

Impact of Foreign Trade on the Economic Growth of India

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Abstract: Foreign trade makes a significant contribution to the economic growth of a country. The policy regime in India about the liberalization of the external sector has brought tremendous changes in India's foreign trade. So, the present study attempts to analyze the trend and composition of trade since 1991 and also to analyze the impact on the economic growth of India. The study reveals that though the total exports and imports both have increased the growth rate of imports is more than the growth rate of exports. It is also noted that manufactured goods comprise the major portion of the export goods while petroleum and crude products contribute to the major portion of the imported goods. The study also reveals that import has a negative influence on economic growth while export and economic openness are positively related to the economic growth of India.

Keywords: Economic Growth, Growth Rate, Export, Import and Balance of Trade

Introduction

Foreign Trade is very crucial for a country's economic development as it has made an increasingly significant contribution to economic growth and substantially to the economic welfare of the people. The foreign trade of a country consists of inward and outward movement of goods and services, which results in outflow and inflow of foreign exchange from one country to another country. No country in the world possesses adequate facilities for economical production of all the goods and services that are consumed by its people. This implies that no country is self-sufficient in the sense that no country can produce all the goods that it needs. Hence, the need to trade with each other arises. 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. Developing countries need more goods to feed a rapidly growing population. Exports can be a leading sector in growth. It implies that increased earnings from higher marketability of a country's commodities in the international market would stimulate the indigenous industrial activity within the country. This in turn brings many distinct benefits, viz., greater utilisation of resources, larger employment opportunities, more foreign exchange, etc. It was thus considered that foreign trade would

make an impressive contribution to a country's development; hence it is considered to be not simply a device for achieving productive efficiency; but also an engine of growth. International trade has now become a vital part of development strategy and it can be an effective instrument of economic growth, employment generation and poverty alleviation in an economy.

Review of Literature

Sushil Kumar Rai & Purvashree Jhala (2015) made an attempt to find out the dependence of growth rate on the exports and imports during the period 2000 to 2013. To find out a proper relationship between the considered variables (Exports, Imports and Growth Rate), statistical tools like Unit Root test (to check the stationarity of economic variables), Pair wise Granger Causality Tests (to investigate the unidirectional and bidirectional relationship between variables), Co-integration test (to find out a long-term or equilibrium relationship between variables) and regression analysis have been used. A multiple linear regression model is considered and exports and imports are regressed upon growth rates for India. It has been observed that in the determination of growth rate of Indian Economy during the reform period exports and imports have contributed significantly. From the result of regression equation, it is observed that the growth rate is more affected by imports rather than exports. The pair-wise Granger Causality test also provides the same result that exports are affected by imports.

Nazaquat Husain (2017) indicated that before the beginning of liberalization, India was largely and intentionally isolated from world market to protect its economy and achieve self reliance. Foreign trade was subject to import tariffs, export taxes and quantitative restrictions, while foreign direct investment was restricted by upper limit equity participation, restriction on transfer of technology, export obligations and government approvals. Since liberalization, India's international trade increased rapidly with the contribution of total trade in goods and services to the GDP rising from 16 per cent in 1990-91 to 48.8 per cent in 2014-15. India's major trading partners are the European Union, China, United States and United Arab Emirates. Major export commodities included gems & jewellery, textiles & allied products, chemical & related product, petroleum crude & products, agriculture & allied products etc. Major import commodities included petroleum crude & products, electronic items, gems & jewellery, chemical & related product, machinery & base metals etc. After economic liberalization, India achieved 6 to 7 per cent average GDP growth annually. Nowadays, Indian economy became world's fastest growing major economy.

Harish Tigari (2018) attempted to analyze the important economic variable which is growth prospective of Indian economy is the foreign trade. The author addressed the importance of foreign trade in the Indian economy and tries to explore the correlation between the foreign trade, foreign investment, and the GDP growth. For analyzing the correlation between the variables, Karl Pearson coefficient technique has been applied.

Pramod R. Botre (2018) in his paper highlighted the performance of India's foreign trade and the various economic policies related to foreign trades which have contributed to its growth. The author tried to focus on foreign trade, its meaning and definition, need and importance and types of foreign trade. Export of goods and services to other countries gives more foreign exchange. Similarly imports leads to expend the home currencies. So every country should concentrates on the export of their goods than the import. International trade takes place between the two or more countries. It involves different currencies of different countries and is regulated by laws, rules and regulations of the concerned

countries. Thus, International trade is more complex. The author also deals about the balance of payments, balance of trade, disequilibrium and India's export and import performance.

