

# India's Foreign Exchange Reserves: Status, Issues, Policies

## A Study of Foreign Exchange Reserves in the Indian Context

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### Abstract

Foreign exchange reserves are assets held as a reserve by a central bank of a country in foreign currencies. These reserves are used to back liabilities and influence monetary policies. It includes any foreign money held by a central bank, such as the Reserve Bank of India.

Countries use their exchange reserves to stay the worth of their currencies at a hard and fast rate. an honest example is China, which pegs the worth of its currency, the yuan to the dollar. That produces Chinese exports cheaper than American-made goods, increasing sales. Those with a floating rate of exchange system use reserves to stay the worth of their currency below the dollar. They are doing this for the identical reasons as those with fixed-rate systems. Such currency trading takes place within the interchange market. A critical function is to keep up liquidity just in case of a slump. for instance, the present Covid-19 pandemic. That cuts off their supply of foreign currency to purchase imports. therein case, the financial institution can exchange its foreign currency for his or her local currency, allowing them to buy and receive the imports. Similarly, foreign investors will withdraw their deposits from the country's banks, creating a severe shortage in foreign currency. This pushes down the worth of the local currency since fewer people want it. that produces imports costlier, creating inflation. The financial institution supplies foreign currency to stay markets steady. It also buys the local currency to support its value and forestall inflation. This reassures foreign investors, who return to the economy. to supply confidence, the financial organization assures foreign investors that it is able to take action to guard their investments. It will also prevent a sudden flight to safety and loss of capital for the country. in this way, a robust position in foreign currency reserves can prevent economic crises caused when an occurrence triggers a flight to safety. Reserves are always needed to form sure a rustic will meet its external obligations. These include international payment obligations and commitments including sovereign and commercial debts. They also include the financing of imports and the ability to soak up any unexpected capital changes. Some countries use their reserves to fund sectors, like infrastructure. China, as an example, has used a part of its forex reserves for recapitalizing several of its state-owned banks. Most central banks want to spice up returns without compromising safety. They know the most effective way to try this is to diversify their portfolios. They will often hold gold and other safe, interest-bearing investments to do this.

India's Forex reserves consist of four major categories: Foreign Currency Assets, Gold, Special Drawing Rights and Reserve Tranche Position. India's Forex position has constantly improved since the 1990s the reasons for this have been discussed in the research paper. Further the current strong position of India's Forex has also been discussed.

This research paper answers various questions about India's Foreign Exchange Reserve policies, issues and recommends ways to further fortify the country's Forex reserves position.

## Introduction

Forex reserves or reserves of foreign exchange (FX reserves) are funds held by the central bank or monetary authority of a country.

The US Dollar and, to a lesser degree, the Euro, Japanese Yen and Pound Sterling are usually kept in reserve currencies. It is used to back up its liabilities—like the issued native currency, and even reserves deposited with the central bank by financial institutions or the government.

From a conservative point of view, forex should include only foreign banknotes, foreign treasury bills, foreign bank deposits, and foreign government securities over long and short term.

But it also includes, in fact, gold stocks, IMF reserve positions, and SDRs, or special drawing privileges (rights). The latter figure is more readily available and are officially known as the international reserves.

## Forex Reserves of India

As on 28<sup>th</sup> August, 2020, India's forex reserves stood at approximately US \$542 Billion. India ranks fifth in the world in forex reserves. Rank 1 is held by China who is followed by Japan and Switzerland.

## How Foreign Exchange Reserves Work

Exporters around the world deposit foreign currency into their local banks. They have the currency transferred to the central bank. Exporters are paid in U.S. dollars, euros, or other currencies by their trading partners. They are exchanged for the local currency by exporters. Exporters use this to pay for their staff and local suppliers.

Economists theorise that in order to provide a barrier, in case of a market shock, it is best to keep foreign exchange reserves in a currency that is not directly related to the country's own currency. However, since currencies have become more interconnected as global trade has become simpler, this activity has become more difficult.

## The Purpose of Foreign Exchange Reserves

1. To keep the value of their currencies at a fixed rate. - A good example of this is China, which pegs its currency, the yuan, to the dollar. When China stockpiles dollars, the dollar value is increased as opposed to the yuan. That makes Chinese exports cheaper than products produced in the United States, thereby growing sales.
2. Countries with a floating exchange rate system use forex reserves to keep the value of their currency lower than the US Dollar. - Although Japan's currency, the yen, is a floating mechanism, Japan's central bank buys U.S. treasuries for keeping its value below the dollar. This makes Japan's exports relatively cheaper, boosting trade and economic growth.

3. Maintaining liquidity because of an economic crisis. - A flood or volcano, for instance, may temporarily suspend the ability of local exporters to produce products. That cuts off their foreign currency supply in order to pay for imports. In this case, the central bank will exchange its foreign currency for its local currency, enabling it to pay for imports and receive them. Likewise, if a nation has a war, a military takeover, or some other blow to confidence, foreign investors will get spooked. They wrest their deposits from the banks of the country, causing a serious foreign currency shortage. Because fewer people want it, this drives down the value of the local currency. That makes imports more costly, creating inflation.
4. The Central bank (RBI) supplies foreign currency in order to keep markets stable. It also purchases the local currency to maintain its value and to stop inflation. That reassures foreign investors who come back to the economy.
5. To make sure that a country does not default on its foreign obligations and liabilities- Reserves are often important to ensure a nation fulfils its external obligations. These include commitments relating to foreign transfers, including sovereign and commercial debts. They also require import funding and the ability to withstand any unforeseen movements of money.

### Current Status of Foreign Exchange Reserves in India

The current situation contrasts dramatically with that of 1991, when India was forced to pledge its gold reserves to stave off a global financial crisis. In March 1991, India had a mere \$5.8 billion in forex reserves; today, the country can rely on its soaring foreign exchange reserves to address any economic crisis.

India's foreign exchange reserves (forex) rose by \$3.883 billion to hit a lifetime peak of \$541.431 billion over the week ended August 28, Reserve Bank of India (RBI) data reported on Friday (September 4). In the week ended June 5, 2020, India's forex reserves had exceeded \$500 billion for the first time ever, touching what was then the all-time high of \$501.7 billion.

While the overall economic situation is grim, with India's Gross Domestic Product (GDP) contracting 23.9 percent in the April-June quarter and the standstill of manufacturing operation and trade, the stock of forex reserves is one data point that India can cheer in the midst of the pandemic of Covid-19.

