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IMPACT OF BILATERAL TRADE BETWEEN INDIA AND CHINA ON ECONOMIC GROWTH OF INDIA

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Abstract

India and China are the two fastest growing economies of the world. Both the economies have grown in the post-reform through economic liberalisation which has enabled them to increase external linkage with rest of the world. India's trade relation with China dates back to ancient times, but it began to change in the 1980s with the opening of both the economies. India has emerged as one of the top ten trading partners of China whereas China has become one of the top three trading partners of India in the recent years.

China has moved from a Soviet-style centrally-planned to a market-based economy. It has emerged as a rapid and socially developed country since the market reforms of 1978, while India is developing into an open-market economy.

This paper is an attempt to find out the impact of bilateral trade between Indian and China on India's Gross Domestic Product (GDP) growth. This paper examines India's percentage growth of export-import to and from China from the year 1996 to 2017.

The main aim of the study was to find out how Indio-China trade relation has made an impact on India's GDP. The result shows that, India's export to China could contribute only 14% to India's GDP growth. This indicates that the bilateral trade between India and China could not contribute significantly to India's GDP growth during the period of study. The study concludes that India's export to China could contribute 14% to India's GDP growth while import from China could contribute only 11.5% to the GDP growth of India.

Keywords: India, China, Bilateral trade, GDP, Economic Growth

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Introduction:

India-China relations, also known as Indo-China relations, refer to the bilateral relationship between the People's Republic of China (PRC) and the Republic of India. Historically, the cultural and economic relation between India and China dates back to ancient times, but the modern relationship began in 1950 when India was among the first countries to end formal ties with the Republic of China (Taiwan) and recognize the PRC as the legitimate government of Mainland China (Kumar, 2017).

China and India are two major countries in the global population contributing 37% to the world's population and 6.4% worth of world output and income at current prices and exchange rates (IMC- Economic Research & Training Foundation, 2017).

Trade relationship between India and China began to change in the 1980s with the opening of both the economies (Virmani, 2016). Development in political and financial matter has increased the significance of India-China bilateral relationship.

Regardless of the strong economic ties, many geo-political issues have impacted the economic relations of the two countries. Bilateral trade between India and China was very little till 1990, but the trade relationship took a paradigm shift with the start of globalization in 1990s. Particularly, China's joining of The World Trade Organisation (WTO) has totally changed the economic and trade environment of China with its trading partners. The World Trade Organization in cooperation with the governments of several countries has worked to lift trade barriers and bring about a better economic environment (Surendar & Mishra, 2014)

In February 2012, it was reported that bilateral trade between India and China will reach US$100 billion by 2015. It recorded a bilateral trade of US$73 billion in 2011, making China the largest trade partner of India. However, it slipped down to US$66 billion in 2012 (Prasad, 2015).

The growth of bilateral trade between India and China in the last few years has paved the way in setting up Indian enterprises in China either as representative offices, wholly owned foreign enterprise (WOFE) or joint ventures with Chinese companies which are into manufacturing of pharmaceuticals, wind energy etc. To name a few, Dr. Reddy's laboratories, Infosys, Wipro, Reliance Industries etc. are some of the prominent Indian companies in China. Similarly, more than 100 Chinese companies have started its operations in India, which includes Huawei Technologies, Haier, Harbin electric, Sany Heavy Industry Ltd. etc. (Embassy of India, Beijing, 2017).

Literature review:

Singh and Santpal (2014) in their paper "A Comparative study of India-China Bilateral trade" tries to study the changes in India's balance of trade in relation to total imports or export to China. The study concluded that the bilateral trade between these two countries was unfavourable to India.

Wani and Dhami (2013) in their paper "Indo-China Trade: Intensity and Potential for Future Trade" attempts to identify how the bilateral trade between India and China helps in growing their partnership for their mutual benefit in the coming time. The trends in the growth rate of China–India trade shows a huge potential focused on their political achievements.

Kumari and Malhotra (2014) in their paper "Trade-led growth In India and China: A comparative Analysis" tries to find out the impact of export-import growth on economic growth of both India and China. The study concludes that China performed better as compared to India, the reasons being the reforms speed, policy implementation and the nature of political governance.

Suresh (2012) in his paper "Exchange Rate Impact on Bilateral Trade between India and China" tries to find how Chinese Renminbi (RMB) impacts India‘s trade with China. The findings hold that appreciation in RMB will impact India's trade, mainly with higher elasticity for imports.