Govindan, P (2020) in his study tried to main investigates that the growth of Exports, Imports and Trade Balance from 1949-50 to 2018-19 in India. It also reveals that the India's export profile state wise share for 2016-17 to 2018-19. The study furthers study on India performance in global trade 2011-2017 and finally examines that the India's exports and imports by destination for 8 digits HS code level 2016-17 to 2018-19. The research data were processed with help of descriptive statistical and inferential statistical techniques applied such as correlation, regression, ANOVA and Paired t test were tested for various hypotheses. India's exports by destination 2016-17 to 2018-19 revealed that the first position secured by USA, followed by United Arab Emirates and third rank secured by China. Imports by destination 2016-17 to 2018-19 revealed that the first position secured by China, followed by USA and third rank secured by United Arab Emirates. Top ten exports destinations were secured by during the years 2016-17 (50.83 per cent), 2017-18 (50.78 per cent) and 2018-19 (50.78 per cent). Top ten destinations imports were secured by during the years 2016-17 (50.82 per cent), 2017-18 (50.32 per cent) and 2018-19 (52.86 per cent). The paper concluded that the India has passed amendment successfully different most important commercial, legal and economic reforms in the past two decades. It shows constructive impact on improving the business environment for international trade into India it will be golden opportunity for strengthening positive trade balance position of India in future.

Objectives

The study aims to achieve the following specified objectives:

1. To analyse the trend of foreign trade in India since 1991.
2. To analyze the impact on the economic growth of India.

Methodology of the Study

The study is based on secondary data collected from Statistical Handbook published by RBI. To examine the trend and composition of foreign trade in India after New Economic Policy of 1991 simple statistical tools like growth rate, percentage share calculations, and simple diagrams have been used. The growth rates of exports ($\Delta X/X$), Import ($\Delta I/I$) and GDP ($\Delta I/Y$) are obtained by using the following formula:

$$Gr_t = \frac{Y_t - Y_{t-1}}{Y_{t-1}} \times 100$$

where Gr_t is the growth rate of variable Y for t^{th} time period compared to its previous year and, it is represented as percentages.

To examine the role of foreign trade in economic growth of India, linear regression model has been used where Gross Domestic Product (GDP) at factor cost at constant price is taken as a measure of economic growth; and volume of export, import and economic openness in monetary terms are taken as variables of the study. Before applying Ordinary Least Squares (OLS) method, the stationary of the concerned variables are tested using Augmented Dickey Fuller (ADF) Test. The following model is applied here examine the impact of trade on economic growth

$$Y_t = \alpha + \beta_1 X_t + \beta_2 M_t + \beta_3 O_t + u_t, t= 1,2,3, \dots, \dots, \dots,$$

Impact of Foreign Trade on the Economic Growth of India

where α and β s are the co-efficients and u_t is the error term which follows normal distribution with mean zero and variance σ^2 . Y_t is the Gross Domestic Product in period t, X_t is the export in time t. M_t is the import in time t. O_t is the economic openness in time t. The openness variable is measured as exports plus imports divided by GDP [$O = (X + M)/GDP$].

Result and Discussion

Trends and Composition of India's Foreign Trade

The impact of trade reforms is apparent from the changing structure of India's Foreign Trade in terms of trend and diversity of market and products. Table 1 presents the growth rates of total exports and total imports measured over the period 1990-91 to 2020-21. During the 1990s, Indian exports have performed well in certain years, and not so well in some other years. The growth rate was high in 1991-92, 1993-94 and 1995-96 at 35.3 per cent, 30 per cent and 28.6 per cent respectively, but declined sharply in 1996-97 to 11.7 per cent, and continuously till 1998-99 on account of the South East Asian crisis and Worldwide recession. It again recovered to 14.2 per cent in 1999-2000 and reached the highest growth rate at 28 per cent in 2004-05. However, the growth rate of export again dropped to 0.57 per cent in 2009-10 in view of the global meltdown. But in 2010-11, the growth rate of export made a jump to 35.2 per cent and 28.3 per cent 2011-12. However, the export of India recorded a negative growth rate continuously from 2014-15 to 2020-21 except 2016-17, 2017-18 and 2018-19. Finally, the cumulative value of export in 2020-21 was the Rs. 13512740 crore and registered a growth rate of -7.25 per cent (Table 1).

