

Indian Foreign Trade 2017-22 Analysis.

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Chapter 1

An Introduction to Macroeconomics

1.1 What is Macroeconomics in its simplest terms?

A subfield of economics known as macroeconomics is focused on the operation and behavior of the economy as a whole. Large-scale economic phenomena like inflation, price levels, economic growth rates, national income, changes in the gross domestic product (or GDP), and variations in unemployment are largely studied in macroeconomics.

1.2 What are the several factors that shape Macroeconomics?

Economists, financial analysts, and other experts who contribute to reports on a nation's financial situation study macroeconomic aspects.

1. Interest rates
2. Inflation
3. Fiscal policy
4. Gross domestic product (GDP)
5. National income
6. Employment
7. Economic growth rate
8. Industrial production
9. International trade
10. Retail sales
11. Business cycle

1.3 What does the Analysis of Indian Foreign Trade 2017 - 2022 depict and what is the Source?

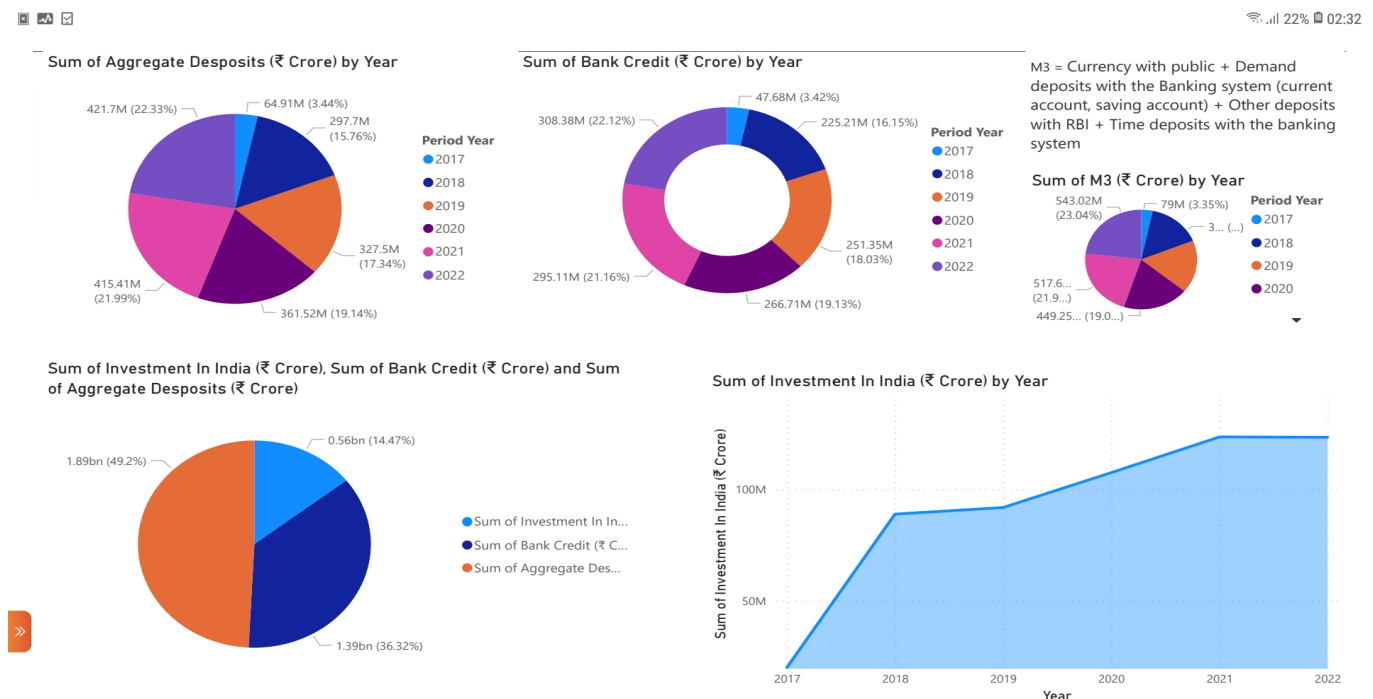
International trade has an impact on a nation's economic health since it shows how valuable their currency is and how much demand there is for it globally. Through international trade, economies that export more goods than they import end up with a surplus, which increases the value of their currency because their exports are in more demand. The Data Analysis takes the data set from the official website of Database on Indian Economy. The data set depicts various factors of the macroeconomy and show how the values were affected from the Period of November 2017 to November 2022. Further report on how the "Exchange Rates" affects the Indian Foreign Import/Export and overall Balance graph.

