

## TRADE PERFORMANCE WITH SPECIAL REFERENCE TO CARGO TRAFFIC OF TUTICORIN AND CHENNAI PORTS

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### ABSTRACT

Foreign trade is one of the significant macro fundamental variables of an economy. India still recently was largely a primary goods exporting and mainly an industrial goods importing country. Foreign trade has become an effective instrument of economic growth and employment generation. The present study explains the performance of the Tuticorin and Chennai ports with the help of cargo traffic of the ports. The mean, standard deviation, coefficient of variation, annual and compound growth rate of cargo traffic have been computed with the data from 2005-2006 to 2014-2015. The mean of cargo traffic per year during the study period, at Tuticorin port is 12305 whereas in Chennai it is 364282 respectively. Lesser coefficient of variation in cargo traffic of import is identified in the case of Tuticorin port since its coefficient of variation is 10.04 per cent. The significant annual growth rate in cargo traffic of

import is identified in Chennai and Tuticorin ports since their respective annual growth rates are significant at five per cent level. The higher compound growth rate of 13.5406 per cent is noticed in Chennai port. The significant 'F' statistics reveals that there is a significant difference among the two ports in their cargo traffic of import of materials. The mean of the cargo traffic of export is identified as higher in Chennai and Tuticorin ports since their respective mean scores are 19758 and 4906. The higher consistency in the cargo traffic is 8.07 per cent. The significant annual growth rate of cargo traffic of export is identified in all the two major ports since their annual growth rates are significant at five per cent level. The higher annual and compound growth rates are seen in Chennai Port since these two growth rates are 0.3814 and 16.3803 per cent respectively. The significant 'F' statistics reveal that there is a significant difference among the two major ports regarding their cargo traffic of export. The present study concludes that

the performance of Chennai port has highest over Tuticorin port regarding cargo traffic.

**Keywords:**

Foreign trade, cargo traffic, economic growth, employment generation, compound growth rate

**Introduction**

Foreign Trade is very vital for a country's economic development as it has made progressively important influence to economic growth and significantly to the economic welfare of the people. Foreign trade has become an effective instrument of economic growth and employment generation (Mathur, 2009). Economies of scale and international specialisation which is also the fruits of scientific and technological progress in the world would become more easily accessible through foreign trade (Agarwal, 1975).

As far as foreign trade is concerned, this meant large scale import substitution (through extensive protection of domestic industries), direct over-valued exchange rates (World Bank, 1987). After independence, the widely prevalent view in Indian Government circles was that the Indian exports faced a stagnant world demand and nothing much could be done to increase them (Patel, 1959).

The restrictions ensured that FDI averaged only around \$200 million annually between 1985 and 1991; a large percentage of the capital flows consisted of foreign aid, commercial borrowing and deposits of non-resident Indians (Srinivasan, 2002). India's exports were stagnant for the first 15 years after independence, due to general neglect of trade policy by the government of that period. Imports in the same period, due to industrialisation being nascent, consisted predominantly of machinery, raw materials and consumer goods (Panagariya, 2008).

Since liberalisation, the value of India's international trade has increased sharply, (Datt, Rudder; Sundharam, 2009) with the contribution of total trade in goods and services to the GDP rising from 16% in 1990–91 to 47% in 2008–10. (Panagariya, 2008). The south western state of Maharashtra contributes the highest towards India's GDP among all states. Mumbai (Maharashtra) is known as the trade and commerce capital of India (The Economist, 2010).

India accounts for 1.44% of exports and 2.12% of imports for merchandise trade and 3.34% of exports and 3.31% of imports for commercial services trade worldwide. (WTO Report) India's major trading partners are the

European Union, China, the United States of America and the United Arab Emirates (Datt, Ruddar; Sundharam, K.P.M., 2009). In November 2010, exports increased 22.3% year-on-year to 850.63 billion (US\$14 billion), while imports were up 7.5% at 1251.33 billion (US\$21 billion). Trade deficit for the same month dropped from 468.65 billion (US\$8.0 billion) in 2009 to 400.7 billion (US\$6.8 billion) in 2010 (Ministry of Commerce and Industry, 2010). The present study explains the performance of the Tuticorin and Chennai ports with the help of cargo traffic of the ports.