On the other hand, the growth rate of import which was 17.7 per cent in 1990-91 rose to 36.3 per cent 1995-96. However, it declined to nearly 11 per cent in 1997-98 but again rose to 20.7 per cent in 1999-2000 and thus it reached the highest growth rate of 39.5 per cent in 2004-05. Again in 2006-07, it dropped to 24.5 per cent as against 33.8 per cent in 2005-06. However, the growth rate of import rose to 35.7 per cent in 2008-09 and again it dropped to -0.78 per cent in 2009-10. Finally, the cumulative value of import in 2020-21 was the Rs. 2909937 crore and registered a growth rate of -13.4 per cent (Table 1).

Table 1: Trend of Export and Import in India

(Rs. in Crore)

Year	Gross Domestic Product	Growth Rate (%)	Exports	Growth Rate (%)	Imports	Growth Rate (%)	Trade Balance
1990-91	2514549	5.53	32558	17.72	43193	22.26	-10635
1991-92	2541123	1.06	44042	35.27	47851	10.78	-3809
1992-93	2680438	5.48	53688	21.90	63375	32.44	-9687
1993-94	2807779	4.75	69751	29.92	73101	15.35	-3350
1994-95	2994747	6.66	82674	18.53	89971	23.08	-7297
1995-96	3221584	7.57	106353	28.64	122678	36.35	-16325
1996-97	3464798	7.55	118817	11.72	138920	13.24	-20103
1997-98	3605116	4.05	130101	9.50	154176	10.98	-24075
1998-99	3828072	6.18	139753	7.42	178332	15.67	-38579
1999-20	4166694	8.85	159561	14.17	215237	20.69	-55676
2000-01	4326736	3.84	203571	27.58	230873	7.26	-27302
2001-02	4535456	4.82	209018	2.68	245200	6.21	-36182

2002-03	4707984	3.80	255137	22.06	297206	21.21	-42069
2003-04	5078049	7.86	293367	14.98	359108	20.83	-65741
2004-05	5480380	7.92	375340	27.94	501065	39.53	-125725
2005-06	5914614	7.92	456418	21.60	660409	31.80	-203991
2006-07	6391375	8.06	571779	25.28	840506	27.27	-268727
2007-08	6881007	7.66	655864	14.71	1012312	20.44	-356448
2008-09	7093403	3.09	840755	28.19	1374436	35.77	-533681
2009-10	7651078	7.86	845534	0.57	1363736	-0.78	-518202
2010-11	8301235	8.50	1142922	35.17	1683467	23.45	-540545
2011-12	8736329	5.24	1465959	28.26	2345463	39.32	-879504
2012-13	9213017	5.46	1634318	11.48	2669162	13.80	-1034844
2013-14	9801370	6.39	1905011	16.56	2715434	1.73	-810423
2014-15	10527675	7.41	1896445	-0.45	2737087	0.80	-840642
2015-16	11369493	8.00	1716384	-9.49	2490306	-9.02	-773922
2016-17	12308193	8.26	1849434	7.75	2577675	3.51	-728241
2017-18	13144582	6.80	1956515	5.79	3001033	16.42	-1044518
2018-19	14003316	6.53	2307726	17.95	3594675	19.78	-1286949
2019-20	14569268	4.04	2219854	-3.81	3360954	-6.50	-1141100
2020-21	13512740	-7.25	2154339	-2.95	2909937	-13.42	-755598

Source: Directorate General of Commercial Intelligence and Statistics.

Impact of Trade on Economic Growth

Using non-stationary variables in the model might lead to spurious regression which cannot be used for precise prediction (Gujarati, 2003). Hence, our first step is to determine whether the variables have unit roots, that is, whether it is stationary and the order of integration. To identify the stationary of the variables under study Augmented Dickey-Fuller (ADF) test is applied. Table 2 shows the result of unit root test and the order of integration. It is seen that all the variables are stationary.

