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Depreciation of INR: Causes and Impact on Indian Economy

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ABSTRACT

The recent move by the US to exclude India from Generalized System of Preferences (GSP), under which India was getting certain privileges from trading with the US, has created a challenge for the exporters in India. Although very lately, with the heavy inflow of Foreign Portfolio Investments (FPI) in India, especial-ly after the re-election of the Government, the Rupee has started to appreciate, confidence of investors across the world in the Indian economy is shooting up; also the recent trade conflict between China and US is likely to open new opportunities for India to tap the US market. In this paper, the authors have made an effort to understand the gains or losses to the Indian economy with the changes in the Rupee value against US Dollar; the causes as well as the impact of the Rupee depreciation; the macro economic implications of the exchange rate on the country's trade balance through J curve analysis and various steps being taken by the Government and the RBI to check Rupee depreciation and to enhance exports. The authors are of the view that in the short period of time, exports are likely to pick up, though slowly, since many initiatives have been taken by the Government and the RBI, and an enhancement in the world demand for goods and services in India is likely to happen; however, over a long period of time, the direction of exports will depend on whether the magnitude of impact of such forces or the effect of Rupee appreciation will be larger and this is something difficult to predicted, given the interdependence of economics across the world. If the Rupee continues to appreciate over the long period of time, then quantity effect may dominate to make exports more expensive and imports cheaper, thereby worsening the trade balance. Continuous measures taken by the RBI and the Government, to stimulate exports and reduces imports and simultaneously, maintain the ex-change rate stability can help the trade balance to improve overtime. To check Rupee depreciation and its adverse impacts, import substitution, export promotion supplemented with attractive funds of non-residential investors in bonds and other schemes should be implemented. Gold imports can be checked by hiking import duties and switching to non-conventional energy sources substituting petroleum and crude oil import.

Keywords: Depreciation of Rupee, Domestic Currency, Foreign Exchange, Imports, Exports, Exchange Rate.

INTRODUCTION:

Depreciation refers to a decline in the domestic currency value with respect to the foreign currency as caused by higher foreign currency demand vis-a-vis domestic currency demand. As a result of depreciation, domestic buyers end up paying larger than they would have paid earlier in exchange of every unit of the foreign currency. The economies of the world have become greatly interdependent upon each other. No economy can operates in vacuum, events of one economy certainly influence other economies. For example, Indian economy is highly contingent on imports of crude oil, hence highly linked with economy of Iran (Iran is the largest crude oil exporter to India). Countries buy foreign goods because they can't entirely suffice domestic needs through domestic production; or other countries have comparative advantage and can produce the same good at a lower cost. India imports goods and services from some countries and export to other countries, with value addition.

In theory, it is the exchange rate which impacts the level of the exports and imports of a country. For example, if Indian currency drops by 10 percent against US Dollars, this is a situation where Rupee buy fewer Dollars and Dollars buy more Rupees. Now goods and services produced in India, become more attractive for both Indians and Americans. This increases exports of India and decreases imports from USA. When a country's exports increase, its GDP increases. Increased GDP shows increased wealth or better economic condition of the nation. When exports increase, more production of goods and services take place in that nation. This phenomenon creates more jobs and attracts investment. While, if US currency drops by 10 percent against Indian currency, Indian imports will increase. This leads to a situation where more production take place outside India leading to a lower level of GDP in India. Exchange rate movements may have important impact on imports, exports, and the movement of capital between countries. Through exchange rates, prices of one country gets linked to the prices of other country. India is importing around 80 percent of the net consumption of the crude oil and is therefore, highly contingent on crude oil. Transport, electricity generation sector of India are the main consumers of oil, making India's two most important sectors highly dependent on the imports of crude oil. India's demand for petroleum and crude oil is less elastic which means India cannot easily switch its crude oil demand to its substitutes in short run. Most of the production of India's energy sector is based upon petroleum. India is experiencing lack to technological advancement in energy generation sector. It is still using conventional sources of energy and will have to shift to new source of energy to reduce its dependency over petroleum.

The table below shows crude oil import bill, 2006 onwards in India.