A correlation diagram is also shown that depicts how different Import, Exports and Exchange Rates are related to each other with what level of co-dependency.

Chapter 2

Data Analysis on Indian MACRO-economics 2017-2022

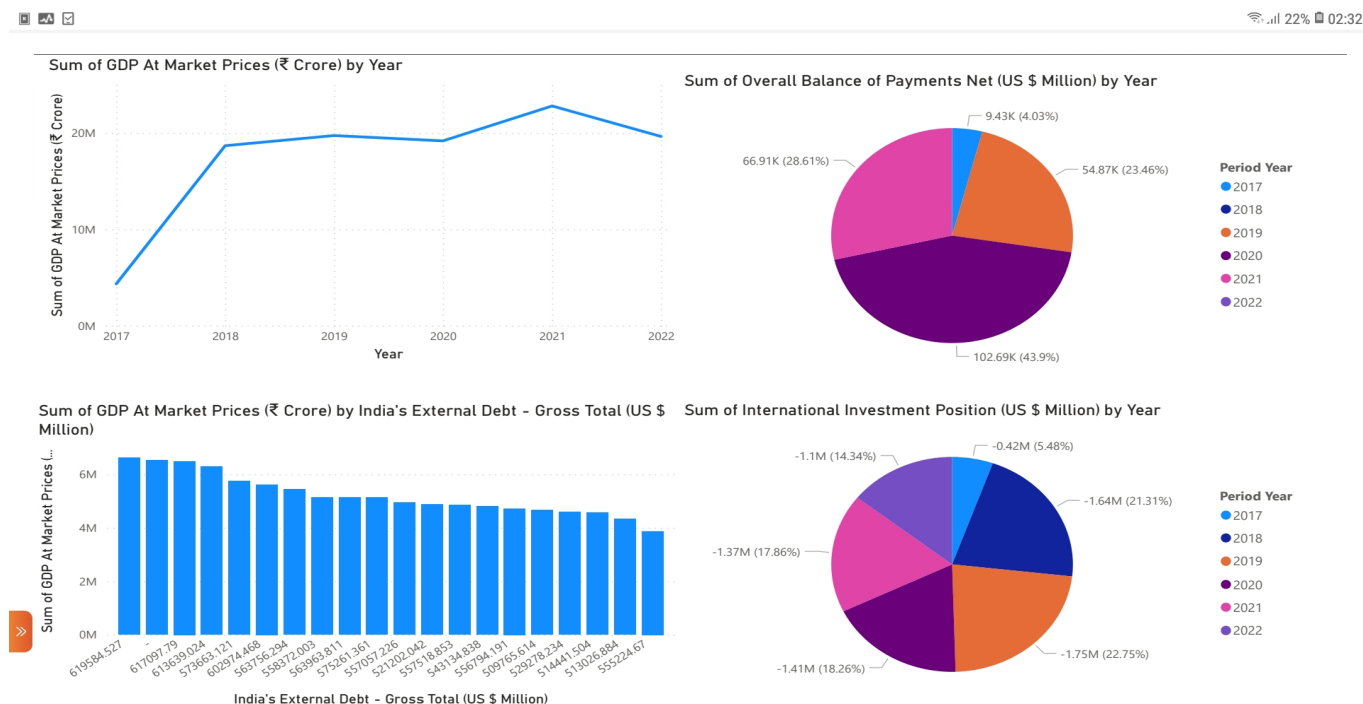
2.1 Fortnightly Exchange



The Indian macroeconomy is currently experiencing an upswing and is in a strong position to weather any potential macroeconomic shocks. This paper provides an overview of the Indian macroeconomy over the last two years, from 2017 to 2019.