### **Methodology**

To assess the performance, the two major ports located at Chennai, and Tuticorin were purposively selected. The mean, standard deviation, coefficient of variation, annual and compound growth rate of cargo traffic have been computed with the data from 2005-2006 to 2014-2015.

### **Objectives of the study**

The objectives of the present study are:

1. To analyze the performance of exports, imports and balance of trade
2. To examine the cargo traffic of imports and exports in Tuticorin and Chennai ports

### **Review of earlier studies**

A brief explanation on some of the studies carried out on India's foreign trade is carried out.

Pillanie (2008) made an explorative study of Indian foreign trade. The author with statistics explains how India's foreign trade has progressed over the last sixty years since independence. He reported that in terms of composition, export was dominated by manufactured goods and services. He concluded that there is huge untapped potential for foreign trade in years to come.

Vinod (2011) evaluated India's direction and composition of foreign trade in the last sixty years, especially since 1991. The data revealed a gradual increase in India's export and import trades and a rise in trade deficit. It was shown that the items which India once used to import are being exported with industrialization of the Indian economy. The change in the composition of India's exports was also brought out in the study.

Kathuria (1996) examined the impact of recent policy changes on India's exports with special reference to export incentives during pre and post reforms periods. Joshi and Little (1996) described various dimensions of India's economic reforms as whole. Various reforms of trade controls and reforms of tariff and

protection during 1991-2001 have been analyzed in fuller detail. Withdrawal of various quantitative restrictions, reduction of tariff protection, and introduction of special export promotion scheme has been highlighted as major reforms on trade front.

Porter (1994) and Prasad (1997) assessed India's competitiveness in export of garments in the MFA phase out and post MFA phase out periods and observe that India's garment sector is one of the sectors where India have a competitive advantage and has a wider scope of export expansion in post MFA phase out period. Mehta (1997) has analyzed the impact of India's trade reforms on external trade by using the Cordon's measures of Effective Rate of Protection. The study concluded that the liberalization process has enhanced the importance of international trade in our domestic economy and the share of trade in GDP has increased to 24 per cent in 1995-96.

Ghemawat and Patibandla (1999) examined export performance of Indian diamond, garments, and software industries and also quantified the impact of economic reform on competitiveness of these three exports. The authors argued that economic reform had enhanced India's competitiveness in the labour and

skill-intensive industries; helped to reduce the dependence of competitive industries on inefficient domestic suppliers and infrastructure.

Bhattachariya et al; (2000) analysed India's export performance in the post liberalization era. The analyses showed that India's exports have shifted more towards value added product categories and the demand for knowledge and capital intensive product is more than labour intensive product.

Sharan and Mukerjee (2001) found that foreign trade reforms no doubt has brought about favourable terms of trade and export diversification has been achieved in terms of commodities and countries but trade deficit too has increased thereby making development process vulnerable.

### **International Trade Performance**

According to World Bank, 24 developing countries that become more integrated into world economy in the 1980s and 1990s had higher income growth, longer life expectancy and better schooling. Countries like China, India, Mexico, and Singapore showed increased amount of their GDP accounted for by trade. Lowering down of trade barriers by developing and developed nations has resulted into potential gains in world

merchandise trade ranging from US\$250 billion to US\$ 680 billion per year. This gain is shared by both the economies.