Table 1: India Crude Oil Import Bill Since 2006

Financial Year	Crude oil import (Million Tonne)	Crude oil import bill (Rs crore)
FY 6	99.40	1,71,702
FY 7	111.50	2,19,029
FY 8	121.67	2,72,699
FY 9	132.77	3,48,304
FY 10	159.25	3,75,277
FY 11	163.59	4,55,276
FY 12	171.72	6,72,220
FY 13	184.79	7,84,652
FY 14	189.23	8,64,875
FY 15	189.43	6,87,416
FY 16	202.85	4,16,579
FY 17	213.93	4,70,251
FY 18	220.4	5,66,450
FY 19*	228.6*	8,81,282*

*Provisional

Source: https://energy.economictimes.indiatimes.com/news/oil-and-gas/

The table above clearly shows that overtime there has been a substantial rise in the crude oil import bill and thereby contributing to widening of the trade deficit. India has been facing financial losses due to rise in the prices of the crude oil and Rupee depreciation. These both elements are creating pressure on the Current Account Deficit (CAD), fiscal deficit and inflation. The retail prices of diesel and petrol in India are linked to international fuel prices. Increase in the prices of the petroleum and crude oil have resulted in high domestic fuel price. India is still running its coal plants to produce electricity, which is strategically important for the economy. India completely cannot depend on the foreign players to fulfill its energy needs. In case, where India does not get petroleum from outside countries, it can generate electricity from its coal stocks and can run economic activity.

LITERATURE REVIEW:

Kishor Nand & Parashar Ajay (2013), in their study on fluctuating Rupee impact on Indian Economy, concludes that India needs to accelerate the pace of reforms, which will make our economy resistant to various external shocks and changes in currency fluctuations. Singh, P. (2013), concludes that Indian economy has less to gain and more to lose with Rupee depreciation in the long period of time. Chellasamy. P (2013), concludes that balance of payment is facing a decreasing trend; factors like higher investment in gold and decrease in the revenue collection from existing foreign investors; shall support in decreasing the rupee value against dollar. Kaur, N. and Sirohi, R. (2013) states that due to currency depreciation, people struggle with inflated commodity prices and affects students planning to go or those currently abroad for studies. Divakaran. N Deepa and Dr. G.S. Gireeshkumar (2014) has a mix approach while discussing the impact of Rupee depreciation on the Indian economy. They cited that Indian export-oriented sector will get benefits and weak Rupee will make Indian producers more competitive internationally and make them able to fetch more money, while it can be inflationary, and broaden the current account deficit. Arora Kanika (2014) studied the Rupee depreciation implications on the economy of India and depicted that in the long period of time, the economy has less to gain and more to lose, with the Rupee weakening. Suhas Avhad (2015), stated that the Rupee depreciation is good for the economy, as long as it is not volatile in nature. Garg Nidhi & Dr. Singh Shakti (2018) infers that India's dependency on imports and large current account and fiscal deficit adversely affected the economy. In an article from The Hindu Business Line (2018, August 27) it was argued that mainly the Rupee depreciation causes current account deficit as it increases the import bills. According to Financial Express (2018, September 1), strong improvement of the US economy, widening trade deficit and rising prices of crude oil is mainly causing the Rupee depreciation. Mittal Anand, et. al (2018, October-December), states that the demonetisation in the long run, will result in better economic development. With the rise in economic development of the country, foreign investors' confidence is likely to enhance which may contribute to the strengthening of the Indian currency. Mittal Anand, et. al (2018, December), recent step of demonetization; the JAM (Jan Dhan- Aadhar-Mobile) infrastructure can enhance the digital transaction culture in the country; which is huge step to check corruption, and may also eventually improve the balance of trade and strengthen the rupee vis-a-vis dollar.

OBJECTIVES:

- To examine the relationship between the US Dollar price in exchange for Indian Rupee.
- To examine the factors influencing the depreciation of Indian currency against the US Dollar.
- To study the impact of depreciation of Rupee on various macro-economic variables (J curve analysis and its implication for Indian Economy).
- To make suitable policy recommendations and suggestions.

DATA AND METHODOLOGY:

The data of India's economy has been collected mainly from the RBI, and the Ministry of Commerce and Industry website. To maintain the uniformity in analysis, the data on exchange rate, trade and GDP throughout the paper are taken in US Dollars. The data needed for the study is collected from the secondary sources and the analysis covers the period from 2013 to 2018.