### Review of Literature

**Arati Basu (2014):** India went through a sharp depreciation of rupee and an acute fall in its foreign exchange reserves in 2013 which resulted in inflation, demand recession and a general slowdown of economic activities. Some of the problems faced by India were - the exports were much greater than the imports thereby ruining the trade balance, there was a sharp fall in the capital account balance due to the reduction in the foreign investments coming into the economy. Inflows/outflows depends upon attractiveness of Indian economy for Foreign Direct investment (FDI) and Foreign Institutional Investments (FII). Though depreciation of rupee decreases the price of India's exports, there are two other forces that come into play that are domestic inflation and price of imports. The high rate of inflation along with depreciation of rupee increased the cost of production. It was also not feasible to put restriction on imports (especially oil) even though the imports were becoming dearer as an effect of rupee depreciation. Some measures were taken to correct this situation like RBI intervened in the foreign exchange market by selling dollars which gave some relief to the fall of rupee but it was only temporary. Other measures like restriction on capital outflows by residents and corporates, gold imports restrictions were executed, however, to no avail. According to the author, the only turning point in rupee's exchange rate was seen when the announcement by US Federation

was made to put off tapering “easy money” by selling Government bonds. After this announcement, investors from abroad started investments in India, thereby improving our capital inflow situation. Another measure that improved the FOREX reserve situation was the introduction of the Swap arrangement by the RBI which allowed for a US dollar-rupee swap window for fresh FCNR (B) dollar funds for a minimum time limit of 3 years. Due to this, total reserves in October 2013 went up to \$281 billion from \$275 billion in August and exports had risen by 11.2 % while imports fell by 18.1% which led to an improvement in trade deficit of \$6.8 billion.

**Nidhi Garg & Dr. Shakti Singh (2018):** The value of rupee had declined by almost 16% in the nine months analysed in this paper. This decline negatively impacted various sectors in India. Through this paper the authors try to analyse the various reasons why the rupee was depreciating with respect to the US dollar and suggested some ways that this issue could be dealt with or resolved. The main reasons that were highlighted in this paper for the depreciation of rupee were- the trade war between US & China, the increasing prices of oil, a deepening CAD deficit ( which rose to 1.9% of GDP in March 2018 from 0.6% in the year before that ), an increased demand for gold ( as India has to import gold from other countries) and a withdrawal by foreign institutional investors due to lack of confidence in the Indian economy. The authors suggested that this issue can be somewhat eased by some measures like the government should encourage foreign investment for a longer term, not only for a short term. It also stated that cooperation between the RBI & government to stabilise the rupee was necessary and exports must be encouraged and imports should be limited.

**Saba Abid, Neelam Jhavar (2017):** This paper aimed at analysing the trend in Foreign Exchange Reserves and its components in India. The paper studies the period between 2001-2016. The study shows that the FOREX reserves have undergone several changes over the years. The total reserves show an increase of about 57%. The gold reserves increased from 2011 to 2013, however then a fall of 7.22% was seen and again a drop from 1296 billion to 1192 billion was seen in 2015. The Reserve Tranche position steadily declined since 2011 and stood at 81 billion in 2015. The SDR's increased from 2011-2014 but showed a decline in 2015 (From 1.46% of total reserves to 1.16% of total reserves). Foreign currency reserve was the only component that showed an increase during the given period and forms a major portion of our total reserves (about 92.88%) due to which the author concludes that the foreign currency reserves are mainly backing our foreign exchange reserves.

**Christopher J Neely (2005):** In this research paper the author states that the Foreign exchange intervention is that practice of monetary authorities of buying and selling currency within the exchange market to influence exchange rates. They also studied whether intervention is successful in influencing rate of exchange movements and the way it affects volatility. Secondly, they need asked how the kind of intervention affects these results and through which channels it would operate.

Intervention has several characteristics that complicate one's ability to review it. It is conducted sporadically, with several interventions over the course of a few days or weeks. Thus, it has an unusual distribution. Intervention policy is rarely stable for long periods. Finally, because intervention quickly reacts to rate of exchange movements and other variables, exchange rates and intervention are determined simultaneously. These problems have made it difficult to point out that central bank intervention has reduced rate of exchange volatility or moved the rate of exchange within the desired direction.

Finally, the authors found two phenomena's that have advanced the understanding of intervention. The first is that the use of event studies to judge the consequences of intervention. Generically, an event study is an examination of asset price behaviour associated with some event, such as a merger, announcement, or intervention. Event studies are used to assess the market's reaction to the event, how the event influenced

prices, and whether the market priced the event efficiently. The second advance is the use of high-frequency data use of both exchange rates and intervention for higher understanding of the behaviour of exchange rates immediately around intervention.

**Charan Singh (2006):** The author during this research paper states that the policy to create an adequate level of foreign exchange Rate (FER) in India has been supported variety of considerations - the current account position and size of short-term liabilities, and therefore the composition, source and risk profile of capital flows. The reserves have succeeded in infusing necessary confidence, both to the markets and policy makers. However, neither the capital inflow to India nor the dimensions of FER is significantly large in comparison with some other countries within the region. consistent with me the author is additionally trying to elucidate the sources of accretion to FER are mainly CSSE, IRWA, and portfolio investments and not FDI (which is more stable) as within the cases of China and Singapore. Therefore, India, which is accumulating FER for precautionary and safety motives, especially after the embarrassing experience of June 1991, should avoid utilising reserves to finance infrastructure. Infrastructure projects in India yield low or negative returns thanks to some difficulties political and economic especially in adjusting the tariff structure, introducing labour reforms and upgrading technology. the utilization of FER to finance infrastructure may cause more economic difficulties, including problems in monetary management. the author finally concludes that, however, if India continues to accumulate reserves and seeks to reinforce the returns on FER within the future, it should consider establishing a separate investment institution on the pattern of the GIC.

**Smita Roy Trivedi and Bobby Srinivasan (2016):** The authors in this research papers state how The Reserve Bank of India (RBI), India's central bank, has consistently intervened in the forex market in an attempt to address volatility concerns. In addition to direct interventions in the spot and forward markets, indirect interventions (including policy measures and signals to market participants) have been commonly used. Excessive volatility is a cause of concern in a growing economy like India given its negative influence on both trade and investment. The managed float regime of India can, therefore, offer powerful evidence on the effectiveness of such interventions.

