European Journal of Business and Management
ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online)
Vol 4, No.16, 2012

Effect of Economic Indicators on Export Performance of India: Pre and post Liberalisation period

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The research is financed by UGC NET JRF, Reference no. [F.15-9(JUNE 2010)/2010 (NET) UGC-Ref. No.:710/ (NET-JUNE 2010)].

The paper examines the export growth affected by various economic indicators (GDP, IMPORTS, PERCAPITA NET NATIONAL INCOME, BALANCE OF PAYMENT, EXCHANGE RATE & INDUSTRIAL PRODUCTION), using data from 1986 to 2011. The paper studies the relationship between exports and indicators by using Karl Pearson's coefficient of correlation and multiple correlation. t – Test helps to study the significance of relation. Diversification of India's exports is depicted through the export import ratio. The paper concludes that the exports are mainly affected by three indicators (GDP, IMPORTS & PCCNI), and the change in policies should be made in accordance with them.

Key Words: Export, GDP, Import, Pre and Post Liberalization Period.

Introduction

Indian economists and policymakers have shown a considerable participation to accelerate the growth of exports since independence. Exports since independence have increased from ₹ 606 cr. in 1950-51 to ₹ 1142649 cr. in 2010-11 with a subsequent increase in imports from ₹608 cr. to ₹ 1683467 cr. in 2010-11. India's trade regime has seen a sea change since liberalisation and exports have shown a consistent rise thereafter. Subsequently world trade has also seen a rising trend since 1970 with 0.6% share of India in 1970 and 1.5% of share in 2010.India's exports although having an increasing trend have always faced a deficit trade balance. The liberalisation policy in 1991 helped India to recover from a deficit BOP position and outstanding external credit assistance.

In the present scenario both India as well as world trade has shown a downfall due to rising inflationary pressures, global recession and the escalating euro crisis. However, with an expected decelerating world trade volume growth of 3.8%, IMF is trying to moderate the growth projections with limited policy options, and is expecting a growth of 1.2 % in 2012 of advanced economies and a rate of 5.4% of growth in 2012 of emerging and developing economies. India has seen a 5 to 7 fold increase in exports since last decade recording 44.6 billion US $ export in 2000-01 to 251.1 billion US $ in 2010-11. The CAGR noted was 8.2% in 1990's which increased to 19.5% in 2008-09, however merchandise exports showed a negative growth of -3.5%.

India's exports which had surpassed not only pre-crisis levels but also pre-crisis trends have started feeling the heat of this second global downturn which has come in quick succession to the first, though the country was in a better position than many others to handle it. During the first half of 2011-12, India's exports witnessed a high growth of 40.6 per cent. However, since October 2011 there has been a deceleration in export growth as a result of the crisis originating in the periphery of the euro zone area and spreading to the core economies resulting in an evident mild growth. Exports registered a high growth of 61.1% in July 2011. After that growth decelerated to 41.5 %, 25.2 %, and 18.1 % in August, September, and October 2011 respectively. Cumulative exports were at US $242.8 billion, registering a growth of 23.5 % during 2011-12 (April- January). During April- December 2011, the export sectors that have done well are petroleum and oil products registering a growth of 55 %; gems and jewellery 38.5 %; engineering 21.6 %; cotton fabrics made ups, etc. 13 %; electronics 21.1 %; readymade garments 23.7 %; and drugs 21.5 %. [a]

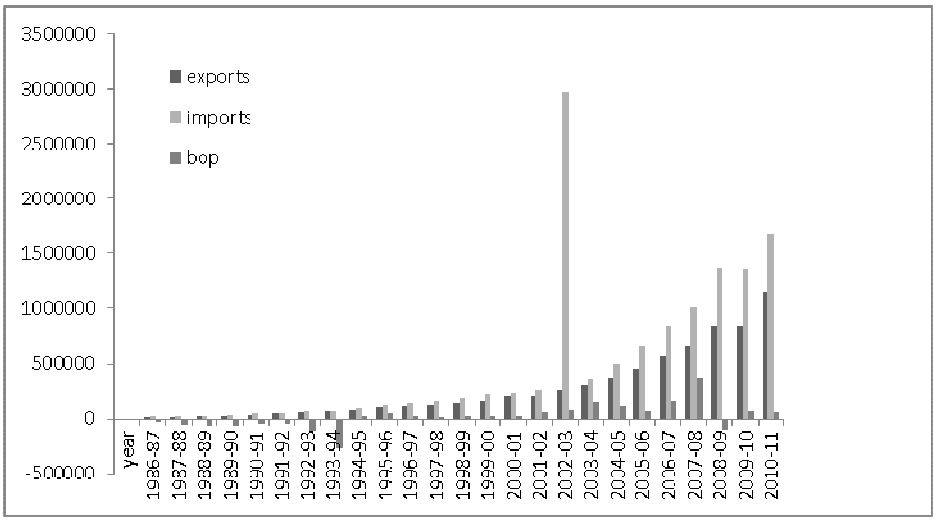


Figure 1: India's exports, imports, BOP (1986-87).

