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‘International Liberalization’–A Gateway to Growth of Indian Economy

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Abstract

India being one of the biggest economies in the world has been identified as the land of opportunities by the world before many decades. India a land of rich culture, diverse geography and heritage is very much significant in commerce and growth. India being have to follow protectionism for some time opened her gates to massive world trade after 1991 in the name of liberalization and has recorded a significant growth rate since then. The journey from Hindu growth rate to an impressive double digit has not been a smooth phenomenon. In this paper we have tried to evaluate the policies and trends in the Indian liberalization process and in order to understand this better we need to undergo a scrutiny of the Solow model which is one of the basic theories for liberalization transformation. The major accomplishment is supported by the idea that the increase in investment rate can increase a country's steady-state of growth position increasing her respective short term growth and the long term growth will direct the Solow residuals which are exogenous factors that accelerate the growth of the economy. This paper also aims in showing the variations in the Indian Economy pre liberalization and post liberalization respectively. There exists a causal impact between inflow

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of Foreign Direct Investment and Balance of Payment dynamics which is intended to study here.

Key words- ***Trade Liberalization, Balance of Payments, Foreign Direct Investment, Economic Growth.***

JEL : F4,F43,O24

I. Introduction

After pursuing a self reliance and protectionist strategy for almost 4 decades, India was compelled to open her gates to the world for trade. In 1991 wide ranging economic reforms were initiated which emphasized macroeconomic stabilization keeping in mind the current account deficit imbalances and exchange rate regimes. After the Second World War, India, with other developing countries, chose a strategy of import substitution as a means of industrializing. Good quality research indicates that trade liberalization by developing countries has raised their aggregate incomes altogether. Indian trade liberalization can very well be identified as compulsion and forceful but the volume was massive. India experienced a huge structural change in 1991 when the nation underwent through the LPG policies(Liberalization , privatization and Globalization). trade liberalization emerges as one of the most serious policy concerns for government not only in India but throughout the world. Among the benefits which spring up from these structural changes, trade liberalization has definitely surcharged the economic growth of the nation. The current GDP PPP of India is 7.277 trillion (2014 est.) trillion USD and according to the world fact book the GDP Per capita PPP is 5800 USD (CIA 2014). In a nation where household consumption is 57% of GDP (CIA 2014) , the potential market is very high for international trade as well as economic growth. We can also see a adverse picture as the distribution of family income has deteriorated after increase in foreign trade. The world fact book identifies distribution of family income to be 33.6 (2012) which was 37.8 in (1998) (Gini Index).

As we continue to talk about trade it should be identified that the current account balance which was $-49.23 billion (2013 est.) now has become $-42.99 billion (2014 est.).The exports have increased from $319.7 billion (2013 est.) to $342.5 billion (2014 est.).