The authors also studied the effectiveness of intervention in the Indian foreign exchange market using the event study methodology. The clustered and non-stochastic nature of intervention made the event study methodology apt for the study of intervention. According to me the authors also used the event study framework which has, so far, not been used for the study of intervention in the Indian context and using six criterions of success for intervention, they evaluated the significance of successful events. Publicly available monthly data and daily data on intervention was gathered from news reports for the study.

**Prabheesh. K. Pa, Malathy. D and Madhumati. R (2007)**

This comprehensive paper examined India's demand for foreign reserves from 1983 to 2005 using quarterly data, a broader collection of explanatory variables, and recent econometric estimation developments. Long-run reserve demand from India is found to be a feature of current account vulnerability, capital account vulnerability, exchange rate, stability, and "opportunity cost of holding reserve."

Empirical Data suggests India retains reserves as a security precaution against vulnerability in current account and vulnerability in capital account. The reserve holding pattern is mainly affected by the vulnerability of the capital account, which suggests the self-insurance motive toward "residential based capital flight." The findings also indicate that India's reserve accumulation is less vulnerable to



its opportunity cost. Moreover, the calculation of stability in the exchange rate does not substantially impact reserve holdings.

**Pooja Talreja** (2014) evaluates how the monetary policy affects the behavior of foreign exchange reserves of India. The paper captures the effects of change in CRR, SLR, Repo Rate, Reverse Repo Rate on the Forex reserves via Regression Analysis. The statistics under analysis are from April 2006-March 2013, and Pooja Talreja (2014) explains how monetary authorities are striving hard to maintain optimal level of Forex reserves by adopting several monetary policy measures, which directly influence the money supply from outside country with immediate effect in the economy. The study concludes that Increase in CRR will increase bank lending rates which will decrease liquidity from the market and results in rupee appreciation which will make import cheaper and give rise to foreign exchange reserves. Meaning, an increase in CRR will also increase foreign exchange reserves, but increase in SLR will have negative impact on foreign exchange reserves as SLR does not have much impact on bank lending rates and therefore liquidity is not getting affected. Similarly, increase in Repo Rate will also cause increase in total reserves.

**Partha Sen** (2005) critically examines India's foreign exchange reserves, claiming India's capital account is too open, meaning that there are flows that can destabilize the non-financial (real) sector. Inflows have almost full convertibility but outflows have restrictions upon them. Partha Sen (2005) argues that India's foreign exchange reserves are an embarrassment of riches. India's foreign exchange reserves originate primarily from the capital account (sale of asset with a promise to repurchase them). A developing economy has to consider 2 budget constraints – domestic and foreign currency. So, taking only foreign currency into consideration would just not do it. Other arguments include how forex reserves should be used for infrastructure and how financial flows are required to give depth to financial markets, buoy the stock markets etc. Moreover, the RBI is in a bind. If it does not intervene the rupee might appreciate, if it does, there is a fiscal cost of holding reserves. Reversing the FII flows would have damaged the credibility in those uncertain times.

**R. Rajanbabu** (2019) analyses the growth of foreign exchange reserves in India, taking into consideration the rise from 1960-2018. Secondary data from handbooks of statistics of Indian economy and the website of RBI has been referred to. The author takes various indicators into consideration such as the growth model, the compound annual growth rate and various components such as the Foreign currency assets, Gold reserves and the Reserve Tranche Position. The paper also analyzed the trends in the forex reserves of India. The paper states how an adequate level of forex reserves has become an important parameter for determining the country's ability to absorb external shocks and that there is noticeable growth during the period in review.

**Sagathevan Sooriyan** (2017), aimed to find the determinants of foreign exchange reserves in India. The study uses the Augmented Dickey-Fuller test (ADF), Phillips-Perron(pp) and Kwiatkosuki Phillips Schmidt Shin(KPSS) tests for the same. It also uses stationarity tests as it allows the detection of any structural break, errors in data and gives an idea of stationarity of the variables. The result that is derived from the stationarity test is that reserves and average propensity to import seem to be an upward trend, albeit with fluctuations and have a time-variant mean and variance indicating that they are non-stationary in raw form. Whereas real effective exchange rate seems to be a downward trend and have a time-variant mean and covariance suggesting that non-stationary. But the interest rate differential and current account sustainability have a constant mean and variance around the mean, and it seems to be stationary series.

The recorded results of the Augmented Dickey-Fuller(ADF), Phillips Perron(PP) and Kwiatkosuki Phillips Schmidt Shin(KPSS) tests indicate that no variables are stationary in raw form except interest rate differentials and current account sustainability. However, when the test is applied to second difference of the

variables, they have become stationary. These tests show that they have a relationship among them during a long period.

Taking all tests into account it can be concluded that almost 99 per cent of the variations in foreign exchange reserves are explained by the average propensity to import, balance of current account, real effective exchange rate and interest rate differentials.

**Dr. R. Rajanbabu, Dr. G. Monikanda Prasad and Dr. K. Manoj (2019)**

This study tries to find out how volatile the foreign exchange reserves in India are this has been done by collecting data on SDR, Gold, Foreign Currency Assets and RTP in the Indian forex reserves. Volatility is calculated by using coefficient of variance and Coppock's Instability Index.

The coefficient of variation of special drawing rights, gold, foreign currency assets, reserve tranche position, and total foreign exchange reserves were order of 114.7 percent, 71.42 percent, 60.70 percent, 63.62 percent and 60.88 percent respectively. The instability index of special drawing rights, gold, foreign currency assets, reserve tranche position, and total foreign exchange reserves were order of 796.33, 15.95, 12.78, 54.78 and 11.87 respectively.

By analysing the data, the author observes that foreign exchange reserves have significantly changed through the years. All the components experienced high volatility except foreign currency assets. However the author also observes that in recent years stability for foreign exchange reserves in India has slightly increased.

**Sparsh Thakur and Raghavender Raju G (2019)**

Through this paper the authors aim to analyze the accumulation, adequacy and utilization of India's foreign exchange reserves ,they try to find the factors for hoarding foreign exchange reserves and to assess the effectiveness of RBI's intervention operations in India's foreign exchange market. Various methods have been used to determine these three things.

The authors have observed the following through this paper. The RBI has done a phenomenal job with respect to the management of foreign exchange reserves in the recent past. Stabilizing the exchange rate and financing the deficit arising from trade are the most significant reasons for hoarding foreign exchange reserves. And that India holds forex reserves far in excess of the adequacy requirements.