Source: Economic Survey, Government of India, (1985-20110), http://indiabudget.nic.in/survey.asp

Objective

The objectives of this paper are:

- Analysis of trade regime in pre and post liberalisation period.
- Study the effect of economic indicators on export performance.
- Analysis of India's position in world trade.

Review of literature

- Kumar Rajan Nalini and Rai Mathura (2007), "Performance, Competitiveness and determinants of Tomato exports from India." They have analysed through this paper the performance and competitiveness of export of tomato and its subsidiary products from India. Their study is a comparative analysis and the research methodology is based on Export Performance Ratio (EPR) and Revealed Comparative Advantage (RCA). The paper also analysed the impact of trade liberalisation on export of tomato and its products by estimating the quantity of exports and imports in 3 phases: Pre-WTO Period (1985-94), Post-WTO Period (1995-2004) and overall period (1985-2004). The study has estimated an annual growth rate and coefficient of variation for pre and post liberalisation period, for studying the impact of liberalisation. The paper also analyses the major determinants of tomato export, through various statistical tools like regression analysis which determines 4 major international trade in tomato, domestic production, ratio of Indian and non- Indian international export price and exchange rate determining the total variations. The paper provides suggestion regarding increase in exports by improving the production and marketing techniques, with adequate government support and minimise quantitative restrictions. The findings of the analysis have therefore revealed that existence of high instability in exports would have an adverse effect on Indian consumption which should be controlled by policymakers to retain its position in the international market.
- Pillania K Rajesh (2008), "An exploratory study of Indian Foreign Trade." He has provided a trade scenario of exports since 1950-51 to 2006-07. The paper shows the progress in foreign trade through various statistical and graphical tools since 1950. The analysis concludes that India's trade has been dominated by manufactured goods and services for past many decades. It provides a descriptive view of the commodity composition of trade as well as the direction of trade. The author on the basis of his analysis concludes that with a large size of economy, high growth rate, small share in world trade and with the help of various economic theories, it is seen that there is huge untapped potential for Indian foreign trade in years to cone
- Veeramani C (2007), "Sources of India's export growth in pre and post reform period. This article has provided a brief view of the pace of India's export growth in pre liberalisation period {1950-1990} and post liberalisation period (1991-2005). The pace of growth was increased due to world demand after 1991. He has analysed this paper to determine the various sources of India's growth of exports before and after 1991, mainly focusing on

years after 1993, because in that year government adopted full convertibility of current account. The study of this article is divided into 3 parts; the first part provides a historic review of export performance before 1991. Second part provides detailed analysis of the exports trend and pattern since1993. Last part decomposes the export growth on the bias of world trade effect, market composition and commodity composition. The article also concluded that the acceleration in growth was mainly due to real effective exchange rate after 1991.

- Goldar Biswanath, (1989), Determinants of India's export performance in engineering products. He has analysed in his paper the determinants of India's export performance with special reference to engineering goods of machinery and transport equipments. The methodologies adopted in this paper are econometric models and time series analysis. The paper determines the determinants of exports as cumulative output, total factor productivity, exchange rate, market conditions, demand etc. the paper provides suggestions regarding the growth of exports engineering goods by formulating proper price competitive strategy. The hypothesis of the paper is "higher productivity leads to better export performance", but it got rejected due to lack of strong empirical support and lack of data. However, this paper concludes that since engineering products do not form a major part of India's exports, the economic growth cannot be increased or influenced by its export performance

From the review of literatures, it is found that previous studies are focused on relation between exports and economic growth. These studies are mainly based on tools like regression, correlation, time series, econometric models, etc. consequently this study is also based on the same forefront but certain important indicators are added and correlation coefficient is used to establish the relation. These literatures have helped to form a base for the following work. The statistics used in them are useful in the study as well as the second and third review is helpful in demarcating the pre and post liberalisation period. The first and fourth review has helped in determining the factors affecting the export performance.

Research methodology

The study is analytical in nature and cover the period from initiation of economic deregulation and liberalisation, as it would represent the real scenario of India's exports. The paper has been divided into 7 parts: Introduction, Research methodology, India's trade regime in pre & post liberalisation period, economic indicators, analysis and interpretation, India's position in world exports, and conclusion. The period covered is from 1986-2011.The data is secondary in nature and is collected from economic survey, WTO publications and trade statistics, publication of CSO and WTO, etc. The assessment of effect of economic indicators on export performance is analysed through coefficient of correlation. Karl Pearson's correlation coefficient is calculated through the following formulae:

$$r = \sum xy/\sqrt{\sum x^2 * \sum y^2}$$

Student's t-test has been used to test significance level of coefficient correlation, so that the relation can be defined. Formula used for t-test is as below:

$$t = r/1\text{-}r^2 * \sqrt{n-2}$$

Multiple correlation has been used to study the relation between the dependent variable and those independent variables which has the highest correlation. 3 independent variable multiple correlation has been used and the formula is as shown below:

$$R_{1.234} = \sqrt{1- [1-(r_{14})^2] [1- (r_{13.4})^2] [1-(r_{13})^2]}$$

In this paper, export has been taken as the dependent variable and import, exchange rate, BOP, industrial production, net national income, and GDP is taken as independent variables. By using the above statistics, any difference in these variables effects the export has been analysed.

