

A COMPARATIVE ANALYSIS ON ECONOMIC GROWTH OF INDIA AND CHINA

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ABSTRACT

Import and export plays a vital role in an economy. It is an important factor for the GDP growth of any country. People's Republic of China and India are the most populous and the largest Asian countries experiencing rapid economic growth over the last two decades. The aim of this paper is to compare the past, study the present to predict the future economic scenario by considering various indicators, mainly imports-exports of minerals, fuels, chemicals and metals. The comparison is done on the basis of secondary data from reliable sources. India started its financial reforms since the economic liberalisation in July 24, 1991. Thus, data from the year 1991 to 2018 is considered for this paper. China grabs the largest market share of Asian, as well as western countries by providing cheap manufacturing goods and known as manufacturing hub of the world. On the other hand, India has made its footprint in the service sectors. India and China have been growing at increasing rate since 1980s and the growth accelerates after 1991. This research tries to find out whether India will be able to compete with China in the long run, despite a large gap in their present economic scenario.

Keywords: China, Economic Growth, Export-Import, GDP, India

I. INTRODUCTION

India and China (People's Republic of China) are the two most fast-growing and powerful countries in Asia as well as in the world. Although the US economy is the largest, but China is the second largest economy, far ahead of France, United Kingdom, Germany and Japan. Similarly, Indian economy is growing at faster rate and in near future it can become the 3rd largest economy after the US & China, and may cross France, United Kingdom, Germany and Japan as well. Indian and Chinese economies are growing rapidly among the Asian countries due to economic reforms. UNCTAD Stat and Morgan Stanley Research from the period of 1980 to 2009 (Rezwanul Hasan, 2013). This study aims to compare the economy of these two fastest growing countries. Since the structural reforms in China in 1978, its GDP has grown at an average rate of about 9 percent per annum (Narendra Jadhav and Janak Raj, 2005). In 1978 China was ranked 9th in nominal GDP with 214 USD billion. Presently, it stands 2nd 13.45 trillion USD and is the world's largest manufacturing hub.

In the last decade it is observed that both the players played a vital role in international trade and has increasingly engaged in trade organizations and treaties in recent years. Till Dec' 2017, the WTO had 164 members. China joined in 2001 whereas, India in 1995. Both the countries engaged in Free Trade Agreement (FTA) with several countries. China engaged in China-Australia Free Trade Agreement, China-South Korea Free Trade Agreement, China-ASEAN Free Trade Agreement etc. Similarly, India engaged in trade relaxation programs with ASEAN, Sri Lanka and Thailand, among others. In 2003, India engaged in India-ASEAN free trade agreement (AIFTA) and further, in 2009, the Free Trade Agreement in Goods was signed, which intrun helps to boost the Indian economy even in servicesectors. ASEAN is currently India's fourth largest trading partner, accounting for 10.2 percent of India's total trade.

China is the largest manufacturing hub and also the largest exporter of goods in the world. However, India is progressing towards one of the largest service industry in the world.China is also the world's fastest growing consumermarket and second largest importer of goods in the world(Dipasri Ghosh,et.al. 2018). China emerged as the world's largest tradingcountry, replacing US since 2008 (Krishna, Bhardwaj 2016). Foreign direct investment (FDI) has played a very important role in the growth of China's manufacturing sector (Agarwal & John Whalley, 2013). At present, China is the world's 2nd largest economy by nominal GDP of 13,457.267 billion USD and India is 7thlargest with 2689.99 billion USDas of 2018 (according to IMF). Till 2014, China was the world's fastest-growing economy, with growth rates averaging 7.9% in the last decade but from 2015 onwards, India supersededChina in nominal GDP growth rate.

Since 1991, a positive trend is being observed in the growth of Indian economy. India has largest young population/ workforce, which is a positive factor in the growth and healthy savings and investment rate, plus growing international collaboration also help to boost Indian economy. India's GDP growth is observed to be appx. 7.3 % over the past decade. (IMF, June 2019). The growth is mostly observed in service sectors including IT and IT enabled services. India is doing extremely well in service sectors and has the potential to place as world's 5th largest economy leaving behind United Kingdom and France in this year and 3rd largest economy in near future (World Economic Outlook Database, 2018). According to the IMF, the Indian economy is the "bright spot" in the global landscape (Dipasri Ghosh, et.al. 2018). India is attempting to leapfrog from a predominantly agricultural economy to a knowledge-based service economy. This approach is highlighted as the "shining" beacon of a 21st century economic development model (Sana Naseem, 2017).

The difference in performance between India & China is not simply because of timely changes in government policies but implementation of policies, nature of political governance and the speed of reforms played a vital role (Deepika Kumari, 2014).