**Pragya Atri (2015)**

This article analyses the connection between increasing volumes of foreign exchange reserves and capital formation for Indian Economy. By comparing the growth rates of average forex and capital formation, the author concludes that it is beneficial to utilise the surplus forex for the purpose of investment in Indian Economy. This article begins with an introduction, where it specifies how the Harrod-Domar Model implies that the level of domestic Investment is limited by the level of domestic savings, assuming it's a closed economy. Similarly, the level of economic growth is also limited by the level of domestic savings. It also then specifies how almost all of the economies in the world are open economies, therefore, domestic investments can be done using not only domestic savings but also foreign savings. The article also states that all capital account proceeds in foreign currency are converted in domestic currency, and the foreign exchange thus received is partly or fully utilised to cover the deficit in the current account. Further, any surplus will then show up as an addition to the foreign exchange reserves of the economy. Through this article, and above stated things they are trying to show how an economy could use excess forex for the purpose of investment. The Article further gives an overview of what Foreign Exchange Reserves are and its composition. It then gives the Indian Scenario for the Foreign Exchange Reserves and Capital Formation. Before Liberalisation, for 4 decades, the volumes of forex were very meagre but post liberalisation, the forex showed a tremendous

increase in volume. In order to prove that Foreign exchange reserves in India can be used for investment purposes, the Author has used Gross Fixed Capital Formation as an indicator in this article. Whereby, after a careful analysis, the author concluded that the part of decline in the capital formation could be uplifted then by using the forex available to the economy of India. The Author concludes the article by stating that it would be beneficial to use surplus forex in addition to domestic savings for enhancing the formation of capital in India because increasing levels of investments means that the economic growth will be higher, and that in the integrated world we live in, the flows of capital imply that domestic investment can be done using foreign savings and not only domestic. As India is a developing economy which requires large amount of capital to be committed towards the expansion of infrastructure, it is beneficial to utilise forex for the purpose of investment.

### **Nirmal Kumar Chandra (2008)**

The Paper begins by introducing Reserves and Volatile Capital, then answers the question “Is India Risky?” and explains the Drain of Foreign Exchange w.r.t India.

The author, in this paper states how the reserves of India’s foreign currency fall remarkably short of the total amount of volatile foreign capital, if only the volatile foreign capital is measured correctly. He also talks about how, thanks to the persistence deficits in GFD and CAB, over dependence on capital inflows in the BOP, costs of ECB by Indian Firms, the drain of foreign exchange is significantly high in relation to India’s GDP.

He suggests that radical changes in the macro and microeconomic policies are needed if the wish list of the “aam aadmi” as stated in the research paper is to be respected. He also explains the benefits that the policies would have on the citizens of the country. The author talks of how the alternative policies would’ve lowered the GDP Growth rate at the time but the well-being of the Average Indian would improve.

### **Partap Singh Chahal & Bhaskar Angaria (2017)**

Through this paper, the authors have managed to carefully analyze and explain the relation that exists between International Reserves, Gross Domestic Product (GDP), Inflation and Exchange Rate. They have also painted the present picture of the impact of these international reserves on the GDP, exchange rate and Inflation Rate. The Authors begin the paper by introducing what International Reserves are, its composition, the purpose of holding foreign exchange reserves. After carrying out the analysis, the authors have written about the results and through which they found out that a relationship exist between the International reserves and GDP in India and Exchange Rate but no relationship exists between the International Reserves and Inflation Rate in India. And also, there is impact of International Reserves on GDP of India and exchange rate but no impact on Inflation rate of India. The paper has given an experiential estimate on the relationship stated above.



## Research Methodology

### Research Motive

Foreign exchange reserves are a nation's backup funds in case of an emergency, such as a rapid devaluation of its currency. Therefore, it is important to understand how the current situation stands in stark contrast to the one in 1991, when India had to pledge its gold reserves to stave off a major financial crisis. It is important to understand what has happened in these past 30 years and why the stock of Forex reserves is still one data point that India can cheer about amidst the COVID-19 pandemic.

### Objectives

1. To analyse the shift in Foreign exchange policies in India over the years
2. To compare India's Forex reserves with previous years
3. To evaluate and determine the composition of Forex reserves in India
4. To analyse the issue of Current Account Deficit in India
5. To assess the current situation of Forex reserves in India
6. To recommend suggestions for further improvement in India's Forex reserves (Post COVID-19)

### Research Design

#### *Nature of Study*

The study is based on historical research. The period post the economic and liberalisation policies of 1991 has been taken as a timeframe for research work.

#### *Scope of Study*

The scope of the research is the study of foreign exchange reserves, while covering policies and issues relating to its current status. The period taken into consideration is from 1991-2020.

#### *Collection of data and sample size*

The study is strictly based on secondary data. Various research papers have been referred to in order to collect the latest data about foreign exchange reserves.

## Analysis & Findings

### Forex Policy in India

Before the 1991 crisis, India's approach towards foreign exchange reserve management was to maintain foreign exchange reserves which were only enough to cover a few months import bill. This approach came under pressure because of the increase in trade deficit and net invisible deficit, which led the RBI to devalue Indian rupee twice in July, 1991. Due to this, the Liberalized Exchange Rate Management System (LERMS), which had twin objectives i.e., encouraging building foreign exchange reserve and discouraging non-essential imports. Double exchange rate system was adopted under this. Under LERMS, exporters could sell 60 percent of their foreign exchange earnings to authorised dealers in the open market at market determined exchange rate, and the remaining 40 percent had to be sold to the RBI at the exchange rate decided by it. This approach of foreign exchange reserve management underwent a model shift as it adopted the recommendations of the High Level Committee on Balance of Payments (Chairman: Dr. C. Rangarajan). The Committee recommended introduction of market determined exchange rate regime within limits; liberalization of current account transactions (i.e. full current account convertibility); encouraging capital flows from debt market to equity market; strict regulation of external commercial borrowing, especially short term debt; placed current account deficit (CAD) at 1.6 percent of GDP as ceiling, etc. The Committee also believed that while determining the correct level of FOREX reserves, attention should be paid to the payment obligations arising out of other than those for imports & the need to ensure confidence to international financial community about country's ability to meet should also be taken into account.

The Reserve Bank of India acts as the custodian of foreign reserves, that is, it is the primary institution responsible for managing the reserves (As given by the Reserve Bank of India Act, 1934). The composition of foreign reserves, the minimum reserves required & the securities and instruments in which the reserves could be held in are all mentioned in the relevant sections of the RBI Act.