The Indian economy has grown steadily since 2017 and is projected to grow at an average rate of 7.3% over the next five years. This growth has been driven by strong consumer spending, investment in infrastructure, and increasing foreign investment in the country. In addition, India has also benefited from government reforms such as the Goods and Services Tax and the sharp reduction in corporate tax rates. The Indian banking sector has also seen a strong recovery over the past two years. The total non-performing assets of the banking sector, as a percentage of the total loan portfolio, has dropped from 11.2% in 2017 to 5.4% in 2019. This is a result of the government's stringent measures to tackle the bad loan problem. The main factors involved are M3 is a measure of the broad money supply in an economy, which includes all forms of money such as cash, demand deposits, time deposits, and other liquid assets. In India, M3 is calculated by the Reserve Bank of India (RBI) and is used as an indicator of the overall liquidity and money supply in the economy. The sum of investments in Indian macroeconomics refers to the total amount of investments made by the government and the private sector in the economy. This includes investments in fixed assets such as machinery, equipment, buildings, and infrastructure. Bank credit is an important indicator of the level of economic activity in a country, as it reflects the demand for credit by borrowers for various purposes such as investment, consumption, and working capital needs. It also provides an insight into the availability of credit in the economy, which can have a significant impact on economic growth and development.

2.2 Monthly Exchange



The India-US exchange rate refers to the value of the Indian rupee (INR) relative to the US dollar (USD). In 2017-2018, the exchange rate between the two currencies was relatively stable, with the INR trading at around 64-68 INR/USD for most of the period.

The stable exchange rate had mixed effects on the Indian macroeconomy. On the positive side, it helped to maintain the competitiveness of Indian exports in the US market, as a stable exchange rate made Indian goods and services more affordable for US consumers. This in turn supported the growth of Indian industries such as IT and pharmaceuticals, which are major exporters to the US.

However, the stable exchange rate also had some negative effects. A relatively strong INR made imports cheaper and could have contributed to a widening of the trade deficit, which is the difference between the value of imports and exports. The high level of imports could have also put pressure on domestic industries, which may have struggled to compete with cheaper imported goods.

A brief of monthly analysis is provided below:

January 2017:

GDP growth rate for Q3 FY17 was 7Inflation rate remained under control at around 3.2Fiscal deficit for FY17 was 3.5

February 2017:

The Union Budget for FY18 was presented, with a focus on agriculture, rural development, and infrastructure. The GDP growth rate for Q4 FY17 was 6.1

March 2017:

The Reserve Bank of India (RBI) kept the repo rate unchanged at 6.25The Index of Industrial Production (IIP) grew by 2.7

April 2017:

The GST Council finalized the tax rates for various goods and services. The GDP growth rate for Q1 FY18 was 5.7