INDIA'S TRADE REGIME IN PRE & POST LIBERALISATION PERIOD

India's trade has increased in absolute terms since independence. Its exports were US$ 1269 million in 1950-51, US $ 2031 million in 1970-71, US$ 17865 million in 1991-92 and US$ 251136 million in 2010-11. Since independence exports of India had an export growth rate of 3.6% in 1950-60 which increased to 19.5% in 1999-00. Just after independence India lagged behind in trade and very slow growth rate of exports. But after 1970, with various policy formulations and establishment of IIFT, its performance improved. However the export growth highlighted itself after 1991, when GOI liberalised imports and allowed free participation of foreign investors in both public and private sector. The EXIM policy of 3 years changed to FTP of 5 years for better assistance to exports. Various export promotion schemes were outlined which included EPCG, DEPB, DFRC, MAI, AEZ, SEZ, EOU, etc. During the post liberalisation period exports increased from

18143 US$ (1990-91) to 251136 US$ (2010-11). BOP noted an increase in exports (f.o.b.) from 18477 US$ (1990-91) to 250468 US$ (2010-11). On the contrary the imports also increased from 27915 US$ TO 381061 US$ (2010-11), creating a trade deficit of in -9438 US$ 1990-91 to in -130593 US $ 2010-11. India has taken appropriate steps to double the exports by 2013, and make India a major player in world trade by 2020. The major initiative taken by India after 1991, to increase trade was by promoting the "BRAND INDIA" in the global market. The recent FTP measures taken 2011-12 are:

- 1% to 17% of FOB values are included in duty drawback scheme.
- Special Focus Market Scheme provides 1% duty credit for exports made to 41 countries (12 from Latin America, 22 from Africa, 7 from CIS region) with total duty credit scrip @ 4% of FOB value of exports.
- 130 items from chemicals, pharmaceuticals, textiles, handicrafts, engineering and electronics has been included in Focus Product Scheme for duty credit scrip @ 2% of FOB value of exports from 1.4.2011.

The present scenario of exports is:

- The improvement in export growth of 35.1 % in rupee terms in 2010-11 was mainly due to a large improvement in growth in volume (43.2 %) despite decline in the growth of unit value index. High growth of exports in volume terms was mainly due to the growth in machinery and transport equipment (85.1 %), manufactured goods classified chiefly by material (41.2 %), food and food articles (29.9 %), and mineral fuels, lubricants, and related materials (26 %). In 2010-11, the growth of unit value index of exports declined to - 5.1 %, mainly due to decline in machinery and transport equipment (-18.2 %) and beverages and tobacco (-11.1 %). A dissection of the export volume country-wise shows that the high growth in this index in 2010-11 is due to the high export volume growth to China, South Africa, and UAE.
- The increase in growth of imports in rupee terms in 2010-11 was due to growth in both volume and unit value indices. The volume index witnessed a growth of 10.1 per cent in 2010-11, due to the high growth of manufactured goods classified chiefly by materials (56 %), beverages and tobacco (31.1 %), and chemicals and related products (8.9 %). The unit value index of imports registered a growth of 11.2 per cent mainly due to growth in unit values of crude materials, inedible, except fuels (23 %), mineral fuels, lubricants and related materials (17.1 %), and machinery-transport equipment (10.1 %).
- Export growth was high in 2010-11 and the first half of 2011-12 in case of agriculture and allied products due to export growth in cereals, meat preparations, oil meals, and coffee. Export growth of petroleum, crude, and products was also very high due to the high prices of crude oil and also due to increase in refining capacity. Ores and minerals is the only item with negative growth in the first half of 2011-12 due to a ban on export of iron ore by the state governments of Karnataka and Odisha.[b]

TABLE 1: Export, Import, Trade balance, CAGR, Openness ratio of India

Year	Export (Ex) (₹ Cr.)	Import (Im) (₹ Cr.)	Trade Balance (Ex-Im)	Compound annual growth rate (%)	Openness Ratio (Ex+Im)/GDP
1986-1991	21731.8	89820.2	-5423	15.44	0.31
1991-1996	71301.4	79395.2	-2632.8	12.3	0.19
1996-2001	150360.2	36701.48	-8027.4	7.32	0.12
2001-2006	317856	412597.6	-20928.6	20.26	0.28
2006-2011	811316.2	1254891.4	-98899.6	20.44	0.42

Source: Economic Survey, Government of India, 2011, http://indiabudget.nic.in/survey.asp

The openness ratio in the 1986 was 0.31 which has gradually climbed to 0.42 in the period 2006-2011. In the post liberalization period, the openness ratio is gradually on a rise. This implies government is following a systematic and watchful policy of trade liberalization.