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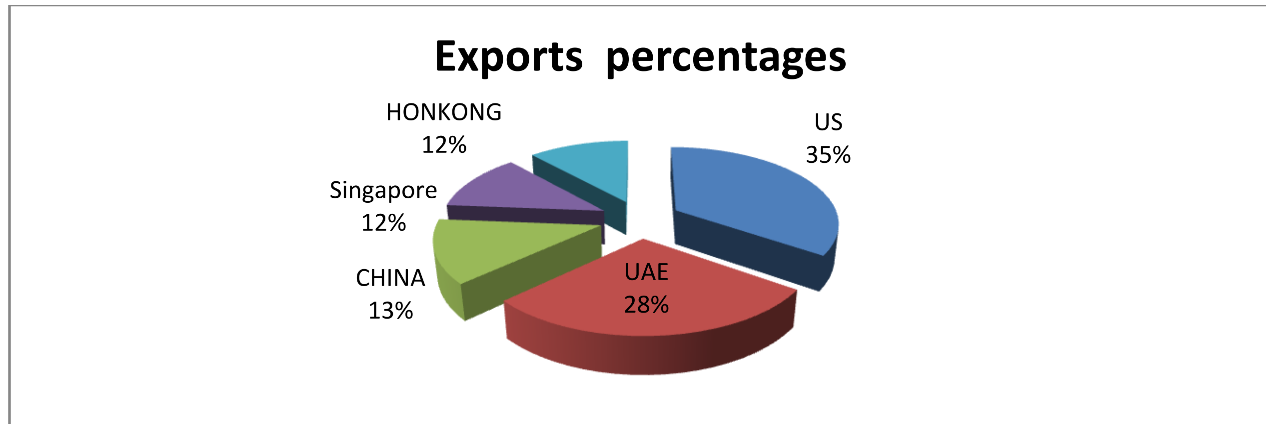
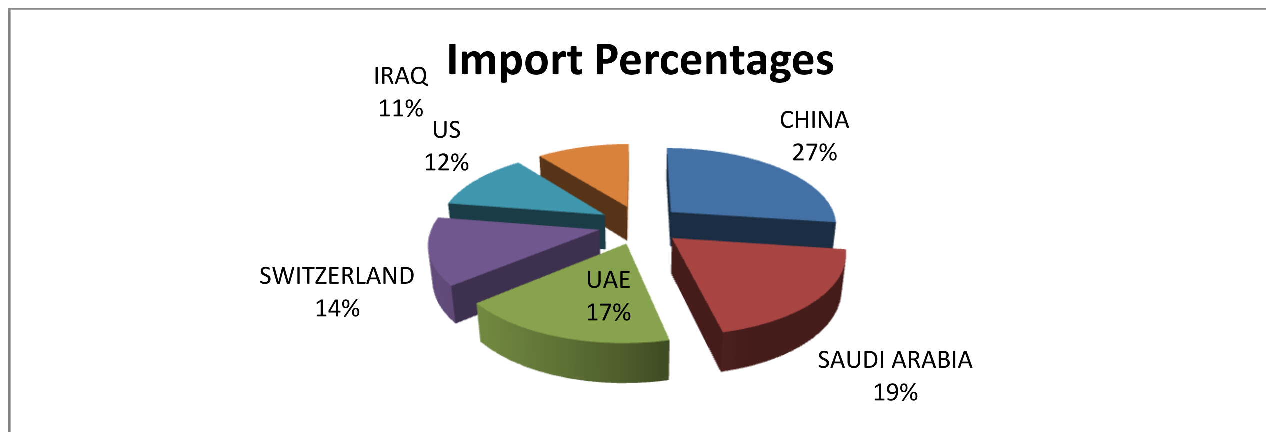


Imports have increased from $482.3 billion (2013 est.) to $508.1 billion (2014 est.) (CIA 2014).The major import commodities being crude oil, precious stones, machinery, chemicals, fertilizer, plastics, iron and steel and the major nation from where India imports are China 11%, Saudi Arabia 7.8%, UAE 7.1%, Switzerland 5.5%, US 4.8%, Iraq 4.3% (2013).



The stock of foreign exchange reserves has increased form $119.8 billion (2013 est.) to $129.8 billion (2014 est.) and now ro $300 billion (2015 est.).Exchange rate volatility is prominent in the economy but the devaluation of our INR has incidentally increased the export promotion and our export as a percentage of world export has surged up for the fact.

India accounted a severe BOP crisis during 1990's and was left with foreign exchange which could support imports for less than three weeks. Hence liberalization was the necessity of the

hour and in that context liberalization transformation resembled the steady state growth model of Solow. Solow residuals resemble trade openness which has accelerated India's overall output leading to a faster economic growth. The transformation from underdevelopment to development needs prosperity which requires economic liberalization to generate output which supports greater aggregate demand. In spite of having positive evidences we even speak about negative aspects of trade liberalization. As Rodriguez and Rodrik (2001) point out, "growth and welfare are not the same thing. Trade policies can have positive effects on welfare without affecting the rate of economic growth." There is a lively debate about the same and Slaughter (2001) criticizes pointing out that "it largely does not address the specific mechanisms through which trade may affect growth."In this context both China and Bangladesh could be compared as to see that China has posed massive growth from trade liberalization but on the same hand Bangladesh has underwent degradation for the same. Lewer and Van den Berg (2003) argue that there is a positive relationship between trade volume and growth and that they are fairly consistent on the size of this relationship. So there is a debate regarding views of different Economists for identifying the real role play of trade liberalization. Ideally growth and development have different indicators altogether. It is the key to find the policies tailor made for a nation to fit her growth and corresponding development altogether.