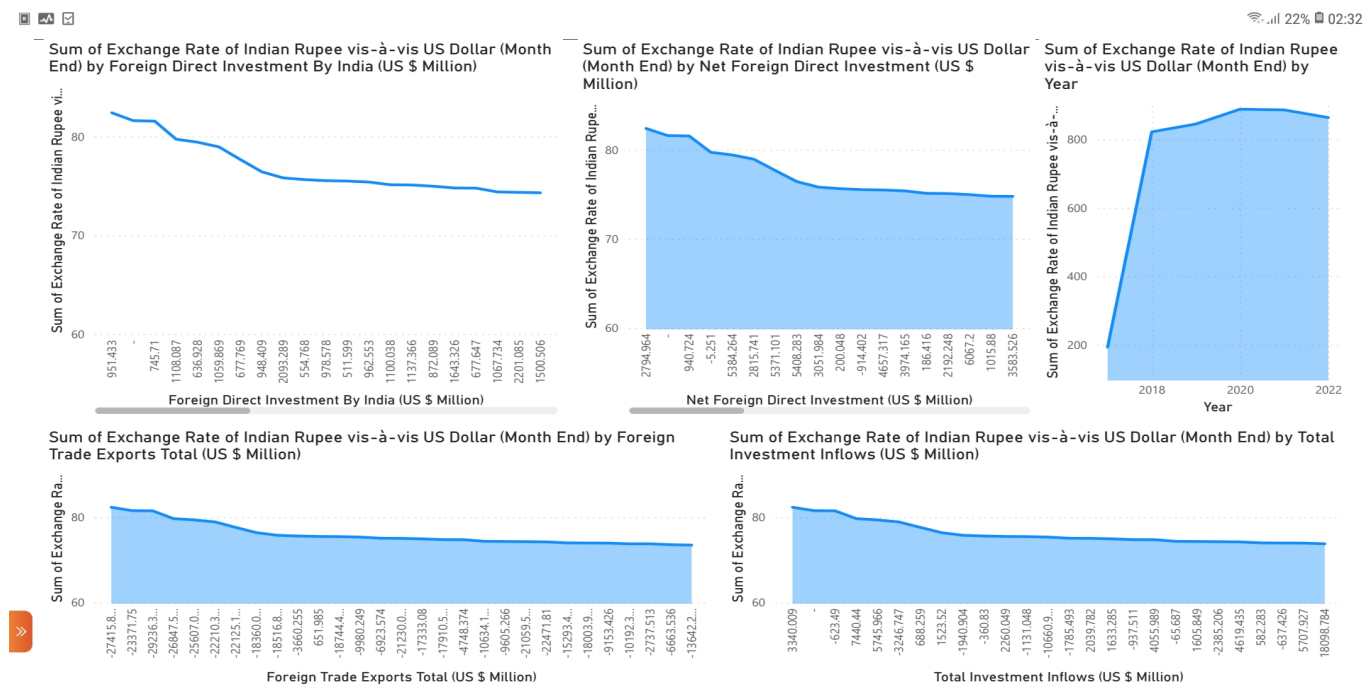
May 2017:

Inflation rate increased to 3.4RBI lowered the reverse repo rate to 6

June 2017:

The Goods and Services Tax (GST) was implemented, bringing significant changes to the indirect tax system. The GDP growth rate for Q4 FY17 was revised to 6.1

2.3 Quarterly Exchange



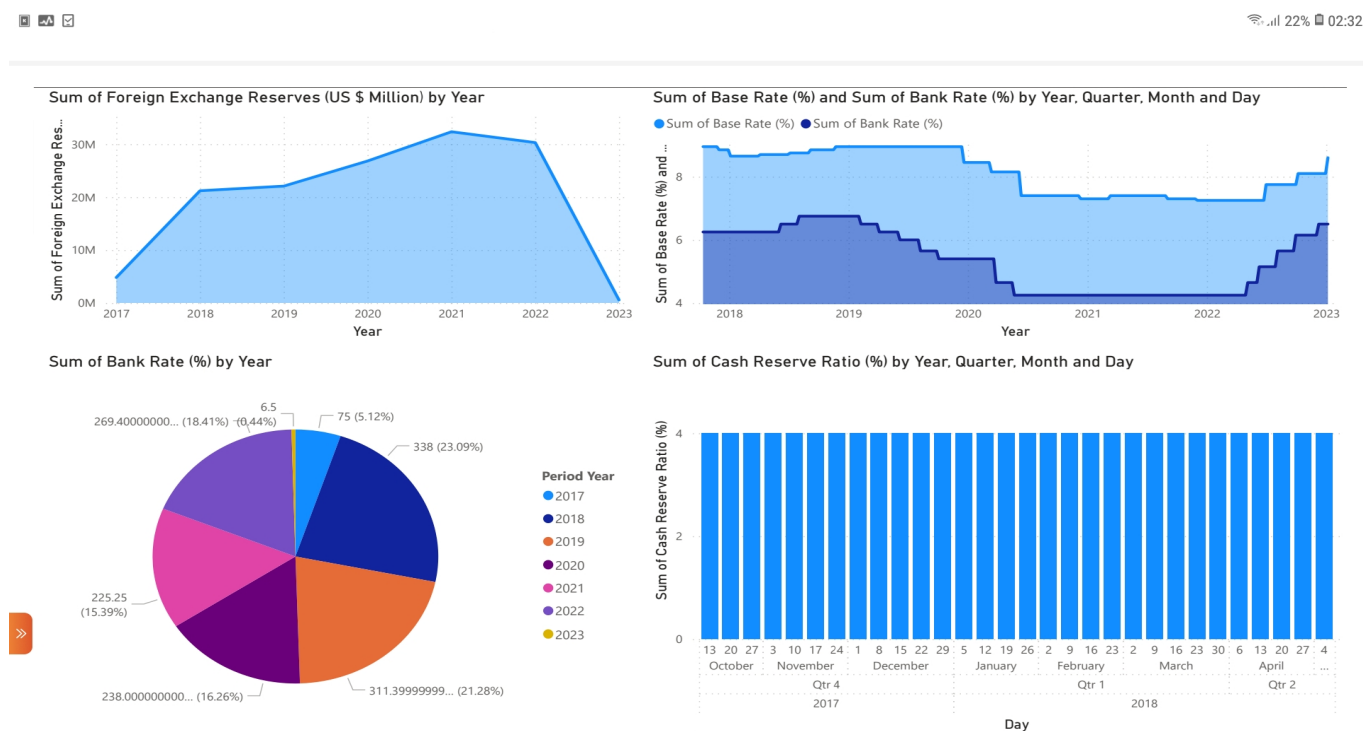
Sum of GDP At Market Prices (₹ Crore) by Year