Economic indicators

India for past 5 decades has analysed its economic growth using various indicators. These indicators represent various sectors and provide a clear picture of the economic position. The economic indicators considered in this paper are : "imports, exchange rate, balance of payment (BOP), industrial production, per capita net national income (PCNNI), and gross domestic product (GDP), discussed in detail as below:

Imports

Before liberalisation imports in India was considered to be a hindrance in development of the economy. From 1950 various steps were taken to curtail it and certain policies were made for its substitution, but after 1991, the scenario changed and with liberalised tariff policies many companies and private players actively imported goods which were cost effective for them. Imports in India increased from ₹ 12549 cr. in 1980-81 to ₹ 43198 cr. in 1990-91, which further raised to ₹ 36979 cr. in 2010-11. Since 1985 the major importing trade partners were the EU countries: Belgium, France, Germany, etc., North American countries: U.S.A, Canada, Asian countries: Singapore, Malaysia, Thailand, Indonesia and OPEC countries: Iran, Iraq. The major goods imported are cereals, raw materials, intermediate manufacturing goods, heavy metal capital goods, etc. India has always focused on importing those goods which would help in further production of finished goods and those heavy metals which leads to better infrastructural development.

Exchange Rate

The important conduit through which the world affects our well being is the exchange rate of rupee. The exchange rate has been a vital pipeline to link India and rest of the world. Rupee currency of India has seen the most unstable exchange rate environment for past decade. After 1991, Indian rupee stabilised as well as gained better exchange value in terms of US$. The formulation of LIBOR and LERMS, helped to achieve a better position in the world currency market. Indian rupee value increased from ₹ 12.778 in 1986-87 to ₹ 24.474 in 1991-92, to ₹ 45.577 in 2010-11. When the rupee sharply depreciated in second half of 2011 (₹ 43.94=US$ 1) measures had been taken to steady the capital controls in the hope of allowing more dollars to flow into the country appreciating the value of money.

Balance of Payment

The BOP position in 1986-87 was ₹ 3788.64 cr., ₹ 4075 cr. in 1991-92 and ₹ 59500 cr. in 2010-11. The highlights of BOP developments during 2010-11 were higher exports, imports, invisibles, and trade Cad, and capital flows as compared to fiscal year 2009-10. India has always been facing a negative trade balance for past three decades, which has been tried to be counter balanced through monetary movement of IMF transactions and loans and advances. The trade deficit has been largely contributed to increased imports. A trade deficit of more than 3% is a sign of growing imbalance in the country's BOP. Thus in order to stabilise the deficit unproductive imports should be discouraged.

Industrial Production

Industrial growth in India has shown a static alignment with the growth rate of GDP. The industrial production comprises of mining, manufacturing, electricity, construction sectors. The long term average annual growth of industries from 1991-92 to 2010-11 was averaged to be 6.7% against 6.9% of GDP, of which manufacturing was the major role player with stagnant contribution of 14-16% during this period. The growth rate in 2007-08 of 15.5% started decelerating on account of global economic meltdown. However a recovering growth of 5.3% and 8.2% was seen in 2009-10 and 2010-11. The index of industrial production was ₹ 155.1 cr. in 1986-87 which increased to ₹ 165.5 cr. in 2010-11. It has been analysed that for past 5 years the decrease in GDP growth of India has been majorly influenced by the industrial sector.

Per Capita Net National Income

The per capita NNI has shown a considerable increase since 1985. The NNI in 1986-87 was ₹ 33673 cr. which increased to ₹ 10291 cr. in 1995-96 and again to ₹ 53331cr. in 2010-11. Since the NNI is calculated on the Net National Product at factor cost, it has shown an increasing trend in absolute terms, but in real terms the increase has not shown any beneficiary impact on the living standard. The livelihood has increased and seen a drastic change since 1950 specially post 1991. PCNNI in real terms of money the standard is constant and rather detoriating for low income class, influenced mainly by inflationary pressures and rising cost of living in the economy.

