AN ECONOMIC ANALYSIS INDIA'S IMPORTS DURING POST REFORM PERIOD

N.Sheeladevi
Research Scholar, School of Economics,
Madurai Kamaraj University, Madurai, Tamilnadu, India.

ABSTRACT

The imports of food capital goods the raw materials of industry and certain essential consumer goods and no exchange restriction were placed upon their imports consumer goods, which were not absolutely essential, while others in the context of the economy of India were regarded as totally unessential and luxury imports were altogether prohibited. In this study for the analysis is 10 years from 2000 to 2010. The reason for choosing this time period because it covers post reform periods. The study used only secondary data for analytical purpose and the data are not originally collected rather obtained from published sources. The data were collected from various sources, such as, various issues of Economic Survey, Foreign Trade Review, RBI Report on currency, finance and RBI Bulletin. Various statistical and Econometric tools have been used for analyzing the data to study the trends and pattern of imports and impact of new economic policy on imports. Some of the important tools are linear trend analysis, semi log model.

Keywords: Imports, Simple Linear Regression, Semi Log Linear Regression.

1. INTRODUCTION

In many developing countries like India, the role of foreign trade in economic development is considerable and are ultimately connected. The trade can stimulate growth when import increased higher than export.

Before 1947 when India was the colony of the British, the pattern of trade was typically colonial. India was the supplier of raw materials to the industries to the countries like England and an importer of manufactured goods. This dependence of foreign countries for manufacturers did not permit industrialization at home rather as a result of competition from British manufacturers.

The colonial pattern of trade had to be changed to suit the heads of developing economy. An economy which decides to embark on a programme of development is required to extend its productive capacity at a frustrate. The imports of machinery and equipment cannot be produced in the initial stages at home. But there are essential imports which either help to create new capacity in the other lines of production are called developmental import. A developing economy is also required to import consumer goods which are in short supply at home during the period of Industrialization. Such imports are anti - inflation because they reduce scarcity of consumer goods.

One example of such imports is the food grain imports in India. The independence period helped to arrest the rice at home. It is therefore, during the early years of development, import had to be increased at faster rates. It is natural that the balance of the payment in such situation will firm heavily against development country. In order to meet gown's debt in view of in elastic imports a developing must increase imports.

The rapid depiction of sterling balance soon after the independence, for the Government of India, to follow a restrictive import policy. Broadly speaking that policy consisted of three import categories. a. Free, b. Restricted and c. Prohibited.

The imports of food capital goods the raw materials of industry and certain essential consumer goods and no exchange restriction were placed upon their imports consumer goods, which were not absolutely essential, while others in the context of the economy of India were regarded as totally unessential and luxury imports were altogether prohibited.

India adopted an inward looking development strategy, after the independence wherein imports substituted a major element of both trade and industrial policies, import substitution was the prime objective of India's trade policy till the mid 1970 to 2005. This policy was largely based on the imports and experts Act of 1947 and the imports trade control order of 1955. Import substitution was significant in the area of industrial machinery, paper, chemical, iron and steel and other metals.

1.1. Impact of new Economic Policy on Imports

Reforms became necessary because two earlier regulatory model of development was followed for several decades after Independence deliver results up to expectation. Poverty eradication programmes and the Government schemes like intensive rural development for work and special employment programmes aimed at improving small and marginal farmers, etc., were not able to reduce the incidence of poverty. The experiment of compulsory family planning did not bring any desirable results and the people who were below the poverty line were increasing because they did not have any social or economic stake of maintaining a large family subsidy also did not bring out the desired effects.

Economic policies begun to change in the 1980 and a much bolder programme of economic reforms was introduced in 1991. It has been continued by successive government since then. These reforms are aimed at closing the gap between India's potential and our actual performance.

India's current economic reforms begun in 1985 when the government abolished some of its licensing regulations and other competition, inhabiting controls since 1991, more new economic policy reforms package is characterized by liberalization privatization and globalization.

According to R.N. Ray "There has been, however a general agreement that as very distinctive feature of these policy changes taken as a whole is the greater scope for unfettered expansion they offer to private sector.

Particularly in the corporate segment of manufacturing industry and the opportunities opened up to multi - national enterprises.

Reforms include currency devaluation and making currency partially convertible reduce import duties on capital goods, decreased in subsidies, liberalized interest rates, abolition of licences for most industries, the sale of shares in selected public enterprises and tax reforms. Although many observers welcomed these changes and attributed the faster growth rate of the economy in the late 1980's to them, others feased that these changes would create more problems and greater vulnerability of outside pressure on economic policy direction caused concerned. The increase in a consumerism and the display of conspicuous wealth by the elite increased fear.

When the pace of internalization increased after 1991 - by the mid 1990 the number of sector research for Public ownership was slashed and private sector investment was encouraged in the areas, such as, energy steel, oil refining and exploration, road building, air transportation, and telecommunication. An area was closed to the Private Sector in the mid 1990's was the defence industry and the foreign exchange regulations in India were simplified. The average import weighed tariff was reduced from 87 per cent in 1991 to 33 percent in 1994. Despite these changes, the economy reminded highly regulated by international standards. The imports of many consumer goods were banned and the government had told of minority shares in Public Sector companies if had any of the loss making Public Companies being closed down, moreover, import duties had been lowered substantially. They were still very high when compared to most other countries.

As a part of our strategy to promote the international integration of our economy, it was necessary to phase out the excessive and indiscriminate protection to industry which is weak end the incentive to develop a vibrant import sector.

India is the seventh largest in the world in land mass, number ten in the world in the size of their economy by GDP, and the fourth largest international economy in purchasing power parity. India has the second largest labour force in the world and also has abundant natural resources. India's economy has grown by about 7.5% yearly since 2000, and that rate is predicted to increase. It is also the fifteenth largest nation in imports and eighteenth largest in exports worldwide in 2009. This means that India imports and exports are a huge potential market.

Indian imports are subject to taxation by the national government. Tariffs, or customs duties, are an important part of any nation's and help curb over dependence on foreign products. Indian customs duties are 5.40% depending on the method of entry. The country of origion matters too, due to trade agreements with individual nations for lower tariffs. Indian exports are generally free of export tariffs, but some are price regulated, such as, basmati rice, which has a minimum foreign sale price.