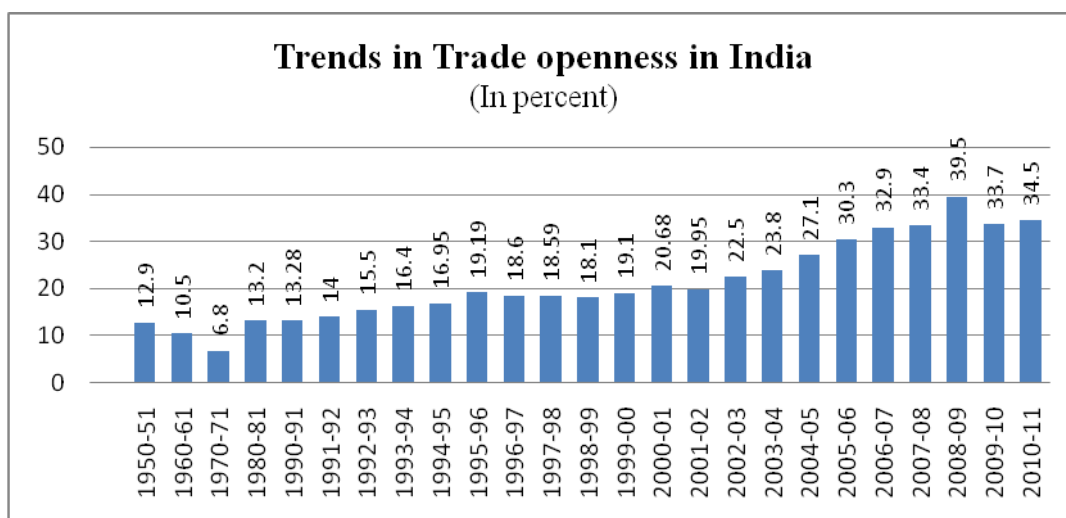
### Trends in Trade Openness at Major Trading Economies

(In per cent)

COUNTRY	Avg. 1980-84	Avg. 1985-89	Avg. 1990-94	Avg. 1995-99	Avg. 2000-04	2005	2006	2008	2011	2014
Argentina	11.6	12.8	12.2	17.9	28.5	38.0	38.0	38.6	39.2	34.6
Brazil	24.9	13.4	12.8	13.8	21.5	22.2	21.4	21.5	24.2	19.9
Chile	35.2	47.0	45.7	46.0	54.0	62.6	66.2	70.1	75.7	67.1
China	14.8	24.6	34.2	34.3	46.5	63.6	66.3	64.3	58.2	50.4
France	37.2	35.3	34.6	38.6	43.3	43.3	45.2	45.2	45.7	46.0
Germany	48.8	48.8	41.3	43.5	56.0	62.9	70.1	71.7	72.6	80.6
Hong Kong	153.1	191.6	226.2	229.8	267.2	331.2	343.0	344.0	348.5	370.0
India	12.2	11.1	15.0	18.8	22.2	30.9	33.8	32.7	38.8	38.5
Indonesia	35.9	31.5	38.2	51.3	53.8	56.8	50.0	49.0	54.2	43.4
Japan	24.6	17.4	15.3	16.6	19.7	24.3	28.2	30.1	31.5	27.3
Korea	60.1	57.5	46.3	53.3	59.7	64.6	66.7	69.4	90.5	96.3
Malaysia	90.9	99.5	140.7	168.5	177.6	185.0	185.9	172.9	168.3	145.7
Mexico	22.1	29.9	30.3	52.5	50.9	52.5	54.5	55.5	56.7	48.8
Philippines	38.9	38.2	50.8	76.7	96.3	87.9	86.3	75.0	64.8	48.9
Russia			61.6	48.8	52.3	50.0	49.0	46.4	47.3	45.9
Singapore	321.3	296.3	285.5	273.4	293.5	355.3	366.8	336.9	361.6	307.8
South Africa	48.4	45.0	35.1	40.9	47.8	46.9	53.1	55.8	55.4	49.8
Thailand	44.8	51.0	67.7	80.3	109.7	129.5	125.4	119.4	128.7	123.6
Turkey	16.6	20.2	18.9	27.1	37.0	39.4	42.5	42.7	45.8	48.3
United kingdom	41.5	41.3	39.0	42.3	38.5	37.5	40.0	37.7	40.9	46.4
United states	15.2	14.5	16.0	18.7	19.3	21.2	22.4	23.0	24.3	24.7

Note: Trade Rate is measured by the Ratio of Export plus Import to GDP.