II. Review of Literature

1. **Hammouda,Jallab (2011)** examined the relationship between liberalization and growth alone, but can be enriched by comparing the development experiences of Africa and Asia. Future thinking should turn towards a search for optimal combinations between liberalization and control in order to promote growth and strengthen the competitiveness of developing economies.

2. **Chuhdhary et al (2010)** studied the relationship between trade liberalization and economic growth by Granger causality test. Results of this study revealed that in long run relationship between economic growth human capital and trade liberalization is significant and positive while in short run labor force also significantly contribute in growth.

3. **Panagariya, (2008)** studied the difference in share of agriculture in Gross domestic product of India over a time period of 1951 to 2008.The share of agriculture which was almost 57% of the GDP had reduced to 21% in 2008.Though the void has been filled by industrial and service share. This has majorly occurred dare to the trade liberalization policies.

4. **Sarkar (2005)** has found no meaningful relationship between the growth rate of real GDP or per capita real GDP and trade openness. The study has been based on two countries in Asian region, India and Korea. According to this study, in the first stage of simple trend analysis, it has been observed that both countries, India and Korea, opened up and consequently shares of trade in their GDPs rose significantly.

5. **Thirlwall and Santos-Paulino (2004)** found that the impact of liberalisation differs as to between highly protected countries and less protected countries. The positive effect of trade liberalisation on import growth is far greater in the industries that were highly protected during the period before liberalisation. Their results also showed that the impact of a more liberalised trade regime, independent of duty reductions, raised import growth by more than exports.

6. **Rodriguez and Rodrik (2001)** argue that openness has no significant effect on growth once institution-related variables are added in the regression analysis. Several studies using tariff rates as their specific measures of openness have found the relationship between trade policy and growth to depend on a country's level of development.

III. Objectives

- To evaluate the policies and trends of liberalization process in India with the help of examination of Solow growth model.
- To study the impact of liberalization in Indian economy before 1990 and compare it to post 1990.

IV. Methodology

This study is descriptive in nature. This paper is divided into two parts, the first part is based on Solow model and second part gives us a clear picture about the changes in the economy in pre and post reform period. In the first half we analyze the picture of the Indian Economy using the Solow model. For fulfilling the research objective we have collected secondary data of India's exports, imports and GDP from UNCTAD database (2015).For analyzing the data we have used paired T test.

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V. Examination of Solow model

Over past decades various economists and scholars have proposed different theories as extremely crucial and vital to achieving economic development. The world is formulatively divided in to major three stages of development viz Developed, Underdeveloped and Developing. In this context great American Economist has also given more sub stages of growth popularly known as Rostows stages of growth in developmental economics. Categorized according the developed economies represent the high mass consumption level of growth, where as the developing economies still drive to maturity and the underdeveloped keep struggling with stages of take off. However rostow failed to explicitly show how economic growth would occur and the void was fille dby Harrod- Domar model. He directly correlated increase in economic growth and development with increase in savings rate which again need external borrowing from international lending institutions such as the Asian Development Bank, the World Bank and the International Monetary Fund. Solow growth model diligently follow the theory of market mechanism where market needs to work very efficiently and is supported by the domestic government also. This is achieved by liberalization of the economy with fewer taxes, lower administration controls and free international trade. He was against the logic of too much government control over the economy which will delay the growth and development. The Solow model directly emphasized on the capital accumulation process which can be done in various ways and by turning the exogenous capital into endogenous capital. Nobel prize winner economist Robert Solow stressed on a country's investment on capital which was considered to be one of the important factors to prosper. Accumulation of capital overtime is the core of growth model which can be expressed mathematically.