Gross Domestic Product

The GDP of India is the most important macro indicator of economic growth. The GDP of India is divided into two parts: GDP @ factor cost and GDP @ current market price. The GDP was ₹ 259055 cr. in 1985-86 which increased to ₹ 701863 cr. in 1991-92 and further to ₹ 4885954 cr. in 2010-11. Though an increasing trend has been seen in GDP, yet there has

been a downfall in growth rate from 2009. A growing divergence has always been highlighted between GDP @ factor cost and GDP @ market price, arising from the global economic crisis and policy responses. According to CSO statistics of 31 January 2012, the GDP @ market price is estimated to grow by 8.2%b and 9.6% in 2009-10 and 2010-11 respectively. With a decreasing trend from 2003 till 2011 India still remains amongst the front runners, due to increase in agricultural and service sectors income. Owing to the turmoil in Euro Zone, India is still looking for a promising outlook of growth and price stability where weakness will be bottomed out and a gradual upswing will be imminent.

ANALYSIS AND INTERPRETATION

Table 2: Mean, Karl Pearson's Correlation Coefficient & t-value of selected indicators & export

Indicators (independent variables)							Dependent Variable
Year	Import	Exchange rate	Balance of payment	Industrial production	Percapita net national income	Gross domestic product	Export
1986-1991	89820.2	14.96	-5241.84	180.28	4380	358809.2	21713.8
1991-1996	79395.2	30.27	12980.84	88.36	8127.2	789842.4	71301.4
1996-2001	36701.48	40.75	4581.24	145.88	14699.6	1579331.6	150360.2
2001-2006	412597.6	46.25	18577.04	191.78	22526.8	2611256.4	317856
2006-2011	1254891.4	44.30	30165.52	170.48	41450.8	4908671.8	811316.2
Mean ($\dot{X}$)	**74936.23**	**7.06**	**2442.5**	**31.07**	**3647.38**	**409916.46**	**54901.9**
Coefficient of Correlation (r)	**0.98**	**0.73**	**0.92**	**0.65**	**0.98**	**0.98**	
"t" value	**23.52**	**5.15**	**11.32**	**4.10**	**23.52**	**23.52**	

Note: all values are taken in ₹ (cr.)

Source: Economic Survey, Government of India, 1986-2011, http://indiabudget.nic.in/survey.asp

- In the table 2 an attempt has been made to measure the effect of economic indicators on export performance by computing Karl Pearson's coefficient of correlation between exports and the selected indicators. Correlation coefficient (r) between export and the first indicator (import) is 0.98, which indicates a positive high degree of

correlation which is statistically (t value – 23.52) significant at 1% (23.52>3.36) and 5 % (23.52 > 2.31) level of significance explaining that significant association exists between exports and imports during the period of study.

- As observed the correlation coefficient (r) between export and second indicator (exchange rate) is 0.73 which says that a high degree of correlation exists between them. t value being 5.15 is significant at both 1% (5.15>3.36) and 5% (5.15%>2.31) level of significance, which says that a significant association exists between them.
- The coefficient of correlation (r) between exports and third indicator (BOP) is 0.92 explaining a high degree of correlation which is statistically (t value- 11.32) at 1% (11.32>3.36) and 5% (11.32>2.31) level of significance, showing a significant association between exports and BOP during the period of study.
- Correlation coefficient (r) between exports and fourth indicator (industrial production) us 0.65 that shows a moderate degree of correlation between them. Being significant (t value- 4.10) at 1% level of significance (4.10>3.36) and 5% level of significance (4.10> 2.31) explains a significant relation between them.
- The coefficient of correlation (r) between export and fifth indicator (per capita net national income) is computed as 0.98, showing a high degree of correlation between them. the t value is computed as 23.52 being significant at both 1% (23.52>3.36) and 5% (23.52>2.31) level of significance explaining a significant level of relation between exports net national income for period 1986-2011.
- As shown in the table 2 the coefficient of correlation (r) between exports and sixth indicator (GDP), is computed as 0.98, which explains a high degree of correlation between them. The calculated value of t (23.52) is significant at both 1% (23.52>3.36) and 5% (23.52>2.31) level of significance, explaining a significant relationship between exports and GDP for the period of study (1986-2011).
- Table 2 shows that correlation between three indicators (GDP, imports & PCNNI) and exports is highest, which is further analysed with the help of multiple correlation, which represents a perfect relation between them ($R_{1.234}$ = 0.99).

