciation of such local currency. For maintaining a state of balance among them, it is important to have stability in the currency exchange rates. Maintaining a lower value of a currency than US Dollars will increase the demand for exports which in turn promotes economic growth and progress. Foreign exchange reserves also ensure liquidity in the times of an economic crisis and national emergency. This enables the importers to pay their bills and prevents the economy from falling. It also builds confidence in investors. Foreign exchange reserves are usually accumulated in different forms. This is to ensure that the risk factor is diversified. When the foreign exchange reserves are accumulated in different forms like stocks, bonds, treasury bills, and commodities, the risk factors will be low. If one does not diversify the investments, the weak performance in one market will lead to a higher risk. (Amadeo, 2020).

Exchange Reserves of India include banknotes, gold reserves, bonds, international banking, and financial resources. Currently, India ranks fifth in the world regarding exchange reserves. There is a humongous growth in India's exchange reserves from 1960 to 2020. The total foreign exchange reserves in India were 637 million USD and it has increased to the highest of 523630 million USD. The increase in gold reserves is from 247 million USD to 30600 million USD. The foreign currency assets are increased from 390 million USD to 480,482 million USD. In the opening year, the Reserve Tranche Position and SDRs were negligible and they increased to 4585 million USD and 1464 million USD.

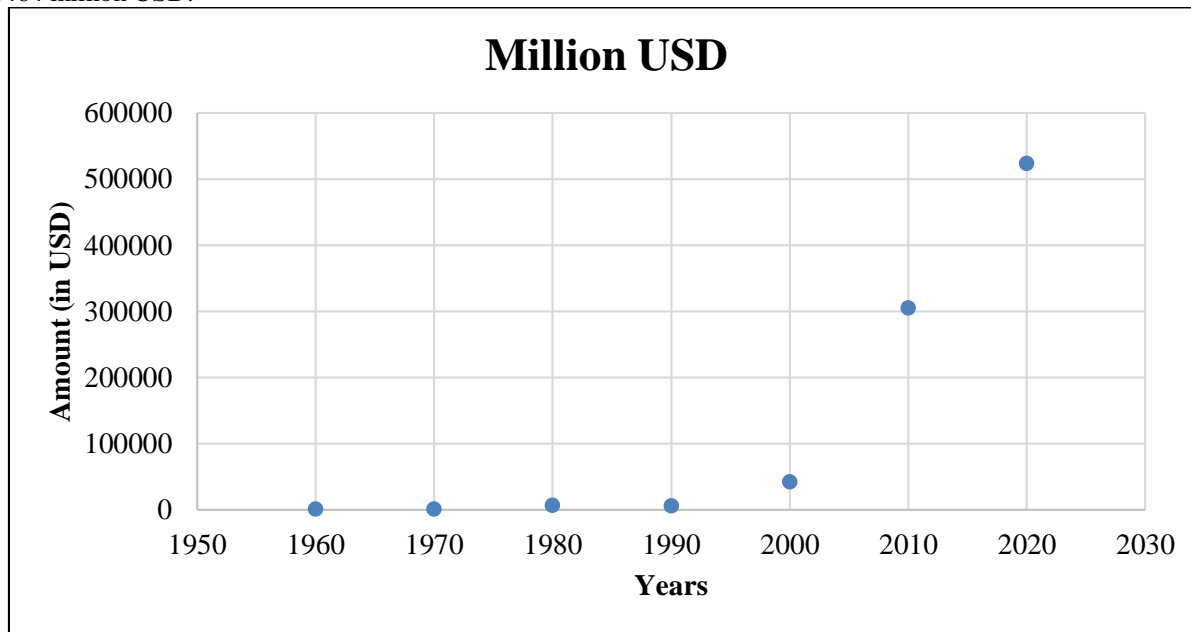


Figure 1: Graph 1

The above graph, (Graph 1) depicts the evolution of foreign exchange reserve holdings from the year 1960 to the year 2020. ("India Forex Reserves [Gold reserves] Analysis [1990-2020]", 2020).