$$Output_t = \mathrm{f}(\ Capital_t\ Labour_t) = \mathrm{A}\ \ Capital_t^{1/3}\ Labour_t^{2/3}$$

This represents the cobb Douglas production function and has constant returns to scale(capital and labour).In capital accumulation the major key is to invest some portion of the income into future for accumulation. So income is the sum of portion of income consumed and invested over time period t,mathematically expressed as:

$$Consumption_t + Investment_t = Consumtion_t Output_t$$

This is a resource constraint showing how an economy can use its resources. The invested part is used by the economy for capital accumulation and mathematically denoting:

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$Output_{t+1}$= $Output_t$+$Investment_t$- d$Output_t$

d$Output_t$ subtracts the depreciation from the capital in the present year.The change in capita stock between time period t and t+1.

Is $\triangle\ Capital_{t+1}$= $Capital_{t+1}$- $Capital_t$

$\triangle\ Capital_{t+1}$= $Investment_t$- d $Capital_t$

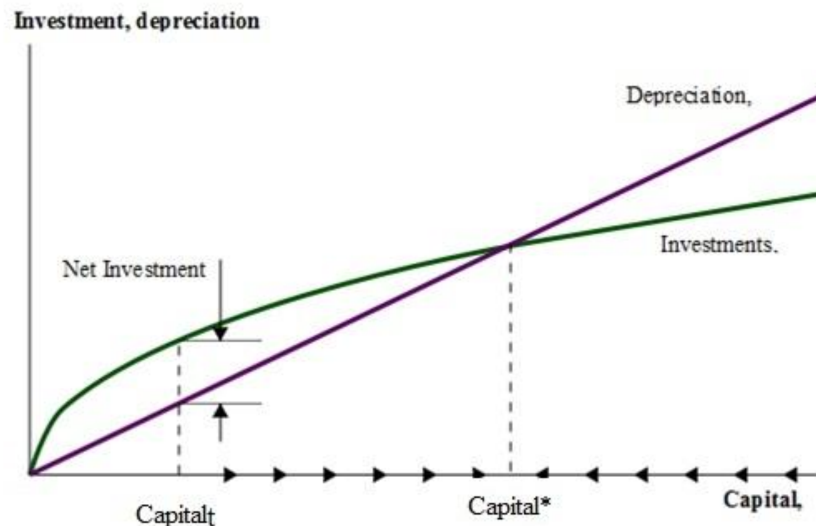
The amend in the capital stock is equal to new investment minus the amount of capital that depreciates in production. Today's capital hoard is the outcome of investments undertaken in the precedent. Considering a constant factor of output and investment

$Consumption_t$=(1-s) $Output_t$

$\triangle\ Capital_{t+1}$= s $Output_t$- d $Capital_t$

Investment in time period t less than the depreciation gives us the net investment.

When the amount of investment exceeds the amount of depreciation then there is an increase in the stock of capital but after a point the amount of investment becomes equal to the amount of depreciation in such case the capital stock remains constant at a specific point.



Source (Jones, 2011, p. 105)