INDIA'S POSITION IN WORLD EXPORTS

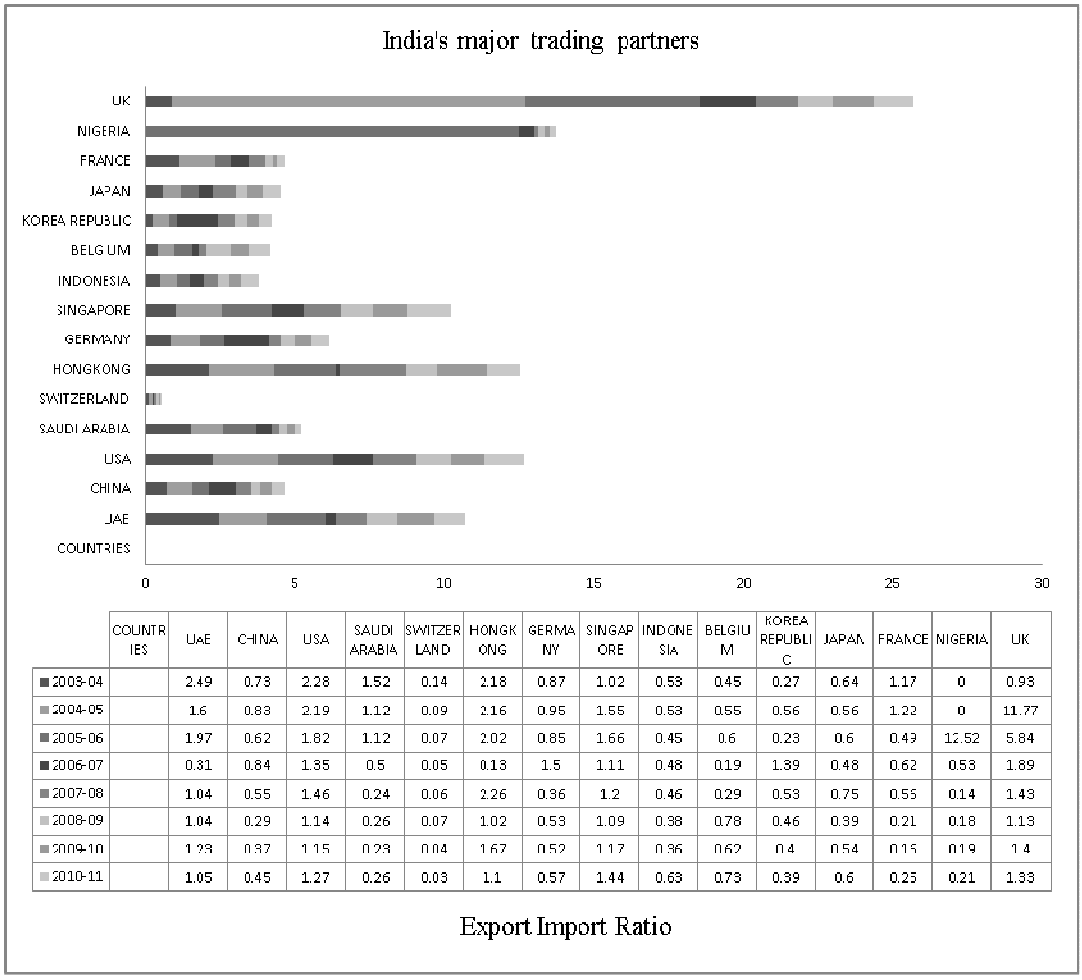
It had a share of 1.78% in 1950 which decreased to 0.53% in 1991. The share further increased to 0.67% in 2000 which jumped to 1.8% in 2012, raising its position from 27 th rank in 2007 to 20 th rank in 2012. Although the world economy has been reeling down from 2008 due to global recessionary pressures and European market crisis, India has tried to break the low growth trap and hold a prominent position in the global economy. The globalisation of Indian trade has provided new and wider opportunities. After 1991, India's share of merchandise exports increased from 0.5% in 1991 to 0.71% in 2000 to 1.5% in 2010. India has become one of the eminent members of G 20. Its exports are mainly directed to European countries in both pre and post liberalisation worth ₹ 230727 cr. in 2010-11. It has also been a constant exporter to its neighbouring countries providing ₹ 641241 in 2010-11 to ASIA & ASEAN region; and those to American countries were ₹ 169232 cr. in 2010-11. Exports to African region were ₹ 74114 cr. in 2010-11, and to CIS & BALTICS region were ₹ 13037 cr. in 2010-11. India's major commodity groups in world exports are food products, iron ore, chemicals, manufactured and unmanufactured leather and fabrics, iron ore and steel, etc. as shown in the table-3. The major manufactured exports which have shown a steady rise in exports are engineering goods, gems and jewellery, chemicals and textiles with a growth rate of 28%, 15.9%, 19.35 and 8.6% from 1999-00 respectively. India in the present scenario has been focusing on diversification of exports for decreasing its trade deficit. Various policies have been formulated to increase exports state – wise, as well as certain financial assistance programmes have been provided to agricultural sector, so that their share can be increased in total exports. Though India has shown a considerable rising trend in exports and has moved 7 ranks up in the list of world exports, yet its real growth is showing a very slow pace. It has been noted as the poorest country in the list of G 20 countries. Thus, it should be focusing on exports in real terms which would help it to emerge as a major exporter and stand among top 10 in the list of G 20.