India's sum of GDP at market prices in 2017-2018 was INR 167.77 trillion, representing a growth rate of 7.2

The growth in India's GDP had a significant impact on the macroeconomy, as it supported job creation, income growth, and consumer spending. With a strong GDP growth rate, the Indian economy attracted greater foreign investment, which further supported economic growth and development.

The strong performance of the services sector, which includes industries such as IT, financial services, and healthcare, contributed to the overall growth of the Indian economy. The services sector is a key driver of the Indian economy, accounting for a significant portion of the country's GDP and providing high-skilled, well-paying jobs to millions of Indians.

2.4 Weekly Exchange



India's bank rate and foreign currency rate were both comparatively stable in 2017 and 2018. For the most of the time, the Reserve Bank of India kept the bank rate—the rate at which it lends money to commercial banks—at 6

On the Indian macroeconomy, the stable bank rate and exchange rate had conflicting results. On the plus side, low borrowing costs for firms and consumers due to a steady bank rate helped to encourage investment and consumption.

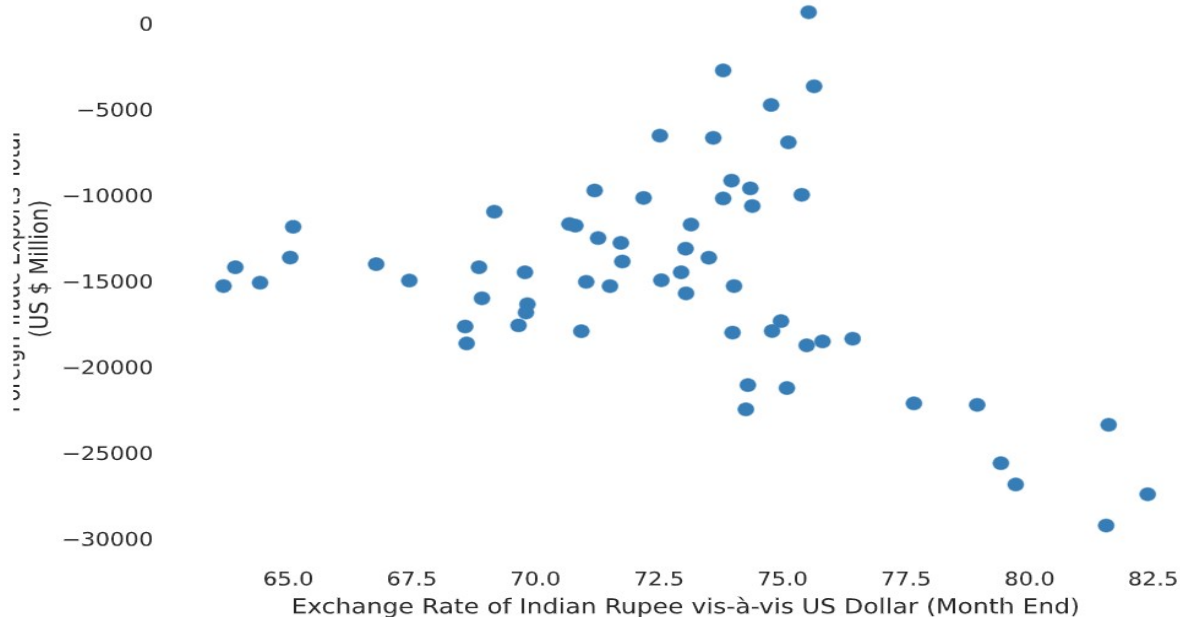
This in turn may stimulate economic expansion and advancement.