Indian import codes are very protective of the country's national industries and restrict the importation of certain items that might compete with them, such as telecommunications and electronic equipments, spices, textiles, raw materials like rubber and timber, and pharmaceutical products gemstones, precious metals, animals, animal fats, seeds chemicals and beef products are also restricted or banned.

2. REVIEW OF LITERATURE

This chapter intends to review some important research work which was undertaken on India's import since new economic policy from 2000-2010. A review of past studies helps to define the scopes of present study. Hence, in this study, a few studies which examine the trend of India's import and its problem have reviewed. This will help to understand the nature of works available in the literature in connection with the present study.

The linear relationship between India's import and independent variables, such as, import price, world's real income, industrial activity has been analysed by Murthy and Sastry sometimes. Time is also considered as variable besides estimating elasticity for India's import at aggregate level.[1]

Nayyar has made the following observation. The new economic policy, export houses, trading houses were made eligible for the facility of self-certification under the advance license scheme. The export promotion capital goods scheme had been liberalization and two windows should be made available for import of capital goods at 25 per cent or 15 per cent with corresponding export obligation.[2]

Bishpuria Gupta explains the changes in policies towards the liberalization. He states liberalization as the moving away from import substitutions to export orientation. The author opinions that the trade policies reflect the nature of protection enjoyed by industries". India has released a great number of proposals to boost foreign investment in India like full convertibility of rupee and massive cuts in import duties. The cut in the customs and import duties on the relevant product will definitely provide a fill up to the inflow of FDI in to India.[3]

M.S.Rao examined the factors determined India foreign trade. The foreign trade is largely influenced by income and price but the other variables in the care of importing domestic production and foreign exchange reserve, external existence and population and population have either a large or marginal influence lagged exports in the care of import seems to be having very insignificant role in the regression analysis.[4]

A.K.Neoy, in his paper analysed the import trade balances and GDP for the period 2001-2010 with five year intervals. The author links industrial production to imports to test the

[1] V.N.Murthy and V.K.Sastry, "Flasticies of Demand for Certain Indian Import and Exports Sankya", May 1951.

[2] Nayyar, Import and Export Policy Regime of Substantial Freedom, Yojna, May 31, 1992, Pp.21-22.

[3] Bishpuria Gupta, Trade Liberalization in 1980's and Change in the Protection of Indian industries – in liberalizatuion impace of India Economy, 1993, p.20.

[4] M.S.Rao, Trends and Determinants of India foreign Trade…..Publication, Allahabad, 1991.

hypothesis and conclude that export and import are all highly correlated to industrial production is highly correlated to imports.[5]

S. Singh in his paper, doused the attention on positive link between import liberalization and export promotion. The author after attempting to survey the existing literature measured import industry in India and assured the impact of import on export. The author concludes that import liberalization have a positive impact on exports of chemical and impact on production of cotton textiles and engineering industries.[6]

Anubhuti Shukla has stated globalization has become a ubiquitous term in the international economics. Over the past two decades, the economic liberalization, reforms, restructuring and globalization have paved the way for a new wave in the Indian economy which mentions about the policy. Reforms it is stated "the policy of import pushed with a vigour in the eighties and nineties has resulted in substantial increase in the volume of import"[7]

Khan estimated the income and the price elasticity for exports and imports of 15 developing countries including India and the study converged the period between 1951 and 1969.This was undertaken on the line of Houthkka and Magee. The quantitative restriction of imports and exports were also taken into consideration. The impact of supply factor on a country's export and import demand was analysed by adopting the stage least square techniques and he found that price played a significant role as important determinants of import.[8]

Susendar Sen has discussed a set of conceptual aspects and the turn of events, which led to the balance of payment crisis, finally it has been concluded that the debt process under these circumstance led to a situation where debtor country became a compulsive borrower in order that the debt charge can be met on schedule while efforts to control imports and the trade deficit by measures of restraints on import continues the inflexible and growing debt service constraints, the capacity of country by measure endanger our efforts, to limit the size of the current account deficit the country thus continues to borrowing order to finance the enter without, however adding to this capacity of imports.[9]

Y.V.Reddy, in his study pointed out that India can be classified as a "moderately indebted economy". In fact it is noted that the size of the external debt by itself is a large, but

---

[5] Neog A.K. Some Aspects of India's External Sector in Structural Reforms in Indian Economy, Ed Bovali. D

[6] Singh, D. Impact of Import Liberalization on export Reserve Bank of India, Occasion papers, Vol.5, No.1, 1994. P.1

[7] Sukhi Annbhass, Economic affairs – Impacts of import liberalization export performance in Indian Economy, 2001, P.199.

[8] M.S.Khan impact and Export of Demand in Developing countries Imt Stage Paper, Vol.XXI, Nov., 1994, p.55

[9] Sunanda Sen, "Dimensions of Indian External Economic crisis", Economic and Political weekly, Vol.XXIX,.no.14, April 12, 1994, PP.805-812.

our export is too small tan import. If improves our exports rather than the import, we can easily qualify as less indebted country.[10]

Indian record, as responsible nation in honouring its commitment, is well known specifically. The independent India has never veneged on its monitory, obligation in 1995 who had a liquidity crisis in currency mainly due to the war in Iraq and broke down the trade with USSR but we preferred to pledge gold initiate a massive import compression and start a reform process with assistance form the IMF and the World Bank. The entire burden of crisis and adjustment was successfully borne by the domestic economy.[11]

K.S. Chalapati Rao, Mr. Murthy, in their study, on foreign direct investment in the post liberalization period tried to analyse the dimensions of foreign direct investment in the post liberalization period in India for a long time. India's approach towards foreign direct investment was governed by the multiple objective of self- reliance, protection of national industry and entrepreneurs import select technologies and export promotion. As a part of the structural adjustment programme along with virtually the damnability of the industry regulating system.[12]

Kannan had estimated the trade instability both in respect of export and imports for India during two sub periods, namely, 1956-1957 and 1965-1966 and for the period 1966 – 1969 and 1979-80. It was found that instability of the imports had increased during the second sub period and this increase was due to the increase in the limit of value of the India's two instability in respect of the manufactured products was found to be higher in the first sub-period neither the commodity concentration nor the geographic concentration was found to be a significant factor in affecting the instability in respects of exports. Fluctuations in two domestic supply, as revealed by the fluctuations in the whole sale prices, were not found to be significant.[13]