The law relating to FOREX in India is the Foreign Exchange Management Act (FEMA), 1999 (came into force on June 1, 2000). This act replaced the Foreign Exchange Regulation Act (FERA) of 1973. The main objective of the FERA act was conservation of the foreign exchange which did not coincide with the post liberalisation ideology and policies which is why it was repealed and replaced with the FEMA act in 1999. FEMA's main target is to promote foreign payments & trade in India. FEMA also focuses on promoting foreign capital & investment in the country to ensure its overall development.

With respect to the exchange rate policy, we learnt that India currently follows a managed floating exchange rate system wherein the RBI has a major role to play (currently, since 1993). The RBI releases/buys US dollars as and when required in order to ensure forex market equilibrium. India earlier practiced a Fixed exchange rate system from 1947-71 and a pegged exchange rate system from 1971-92.

### Comparison of India's FOREX Reserves with previous years

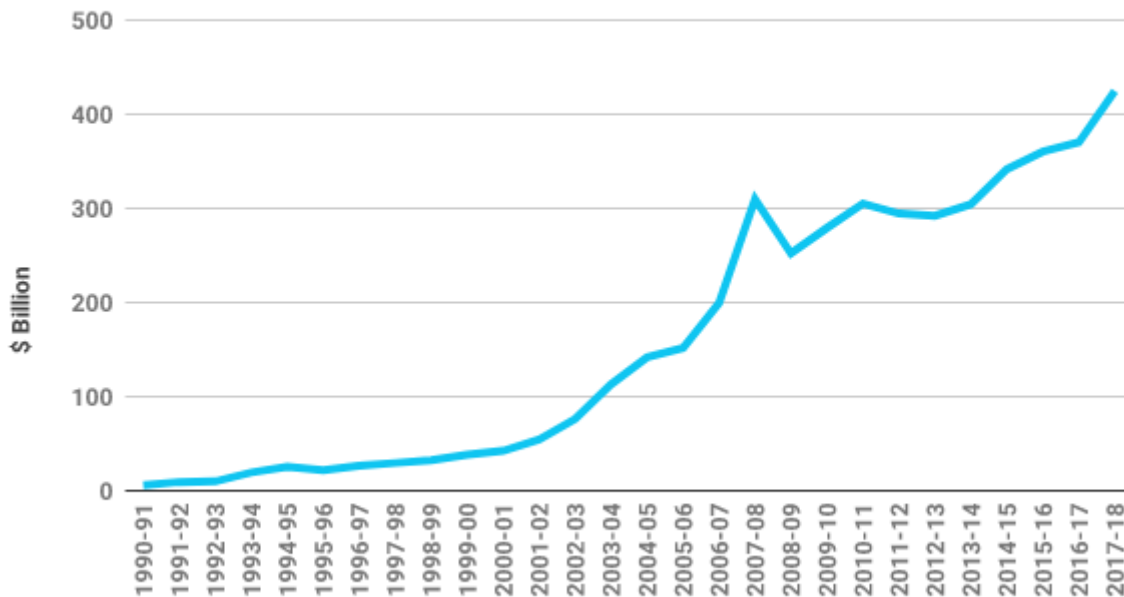
India's forex reserves stood at \$5.8 billion as of March 1991 and dwindled further during the course of that year, prompting the country to ship out its gold to avoid a default. The crisis eventually led to the liberalisation of the Indian economy.

In 1997 Asian Financial Crisis happened and the first test of India's external sector since liberalisation. Beginning September of that year, volatility in the foreign exchange markets forced large spot forex operations from the Reserve Bank. This was done "to restore orderly conditions and quell adverse market expectations," the central bank's annual report for that year shows. While the RBI sold forex when needed, periods of calm also allowed it to continue building reserves. For the year 1997-98, the central bank managed net purchases of \$3.8 billion, which added to foreign currency assets. That was the year in which the RBI also wound down the FCNR-A scheme and saw \$2.4 billion in outflows under that. The scheme, under which the financial risk was borne first by RBI and then the government had been stopped in 1993. May 1998 saw the Pokharan nuclear tests and economic sanctions on India followed. This led to the launch of the 'Resurgent India bonds', which resulted in an accretion of foreign currency assets of \$3.5 billion, the central bank's annual report for that year shows.

As of March 2000, India's forex reserves stood at about \$37 billion. Over the next few years, India saw its reserves cross \$100 billion. As of March 2004, reserves stood at \$107.4 billion. A low current account deficit helped with accumulation of reserves through the period of 2001-07. During these years, India's CAD averaged 0.1% of GDP, while capital flows were strong. India's reserves increased by \$232 billion between Q1 2001-02 and Q1 2008-09, a period in which cumulative net FPI inflows stood at \$66.3 billion, the paper noted. The inability to pull back on post global financial crisis fiscal stimulus in time led to wider twin deficits and high inflation. During this period, as the data from the Das and Nath research above showed, forex reserves as a % of GDP also slid. Once again, India found itself in a position where the adequacy of its reserves came into question. As of August of 2013, forex reserves of about \$275 billion were adequate to cover less than seven months of imports.

At \$500 billion in 2020, adequacy of reserves does not appear to be a concern for the Indian economy at this stage. Yet, a rethink on the issue of judging reserve adequacy is underway at the central bank. The rethink may be needed not just on how much in reserves is adequate but also how much is too much. After all, forex reserves are invested in low-yielding assets such as U.S. treasuries and do subject. We noted that foreign exchange reserves (then at about \$400 billion) were significantly lower than the country's total external liabilities (\$1 trillion) and even lower than total external debt (\$500 billion). This needs to be taken into account in assessing the external risk being faced by the country and the possibility that the RBI may be required to increase the size of its forex reserves with its concomitant implications for the balance sheet, risks and desired economic capital.

Figure 4: India's Foreign Exchange Reserves (\$ Billion)



## Components of foreign exchange reserves

The foreign exchange reserves are correlated to the Indian rupee position very closely. When rupee value decreases, the reserves also go down. Financial assets which are denominated in the foreign currencies, bonds, gold, cash and bank deposits are included in the foreign exchange reserves of India. In the year of 2003, December the forex reserve of India crossed dollar 100 billion. The forex reserve of India have increased by 48% post 2008 global financial crises. The Reserve Bank Of India bought 200 tons of gold in 2009 from the International Monetary Fund (IMF) under its forex reserve management program as stated by IMF's official press release. In the year 2020 the India's foreign exchange reserve have crossed dollar 500 billion on June 5th.