Kowalski (2008) in his working paper "China and India: A Tale of Two Trade Integration Approaches" compares the key features of the trade integration processes and the economic outcomes in China and India. It reveals that Chinese reforms regarding manufacturing trade is likely to be one of the key reasons for China's better economic performance. On the other hand, India has gone a long way in tariff reduction on non-agricultural products but due to moderate protection the manufacturing sector is likely to face hurdles.

Kumari (2014) in her paper “India’s foreign trade with China with special reference to agricultural commodities” tries to study mainly the changes in India’s trade relation with China since the liberalisation of its trade. The study concludes that the liberalisation of trade has a positive effect on India’s relation with the Chinese Government. The emergence of external sector has helped both the countries to improve their growth during the last two decades.

Siddiqui and Alam (2017) in their paper attempt to find out India and China’s trade pattern from 2005-2016 and also attempt to examine the proportion of Chinese electronic toys in India. The study concludes that the introduction of economic reforms and liberalisation benefitted both the countries in integrating with the world economy and attaining higher growth. Indian markets are flooded with Chinese toys, which are giving a tough competition to the domestic producer of Indian toy industry.

Dimaranan, Ianchovichina and Martinr (2007) in their working paper “China, India, and the Future of the World Economy: Fierce Competition or Shared Growth?” tries to understand the implications of India and China’s growth for other developing countries.

Bussiere and Mehl (2008) in their working paper “China’s and India’s roles in Global trade and Finance: Twin titans for the New Millennium?” tries to compare some of the major aspects of China’s and India’s roles in international trade and finance using estimates from a gravity model to measure the overall degree of their trade intensity and the depth of their bilateral relations, and also tries to find the measures of revealed comparative advantages and economic distance. The four main findings are- First, taking into consideration the trade in goods, the overall degree of China’s trade intensity is higher than fundamentals would suggest, whereas the converse is true for India. Second, Chinese export goods seem to compete with mature economies goods, while Indian exports remain more low-tech. Third, China’s export of goods and services tend to complement each other, while exports of services tend to complement its exports of goods, whereas, India’s exports are increasing mainly in deregulated sectors such as IT-related services. And finally, India and China plays an important role in the global trade

Svensson (2012) in his thesis “Sino-Indian Relations: Complex Challenges in a Complex Relationship” aims to understand the role of trade and cooperation in moving the attention away from security-related issues to a more positive direction. The study concludes that although trade and cooperation has played a major role in stabilizing India-China relationship, it could not be accepted as the main factor preventing any security issue being raised or moving attention from security related issues to a more positive direction.

Objectives of the study:

1. To show the overview of Indo-China bilateral trade
2. To see the relationship of Export to China on India’s GDP growth
3. To see the relationship of Import from China on India’s GDP growth

Overview of Indo-China bilateral trade:

China has emerged as a rapid and socially developed country since the market reforms of 1978. It has moved from a Soviet-style centrally-planned to a market-based economy which is playing a major role in the global economy.