Source: IMF data, International Financial Statistics



*Source:* Computed on the basis of data taken from RBI bulletin

Free trade lead to growth in world trade and ultimately to increase in global employment and income. Global market offers greater opportunity for nations, apart from access to capital, goods and technology it has provided access to

### India's Trade Performance

India's merchandise exports reached a level of US \$ 312.61 billion during 2013- 14 registering a growth of 4.06 percent as compared to a negative growth of 1.82 percent during the previous year. Despite the recent setback faced by India's export sector due to global slowdown, merchandise exports still recorded a Compound Annual Growth Rate (CAGR) of 15.79 per cent from 2004-05 to 2013-14.

### Exports

Exports recorded a growth of 4.06 per cent during Apr-Mar 2013-14. The

knowledge and information. The benefit of liberalize trade falls more upon the developing economies as it provides them with means and opportunities which are more essential for their rapid growth and development.

Government had set an export target of US \$ 325 billion for 2013-14. The merchandise exports have reached US \$ 312.61 billion in 2013-14.

### Imports

Cumulative value of imports during 2013-14 was US \$ 450.07 billion as against US \$490.74 billion during the corresponding period of the previous year registering a negative growth of 8.29 per cent in \$ terms. Oil imports were valued at US \$ 167.62 billion during 2013- 14 which was 2.2 per cent higher than oil imports valued at US \$ 164.04 billion in the corresponding period of previous year.

Nonoil imports were valued at US \$ 13.3 per cent lower than non-oil imports of 283.32 billion during 2013-14 which was US \$ 326.7 billion in previous year.

### Trade Balance

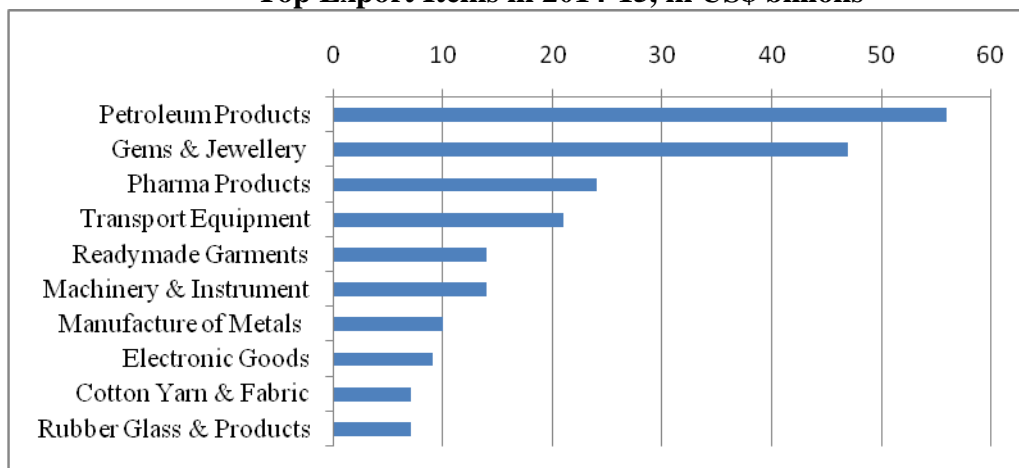
The Trade deficit in 2013-14 was estimated at US \$ 137.46 billion which was lower than the deficit of US \$ 190.34 billion during 2012-13.

### Performance of Exports, Imports and Balance of Trade(Rs crores)

S.No	Year	Exports	%Growth	Imports	%Growth	Trade Balance
1	2005-2006	4,56,418	21.6	6,60,409	31.8	-2,03,991
2	2006-2007	5,71,779	25.28	8,40,506	27.27	-2,68,727
3	2007-2008	6,55,864	14.71	10,12,312	20.44	-3,56,448
4	2008-2009	8,40,755	28.19	13,74,436	35.77	-5,33,680
5	2009-2010	8,45,534	0.57	13,63,736	-0.78	-5,18,202
6	2010-2011	11,42,922	35.17	16,83,467	23.45	-5,40,545
7	2011-2012	14,65,959	28.26	23,45,463	39.32	-8,79,504
8	2012-2013	16,34,319	11.48	26,69,162	13.8	-10,34,843
9	2013-2014	18,94,182	15.9	27,14,182	1.69	-820,000
10	2014-2015	20,64,501	17.7	29,37,914	3.02	-873,413