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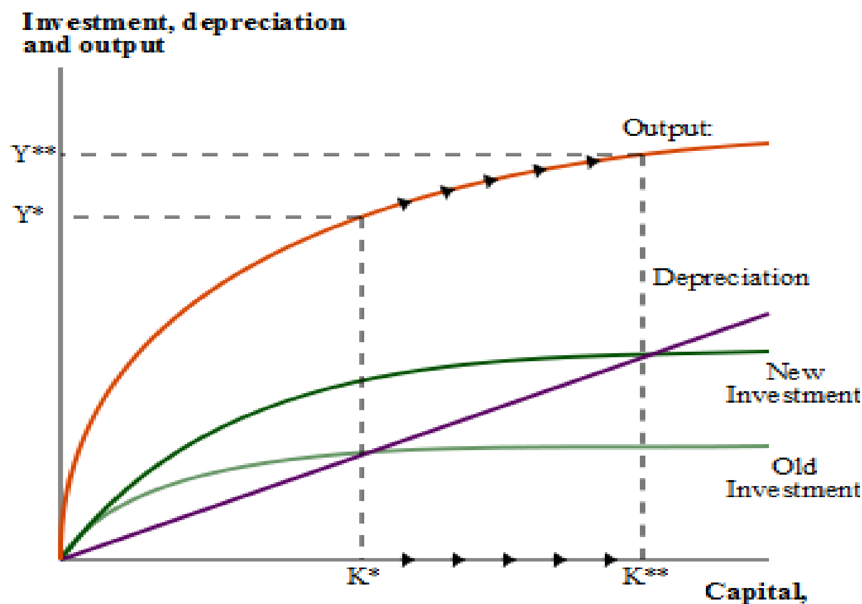
In the first part of the diagram the investment exceeds depreciation so there is a net positive investment. At point Capital* we can see that both depreciation and investment are in the equilibrium and hence the change in capital stock is zero($Capital_{t+1} = Capital_t$).To recover from the constant capital stock there is a necessity of an external stock. Point Capital* is known as Steady state of growth in the Solow model.

The major implication of the steady-state is that there is no long-run growth in the Solow model where the economy becomes stagnant at a constant level of Output* and a constant level of capital*. So in the long run the diminishing returns to capital accumulation directly causes decline in the return from these investments. Hence a country needs to focus on exogenous factors for long term growth as the factor of only capital accumulation is not only enough. Exogenous factors are Solow Residuals which a country requires to grow faster and in the long run.



The International trade is Solow residuals and the external shock which drives an economy towards faster growth. In this figure where Y and K are output and capital respectively, we see the new equilibrium or steady state is at point K** where depreciation equals investment. Before the point the investment is positive. Fast growth of India is a result of international trade where the out has increased due to increase in net positive investment. Hence the Solow residuals are

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the major reason for the growth of Indian Economy which has been achieved after the liberalization period.

VI. From Protectionism to Liberalization

The can be done a comparative analysis between the pre and post reform period. An analysis can be done since Independence period to the present period. The volume of export and import of India was so low that it did not even constitute to one percent of the total world trade. During the pre reform period there was protectionism dominance, unlike other south Asian nations India was not undergoing a fast growth process. But from the latter half of 1980 India made agricultural revolutions and during the beginning of 1991 India faced a strong BOP crisis which was extremely crucial and compelled our mighty nation to go on a revolutionized reform policies and strategies.

Data source:UNCTAD

Exports of goods and services, annual, 1980-2013(US Dollars at current prices and current exchange rates in millions)

Indian exports have increased in due course of time and has definitely constituted to positive growth effects ion the Indian Economy.