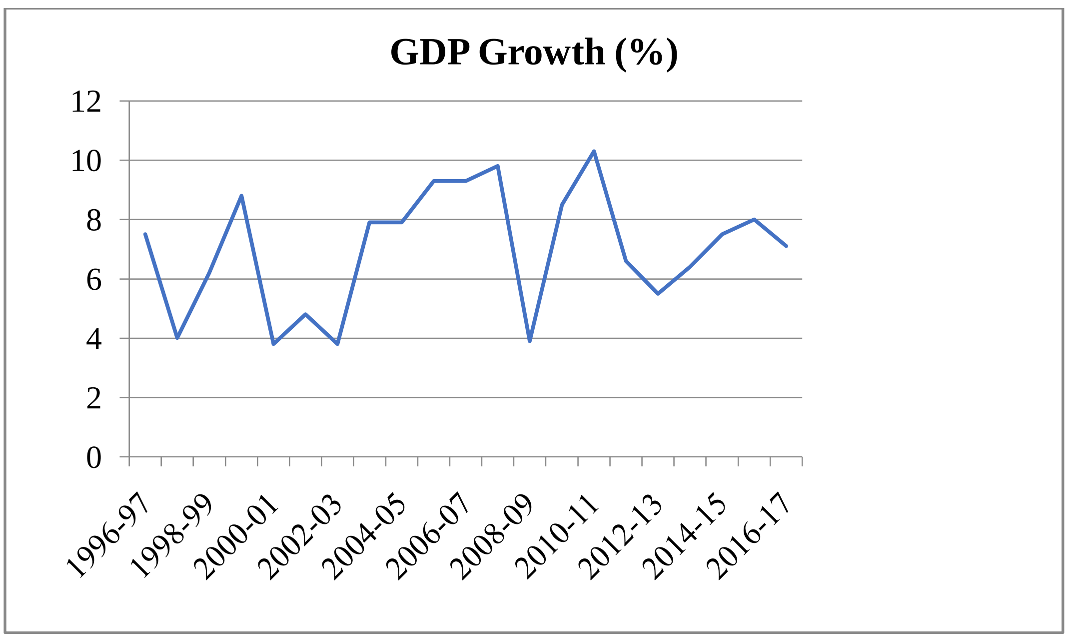
China has been able to maintain a sharp increase in its export since mid-2000s and has become world’s largest exporter in 2010 and the largest trading nation in 2013 (Factbook, 2017). Speedy progress of China is evident from the information, that in 1990, it was the 14th largest exporter with export at US $ 62 billion i.e., around 1.8 per cent of world export. Further in the recent years it has become world‘s seventh largest exporter with around 3.9 per cent of world exports. Correspondingly, if we look at the merchandise imports side of China, it became the second largest importer in the world in 2009 (Suresh, 2012).

Measured on the basis of purchasing power parity (PPP), China overtook US and stood as the second-largest economy in the world, although in per capita terms the country is still poor. China has achieved GDP growth averaging nearly 10 annually, and has been able to lift 1.3 billion people out of poverty successfully. Even though China's GDP growth has gradually slowed since 2012, it is still impressive by current global standards (World Bank, 2017).

India is developing into an open-market economy, yet traces of its earlier autarkic policies remain (Central Intelligence Agency, 2017). Almost half of the population of India is engaged in agriculture sector which contributes around 17.4% to GDP in 2014. However, service sector contributes the major part of GDP which is around 57.9%, while the industrial sector contributes 24.2% to GDP (Statistics Times, 2017).

India's GDP averaged nearly 7% annually from 1997 to 2016 after undertaking Economic liberalization measures in early 1990s which included industrial deregulation, privatization of state-owned enterprises, and reduction in controls on foreign trade and investment. However, the growth rate slowed in 2011 as a result of high inflation, high interest rates and scepticism of investors about the government's economic reforms. Eventually, this macroeconomic imbalance resulted into a sharp depreciation of the rupee (Central Intelligence Agency, 2017).