Table 2: Unit Root Test Summary Statistics (Augmented Dickey-Fuller)

Variables	ADF Test Statistics	Critical Values			Order of Integration
		1%	5%	10%	
GDP	4.439	-3.750	-3.000	-2.630	I(0)
Export	5.155	-3.750	-3.000	-2.630	I(0)
Import	5.004	-3.750	-3.000	-2.630	I(0)
Economic Openness	2.666	-3.750	-3.000	-2.630	I(0)

Source: Calculated on the basis of Statistical Handbook on Indian statistics 2020-21.

Table 3 presents the result of the regression analysis depicting the impact of foreign trade on economic growth. The value of R^2 in the model is 0.98 which shows that 98 percent of the variation in the dependent variable is explained by the independent variables of the model. The one per cent variation in the dependent variable remains unexplained by independent variables of the study.

Impact of Foreign Trade on the Economic Growth of India

Table 3: Impact of Trade on Economic Growth (GDP)

Variables	Co-efficient	t-values	Prob. Value	ANOVA
Intercept	3323303*	10.75341	1.890877	R ² = 0.961 Adj. R ² = 0.956 F Stat. = 230.5261*
Export	5.313082*	2.434889	0.021523	
Import	0.052192*	0.0333	0.973672	
Economic Openness	-4075731*	-1.32387	0.196252	

Source: Calculated by Statistical Handbook on Indian Statistics 2020-21.

Note: * denotes parameters are significant at less than one per cent.

The adjusted R² shows that asymptotically the variables can explain approximately 95 percent of total variation. The implication is that the model has the goodness of fit. F-statistic tests the overall significance of the model under study. The value for the F-statistic is 230.52 and is significant. The result of regression analysis shows that export and import have the significant positive impact on GDP while economic openness has a negative impact on GDP. The results confirm the importance of foreign trade on expansion and growth of Indian economy. Although economic openness is negatively related with GDP, the overall impact of trade on economic growth represented by export is positive and highly significant (Table 3).

Conclusion

Over the study period, it has been observed that total exports of India have increased after the adoption of New Economic policy in India. Although India is facing a continuous deficit in its balance of payment but the overall prosperity is unbounded. In spite of fluctuations in GDP growth rate, the volume of trade is increasing day by day. The share of imports of petroleum and crude products and other non-bulk items have increased significantly while the imports of food grains and export-related items have declined. The study also indicates that post liberalization era has certainly helped India in achieving high growth in the economy as there has been a rapid growth of imports of capital goods and technical raw materials to meet the requirement of industrialization and growing imports of petroleum products for meeting industrial and consumption requirement. It is also found that though import has a negative influence on economic growth, the volume of trade reflected by economic openness has a positive impact on the economic growth of India and its magnitude is increasing continuously.

Reference

- Sushil Kumar Rai and Purvashree Jhala (2015). Impact of Exports and Imports on Growth Rate of India: An Empirical Enquiry. *Pacific Business Review International*, (8)6 December, pp. 53-57
- Nazaquat Husain (2017). Analytical Study of Foreign Trade Performance in India. *International Journal of Trade and Commerce*, (6)2, pp. 507-518. Retrieved from <https://sgsrjournals.co.in/paperdownload/18.%20Nazaquat%20Hussain%20Foreign-New.pdf>
- Harish, Mr & Tigari, Harish. (2018). An Analytical Study on Foreign Trade in Indian Perspective. *International Journal for Science and Advance Research in Technology*. (4)2, pp. 132-134. Retrieved from https://www.researchgate.net/publication/336312871_An_Analytical_Study_On_Foreign_Trade_In_Indian_Perspective

Pramod R. Botre (2018). A Study on Foreign Trade in India: An Overview. *Pune Research Scholar: An International Multidisciplinary Journal*, (4)5,pp. 1-11. Retrieved from <http://puneresearch.com/media/data/issues/5c0abeab8f54d.pdf>

Govindan, P. (2020). A Study on Growth and Impacts of India's Foreign Trade: An Engine for Entrepreneurship and Economic Development. *Applied Econometrics and International Development, Euro-American Association of Economic Development*, 20(2), pages 161-174. Retrieved from https://ideas.repec.org/a/ea/aeinde/v20y2020i2_12.html