Having a steady currency exchange rate can also benefit for the economy, as it can support the competitiveness of Indian exports in foreign markets. A stable exchange rate can make Indian goods and services more affordable for foreign buyers, which can support the growth of Indian industries such as IT and pharmaceuticals.

However, a stable bank rate and foreign exchange rate can also have negative impacts on the economy. A low bank rate can lead to inflationary pressures, which can impact consumer purchasing power and put pressure on the central bank to raise interest rates. Additionally, a stable foreign exchange rate can make imports cheaper, which can contribute to a widening of the trade deficit and put pressure on domestic industries to compete with cheaper imported goods.

Overall, the stable bank rate and foreign exchange rate in 2017-2018 had mixed effects on the Indian macroeconomy, with both positive and negative impacts on various sectors of the economy. It highlights the importance of monitoring macroeconomic indicators such as the bank rate and foreign exchange rate and their potential impacts on various economic factors.

2.5 Foreign Trade Exports

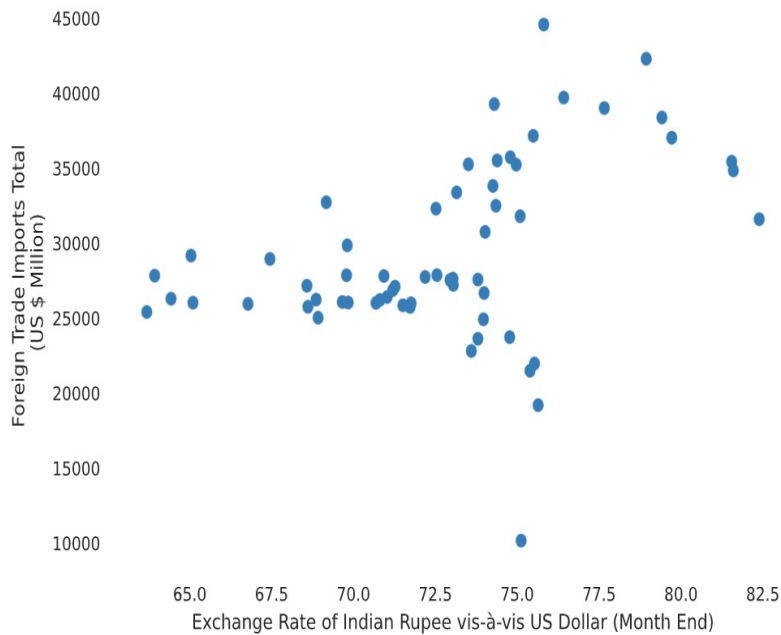


The Indian Foreign Trade Export Report of November 2017 - November 2022. The y-axis depicts the "Foreign Trade Exports Total (in Million USD) whereas the x-axis depicts the INR-USD Exchange Rate. An Exchange Rate of 75.0 means that 1 USD = 75 INR. Negative values on the y - axis hugely portray a Trade Export Deficit in India during the aforementioned period. This also means that the Imports from Foreign Lands were large compared to Exports and the Net Profit suffered greatly.

A huge cluster can be seen in the range of 70.0 - 77.5 can be seen presenting that huge Exports happened in when the INR/USD Exchange Rate was at a local Minima.