FACTS AND ANALYSIS:

(1) Causes of Currency Depreciation:

(i)*Demand and Supply Rule:* In foreign exchange market, if there is an excess demand for Dollars, other things remaining constant, the Rupee depreciates; and if there is an excess supply for the Dollars other things remaining constant, the Rupee appreciates. People take part in foreign exchange market for their own different reasons. Their activities and decisions influence the current exchange rate. Those who supply Rupees are the holders of Rupees seeking to exchange them for Dollars. Those who demand Rupees are the holders of the Dollars seeking to exchange them for the Rupees. Private Citizens, banks, government, and corporate parties exchange Rupee for Dollars and Dollars for Rupees every day. Some parties may intend to settle their international transactions, while some parties think that if Rupee is depreciating against dollar, it is more profitable to hold their wealth in Dollar terms, for that purpose they demand Dollars and thus Rupee would depreciate further as demand for Dollars is greater. (ii) *Greater Strength of the Economy of US:* Strength of US economy/ Dollar is another reason for depreciation of the Rupee. Recently according to "The Economist" America had announced that "America's economy grew by the amazing rate of 4.1% around mid of 2018, and this will put their average annual growth over 3 percent"; leading to increase in investment demand for Dollar. The US economy has 20 percent of the global output and is greater than that of China and India. Large US based corporations plays a significant role over the world economy; service sector is the engine of the US economy but had about 15 percent of the global manufacturing output of goods; major manufacturing units in US are high value industries such as machinery, telecommunications, chemicals, automobiles and aerospace, these industries are the base for the other industries. Hence US economy influences the economic growth of the nations by participating in their exports and imports and thereby affecting demand and supply of various currencies of the world. (iii) *Higher Price of Oil:* Changes in crude oil prices always been a cause of worry to the Indian economy, because of its high dependency over crude oil. India has to pay in terms of Dollar for bulk demand of crude oil. When prices of crude goes up, India has to demand more Dollar to pay for the same quantity of crude. Badly the quantity demanded for the crude is also increasing every year. There are many reasons for increment in the prices of crude oil, such as sanctions on Venezuelan oil industry, global oil producers limiting supply, US Oil Production. (iv) *Wider Current Account Deficit:* Higher oil prices, foreign portfolio outflows and a weaker Rupee has increased the nation's current account deficit. When excess is imported, more Dollar is demanded to pay against net imports, leading to the Rupee depreciation. The main items which causes India's current account deficit are the excessive imports of crude oil, gold and electronic items. (v) *High Demand for Gold*: In India people wear gold and diamond ornaments for the auspicious occasions like weddings, religious festivals etc. India is one of the world's largest importers of gold. In India, it is considered as "safe" asset. According to data from the Ministry of Commerce, India's gold imports declined by 25 percent to \$8.43 billion during the first quarter of 2018-19. A decrease in gold imports checks on India's current account deficit (CAD). Due to depreciation in the Rupee value, imports of gold declined as gold became more expensive, reflecting the gold demand in India getting shifted towards more elastic compared to earlier times of inelastic demand.

(2) Impact of Changes in Exchange Rate on Imports, Exports and GDP:

Since when a currency depreciates, imports become costlier and the use of domestic products became cheaper than earlier. However, exactly reverse impact takes place when a currency appreciate. When domestic product became cheaper for the domestic and international demand, the demand for domestic product rises and this would have positive impact on GDP. This happens due to currency depreciation, while, when currency appreciates, domestic products became costlier, hence demand for it decreases. Level of imports increase, and there is an adverse effect on the GDP growth. Crude oil, electronic items and gold are the major import items of India. Export oriented sectors such as gems, jewellery, IT sector, pharmaceuticals, textile will be benefited from depreciation of currency. In global markets, Indian produce become more competitive, exporters will be able to fetch more money from the international market. Due to depreciation of currency, in case of imports, the same goods and services became costlier to domestic market. Petroleum, gold, electronics are the major import items of India. Due to weak Rupee, petroleum prices rise, and ultimately the pressure is passed on the consumers and good become more expensive including foreign trade. A continuous depreciation of money increases inflation, which adversely affects GDP.

(3) Impact of Rupee Depreciation:

Adverse impact of Rupee weakening can be observed on various segments and across different sectors of Indian Economy. (i) External Debt : India's external debt is mostly dominated in foreign currency i.e. most of the money has been borrowed in the foreign currency since developing countries like India find it quite difficult to borrow in the domestic currency. As a result, Rupee depreciation has put an intense pressure on the government balances. (ii) Cost of Production: Certain sectors like Airlines, fertilizers, automobiles, electronic good, oil marketing companies, are adversely affected by a rise in the input costs due to Rupee weakening, as fuel is the main inputs in most of such industries. For example: Crude petroleum prices has been increasing largely and much of this rise can be accredited to the Rupee weakening. (iii) A depreciating Rupee is likely to have a pessimistic impact on the company's balance sheet that have high foreign debt. (iv) Inflation: Effect of depreciating currency is also visible on inflation as imported goods become costlier. Companies may pass on their increasing input costs to the consumers. Price of fertilizers, petrol and diesel rise if government cut down its subsidy bill; besides this, cost of foreign education and travel also increases.