Data Source: DGCIS, Kolkata

### Top Export Items in 2014-15, in US\$ billions



Source: Ministry of Commerce, Government of India

### Trade Performance (USD Millions)

S. No	Year	Exports	%Growth	Imports	%Growth	Trade Balance
1	2005-2006	1,03,091	23.41	1,49,166	33.76	-46,075
2	2006-2007	1,26,414	22.62	1,85,735	24.52	-59,321
3	2007-2008	1,63,132	29.05	2,51,654	35.49	-88,522

4	2008-2009	1,85,295	13.59	3,03,696	20.68	-1,18,401
5	2009-2010	1,78,751	-3.53	2,88,373	-5.05	-1,09,621
6	2010-2011	2,51,136	40.49	3,69,769	28.23	-1,18,633
7	2011-2012	3,05,964	21.83	4,89,319	32.33	-1,83,356
8	2012-2013	3,00,401	-1.82	4,90,737	0.29	-1,90,336
9	2013-2014	3,12,610	4.06	4,50,068	-8.29	-137,458
10	2014-2015	3,95,026	6.35	4,86,307	-12.1	-91,281

Data Source: DGCIS, Kolkata

### Cargo Traffic of Import

The import and export performance at the two major ports has been examined with the help of various performance indicators. One of the indicators is cargo

traffic. The cargo traffic details regarding the import of goods at Chennai and Tuticorin ports have been collected for the period from 2005-06 to 2014-15.

### Cargo traffic of import in major ports

Tuticorin	Chennai	Cargo traffic of import
12305	364282	Mean
2316	4027	Standard deviation
10.04	13.86	Coefficient of variation (in per cent)
0.2473*	0.2961*	Annual growth rate
11.8532	13.5406	Compound Growth rate (in per cent)
		F – Statistics: 6.3458*

\*Significant at five per cent level.

The mean of cargo traffic per year during the study period, at Tuticorin port is 12305 whereas in Chennai it is 364282 respectively. Lesser coefficient of variation in cargo traffic of import is identified in the case of Tuticorin port since its coefficient of variation is 10.04 per cent. The significant annual growth rate in cargo traffic of import is identified

in Chennai and Tuticorin ports since their respective annual growth rates are significant at five per cent level. The higher compound growth rate of 13.5406 per cent is noticed in Chennai port. The significant 'F' statistics reveals that there is a significant difference among the two ports in their cargo traffic of import of materials.

### Cargo Traffic regarding Export

Tuticorin	Chennai	Cargo traffic of import
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4906	19758	Mean
573	2843	Standard deviation
21.06	8.07	Coefficient of variation (in per cent)
0.2384*	0.3814*	Annual growth rate
10.0802	16.3803	Compound Growth rate (in per cent)
		F – Statistics: 6.3458*

\*Significant at five per cent level.

The mean of the cargo traffic of export is identified as higher in Chennai and Tuticorin ports since their respective mean scores are 19758 and 4906. The higher consistency in the cargo traffic is 8.07 per cent. The significant annual growth rate of cargo traffic of export is identified in all the two major ports since their annual growth rates are significant at five per cent level. The higher annual and compound growth rates are seen in Chennai Port since these two growth rates are 0.3814 and 16.3803 per cent respectively. The significant 'F' statistics reveal that there is a significant difference among the two major ports regarding their cargo traffic of export.

### **Conclusion**

The present study concludes that the performance of Chennai port has highest over Tuticorin port regarding cargo traffic. The development of the port and shipping services is a prerequisite for sustained growth of the economy. Availability of adequate ports and shipping

services is also considered a key to foreign direct investment. Imports and exports exert a major influence on the consumer and the economy directly, as well as through their impact on the domestic currency level, which is one of the biggest determinants of a nation's economic performance.

Data for 2015 depicts that imports in India will also accelerate till 2025 to 6075184 USD Million in 2025 from 2701690 USD Million in 2013 which envisages that the model is fit where it had incorporated all the fluctuations. Eventually from the forecasted Exports in India 19% average growth was observed i.e. increase from 2014, reaching an all-time high of USD Million in 2025 and which was 32552 USD Million in 1991.

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