Figure 1: GDP growth 1996-2017

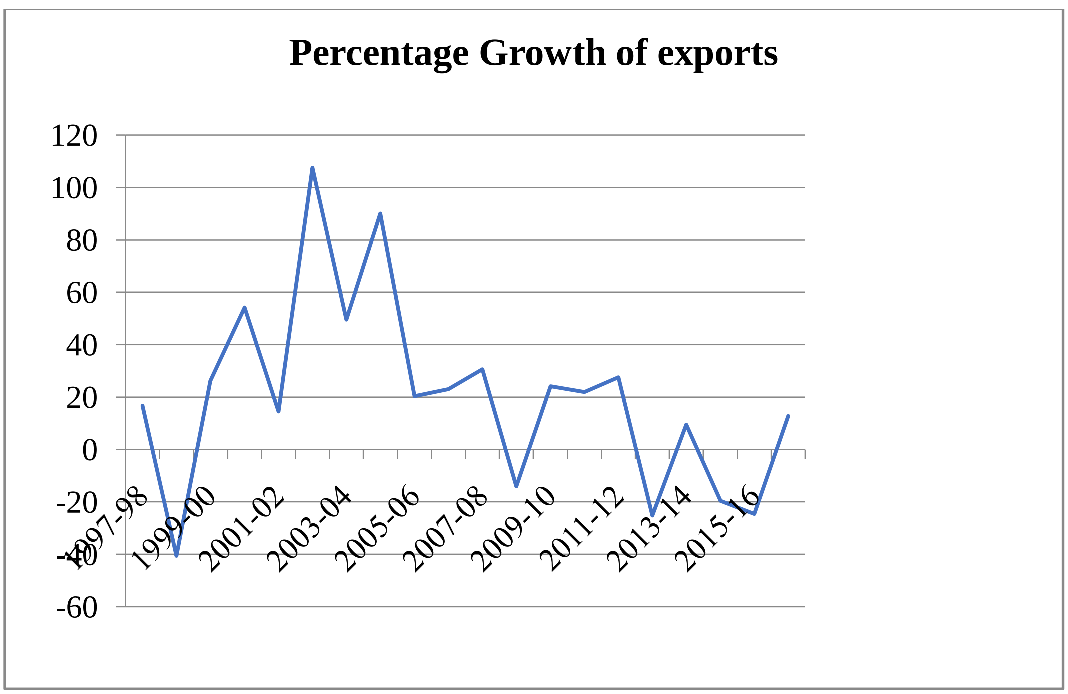


Source: World Bank Database

From figure 1, it is evident that India has been experiencing a fluctuating trend in the annual GDP growth. The growth rate recorded in the year 1996-97 which had a sharp decline in 1998-99 recording only 4% growth rate. Due to global meltdown, the growth rate of India dropped down to 3.9% in the year 2008-09 (Ministry of Commerce and Industry, 2017). The highest growth rate recorded was in the year 2010-11 which was 10.3%. China has become India's largest trading partner in the last few years with a bilateral trade at $71.5 billion in 2017, but it is heavily leaned in favour of China. India's import from China recorded at $61.3 billion, while its exports to China were recorded at $10.2 billion only (The Economic Times, 2017).

India has already been the top trading partner of China in the recent time. The bilateral trade between these two countries is considered to be one of the most significant bilateral relations in the modern global scenario and the same is expected to continue in the coming years (Naidu & Kumar, 2013).

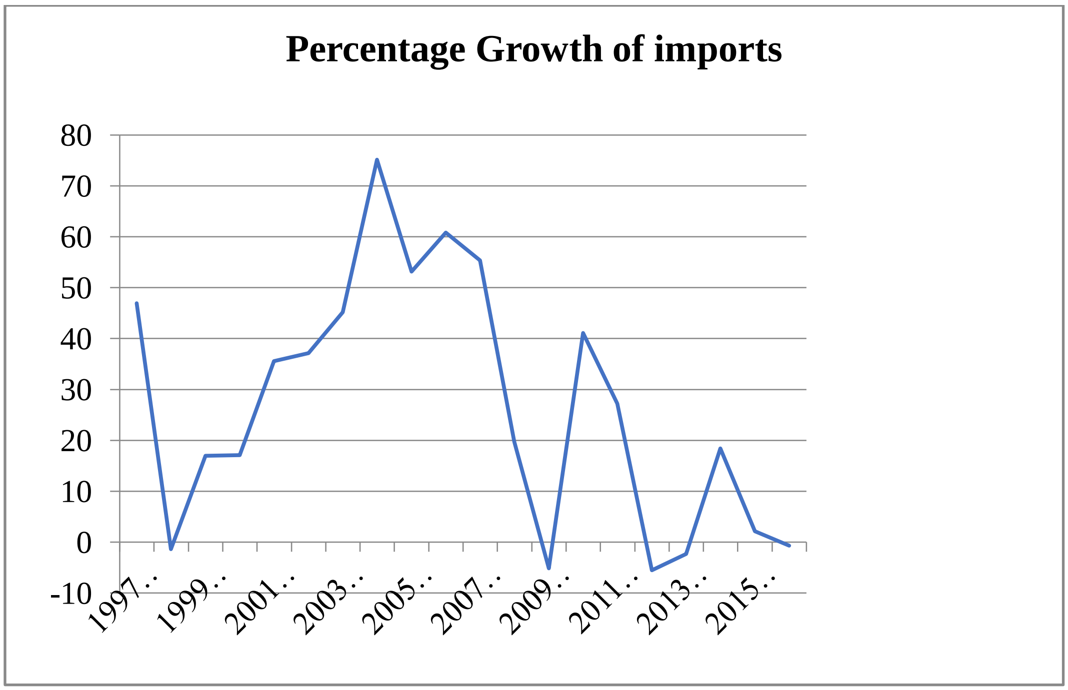
Figure 2: Growth of export 1997-2017



Source: Ministry of Commerce and Industry, Department of Commerce, Government of India

From figure 2, it can be seen that India's Export to China dropped down from 16.78% in the year 1997-98 to -40.5% in the year 1999-00. The figure shows a fluctuating but a positive trend in export growth till the year 2007-08, but recorded a negative growth in the year 2008-09, 2012-13, 2014-15 and 2015-16 with growth rates of -13.96%, -25.12%, -19.5% and -24.5% respectively.