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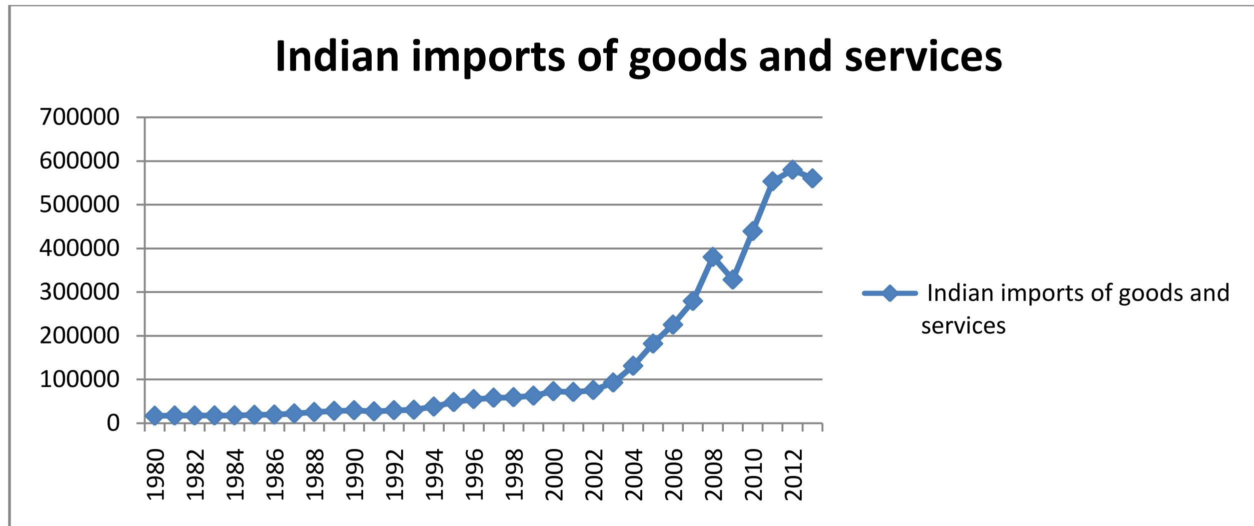
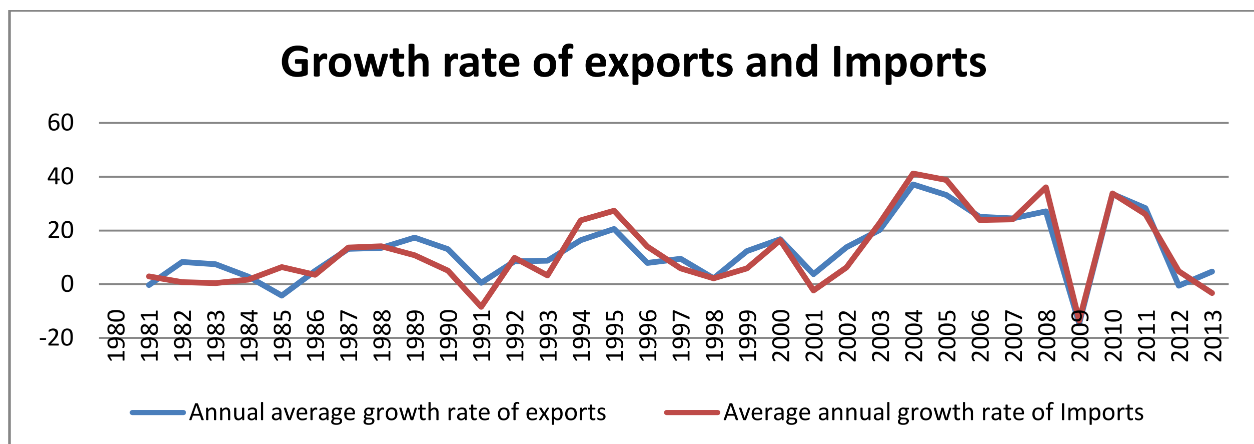


Data source:UNCTAD

Imports of goods and services, annual, 1980-2013 (US Dollars at current prices and current exchange rates in millions)



Data source:UNCTAD

We can see that the growth rates of the total exports and imports during the time period of 1980 to 2013.When India was following a protagonist policy then the rate of growth of import was negligible to zero but the rate of growth of exports was increasing.1985 saw a downturn of growth in export and recorded a growth in import. Both the export and imports kept growing until 1991 when again there was a downturn. After the policy regime the structural changes in the Indian Economy was good enough for her to be liberalized as in we see the growth rates of