(4) Macro Economic Analysis:

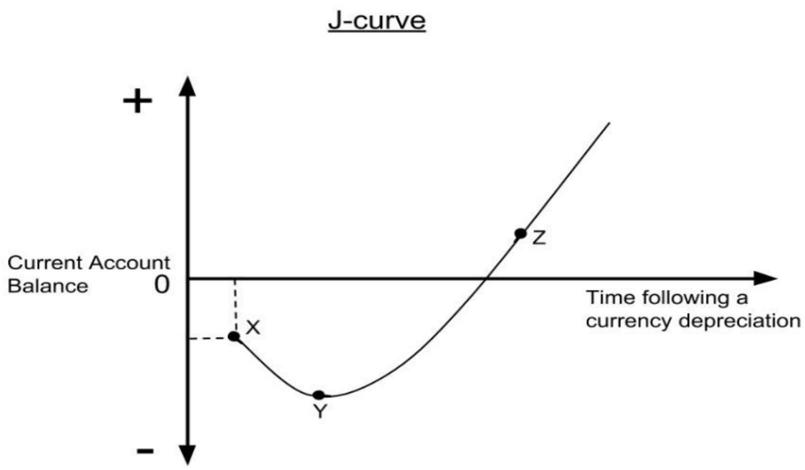
(4.1) J Curve Analysis:

J Curve is the phenomenon in which a country' trade balance initially deteriorates following a depreciation or devaluation of its currency, before it recuperates to a high level than where it initiated *(figure 1)*. The J-curve effect is visible in balance of trade, since the weaker currency initially translates into more cheaper exports and costly imports, leading to a larger initial trade deficit/ smaller surplus. However, overtime as the affected country's exports gets cheaper now in currency terms, foreign demand for the exported good start to rise. Local consumers also purchase less of the now more costly imports and replace them with comparable domestic goods that have now become more cheaper relatively. Thus, the trade balance ultimately improves and bounces back to a high level than compared to the previous level; this happens because in the short term, goods tend to be inelastic, as the consumption pattern takes time to change. Thus, in the short period of time, the Marshall–Lerner condition* is not met and when it holds, the trade balance improves over the long period of time.

***Marshall-Lerner condition:**

Sum of the elasticity of demand for imports and exports is greater than one. The figure below shows the J curve:

Figure 1: J Curve



(4.2) Applicability of J Curve Analysis for India

The graph below shows the exchange rate (USD/INR) movement during 2013 to 2018.

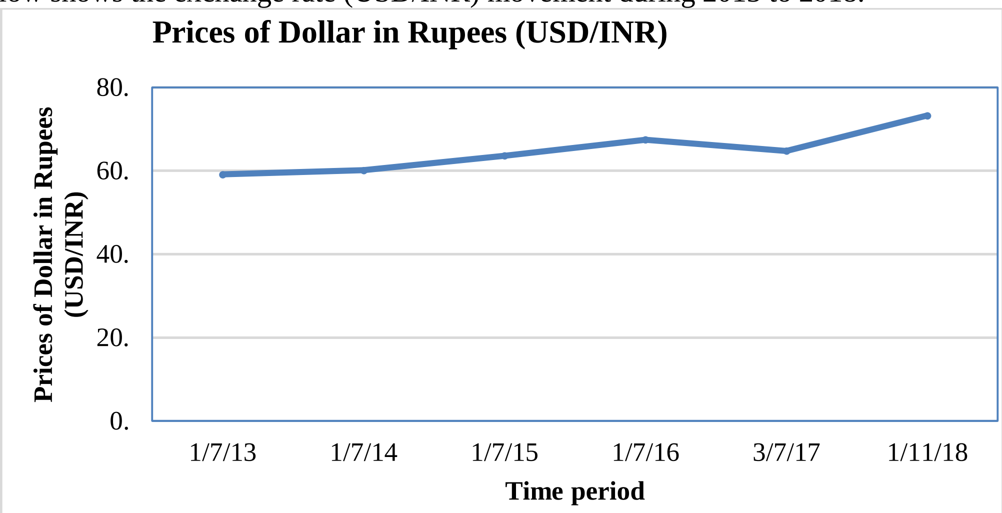


Figure 2: Exchange rate – Price of Dollar in Rupees (USD/INR)

Source: *http://www.rbi.org.in*

The graph clearly shows that Rupee has depreciated steadily over the period studied from INR 59.149 for a Dollar in 2013 to INR 73.236 for a Dollar in 2018; indicating that Rupee has depreciated during 2013-18. The below graph depicts the picture of trade balance (USD (millions)) for the same period studied (2003-2008) in India.