Figure 3: Growth of Import 1997-2017



Source: Ministry of Commerce and Industry, Department of Commerce, Government of India

Figure 3 shows a sharp decline in the growth of imports from 46.92% in the year 1997-98 to a negative growth of -1.38% in the year 1999-00. It experienced an upward sloping trend in import growth till the year 2008-09, and thereafter the trend declined and recorded a negative growth of -5.15% in the year 2009-10. It then mounted to 41.06% in the year 2010-11 again recorded a negative growth of -5.54%, -2.32 and -0.69% in the year 2012-13, 2013-14 and 2016-17 respectively.

Data Analysis and Interpretation:

Variables of the study:

The variables of the study used are Export to China (Ex), Import from China (IM) and Gross Domestic Product growth rate (GDP). The export, import and GDP growth has been converted into log to reduce the skewness of the distribution.

Table 1: Variables used in the study (Amount in US Dollar)

Year	**Export to China**	**Import from China**	**GDP Growth (%)**
1996-97	614.8	756.91	7.5
1997-98	717.95	1112.05	4
1998-99	427.16	1,096.71	6.2
1999-00	539.04	1,282.89	8.8
2000-01	831.3	1,502.20	3.8
2001-02	951.95	2,036.39	4.8
2002-03	1,975.48	2,792.04	3.8
2003-04	2,955.08	4,053.21	7.9
2004-05	5,615.88	7,097.98	7.9
2005-06	6,759.10	10,868.05	9.3
2006-07	8,321.86	17,475.03	9.3
2007-08	10,871.34	27,146.41	9.8
2008-09	9,353.50	32,497.02	3.9
2009-10	11,617.88	30,824.02	8.5
2010-11	14,168.86	43,479.76	10.3
2011-12	18,076.55	55,313.58	6.6
2012-13	13,534.88	52,248.33	5.5
2013-14	14,824.36	51,034.62	6.4
2014-15	11,934.25	60,413.17	7.5
2015-16	9,010.35	61,706.83	8
2016-17	10,171.18	61,281.57	7.1

Source: Ministry of Commerce and Industry, Department of Commerce, Government of India; World Bank Database

Research Methodology:

The study used Simple linear regression to show the relationship between two variables by producing an equation for a straight line of the form y = a + bx, where independent variable (x) is used to predict the dependent variable (y).

Results of the study:

To examine the relationship of export to and import from China and India's GDP growth, simple linear regression has been run.

Table 2: Regression result of export to China on India's GDP growth

Summary			
R	R Square	Adjusted R Square	Std. Error of the Estimate
.375	0.14	0.095	0.3119

Predictors: (Constant), Ln_EX

Dependent Variable: Ln_GDP

Source: SPSS output

The above table the R value denotes the correlation between the export growth and the GDP growth. It shows a correlation of 0.375 which signifies a positive but not so strong correlation between export growth and the GDP growth.

The R^2 value denotes how much proportion of variation in GDP growth, can be explained by the exports. Only 14% can be explained in this model, which means that GDP growth is being affected by growth in export only by 14%.

Table 3: Regression result of import from China on India's GDP growth

Summary			
R	R Square	Adjusted R Square	Std. Error of the Estimate
.339	0.115	0.068	0.3165

Predictors: (Constant), Ln_IM

Dependent Variable: Ln_GDP

Source: SPSS output

The above table the R value denotes the correlation between the import growth and the GDP growth. It shows a correlation of 0.339 which signifies a positive but not so strong correlation between import growth and the GDP growth.

The R^2 value denotes how much proportion of variation in GDP growth, can be explained by the growth rate of export. Only 11.5% can be explained in this model, which means that GDP growth is being affected by growth in import only by 11.5%.

Conclusion:

The main aim of the study was to find out how Indio-China trade relation has made an impact on India's GDP. The result shows that, India's export to China could contribute only 14% to India's GDP growth. On the other hand, India's import from China could contribute only 11.5% to India's GDP growth. This means that the rest of the variation in GDP growth rate of India might have been affected by factors such as Foreign Direct investment (FDI), Net Foreign Institutional Investor (FII) equity etc.(Jain, Nair & Jain, 2015).

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