M.S.Rao examined the factor determined Indias foreign trade largely influenced income and price. But the other variable in the case of import domestic production and foreign exchange reserve external assistance and population have either a large or a marginal influence lagged export in the case of imports seems to be having very insignificant role in the regression analysis.[14]

V.K.Bhaskara Raw says that the developing country like India needs imports of capital goods technology and consumer goods to implement its development programmes. However, the imports are to be paid by the earning of exports. The export sector should be given all possible assistance to earn enough foreign exchange to pay for essential imports. The trade policies should be basically aimed at strengthening and maintaining a sound industrial base in

[10] Y.V.Reddy, External Dept and Economic Reforms, RBI Bulletin, December, 1997, P.104.
[11] Y.V.Reddy, India the Global Partner, Reserve Bank of India Bulletin, May 2008, P.790.
[12] K.S.Chalpatei Rao, M.R.Murthy, Foreign Direct investment in Post liberalization period: An over view, Journal of Indian School of Political Economy, Vol.II.No.3, July - September 1999, pp.423-434
[13] Kannan R. Trade Instability – Indian Experience, RBI Occasional Papers, Vol.4, No.2, December 1983, pp.152-181
[14] M.S.Rao, Trade and Development of India Foreign Trade Chug publication, Allahabad, 1991.

the country and promoting competitive export through creating competitive environment.[15]

J.C.Kocher had expressed a strong optimistic in favour of the foreign direct investment. The opponents had argued that the scope for research and development would get reduced if the liberal policy towards FDI should allow the import of foreign technology to a greater extent. But he had brought out the fact about how the companies with move of foreign direct investment were spending move on the research and development activities.[16]

Bhattacharyya (1984) had estimated the trade off effect between the export promotion and the import substitution strategies adopted by India during period 1966 to 1980. It was found that a unit increment in imports as a percentage of GDP would result in a ridge in the share of exports in relation to GDP to the extent of 50 per cent of the increment in the former the study had favoured import substitution rather than export promotion as import substitution yielded more of foreign exchange than what export promotion had earned.[17]

Sidharthan (1989) had tried to examine the impact of import liberalization the export intensities of the large scale public limited companies for the two periods that is for 1982-83 and 1984-85 (per liberalization period). The results had revealed that the import intensities had drastically changed after liberalization, but the export intensities had declined in respect of large scale companies, thus contributing to the large trade gap in India’s foreign trade.[18]

Sharma (1990) had examined the relationship between the export growth and the import intensity during the period 1983-87 by using the input and output frame work. The results had confirmed between the sectoral export growth and the respective import intensity, indicating a rapid increase in the import intensity of exports.[19]

The EXIM Bank had computed the import intensity of exports by using primary data of different firms of five sectors leather products, Readymade garments, chemicals and drugs, engineering products and Germs and Jewellary. The results had revealed that the index of import intensity of the exports had increased from 21.2 per cent in 1980-81 and 41.7 per cent in 1988-89: but decreased subsequently to 38.1 percent in 1989-90 while those of manufactured exports had gone from 38 per cent in 1980-81 to 52 per cent in the year 1989-90 Exclusive of the gems and the jewellery sector the import intensity of the manufactured

[15] V.K.Bhaskar Rao, Indian foreign trade – An overview, Southern Economics, September, 15, 1998 pp.7-10.

[16] J.S.Kocher, Foreign Investment in India and Activity, Yojana, Vol.36, No.11, June 30, 1992, pp.22-24.

[17] Bhattacharya , Manas, “Export Promotion versus Import Substitution”, foreign Trade review, Vol.18, No.4, January- March, 1984, pp.474-77.

[18] N.S.Sidharthan, “Impact of Import Liberalization on Export Intensities: A study of the Indian private corporase sector”. The Indian Economic journal, Vol.37, No.2, 1989, pp.103-11

[19] Sharma, Atul, “Import Intensities of Indian Industries in the context of new Economic policy – An Analysis in Input – output frame work”, Man and development, September, 1990, p.19

exports had increased from 32 per cent to 42 percent.[20]

G.Bharathi Kamath (2007), in his article, "Trade Liberalization its impact on the Import Dependence of the Consumer Goods vs. Capital Goods Industry" analyse whether the import dependence of the industrial sector has increased in the post–liberalization period when compared to the pre-liberalization in aggregate and for the selected industries, and to analyses the import dependence in case of consumer goods and capital good industry in the pre and post liberalization periods. The paper also presents a comparative analysis of both the industries. She also had given some reviews.[21]

Anubhuti shukla (2001) had analysed the impact of liberalization on the exports of India for the period 1990-91 to 1998-99. Trends in the terms of trade, the value of exports, the export GDP ratios, and India's share in world trade were estimated. The results were found to be[22].

Wadhva had analysed the price and the increase elasticities of demand for India's exports and for it imports for the period 1954 to 1970 to know about the possible effects of devaluation. The results had indicated that the price and the income variables had explained for about 90 per cent of the variation in the demand for exports. Though the price elasticity of demand for India's exports was low, the income elasticity of demand was found to be high. To capture the effect of devaluation (1996), a dummy variable was used and the results had indicated that the devaluation had not resulted any improvement in the demand for our exports. [23]

3. METHODOLOGY

Any serious and scientific study requires a well know way to solve the research problem. It will try to assure the authenticity of the work. In this study for the analysis is 10 years from 2000 to 2010. The reason for choosing this time period because it covers post reform periods. The study used only secondary data for analytical purpose and the data are not originally collected rather obtained from published sources. The data were collected from various sources, such as, various issues of Economic Survey, Foreign Trade Review, RBI Report on currency, finance and RBI Bulletin. Various statistical and Econometric tools have been used for analyzing the data to study the trends and pattern of imports and impact of new economic policy on imports. Some of the important tools are linear trend analysis, semi log model.

4. India's Imports Items during 2000-2010.

---

[20] EXIM Bank, "How Import Intensive are Indian Exports? Occasional Paper no.16, December 1991.

[21] G.Bharathi Kamath, Trade Liberalization, its Impact on the Import Dependence of the Consumer goods Vs. capital goods industry" the Journal of Industrial Economics, Vol.IV, No.1, 2007, p. 43-60.