Present scenario of India's direction of trade is discussed as below:

- India is a success story in terms of diversification of export and import markets. The share of Asia and ASEAN in total trade increased from 33.3 % in 2000-1 to 57.3 % in the first half of 2011-12, while that of Europe and America fell from 42.5 per cent to 30.8 % respectively. This has helped India weather the global crisis emanating from Europe and America.
- The major changes are the entry of Indonesia, Korea, Iran, and Nigeria in the new list in place of Italy, Malaysia, France, and Australia. Recent development in the direction of India's trade is: USA which was in first position in 2007-8 has been relegated to third position in the following years, with UAE becoming India's largest trading partner, followed by China. This position continued from 2008-9 to 2010-11.

Region-wise, India's diversification in exports is evident from the fact that the share of Asia and ASEAN increased from 38.7 % in 2000-1 to 56.2 % in 2010-11, while the share of Europe and USA fell from 46.9 per cent to 30.8 % during the

same period. The UAE has replaced USA as the topmost destination of India's exports in 2008-9 and continues to be in the top position in 2009-10, 2010-11, and first half of 2011-12 with export shares of 13.4 %, 13.7 %, and 11.9 per cent respectively. India's exports to all the top three destinations, i.e. UAE followed by USA and China, registered growth of 43.3, 30.8, and 69.1 % in 2010-11 and 21.9 %, 40.7 % and 34.2 % in the first half of 2011-12 respectively. [c]



	COUNTRIES	UAE	CHINA	USA	SAUDI ARABIA	SWITZERLAND	HONGKONG	GERMANY	SINGAPORE	INDONESIA	BELGIUM	KOREA REPUBLIC	JAPAN	FRANCE	NIGERIA	UK
2003-04		2.49	0.73	2.28	1.52	0.14	2.18	0.87	1.02	0.53	0.45	0.27	0.64	1.17	0	0.93
2004-05		1.6	0.83	2.19	1.12	0.09	2.16	0.95	1.55	0.53	0.55	0.56	0.56	1.22	0	11.77
2005-06		1.97	0.62	1.82	1.12	0.07	2.02	0.85	1.66	0.45	0.6	0.23	0.6	0.49	12.52	5.84
2006-07		0.31	0.84	1.35	0.5	0.05	0.18	1.5	1.11	0.48	0.19	1.39	0.48	0.62	0.53	1.89
2007-08		1.04	0.55	1.46	0.24	0.06	2.26	0.36	1.2	0.46	0.29	0.53	0.75	0.55	0.14	1.43
2008-09		1.04	0.29	1.14	0.26	0.07	1.02	0.53	1.09	0.38	0.78	0.46	0.39	0.21	0.18	1.13
2009-10		1.23	0.37	1.15	0.23	0.04	1.67	0.52	1.17	0.36	0.62	0.4	0.54	0.15	0.19	1.4
2010-11		1.05	0.45	1.27	0.26	0.03	1.1	0.57	1.44	0.63	0.73	0.39	0.6	0.25	0.21	1.33

Export Import Ratio

Figure 2: India's major trading partners & export import ratio from 2003-2011

Note: Export Import ratio = Exports from India to partners/ Import from partners

SOURCE: Economic Survey, Government of India, 2003-2011. http://indiabudget.nic.in/survey.asp

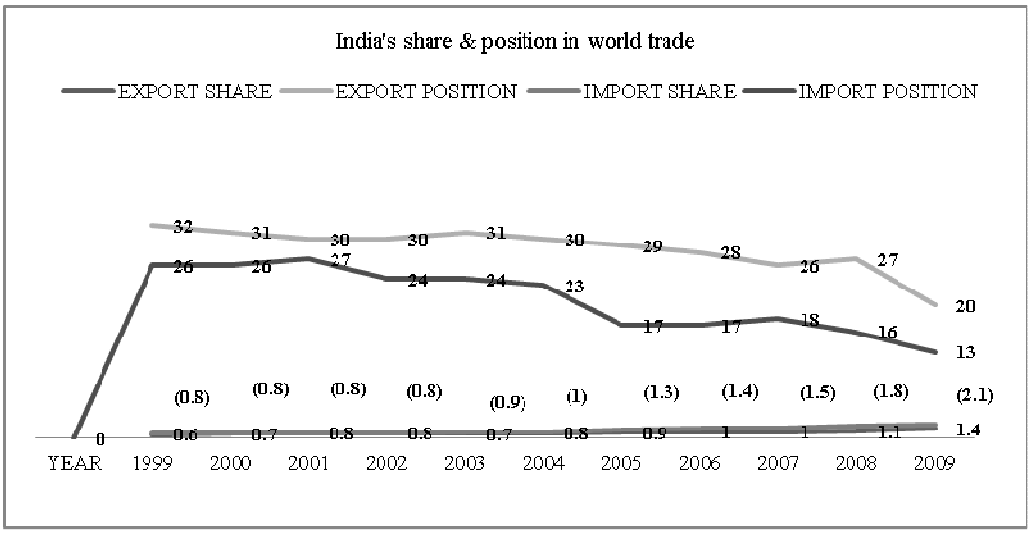


Figure 3: India's share & position in world trade (1999-2009)