A sharp decline in the Exports Rate can be seen sharply when the exchange rates were around it's peak at about 82.5 during the aforementioned period. Though the decline in exports can be attributed to the global slowdown and trade partners' protectionist policies, a variety of other factors have also contributed to the country's slowing exports. Factors of structure: Some structural (long-term) factors, such as low technological adaptability and a lack of technology-intensive foreign investment, are limiting India's exports. Such structural factors result in the slowing of engineering goods and poor progress in electronics. Competitors' undervalued currency policies in the face of a relatively strong rupee: India's competitors, such as China and several other low-income countries, are keeping their currencies undervalued in order to maintain export competitiveness. At the same time, the rupee has remained a relatively strong currency in recent quarters.

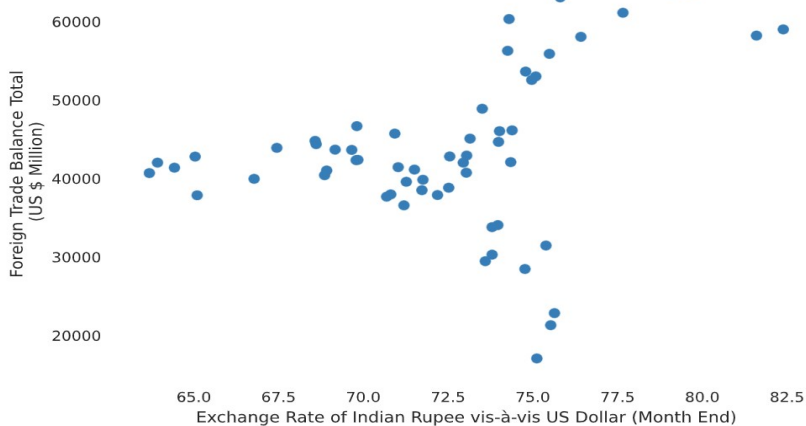
2.6 Foreign Trade Imports



The Indian Foreign Trade Export Report of November 2017 - November 2022. The y-axis depicts the "Foreign Trade Import Total (in Million USD)" whereas the x-axis depicts the INR-USD Exchange Rate. An Exchange Rate of 75.0 means that 1 USD = 75 INR. Positive values on the y - axis hugely portray of a Trade Import abundance in India during the aforementioned period.

A huge cluster of patterns can be again seen in between the range of 70. - 75.0 (INR/USD Exchange Rate) portraying an increase and huge amounts of import done whenever the Exchange Rate were in the mentioned range. The interesting fact though is that the Imports were still high even though the Exchange Rate was increasing in that period. This can be explained due to the need of Natural and Defensive resources during the 2020 Epidemic time. India relies on Gulf countries for the majority of its petrochemical products, and because these products are the foundation of all our trade and commerce, the cost of everything rises. Major imports are also present in the defence sector, where India has had to rely on Russia, Israel, the United States, and other European countries. As you can see, energy and defence account for a significant portion of our imports, and our government would be wise to focus on and develop policies to reduce spending in these sectors.

2.7 Foreign Trade Balance Total



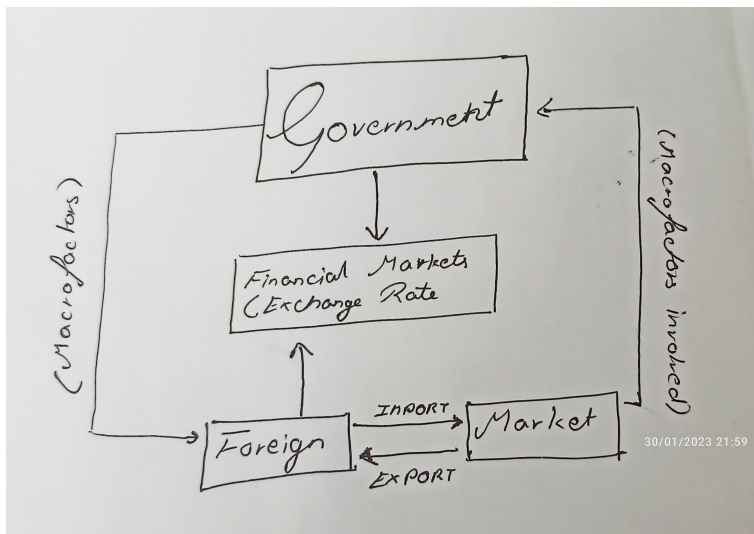
The difference between a country's exports and imports for a given period is known as the balance of trade (BOT). The largest component of a country's balance of payments is the balance of trade (BOP). The balance of trade between a country's goods and the balance of trade between its services are sometimes treated separately.