Foreign reserves adequacy refers to the number of reserves that secure a feasible balance of international payments and macroeconomic acclimation which results from price fluctuations or reversal in capital-flows. The current level of foreign exchange holdings of India is adequate to cover nearly 12 months of imports. An adequate level of exchange reserves is a vital parameter to identify the country's ability to absorb external crisis. Holding exchange reserves to recover import bills is no longer necessary as it is not the only parameter influencing exchange reserves in a country. India retains an adequate level of exchange reserves regarding imports, short run debt coverage, and money aggregate. (Suresh S, 2015).

The idea of marginal social costs or opportunity costs are termed to be significant for rational purposes, Suppose if the direct holding reserve of financial cost is considered to be the distinction between reserves returns on external assets and payment of interest on external debt, then the costs of such sort are termed to be taken as insurance premium which is to sustain, support and satisfy the dependence in the accessibility of liquidity. The gain concerning the premiums is in terms of warding off risks and also in means of better credit rating and finer spreads which might be provided while contracting debt to various private participants. Although the stage of reserves is said to be important in the high comfort zone, it is viable to add greater weight on the return of foreign reserve assets than that on liquidity which in turn deducts the net costs if any of the holding reserves is considered. Determining the costs of holding reserves is formed through differentiating the return on exchange reserve with costs of external debt which may indicate an addition on to reserves built by engaging additional external debt. In India, Mostly the whole of inclusion to reserves in the past few years is formed ever after having the entire level of external debt almost the same. The expenses and gain of adding or not adding to reserves should be evaluated with a medium-term view. Significantly, it is important to judge the costs of not adding to reserves using open market operations at that duration when the capital flows are considered to be relatively strong. (Reddy, 2002).

The purpose of regulating the foreign exchange holding management in India is close to similar to those of various central banks in the world. The order deposited on the foreign exchange holdings may differ depending upon a variety of factors. The legal structure for the division of reserves in different foreign gold and currency assets within the wide parameters of instruments, issuers, counterparties, and currencies is provided under The 1934 Act of The Reserve Bank of India. The necessary lawful system for reserve management is explained in sub-sections 17(6A), 17(12), 17(12A), 17(13), and 33 (6) of the 1934 Act. The blueprint for reserve management considering investment policy and currency composition is determined in consultation with the Government of India. The risk management functions are intended at providing, improved accountability, international practices, and efficient allocation of resources along with the development and growth

of the same. The risks attendant on the category of reserves includes market risk, credit risk, operational risk, control systems, and liquidity risk. ("Reserve Bank of India - Publications", 2020).

V. CONCLUSION

This research paper concludes that foreign reserves are amassed in order to control the currency rate fluctuations. This is to shield the country's economy during times of economic crisis, to ensure liquidity, to attract foreign direct investments and to create confidence among the investors that their dues will be paid even in case of a liquidity crunch or economic slowdown. The strategy for the purpose of management of reserves including investment policy and currency composition which are discussed decided and consulted with the Government of India. There are four broad categories under the composition of foreign reserve holdings, which are gold reserves, foreign currency assets, reserve tranche position and special drawing rights. Foreign reserve holdings of India were said to be 637 million USD in the year 1960 whereas in July 2020, the foreign exchange reserves stands at 522630 million USD. Which implies a humongous growth in the reserves accounting to 81945.5% growth over a period of 60 years. In the recent years, in India, accumulation of marginal reserves has been made such that the level of external or foreign debt remains almost unchanged. The costs that the marginal addition or reduction of reserves should be considered with a medium- term view. But most necessarily, the costs involved in not increasing the reserve balance must be considered through open market conditions. It should be carried out in such a time where there is strong flow of capital. Adequacy of foreign exchange holdings refers to sufficiency of reserves regarding the import demands. Currently, foreign reserve holdings are adequate to cover nearly 12 months of imports. The adequate level of foreign exchange reserves is a crucial parameter to determine country's capability to absorb external shocks. The amount of reserves maintained by a country should be sufficient to cover its growing demand. 637 million USD was sufficient in 1960. The demand has increased in these 60 years. So, it is not advisable to have a rule of thumb with respect to the foreign exchange holdings. The exchange reserves will constantly reconstruct based on the demands of the country.

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