Note: 1. Figures in parenthesis: India's share in world imports

Source: International trade statistics, WTO, (1999-2010), http://www.wto.org/english/res_e/statis_e/statis_e.html

Table 3: Change in Major Commodity Exports & Total Share in World Exports

Year / *Commodities*	1980	1990	2000	2010
Fish, crustaceans & molluscs	2	1.6	2.7	2.4
Rice	3.7	6.4	10.2	11.2
Vegetables and fruits	1.1	0.8	1.3	1.3
Coffee, tea, cocoa, spices & manufactures	4	4	3.4	2.8
Coffee & coffee substitutes	2.1	1.7	2.3	1.9
Tea and mate	27.7	22.1	14	9.9
Spices	14.5	7.7	10.3	15.5
Feeding stuff for animals	1.6	2.2	2.3	3.6

Tobacco & tobacco manufactures	4.4	0.8	0.7	2.4
Unmanufactured Tobacco & refuse	4.4	2.1	2.7	6.5
Metalliferous ores & metal scrap	1.5	2.1	1	3
Iron ore & concentrates	6.3	7.6	3.9	5.9
Leather, leather manufactures & dressed fur skins	6.8	6.3	3.3	3.3
Leather	10.0	4.8	2.3	3.4
Manufactures of leather or of composition leather	6.3	13.4	6.2	4.2
Textile yarn, fabrics, made-up articles	2.3	2.1	3.6	5
Woven cotton Fabrics	5.3	3.7	4.9	3.7
Woven fabrics of manmade fibres	0.5	0.7	1.6	5.5
Woven fabrics other than of cotton or man-made fibres	6.4	2.3	3.9	5.2
Pearls, precious & semi-precious stones	3.1	9.8	12	17.7
Articles of apparel	1.8	2.3	3.5	3
India's total share in world exports	**0.4**	**0.5**	**0.7**	**1.5**

Conclusion

India's trade regime has drastically changed in the post liberalisation period. It has shown a favourable trend as the policies has been liberalised and tariffs removed which has helped in uplifting the trade to overcome the deficit BOP position. The export performance for the period has shown an increasing trend in absolute terms but in real terms it has always been affected by the increased imports. From the study it can be concluded that GDP (0.13)*, PCNNI (0.15)**, and IMPORTS (0.73)*** are the three major indicators affecting India's export performance for the given period (1986-2011) depicted through the coefficient correlation of r = 0.98, respectively. India should be making changes to curtail the imports of

unnecessary products, which would help to undermine the negative trade balance. The export import ratio of 2010-11 (fig 3) shows that India is having a deficit trade with 10 countries, whereas it still has a surplus trade balance with 5 countries (USA, UK, Hong Kong, UAE, Singapore). It can be noted that India has trade surplus with the UAE from which it imports large quantities of oil, while it has a high trade deficit with similar oil exporters like Saudi Arabia, Iran, and Nigeria. However, in the first half of 2011-12 (April-September), India's trade surplus with the UAE has turned into deficit, though very low, due to the rising oil prices. Another important trend is the high trade deficit of India with China and Switzerland which increased from US$ 19.2 billion and US$14.1 billion in 2009-10 respectively, to US$ 23.9 billion and US$ 24.1 billion in 2010-11 and further to US$ 20 billion and US$ 14.8 billion in the first half of 2011-12.[d] The reasons for this are the rising imports of machinery from China and gold from Switzerland. The above analysis indicates the need for a more focused strategy with respect to bilateral balance of trade.

Being the main indicator of India's economic growth, focus should be given to increase the GDP, as it would directly and positively affect the export performance. In the present scene, as the domestic factors, namely the tightening of monetary policy, in particular raising the repo rate in order to control inflation and anchor inflationary expectations, resulted in slowing down of investment and growth, particularly in the industrial sector. Since monetary policy operates largely through demand compression in the short run, the expectation is that this policy will in fact affect long-run growth. As the correlation coefficient (r=0.98), suggests policies should be liberalised in terms of GDP growth and investment policies, so that the foreign trade can show a rising performance. PCNNI largely depends on GDP, which according to the analysis will have a major impact on export performance. Other indicators like exchange rate, agricultural and industrial production, imports, BOP, etc, affecting the export performance, registered a balanced growth. Thus, the study suggests that the policies should be formulated such that they would be centred on these 3 (GDP, IMPORTS, PCNNI) which might help to increase the export growth of India in the future scenario.

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*ratio of Total Exports#: Total GDP# = 1372547.6:10247911.4 = 0.13

** ratio of Total Exports#: Total PCNNI# = 1372547.6: 9118440 = 0.15

***ratio of Total Exports#: Total Imports# = 1372547.6: 1873405.88 = 0.73

Source: table 2

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