[22] Anubhuti shukla "Impact of Import Liberalization on Export Performance" of India Economy, Economic Affairs, Vol.46, no.4, 2001, pp.199-209.

[23] Wadhva, D.Charar, "Elasticities of Demand for Indias Exports and Imports and the Question of the Devaluation of the Indian Rupee", Foreign Trade Review, Jan-march 1974, pp. 364-378.

India’s imports could be divided into the bulk imports and the non bulk imports. Bulk imports could further be subdivided into three categories of imports such as i. petroleum, crude and other petroleum products. ii. bulk consumption goods which comprise of careals and pulses, edible oils and sugar, iii. Other bulk items compre fertilizers, non-ferrous metals, paper boards, rubber, pulp and waste paper and metallic oars, iron and steel and the like. The following table 4.1 presents India’s bulk and Non-bulk imports during the period 2000-2010.

4.1. Bulk Imports

The above table 4.1 presents India’s bulk and non-bulk imports during the period 2000-2001. India’s bulk imports had amounted 20815.7 millions of US dollars and it had increase to the level of 61086.1 millions of US dollars in the year 2005-2006. As against an increase in imports to the level of 84235.8 millions of US dollars in the 2006-2007. Then these had been decline trend in the bulk imports of India. Finally, it had reached the level of 125315.1 millions of US dollars in the year 2009-2010. In constrast to this, the share of the bulk imports in total imports of India had declined slowly from the level of 41.8 per cent in the year 2000-2001to the level of 43.5 per cent in 2009-2010.

The trend co-efficients of the imports of the fertilizers were found to be statistically significant at the 5 per cent level for the post-reform period. The R^2 values were also found to be satisfactory. The trend co-efficients had also revealed that fertilizers had increased from the level of -13906.17 millions of US dollars per annum on an average during the post-reform period. Its growth rate had also increased from the level of 9.487 per cent per annum on an average during the period.

Table -4.1 India’s Bulk and Non-Bulk Imports from 2000-2010

Year	Bulk Imports	Non-Bulk Imports	Total Imports
2000-2001	20815.7 (41.8)	29720.8 (58.8)	50536.5
2001-02	20263.1 (39.5)	31150.2 (60.6)	51413.3
2002-03	24299.5 (39.6)	37112.6 (60.5)	61412.1
2003-04	29461.5 (37.7)	48687.6 (62.4)	78149.1
2004-05	42400.7 (38.2)	69116.7 (61.9)	111517.4
2005-06	61086.1 (40.9)	88079.6 (59.4)	149165.7
2006-07	84235.8 (45.5)	101499.4 (54.6)	185735.2
2007-08	112744.8 (44.8)	138694.6 (55.2)	251439.4
2008-09	138791.1 (46.4)	160042.8 (53.5)	298833.9
2009-2010	125315.1 (43.5)	163057.7 (56.5)	288372.9

Source: Monthly statistics of the foreign trade of India, various Issues and figures in brackets indicate percentages to total imports.

Further, the compound growth rate of the fertilizers had increased from the level of 28.60 per cent per year on an average during the period.

Table-4.1 Trend and Growth rate of Bulk Imports

year	model	A	B	SE	t	sig	R^2	R^{T2}	CGR
	Linear	14517.729	-13906.17	100059.92	-1.382	.2042	.90928	.89794	
	Semi log	.247366	9.487	.112042	84.676	.0000	.95911	.95400	28.60

4.2. Bulk Imports of petroleum, crude and petroleum products

The table 4.2 discloses India's bulk imports, which consist of petroleum, crude and petroleum products, bulk consumtions goods and other bulk items. Imports of petroleum products and bulk goods had declined from 15650.1 millions of US dollars in the year 2000-2001 to 56945.3 millions of US dollars in the year 2006-2007, due to the fall in the international oil prices (relevant to Indias' purchases). After that, due to the increased in the world's oil prices, the value of petroleum imports had continuously increased from 79644.6 millions of US dollars in the year 2007-2008. And to 87135.9 millions of US dollars in the year 2009-2010.Its share in the total imports of India had increased from 75.2 per cent in 2000-2001, which had decreased to the level of 69.5 per cent in the year 2009-2010. There were UPS and downs in the share of imports of petroleum to the total imports of India during the study period of 2000-2001 to 2009-2010.

Table -4.2 India's Bulk Imports from 2000-2010

Year	Petroleum	Bulk Consumption Goods	Other Bulk items	Total Bulk Imports
2000-2001	15650.1 (75.2)	1443.2 (6.9)	3722.4 (17.8)	20815.7
2001-02	14000.3 (69.9)	2043.2 (10.8)	4219.6 (20.8)	20263.1
2002-03	17639.5 (72.6)	2411.0 (9.9)	4249.0 (17.5)	24299.5
2003-04	20569.5 (96.8)	3072.8 (10.4)	5819.2 (19.7)	29461.5
2004-05	29844.1 (70.4)	3104.6 (7.3)	9452.0 (22.3)	42400.7
2005-06	43963.1 (71.9)	2766.6 (4.5)	14356.5 (23.5)	61086.2

2006-07	56945.3 (67.6)	4294.1 (5.9)	22996.4 (27.3)	84235.8
2007-08	79644.6 (70.6)	4600.3 (4.8)	28499.9 (25.3)	112744.8
2008-09	93671.7 (67.5)	4975.3 (3.6)	40144.0 (28.9)	138791.1
2009-2010	87135.9 (69.5)	9012.7 (7.2)	29166.5 (23.3)	125315.1

Source: Monthly statistics of the foreign trade of India, various Issues and figures in brackets indicate percentages to total imports.

Table-4.2 Trend and Growth rate of Bulk Imports of Petroleum, Crued and Petroleum Products

year	model	A	B	SE	T	sig	R^2	R^{T2}	CGR
	Linear	9905.114	-8571.72	6760.615	-1.268	.2405	.91174	.90071	
	Semi log	.240832	9.172155	.116969	78.415	.0000	.95327	.94743	27.230

The trend co-efficients of the imports of the fertilizers were found to be statistically significant at the 5 per cent level for the post-reform period. The R^2 values were also found to be satisfactory. The trend co-efficients had also revealed that fertilizers had increased from the level of -8571.72 millions of US dollars per annum on an average during the post-reform period. Its growth rate had also increased from the level of 9.172155 per cent per annum on an average during the period.