While analysing, we noticed not much attention is paid to the composition of such reserves. However, from the information available we could make out that broadly India's reserves comprise of special drawing rights, reserve tranche position, foreign currency assets & gold deposits. India has about 654.9 tonnes of gold as holdings as estimated by the World Gold Council (WGC), this makes it about 7.5% of the total foreign reserves. According to the WGC the largest gold reserve holders in the world have gold as their main foreign reserves- 76.9% in USA, 73% in Germany etc. In comparison to this, India has a very low percentage of their total foreign reserves i.e. 7.5%, however, it still makes it in the list of the top 10 countries having the largest gold reserves. This is because India has to keep a higher percentage of its reserves in the form of US dollars in order to maintain the value of rupee. Foreign Currency Assets (FCA) it is the most important component of the RBI's foreign exchange reserve is the assets like US Treasury Bills bought by the RBI using foreign currencies. The FCA is the largest component of the forex reserve. International Monetary fund is financed by member's quota. Each member of the IMF is assigned a quota part of which is payable in SDR's or specified useable currencies (Reserve Assets) and part in member's own currency. The difference between a member's quota and the IMF's holding of its currency is a country's Reserve Tranche Position (RTP). The reserve tranche position of the quota can be accessed by the member at any time, whereas the rest of the member's is typically inaccessible. Reserve tranche position has also declined since 2011 and

stood at 81(billion) in 2015, percentage share in total reserves in 2015 is 0.037%. Where total reserves have increased over the years but tranche position has been falling. However, the RBI announced on December 2019 that the RTP had risen by 58 million USD. “The SDR is an international reserve asset, created by the IMF in 1969 to supplement its member countries” official reserves. SDRs can be exchanged for freely usable currencies. The value of the SDR is based on a basket of five major currencies the U.S. dollar, euro, the Chinese renminbi (RMB), the Japanese yen, and pound sterling as of 2018. The value of SDR’s remains low in India & on an average only forms about 1% of the total reserves ( as can be seen in the pie chart given below) . As on 7th August, 2020, Foreign Exchange Assets component at around US\$498.362 Billion, Gold Reserves at around US\$37.521 Billion, SDRs (Special Drawing Rights with the IMF) of around US\$1.482 Billion and around US\$4.647 Billion Reserve Position in the IMF.



## Current Account Deficit Problem in India

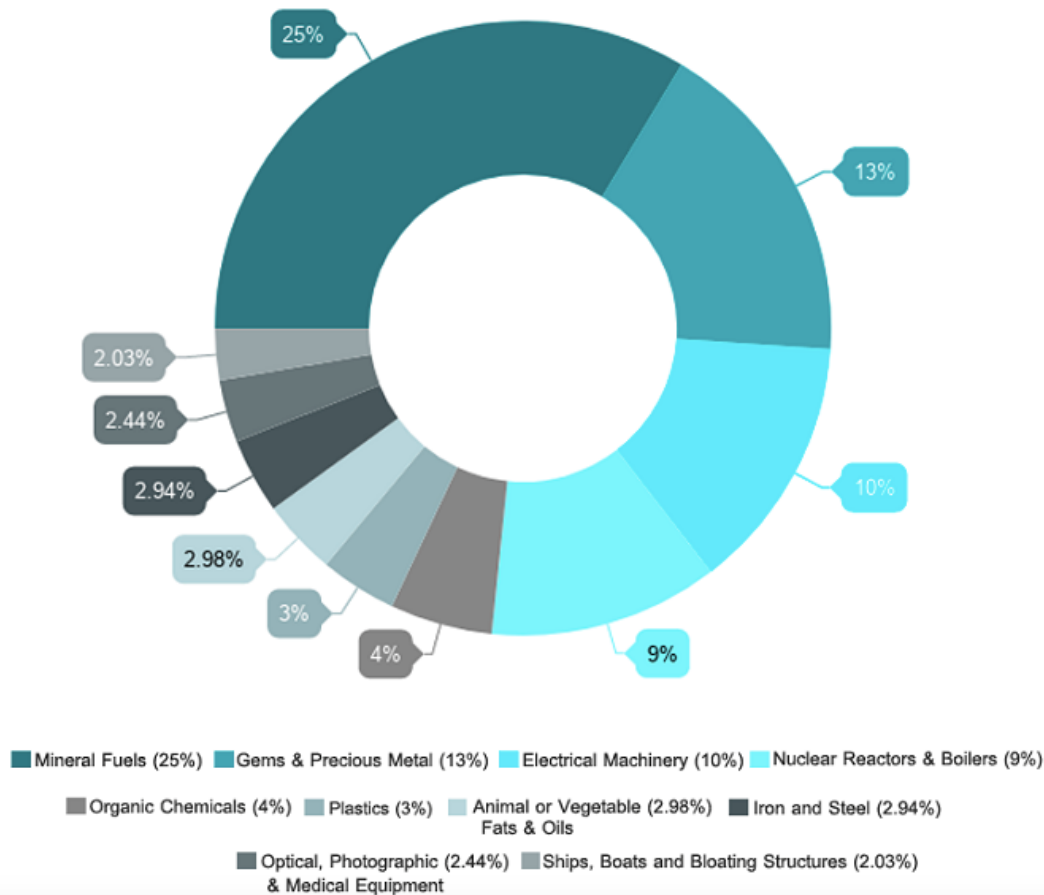
The main reason for the CAD in India is its foreign trade. India’s export basket includes gems, jewellery & manufactured goods. Out of these, manufactured goods form a major component, however their share in world manufacturing exports is incredibly low ( about 1.6% as on 2012) thanks to the semi-skilled nature & low value of those goods.

On the other hand, Imports of petroleum, crude products & gold in India are rising. Petroleum is a crucial input in various production processes & transportation and gold has a sentimental value and is considered to be a safeguard against inflation in Indian households. The utilisation of gold for creating jewellery was realised as unproductive which was why the RBI & the govt of India decided to impose restrictions on gold imports which helped curtail gold imports and improve the CAD situation to some extent.