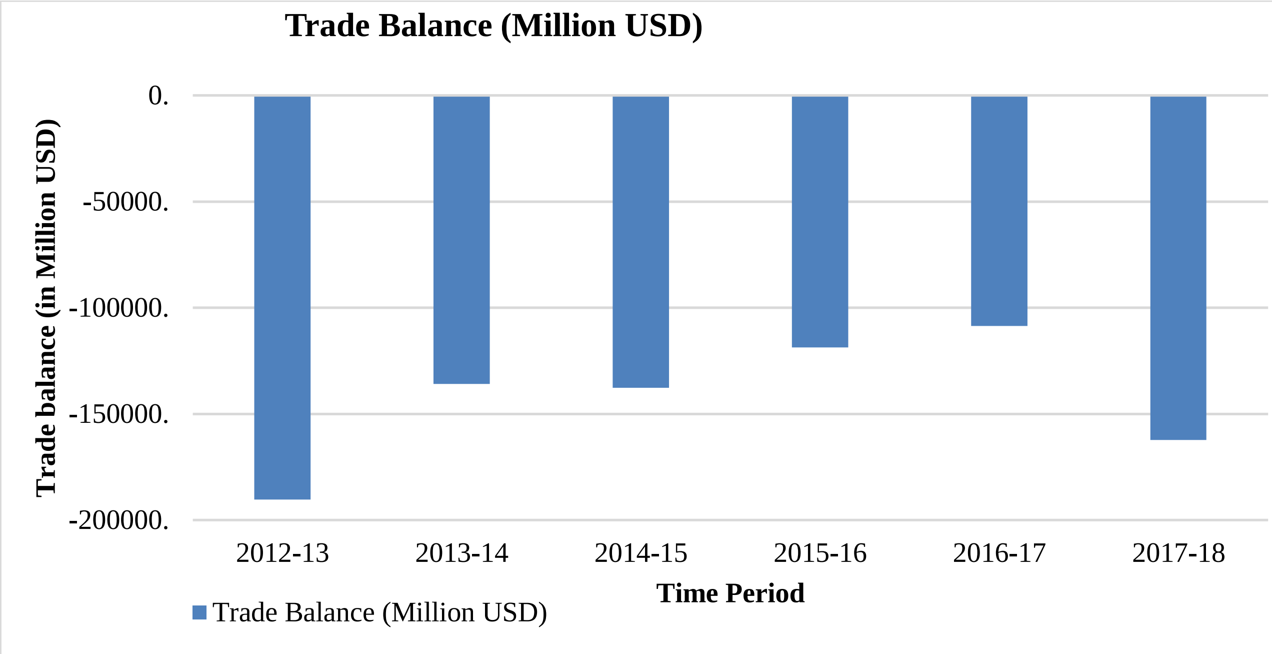


Figure 3 : India's Trade Balance (millions USD)

Source: http://www.rbi.org.in

The graph above clearly reflects an increasing trade deficit (except for 2015-16 and 2016-17), which further causes current account deficit. India is among the leading importer of gold, petroleum, heavy machinery, and electronic items. When these items are imported Indian buyers of these goods have to pay back in terms of Dollar and as the Rupee depreciates, importers have to shell off more amount of Dollars as it becomes costly. This trend also reflects, that as the Rupee depreciates, trade deficit is rising indicating that India is experiencing the downward portion of the J curve as the trade balance is deteriorating. However, it is believed that with consistent efforts of the government and the RBI, various initiatives have been recently taken to promote exports, as discussed below, which will help the economy in improving its trade balance overtime, especially in the short period of time, and it is possible, that even if the currency depreciates further, trade balance is likely to improve, leading us to the path of upward portion of the J curve. Although, with the re-election of Modi Government in May'2019, first time in the history of India, since New Economic Policy reforms of 1991, India has experienced an appreciation of the Rupee in the month of May, June and therefore, as per the market sentiment, it is likely to appreciate further, forex exchange reserves will rise, import value may fall and as exports have started to show positive signs of improving and shall further improve with consistent efforts of the Government to enhance it further, the trade balance shall improve in the coming future. As a result, India may experience an upward portion of inverse J curve, while also satisfying the Marshall-Lerner conditions.