Further, the compound growth rate of the fertilizers had increased from the level of 27.230 per cent per year on an average during the period.

4.3. Imports of Bulk Consumption Goods

The import value of the bulk consumption goods had fluctuated and decreased from 1443.2 millions of US dollars in 2000-2001 to 3104.6 millions of US dollars in 2004-2005. During the year 2009-2010, the import of bulk consumption goods had accounted for 9012.7 millions of US dollars. But its share in the total imports of India had decreased from the level of 6.9 per cent in the year 2000-2001 and had increased further to the level of 7.2 per cent in the year 2009-2010.

Table-4.3 Trend and Growth rate of Imports of Bulk Consumption Goods

year	model	a	B	SE	t	sig	R^2	R^{T2}	CGR
	Linear	623.773	341.626	763.0313	.448	.6662	.76282	.73317	
	Semi log	.162635	7.215361	.115114	62.680	.0000	.90571	.89393	17.660

The trend co-efficients of the imports of the fertilizers were found to be statistically significant at the 5 per cent level for the post-reform period. The R^2 values were also found to be satisfactory. The trend co-efficients had also revealed that fertilizers had increased from the level of 341.626 millions of US dollars per annum on an average during the post-reform period. Its growth rate had also increased from the level of 7.215361per cent per annum on an average during the period.

Further, the compound growth rate of the fertilizers had increased from the level of 17.660 per cent per year on an average during the period.

4.4. Other Bulk Items

Imports of other bulk items had also increased from 3722.4 millions of US Dollars in the year 2000-2001 to 22996.4 millions of US dollars in the year 2006-2007 and still further to 29166.5 millions of US dollars in the year 2009-2010. Whereas, the shares of the other bulk items in total imports had increased from 17.8 per cent to 27.3 per cent, and further to the level of 23.3 per cent during the corresponding years.

Table-4.4 Trend and Growth rate of Other Bulk Items

year	model	a	B	SE	t	sig	R^2	R^{T2}	CGR
	Linear	3988.8381	-5676.060	3622.7084	-1567	.1558	.85368	.83539	
	Semi log	.293052	7.73828	.165297	46.814	.0000	.93799	.930241	34.05

The trend co-efficients of the imports of the fertilizers were found to be statistically significant at the 5 per cent level for the post-reform period. The R^2 values were also found to be satisfactory. The trend co-efficients had also revealed that fertilizers had increased from the level of -5676.060 millions of US dollars per annum on an average during the post-reform period. Its growth rate had also increased from the level of 7.73828 per cent per annum on an average during the period.

Further, the compound growth rate of the fertilizers had increased from the level of 34.051 per cent per year on an average during the period.

4.5. Cereals and its preparations

The above table 4.5 presents India's import of bulk consumptions goods for the period 2000-2001 to 2009-2010. Due to the increased demand in the domestic market, the increased to 36.1 millions of US dollars in 2005-2006 from 19.1 millions of US dollars in 2000-2001. But after that, it had increased to 705.2 millions of US dollars in 2007-2008 mainly because of the successive good harvests and the abundant stock of the food grains in the country. But its share in the total imports had increased to the level of 1.3 per cent in the year 2000-2001. from share as well as its value in imports had decreased from year to year and it reached the level of 1.2 per cent in the year 2009-2010.

Table -4.5 India's Imports of Bulk consumption goods from 2000-2010

Year	Cereals	Edible Oil	Pulses	Sugar	Total Bulk Consumption Goods
2000-2001	19.1 (1.3)	1308.2 (90.6)	109.1 (7.5)	6.8 (0.5)	1443.2
2001-02	18.2 (0.8)	1355.6 (66.4)	662.6 (32.4)	6.8 (0.3)	2043.2
2002-03	24.5 (1.0)	1814.2 (75.3)	565.6 (23.5)	6.8 (0.3)	2411.1
2003-04	19.4 (0.6)	2542.5 (82.7)	497.2 (16.2)	13.6 (0.4)	3072.7
2004-05	26.4 (0.8)	2465.3 (79.4)	395.6 (12.7)	217.3 (6.9)	3104.6
2005-06	36.1 (1.3)	2024.0 (73.2)	559.3 (20.2)	147.2 (5.3)	2766.6
2006-07	32.1 (1.6)	2108.3 (70.3)	860.1 (28.6)	0.8 (0.2)	3001.3
2007-08	705.2 (15.3)	2558.6 (55.6)	1335.0 (29.1)	1.5 (0.3)	4600.3
2008-09	47.0 (0.9)	3443.4 (69.2)	1358.1 (27.3)	126.8 (2.5)	4975.3
2009-2010	104.7 (1.2)	5582.1 (61.9)	2068.4 (22.9)	1257.5 (13.9)	9012.7

Source: Monthly statistics of the foreign trade of India, various Issues and figures in brackets indicate percentages to total imports.

Table-4.5 Trend and Growth rate of Cereals and its Preparations

year	model	A	B	SE	t	sig	R^2	R^{T2}	CGR
	Linear	26.8078	-142.732	-.309	.7649	.14513	.03827	-	
	Semi log	.245918	2.38778	.60779	3.929	.0044	.44067	.37035	27.879

The trend Co-efficients of the imports of the fertilizers were found to be statistically significant at the 5 per cent level for the post-reform period. The R^2 values were also found to be satisfactory. The trend co-efficients had also revealed that fertilizers had increased from the level of -44.173 millions of US dollars per annum on an average during the post-reform period. Its growth rate had also increased from the level of 2.38778 per cent per annum on an average during the period.

Further, the compound growth rate of the fertilizers had increased from the level of 27.879 per cent per year on an average during the period.

4.6. Edible Oils

A fluctuating trend had been exhibited in respect of the imports of edible oils. The edible oil imports had fallen from 1308.2 millions of US dollars in 2000-2001 to 1814.2 millions of US dollars in 2002-2003, as against an import of 2542.5 millions of US dollars during the year 2003-2004. It could be seen from the Table 4.8 there had been a fluctuating trend during the period 2003-2004. from the year 2004-2005 on words the imports of edible oils had continuously increased from the level of 5582.1 Millions of US Dollars in 2009-2010. The share of the edible oil imports had increased from 90.6 per cent in the year 2009-2010.