The trade balance also known as the trade balance, international trade balance, commercial balance, or net exports here through visualization clearly depicts that only International Exports and Imports do not affect the Foreign Trade Imports keeping it positive as it is also affected by factors such as Foreign and Direct Investments, etc.

Chapter 3

Conclusion through Schema and Correlation Diagram

3.1 Schema Diagram



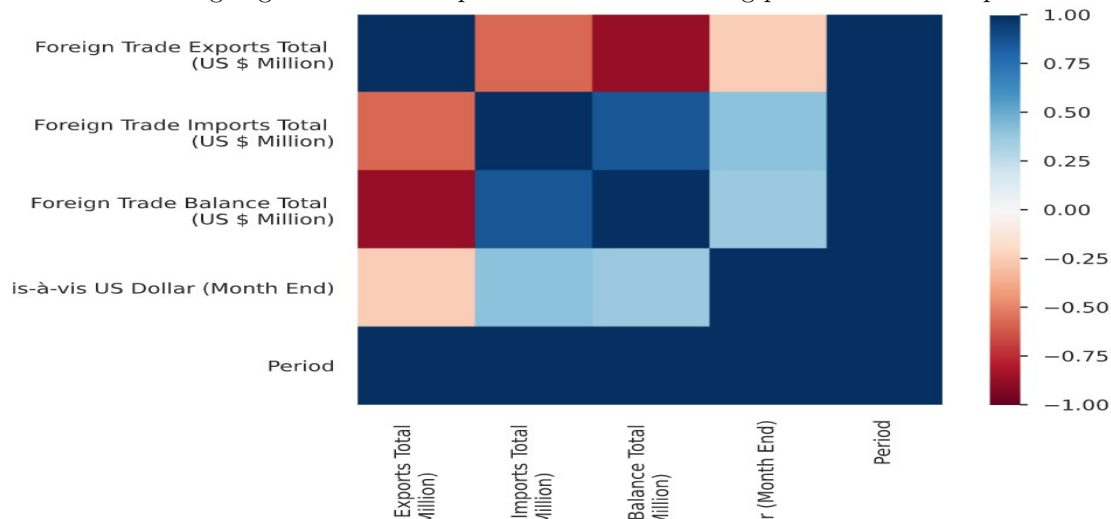
3.2 Correlation Diagram

Correlation is defined as the mutual connection of two or more sets of data. In statistics, bivariate data or two random variables are used to determine their correlation. Correlation coefficient is a measurement of bivariate data correlation that denotes how much two random variables are correlated with each other.

If the correlation coefficient is 0, the bivariate data are not correlated with each other.

If the correlation coefficient is -1 or +1, the bivariate data are strongly correlated with each other.

$r=-1$ denotes strong negative relationship and $r=1$ denotes strong positive relationship.



Conclusion

In terms of macroeconomic performance from 2017 to 2019, India did reasonably well thanks to a robust GDP growth rate of about 7% and steady inflation. To enhance the business climate and boost economic growth, the government introduced a number of significant changes, including the Goods and Services Tax (GST) and the Insolvency and Bankruptcy Code (IBC). Yet, the Indian economy also had to deal with difficulties during this time, such as a slowing global economy and a drop in private investment. India's macroeconomic performance from 2017 to 2019 overall demonstrated the economy's resilience and the potential for further growth and development.

References

1. Data Source: <https://dbie.rbi.org.in/DBIE/dbie.rbi?site=home>
2. <https://lms.indianeconomy.net/news/why-indias-exports-are-declining/>
3. Correlation chart: <https://www.geeksforgeeks.org/correlation-chart-in-excel/>