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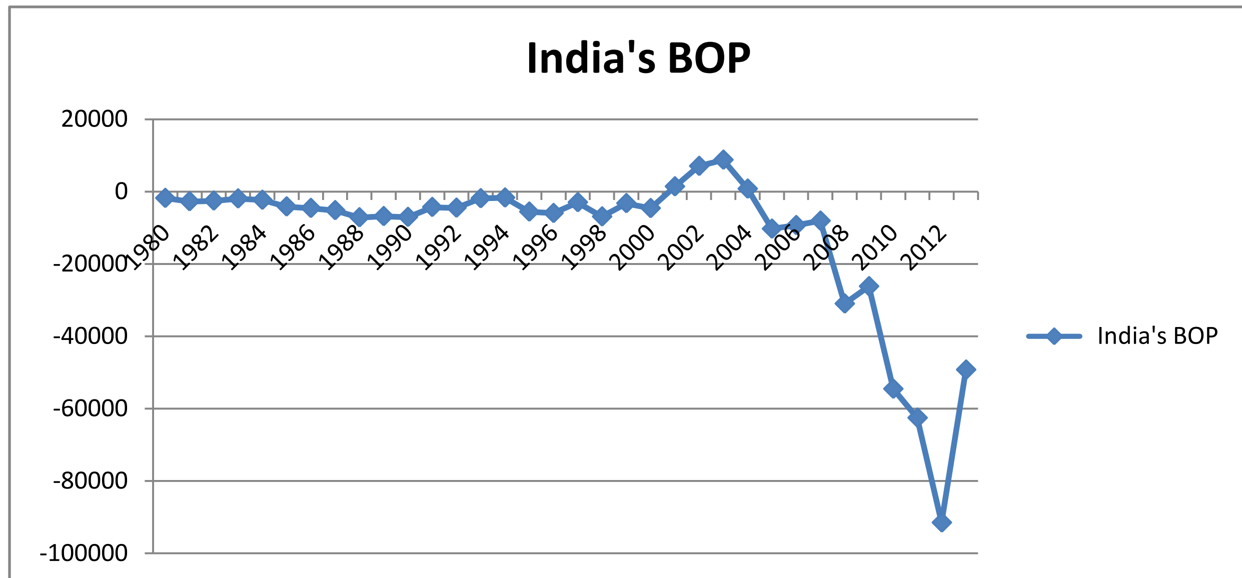
both export and import have increased considerably. There was a downturn in both in 2009.After 2013 we can clearly see a decrease in import growth and increase in export growth mainly due to the change foreign exchange policies.



Data Source:UNCTAD

Balance of payments, Current account net, annual, 1980-2013(US Dollars at current prices and current exchange rates in millions).From the graph below it can be interpreted that India underwent a positive current account balance during the years 2001 to 2004.The CAD crisis was somewhat solved during 1992-93 when the mighty nation became liberalized. Then the CAD problem tended to solve, as in the years 2011 and 2012 the CAD increased a great deal but it was solved with the inflow of foreign capital in many forms explicitly the Foreign Direct Investment which constituted to the decrease in the current account deficit from -91471.2 to -49226 in 2013.Currently the current account deficit is only 1.9% of the gross domestic product.

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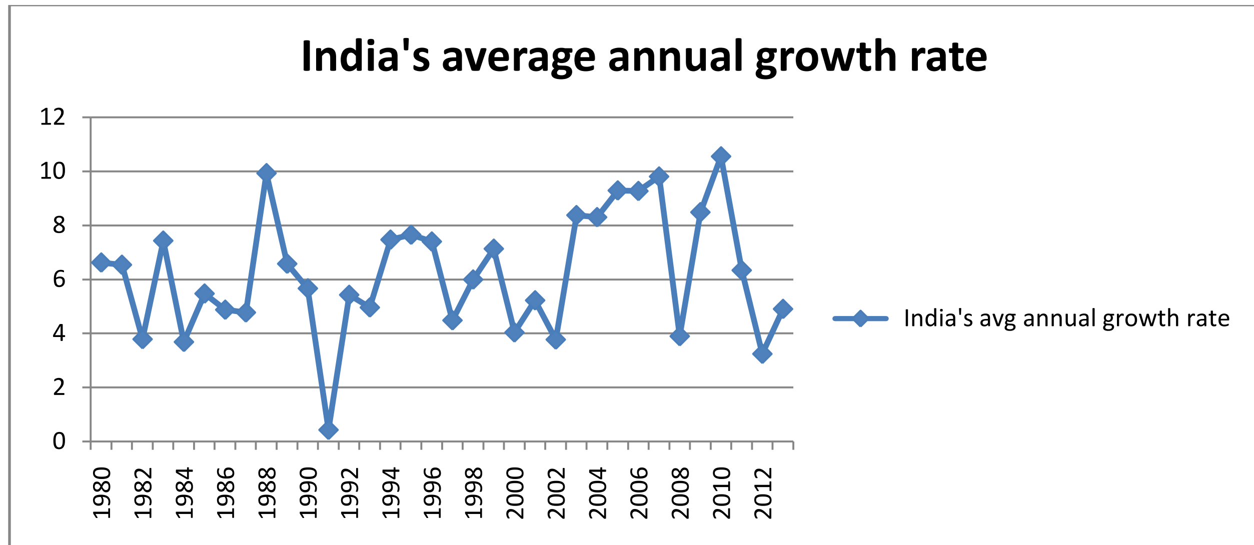