Table-4.6 Trend and Growth rate of Edible Oils

year	model	A	B	SE	t	sig	R^2	R^{T2}	CGR
	Linear	333.6836	684.960	258.3847	1.296	.2310	.65745	.61463	
	Semi log	.124508	7.0580	.1477	47.763	.0000	.77358	.74527	13.259

The trend Co-efficients of the imports of the fertilizers were found to be statistically significant at the 5 per cent level for the post-reform period. The R^2 values were also found to be satisfactory. The trend co-efficients had also revealed that fertilizers had increased from the level of 684.960 millions of US dollars per annum on an average during the post-reform period. Its growth rate had also increased from the level of 7.0580 per cent per annum on an average during the period.

Further, the compound growth rate of the fertilizers had increased from the level of 13.259 per cent per year on an average during the period.

4.7. Pulses

Through the value of imports of pulses had decreased from 109.1 Millions of US Dollars in the year 2000-2001 to 1358.1 millions of US dollars in the year 2008-2009 and further to the level of 2068.4 millions of US dollars in the year 2009-2010, its share in the total imports of India had decreased from 7.5 per cent and still further to the increase to 22.9 per cent during the corresponding years of 2000-2001 and 2009-2010 respectively.

Table-4.7 Trend and Growth rate of Pulses

year	model	a	B	SE	t	sig	R^2	R^{T2}	CGR
	Linear	167.2824	-78.953	209.019	-.378	.7155	.75505	.72443	-
	Semi log	.229021	5.2248	.314673	16.604	.0000	.71825	.68303	25.736

The trend co-efficients of the imports of the fertilizers were found to be statistically significant at the 5 per cent level for the post-reform period. The R^2 values were also found to be satisfactory. The trend co-efficients had also revealed that fertilizers had increased from the level of -78.953 millions of US dollars per annum on an average during the post-reform period. Its growth rate had also increased to the level of 5.2248 per cent per annum on an average during the period.

Further, the compound growth rate of the fertilizers had increased from the level of 25.736 per cent per year on an average during the period.

4.8. Sugar

During the study period the imports of sugar had exhibited from the level of 6.8 Millions of US Dollars in the year 2000-2001 the imports of sugar had reached the maximum amount of 217.3 millions of US dollars in the year 2004-2005. The sugar imports had suddenly increased to the level of 1257.5 millions of US dollars in the year 2009-2010. Sugar imports had declined to the level of 0.5 per cent and then had increased to the level of 13.9 per cent during the corresponding years of 2000-2001 and 2009-2010 respectively.

Table-4.8 Trend and Growth rate of Sugar

year	model	a	B	SE	t	sig	R^2	R^{T2}	CGR
	Linear	72.49	-220.20	230.95	-0.95	0.32	0.23	-	
	Semi log	0.30	1.38	1.58	0.877	0.4059	0.15	0.49	36.22

The trend Co-efficients of the imports of the sugar items were found to be statistically significant at the 5 per cent level for the post- reform period. The R^2 values were also found to be satisfactory. The trend co-efficients had also revealed that sugar items had increased from the level of -220.20 millions of US dollars per annum on an average during the post-reform period. Its growth rate had also increased to the level of 1.389138 per cent per annum on average during the period.

Further, the compound growth rate of the sugar items had increased from the level of 36.229 per cent year on an average during the period.

4.9. India's Imports of other Bulk items during from 2000-2010.

Presents a Table 4.9 India's imports of various items of other bulky goods from 2000 to 2010. Due to the decreased demand in the domestic market, the imports of fertilizers had decreased to 751.8 millions of US dollars in 2000-2001. But after that, it had increased to 2127.9 millions of US dollars in 2005-2006. Finally, it had reached the level of 6836.9 millions of US dollars in the year 2009-2010. The share of the fertilizers import to total imports had also decreased from the level of 20.2 per cent in 2000-2001 and then had increased to the level of 23.4 per cent in the year 2009-2010, respectively.

India's imports of non-ferrous metals and slowly increased from 533.8 millions of US dollars in the year 2000-2001 and further to the level of 1844.4 millions of US dollars in the year 2005-2006. Then it had decreased from 3006.5 millions of US dollars in the year 2009-2010. But the share of the imports of non-ferrous metals to total imports had gradually increase from 14.4 per cent in the year 2000-2001 and further to 12.8 per cent in 2005-2006 and still further to the level of 10.3 per cent in 2009-2010 respectively.

Import of paper, paper boards, manufactures including news prints had increased from 451.1 millions of US dollars in the year 2000-2001 to 1206.8 millions of US dollars in the year 2009-2010. The share of paper and its products to total imports had increased from the level of 12.1 per cent to the level of 5.3 per cent and 5.2 per cent during the corresponding years 2000-2001, 2009-2010, respectively.

The value of crude rubber imports had a rising trend from 151.9 millions of US dollars in the year 2000-2001 to the level of 630.8 millions of US dollars in 2006-2007, the it had increased from 1014.6 millions of US dollars in the year 2009-2010, Its share in total imports had increased from 4.8 per cent in the year 2000-2001 and further to 2.7 per cent in 2006-2007, and still further to the level of 3.5 per cent in 2009-2010.

The pulp and waste paper imports had increased from the level of 281.7 millions of US dollars in 2000-2001 to the level of 572.9 millions of US dollars in 2005-2006 likewise, its share in the total exports had increased from 7.6 per cent to 3.9 per cent during the corresponding years. After that, though there was an increase in the imports values from 639.3 millions of US dollars in 2006-2007 and further to the level of 880.7 millions of US dollars in the year 2009-2010, its share to total imports had increase from 2.8 per cent to 3.1 per cent respectively during the years 2006-2007 and 2009-2010.

The imports of metalliferrous ores had increased from 774.2 millions of US dollars in 2000-2001 and further to 3881.8 millions of US dollars in 2005-2006 as its demand had increased in the domestic market. But in the very next year the imports had increased to the level of 7682.8 millions of US dollars in the year 2009-2010, its share in total imports had increased from 20.8 per cent in the year 2000-2001 and further to 27.3 per cent in 2005-2006 and still further to the level of 26.4 per cent in 2009-2010.