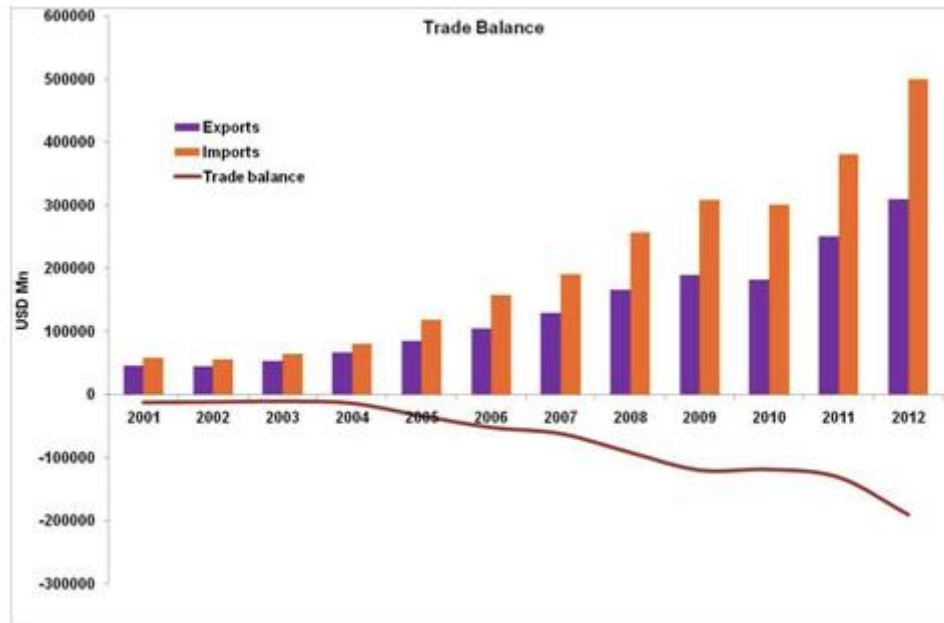
Over the years, it's also become clearer that merchandised deficit is what's resulting in India’s accounting deficit. This also offsets trade surplus from invisibles like remittances and services. a rise in merchandised deficit is seen since 2004 ( mainly thanks to oil imports). Gold imports have also contributed to the increase in deficit.



## India's Top 10 Import Products



Most of the deficit is being financed by receipts from services and inflows from remittances. However, CAD has widened recently thanks to deceleration in export growth, strong growth in oil and gold imports and rise in investment income payments as well as a slowdown in investment income receipts. As a result, CAD to GDP ratio rose from a mean of 1.7 per cent in 2006–2010 to 3.4 per cent during 2008–2012, reaching its historical peak of 4.8 per cent in 2012–2013. A reason for a persistent CAD in India might be because of large payments made to service international liabilities specified the investment income account balance becomes negative. Thus, prolonged accounting deficits in India are putting huge pressure on its reserves & increasing India's debt servicing burden.



In the first quarter of 2020, India's current account posted a USD 0.6 billion surplus from a USD 4.6 billion deficit that was recorded last year, equivalent to 0.1% of the GDP. This was the first surplus seen since the first quarter of 2009. This was because of a lower trade deficit on goods (USD -35 billion vs USD -35.2 billion) and a lower primary income gap (USD -4.8 billion vs USD -6.9 billion). The services surplus rose to USD 22 billion from USD 21.3 billion & secondary income surplus increased to USD 18.4 billion from USD 16.2 billion. Services receipts increased due to net earnings from computer and travel services and private transfer receipts, mainly representing remittances by Indians employed overseas, increased to USD 20.6 billion, up by 14.8 percent from their level a year ago. In the 2019-20 fiscal, India's CAD narrowed from 2.1% to 0.9% of the GDP.

## CURRENT SITUATION IN INDIA

As mentioned earlier, India's Forex reserves are at an all-time high. Let us look at the reasons why it happened and what it means for India's economy in the future.

### Investment

The increase in investment by foreign portfolio investors in Indian stocks and foreign direct investment (FDIs) is the key reason for the increase in forex reserves. Over the months of April and May, 2020, foreign investors have acquired stakes at many Indian firms. After pulling out Rs 60,000 crore each from debt and equity segments in March, in the first week of June, Foreign Portfolio Investments (FPIs), which expect a turnaround in the economy later this fiscal year, had returned to Indian markets in June and purchased stocks worth over \$2.75 billion.

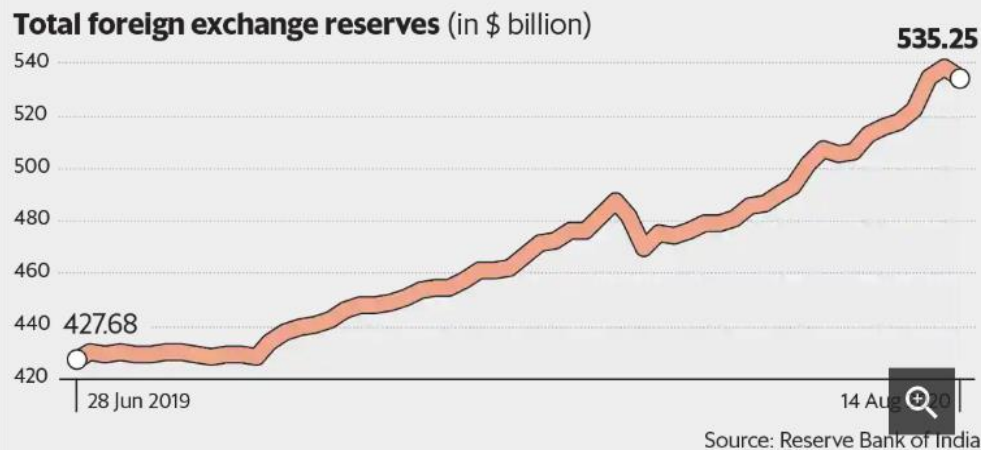
## Other Factors

The decline in crude oil prices, on the other hand, has taken the oil import bill down, saving precious foreign exchange. Similarly, overseas remittances and international travel have declined steeply, which were down 61% from \$12.87 billion in April. The dramatic jump in reserves seen over the months from September, 2019 - April, 2020, began with the decision on September 20 by the finance minister, Nirmala Sitharaman, to cut corporate tax rates. The forex reserves have risen by more than 73 billion dollars since.

As the price of gold rose, the value of gold held by the Reserve Bank of India (RBI) jumped by 21.7 per cent to \$37.6 billion between 27 March and 14 August. It is clear that not only individuals have gained from owning gold but also the RBI.

### Sudden surge

In the period between 27 March and 14 August this year, foreign exchange reserves rose 12.6% to \$535.25 billion. In comparison to a similar period in 2019, the reserves had climbed by just 4.5% to \$430.5 billion.