India’s average annual growth rate has shown considerable fluctuations but has always been a pride for the economy. If noticed carefully the GDP growth rate had undergone a considerable decline during the period of 1991 ,but how so ever was recovered after policy regime and since then have unwent through a good growth percentage until 2008.This decline was majorly due to the global financial crisis but again India recovered her growth and currently boasing a growth of more that 6% and projected 8.5% for the next financial year.

Trade liberalization in India has opened the gates of growth in a nation. There can be seen a positive rise in the gross domestic product of our nation which was close to zero during the 1990 and since then the nation has witnessed a positive growth trend altogether.

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VII. T-Test

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Indian exports of goods and services	110066.0683842932	34	140350.82385517145	24069.96771474738
	Pre Liberalization and Post Liberalization	1.68	34	.475	.081

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Indian exports of goods and services & Pre Liberalization and Post Liberalization	34	.476	.004

Paired Samples Test

		Paired Differences			
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference
					Lower
Pair 1	Indian exports of goods and services – Pre Liberalization and Post Liberalization	110064.39191370497	140350.59768956664	24069.92892766615	61093.75330185561

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Paired Samples Test

		Paired Differences: 95% Confidence Interval of the Difference: Upper	t	df	Sig. (2-tailed)
Pair 1	Indian exports of goods and services – Pre Liberalization and Post Liberalization	159035.03052555432	4.573	33	.000

Interpretation-

T-value is 4.573 and the corresponding p-value .000 is less than 0.05. Therefore we can safely reject the null hypothesis (H_{01}) and conclude that there is a significant difference between pre liberalization Exports of goods and services and post liberalization Exports of goods and services in India.

VIII. Suggestions

It is plausible that trade liberalization may lead to faster growth of imports than exports if the countries were highly protected in pre-liberalized period. India should now make her mighty land a manufacturing hub in order to promote more and more exports for an exponential growth trend. The Foreign Direct Investment policies in India have led to massive capital inflows in the nation but India should be more careful regarding the policy implications as to not allow any kind of depreciation impact for the common pavement vendors or the mom and pop shops. In order to make the FDI policies more sustainable, India should allow foreign investors to earn profit only if they fulfill the requisite criteria of Indian infrastructural development which includes abundance of storage facilities, road buildings and transportation facilities. India should drive herself more towards the export oriented growth strategies which will make her position in the world more stronger.

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IX. Conclusion

Than other developing countries, India has experienced the fastest economic growth. After India attained her independence it was utterly difficult for her to undergo growth as the economy was pretty much exhausted and worn out by the British Raj. India undertook five year plans and accordingly underwent through strategic growth plans respectively. After the protectionism policies proving its growth Indian growth rate declined considerably and India could not maintain a sustained growth rate howsoever and realized that it was important to open her to the world for trade. If we compare the growth rate before reform and after reform we can definitely see a significant difference in both. India has achieved her goals and that makes the study of her economy important for other Asian Nations who are developing. Presently India is growing at a rate of more than 6% and the Economy is undergoing considerable structural changes like policies eradicating black money and BRICS member etc. Foreign exchange reserves have been recorded to be more than 320 billion USD and India is now one of the fastest growing nations in the world with her impressive growth rate and strong economic strategies.

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