The iron and steel imports had fallen to the level of 2669.7 millions of US dollars in 2004-2005 from the level of 777.8 millions of US dollars in the year 2000-2001. It had reflected the improvements brought about in respect of domestic production due to the greater availability of power and coal and the better matching of the domestic supply of iron and steel to the pattern of domestic demand. But the imports had continuously increased from the level of 8240.9 millions of US dollars in the year 2009-2010 and its share in total imports had increased from 20.9 per cent in 2000-2001 to 28.3 per cent in 2004-2005 and further to the level of 28.3 per cent in 2009-2010.

Table -4.9 India's Imports of other Bulk items from 2000-2010

Year	Fertilizers	Non Ferrous metals	Paper	Crude Rubber	Pulp and waste paper	Metalliferous	Iron and steel	Other Bulk Items
2000-2001	751.8 (20.2)	533.8 (14.4)	451.1 (12.1)	151.9 (4.8)	281.7 (7.6)	774.2 (20.8)	777.8 (20.9)	3722.3
2001-02	679.0 (16.9)	647.3 (15.4)	446.9 (10.6)	174.3 (4.2)	294.7 (6.9)	1143.7 (27.1)	833.7 (19.7)	4219.6
2002-03	625.8 (14.7)	666.5 (15.7)	449.4 (10.6)	182.5 (4.3)	343.4 (8.0)	1037.8 (24.4)	943.7 (22.2)	4249.1
2003-04	720.8 (12.4)	948.8 (16.3)	657.7 (11.3)	280.8 (4.8)	409.1 (7.3)	1295.9 (22.3)	1506.1 (25.8)	5819.2
2004-05	1377.1 (14.6)	1310.3 (13.8)	727.7 (7.7)	409.2 (4.3)	489.5 (5.2)	2468.5 (26.1)	2669.7 (28.3)	9452.0
2005-06	2127.0 (14.8)	1844.4 (12.8)	944.1 (6.6)	414.1 (2.8)	572.9 (3.9)	3881.8 (27.3)	4572.2 (31.8)	14356.5
2006-07	3144.1 (13.7)	2604.9 (11.3)	1206.8 (5.3)	630.8 (2.7)	639.3 (2.8)	8345.8 (36.3)	6424.7 (27.9)	22996.4
2007-08	5406.0 (18.9)	3505.2 (12.3)	1424.8 (4.9)	785.7 (2.7)	778.0 (2.7)	7911.7 (27.7)	8688.6 (30.5)	28500.0
2008-09	13626.5 (33.9)	5699.3 (14.2)	1770.3 (4.4)	860.8 (2.2)	805.6 (2.0)	7906.3 (19.7)	9475.3 (23.6)	40144.1
2009-2010	6836.9 (23.4)	3006.5 (10.3)	1504.1 (5.2)	1014.6 (3.5)	880.7 (3.1)	7682.8 (26.4)	8240.9 (28.3)	29166.5

Source: Monthly statistics of the foreign trade of India, various Issues and figures in brackets indicate percentages to total imports.

4.9.1. Fertilizers

The trend Co-efficients of the imports of the fertilizers were found to be statistically significant at the 5 per cent level for the post-reform period. The R^2 values were also found to be satisfactory. The trend co-efficients had also revealed that fertilizers had increased from the level of -2381.140 millions of US dollars per annum on an average during the post-reform period. Its growth rate had also increased to the level of 5.72186 per cent per annum on an average during the period.

Table-4.9.1 Trend and Growth rate of fertilizers

year	model	A	B	SE	t	sig	R^2	R^{T2}	CGR
	Linear	1074.6618	-2381.140	1871.453	-1.272	0.2390	.61344	.56512	-
	Semi log	0.342408	5.72186	0.282949	.0000	0.87574	0.86021	0.86021	40.833

Further, the compound growth rate of the fertilizers had increased from the level of 40.833 per cent per year on an average during the period.

4.9.2. Non –Ferrous Metals

The trend Co-efficients of the imports of the fertilizers were found to be statistically significant at the 5 per cent level for the post-reform period. The R^2 values were also found to be satisfactory. The trend co-efficients had also revealed that fertilizers had increased from the level of -500.440 millions of US dollars per annum on an average during the post-reform period. Its growth rate had also increased to the level of 5.934005 per cent per annum on an average during the period.

Table -4.9.2 Trend and Growth Rates of Non –Ferrous Metals

year	model	a	B	SE	t	sig	R^2	R^{T2}	CGR
	Linear	468.5709	-500.440	616.6953	-.811	.4406	.73533	.70225	-
	Semi log	.257304	5.934005	.173851	34.133	.0000	.91336	.90253	29.343

Further, the compound growth rate of the fertilizers had increased from the level of 29.343 per cent per year on an average during the period.

4.9.3. Paper

The trend Co-efficients of the imports of the fertilizers were found to be statistically significant at the 5 per cent level for the post-reform period. The R^2 values were also found to be satisfactory. The trend co-efficients had also revealed that fertilizers had increased from the level of 108.9066 millions of US dollars per annum on an average during the post-reform period. Its growth rate had also increased from the level of 5.79615 per cent per annum on an average during the period.

Table -4.9.3 Trend and growth rates of Paper

year	model	a	B	SE	t	sig	R^2	R^{T2}	CGR
	Linear	154.433	108.9066	105.421	1.033	.3318	.91172	.90068	-
	Semi log	.171667	5.79615	.091655	63.239	.0000	.94408	.93709	18.728

Further, the compound growth rate of the fertilizers had increased from the level of 18.728 per cent per year on an average during the period.

4.9.4. Crude Rubber

The trend Co-efficients of the imports of the fertilizers were found to be statistically significant at the 5 per cent level for the post-reform period. The R^2 values were also found to be satisfactory. The trend co-efficients had also revealed that fertilizers had increased from the level of -64.220 millions of US dollars per annum on an average during the post-reform period. Its growth rate had also increased to the level of 4.71924 per cent per annum on an average during the period.

Table -4.9.4 Trend and Growth Rates of Crude Rubber

year	model	A	B	SE	t	sig	R^2	R^{T2}	CGR
	Linear	100.8527	-64.220	51.47169	-1.248	.2474	.94865	.94224	-
	Semi log	.23036	4.71924	.079706	59.208	.0000	.97573	.97269	25.905

Further, the compound growth rate of the fertilizers had increased from the level of 25.905 per cent per year on an average during the period.