(5) Steps by the Government and RBI:

The currency of India has been the worst performing currency of the Asian region in the year 2018, as a result, there has been sharp decline in the Rupee value. However, RBI and Government has taken various steps to strengthen the Rupee value, which are discussed as follows: (i) Government has made External Commercial Borrowings easier for manufacturing companies, to have more capital inflows in the productive sector. (ii) The government has raised import duty on various goods including gold, to curb imports and encourage exporters to export more. (iii) Masala bonds has been exempted from withholding tax so that the foreign investors remain attracted towards the bonds. (iv) There was a revision in the FPI norms by relaxing 20% exposure limits, to encourage fresh debt investment and to reduce debt outflow. (v) Government has also removed the hedging for infrastructure ECBs so that the threat of Rupee decline may be reduced. (vi) RBI has also made it necessary to export nearly 20 percent of all the gold imported into the country. Apart from this, RBI has been interceding in forex market actively, and many more. (vii) There are various incentives as part of the Foreign Trade Policy-

2015-20 and other schemes that provide various incentives to boost India's exports with the purpose of providing them a common platform by offsetting infrastructural costs and associated inefficiencies; such as (a) Export Oriented Unit Scheme- which gives a competitive duty-free environment internationally, along with better infrastructural amenities for export production, (b) Market Access Initiative Scheme - formulated on focus country focus product mechanism to evolve specific product and specific market, and is predicted to act as a channel for the promotion of exports in India on a continuous basis. (c) Software Technology Park Scheme-is a pure export-oriented scheme for committing software development for the purpose of export. The approvals are provided under single window clearance approach. (d) Services Exports from India Scheme (SEIS)- has been introduced to increase exports of certain notified services; the rewards under SEIS shall be permissible for services rendered/ exports made after the notification date of this policy. (e) Market Development Assistance Scheme - Entrepreneurs get finances for their participation in trade fairs (also funding of around 90 per cent with respect to, to and fro of air travel charges in overseas trade/ fairs delegations), helping them for export promotion activities.(f) The Merchandise Exports from India Scheme (MEIS)- has been introduced for the export of certain goods to specified markets. (g) Export Promotional Capital Goods (EPCG) Scheme- The objective is to facilitate capital goods import for preproduction, production and post-production at zero customs duty. (viii) Further, the recent trade conflict between China and US recently has opened an opportunity for the Indian Government to take an advantage of it, by tapping the US market, as China exports nearly 774 items to the US. India's exports capabilities need to be matched with China's imports from the US, and immediate policy action is needed to boost exports.

CONCLUSIONS AND SUGGESTIONS:

The recent move by the US to exclude India from the Generalized System of Preferences, under which India was getting certain privileges from trading with the US has created a challenge for the exporters in India. Although very lately, with the heavy inflow of Foreign Portfolio Investments in India especially after the re-election of the Government, the Rupee has started to appreciate, confidence of investors across the world in the Indian economy is shooting up; also the recent trade conflict between China and US is likely to open new opportunities for India to tap the US market. Moreover, the recently re-elected government is energetically working on reviving the import substitution industrialization policy to reduce imports. The authors are of the view that in the short period of time, exports are likely to pick up, though slowly, since a number of measures have also been taken by the Government and the RBI, and an enhancement in the world demand for goods and services produced in India is likely to happen; however, in the long period of time, the direction of exports will depend on whether the magnitude of impact of such forces or the effect of Rupee appreciation will be larger and this is something difficult to predict, given the interdependence of economics across the world. If the Rupee continues to appreciate however, in the long period of time, then quantity effect may dominate to make exports more expensive and imports cheaper, thereby worsening the trade balance. Continuous measures taken by the RBI and the Government, to stimulate exports and reduces imports and ensuring stability of the exchange rate simultaneously, can help the trade balance to improve overtime.

The Government may make available the bonds to the nonresidential investors which will increase the inflow of Dollars. To overcome this crisis, government must improve export intensive sectors and develop import substituting industry that helps India to be less dependent on imports. In such a situation government releases its Dollar reserve to supply Dollars in the market. Government can also reduce the import of some goods like gold, by hiking the duties. To counter the outflow or foreign portfolio, government may attract NRIs by launching different schemes. Import substitution and export substitution measures can be adopted in such a situation. India should follow a low exchange rate policy to further promote exports. Gold imports can be checked by hiking import duties and switching to non-conventional energy sources substituting petroleum and crude oil imports.

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