## Significance of Rising Forex

The growing forex reserves provide the Government and the RBI with comfort in managing India's external and internal financial problems at a time of significant economic growth contraction. In case of a recession on the economic front, it acts as a buffer, and is enough to cover the country's import bill for a year.

The increase in reserves have also helped the rupee to strengthen against the dollar. The ratio of foreign exchange reserves to GDP is around 15 per cent. The reserves would provide markets with a degree of trust that a country will satisfy its external obligations, show that external assets sustain the domestic currency, help the government meet its forex needs and external debt obligations, and be prepared for national disasters or emergencies through maintaining a reserve.

## Certain Suggestions

The rise of the FOREX reserves in India this year was mainly a result of unforeseen developments like a trade surplus & increased external commercial borrowings. These factors, in future, may lead to a reserve situation that is vulnerable to fluctuations. The central banks in many countries are currently pumping in huge amounts of money into the global economy to reduce their interest rates, thus making it easier & cheaper for Indian companies to raise funds overseas. A rise of almost 127% was seen in ECB's in FY20 as compared to FY19. Due to this corporates may face problems to repay especially if the rupee keeps on depreciating or if the interest rate cycle overseas turns adverse. The current trade surplus currently is also only owed to the fact that demand is declining. Once the domestic demand revives, the demand for petroleum and other products will also go up which will cause pressure on the trade balance yet again. On the other hand the FPI's have also seen a decline this year and remittances from NRI's have seen a dip due to many people facing pay-cuts or job losses. Thus, in such conditions we believe that the government of India should try and boost domestic demand, possibly even by providing funds to common citizens. This may lead to fiscal deficit, however, given the current scenario, it is necessary as it will encourage economic growth which will further encourage foreign investments in our country. An example is -Recently China gave away billions of yuan in shopping vouchers and offered other financial incentives to coax shellshocked consumers to start spending again. Similar measures can be taken in India as well.

## Findings

1. We learnt that India practiced a Fixed exchange rate regime up until 1991, however the crisis forced the RBI to liberalize the exchange rate policy. It adopted a managed floating rate system in 1993-94. FEMA was introduced and it replaced FERA in 1999.
2. India's FOREX reserves stood at \$5.8 bn. In 1997 the Asian financial crisis happened which led to the decrease in FOREX reserves to \$3.8 bn. From 2000-2013 the FOREX rose continuously except in 2008-9 ( because of the global financial crisis). It currently stands at \$500 bn as of 2020.
3. We found out that FOREX in India comprises of - gold reserves, foreign currency assets, reserve tranche position & SDR's. Out of these FCA form the major component of the reserves ( more than 90% ).
4. The current account of India has always faced a deficit because the exports have been low and imports keep on rising (mainly due to oil & gold). India faced a current account surplus in 2020 (\$0.6bn) due to the lower trade deficit on goods.

We found out that India's current position with relations to forex is extremely good, giving it a cushion to combat external shocks. However, considering the increase in reserves as a direct sign of a healthy economy is incorrect.

## Recommendations and Conclusion

### Recommendations

India's foreign exchange reserves have skyrocketed because of the following reasons:

1. Plunge in crude oil price leading to a reduction in production cost.
2. Boost to Make in India movement and reduction in import bills.
3. FDI inflows with special emphasis on tech giants investing in various Jio interfaces.
4. Dip in gold imports due to increased prices and COVID lockdown instructions.

A lot of experts have considered this to be a sign for the healing Indian economy but there's more beyond the horizon.

The aforementioned is only due to dipped demands of goods and low crude oil prices which begun from US-Saudi Arabia oil price war. However, now that the government is de-regulating the lockdown restrictions and there is more movement of goods and people, a surge in demand is forecasted. This surge means increased import bills. Hence, the government should try to create a cushion of surplus reserves to sustain the increased prices foreseeable in future.

RBI should be persistent in its efforts to buy the dollars and keep Indian Rupee weak in the foreign market. This will add buffer to face the future turbulence when the world economy resumes fully while to maintain the trade balance.

Increasing internal issues of farmer suicides, rising unemployment, the rise in geo-political tensions with China has forced the government to take decisions like halting onion export to cater to the domestic demand. This foreplay of circumstances should be used to support startups, entrepreneurs and stir up the demand for domestic goods. Currently when a plethora of manufacturers are removing their manufacturing units from China, India stands a chance to emerge as the new manufacturing hub. While this can boost our income from exports, there can be a likely improvement in unemployment statistics. This will further widen the cushion of forex reserves to be exploited in case of turbulence.

Having a large reserve of foreign reserve will reassure the foreign investors of India's capacity to repay its foreign debt and import bills, much unlike the scenarios India was in before 1991. While this looks like a balance between requisite levels of globalization and the need to rely of domestic manufacturers, it might also raise concerns as to how the reserves haven't been converted into realizable investments which can further exponentially multiply the returns. Hence, what seems likely to be done is to utilize the growth in reserves as investments, bringing in tangible as well as intangible assets in the country, become technologically competitive on the global front.



## Conclusion

Foreign exchange reserves are cash and other assets held by a financial organisation or other monetary authority that are primarily available to balance payments of the country, influence the exchange rate of its currency and to take care of confidence in financial markets. India's Foreign Exchange Reserves are constantly improving throughout the years and currently are at an all-time high. In the uncertain economic scenario caused by the pandemic, high Forex reserves act as a buffer for the economy. Reasons for India's strong Forex reserves increase in investment by foreign investors in the Indian stock market and foreign direct investment, the decline in crude oil prices has decreased the oil import prices, recent decision to cut corporate tax rates and the surge in gold prices have also increased the valuation of RBI's gold reserves. Components of India's Forex reserves broadly include special drawing rights, reserve tranche position, foreign currency assets & gold deposits. During the early 90s, India's Forex position was very weak, this changed following the recommendations of the High Level Committee on Balance of Payments. The Committee recommended the introduction of market-determined exchange rate regime within limits, liberalization of current account transactions, encouraging capital flows from debt market to equity market, strict regulation of external commercial borrowing. The Committee also believed that attention should be paid to the payment obligations resulting from reasons other than imports. It was also observed that Forex reserves are directly proportionate to the Indian rupee position i.e. when rupee value increases, the reserves also go up and vice versa. Overall, we have observed that Foreign Exchange Reserves is one of the few strong points in India's economic structure and will prove to be a huge asset in the present and the future.

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