4.9.5. Pulp

The trend Co-efficients of the imports of the fertilizers were found to be statistically significant at the 5 per cent level for the post-reform period. The R^2 values were also found to be satisfactory. The trend co-efficients had also revealed that fertilizers had increased from the level of 152.3466 millions of US dollars per annum on an average during the post-reform period. Its growth rate had also increased to the level of 5.468516 per cent per annum on an average during the period.

Table -4.9.5 Trend and Growth Rates of Pulp

year	model	A	B	SE	t	sig	R^2	R^{T2}	CGR
	Linear	72.2078	152.3466	22.110346	6.890	.001	.98089	.97850	-
	Semi log	.138691	5.468516	.036817	148.531	.0000	.98557	.98376	14.876

Further, the compound growth rate of the fertilizers had increased from the level of 14.876 per cent per year on an average during the period.

4.9.6 Metalliferrous Ores

The trend Co-efficients of the imports of the fertilizers were found to be statistically significant at the 5 per cent level for the post-reform period. The R^2 values were also found to be satisfactory. The trend co-efficients had also revealed that fertilizers had increased from the level of -1303.420 millions of US dollars per annum on an average during the post-reform period. Its growth rate had also increased to the level of 6.301404 per cent per annum on an average during the period.

Table -4.9.6 Trend and Growth Rates of Metalliferrous Ores

year	model	A	B	SE	t	sig	R^2	R^{T2}	CGR
	Linear	1008.7763	-1303.420	-1.372	.2072	.84444	.82499	.85183	-
	Semi log	.305360	6.301404	.217628	28.955	.0000	.90453	.89260	35.711

Further, the compound growth rate of the fertilizers had increased from the level of 35.711 per cent per year on an average during the period.

4.9.7 Iron and Steel

The trend Co-efficients of the imports of the fertilizers were found to be statistically significant at the 5 per cent level for the post-reform period. The R^2 values were also found to be satisfactory. The trend co-efficients had also revealed that fertilizers had increased from the level of -1688.126 millions of US dollars per annum on an average during the post-reform period. Its growth rate had also increased to the level of 6.179547 per cent per annum on an average during the period.

Table -4.9.7 Trend and growth rates of Iron and Steel

year	model	A	B	SE	t	sig	R^2	R^{T2}	CGR
	Linear	1109.3448	-1688.126	788.405	-2.141	.0647	.90502	.89314	-
	Semi log	.328771	6.179547	.186950	33.054	.0000	.93704	.92917	38.925

Further, the compound growth rate of the fertilizers had increased from the level of 38.925 per cent per year on an average during the period.

5. Conclusion

India had come a long way from the days of crisis of the early 1990s. Its pragmatic and gradual approach to trade reform seemed to have rewarded us reasonably well. India had emerged almost unscathed from the crises unlike east Asian countries. These are strong reasons to believe that India would certainly achieve a higher growth in the decades to come.

References

1 Anubhuti Shukla "Impact of Import Liberalization on Export Performance" of India Economy, Economic Affairs, Vol.46, no.4, 2001, pp.199-209.
2 Bharathi Kamath.G Trade Liberalization, its Impact on the Import Dependence of the Consumer goods Vs. capital goods industry" the Journal of Industrial Economics, Vol.IV, No.1, 2007, p. 43-60.
3 Bhaskar Rao.V.K Indian foreign trade – An overview, Southern Economics, September, 15,1998 pp.7-10.
4 Bhattacharya , Manas, "Export Promotion versus Import Substitution", foreign Trade review, Vol.18, No.4, January- March, 1984, pp.474-77.
5 Bishpuria Gupta, Trade Liberalization in 1980's and Change in the Protection of Indian industries – in liberalization impace of India Economy, 1993, p.20.
6 Chalpatei Rao.K.S Murthy.M.R Foreign Direct investment in Post liberalization period: An over view, Journal of Indian School of Political Economy, Vol.II.No.3, July - September 1999, pp.423-434
7 EXIM Bank, "How Import Intensive are Indian Exports? Occasional Paper no.16, December 1991.
8 Kannan R. Trade Instability – Indian Experience, RBI Occasional Papers, Vol.4, No.2, December 1983, pp.152-181
9 Khan.M.S impact and Export of Demand in Developing countries Imt Stage Paper, Vol.XXI, Nov., 1994, p.55
10 Kocher.J.S Foreign Investment in India and Activity, Yojana, Vol.36, No.11, June 30, 1992, pp.22-24.
11 Murthy.V.N and Sastri.V.K "Flasticies of Demand for Certain Indian Import and Exports Sankya", May 1951.
12 Nayyar, Import and Export Policy Regime of Substantial Freedom, Yojna, May 31, 1992, Pp.21-22.
13 Neog A.K. Some Aspects of India's External Sector in Structural Reforms in Indian Economy, Ed Bovali. D Singh, D. Impact of Import Liberalization on export Reserve Bank of India, Occasion papers, Vol.5, No.1, 1994. P.1
14 Rao.M.S Trade and Development of India Foreign Trade Chug publication, Allahabad, 1991.
   a. Rao.M.S Trends and Determinants of India foreign Trade…..Publication, Allahabad, 1991.
15 Reddy.Y.V External Dept and Economic Reforms, RBI Bulletin, December, 1997, P.104.
16 Reddy.Y.V India the Global Partner, Reserve Bank of India Bulletin, May 2008, P.790.

17 Sharma, Atul, "Import Intensities of Indian Industries in the context of new Economic policy – An Analysis in Input – output frame work", Man and development, September, 1990, p.19 [1]

18 Sidharthan.N.S "Impact of Import Liberalization on Export Intensities: A study of the Indian private corporate sector". The Indian Economic journal, Vol.37, No.2, 1989, pp.103-11

19 Sukhi Annbhass, Economic affairs – Impacts of import liberalization export performance in Indian Economy, 2001, P.199.

20 Sunanda Sen, "Dimensions of Indian External Economic crisis", Economic and Political weekly,Vol.XXIX,.no.14, April 12, 1994, PP.805-812.

21 Wadhva, Charar.D "Elasticities of Demand for India's Exports and Imports and the Question of the Devaluation of the Indian Rupee", Foreign Trade Review, Jan-march 1974, pp. 364-378.