In this paper we tried to focus on the economic growth of two largest and fastest growing countries in the world i.e. India and China. The main objective of this study is to compare and analyse the economy and growth strategies of India and China. This study also aims to examine the impact of exports and imports along with few major indicators to analyse the present trend and to understand the future economic growth for India and China.

II. DATA ANALYSIS

It is a necessity to understand the growth trend of these two countries since 1991, the year of liberalization reforms of India. In this research, data are collected from the reliable secondary data sources as, World Bank, International Monetary Fund (IMF), RBI and other relevant sources.

1) Comparison of the top 10 countries last two years (i.e. 2017 & 2018) on the basis of Nominal GDP are analysed along with the global share % of GDP of each country. US economy has the highest share of world GDP, contributes 24.2%.

Table 1: Comparison of GDP Nominal of top 10 largest countries in world's economy, of the year 2017 & 2018

Rank	GDP Nominal in Billions USD			% Share
	Country	2017	2018	
1	United States	19,485.40	20,513.00	24.2
2	China	12,014.61	13,457.27	15.9
3	Japan	4,873.20	5,070.63	5.98
4	Germany	3,700.61	4,029.14	4.75
5	United Kingdom	2,628.41	2,808.90	3.31
6	France	2,587.68	2,794.70	3.29
7	India	2,602.31	2,689.99	3.17
8	Italy	1,938.68	2,086.91	2.46
9	Brazil	2,055.14	1,909.39	2.25
10	Canada	1,653.04	1,733.71	2.04

Source: International Monetary Fund World Economic Outlook, October – 2018

Analysis: This is observed that the first five rank holders maintained their ranking unchanged in the year 2017 and 2018. However, France and India interchanged their ranking, in 2017 France was in 7th and India in 6th position but in 2018 ranking of France increased to 6th whereas, ranking of India declined to 7th position.

It is also observed that China is the 2nd largest economy with GDP Nominal of 13,457.27 billion USD in 2018 with 15.9 % share of world's GDP. In the other hand India in 2018 is in 7th position with 2689.99 billion USD of Nominal GDP, with 3.17 % share of world's GDP. However, as per the forecasting of IMF, India may cross

France and United Kingdom and stood 5th in the world economy with 2,957.72 billion USD(IMF Outlook, October - 2018).

2)More than 25 years of GDP data is collected from the World Economic Outlook, October – 2018 and analysed for these two countries. As the economic liberalisation in India began since 1991, a comparison is appropriate for the analysis between China and India with effect of 1991 till 2018.

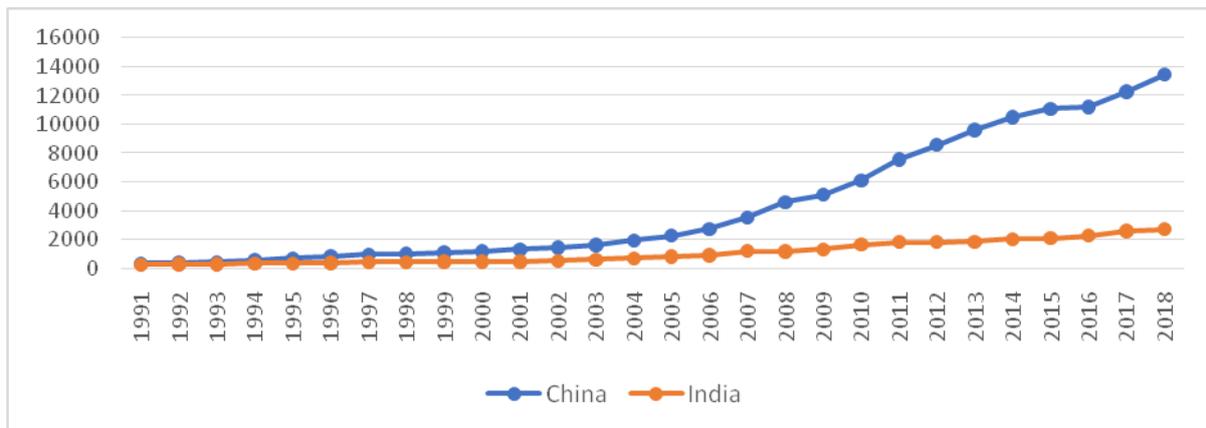


Figure 1:Comparison of GDP Nominal (in billions \$) of China and India from the year 1991 to 2018.

Analysis:It is observed that in 1991, China’s GDP was 383.37 billion USD and GDP of India was 266.5 billion USD. Upto 2002 both the economies were growing marginally with China GDP 1470.55 billion USD and GDP of India was 508.07 billion USD. Since 2002, China is observed to have a sharp and continuous growth. Here, it is important to emphasise that China has become the member of WTO in the year 2001. Whereas, India has maintained a steady growth in GDP, which is way lower than China.

3)Analysis of GDP growth rate of China and India since 1961.

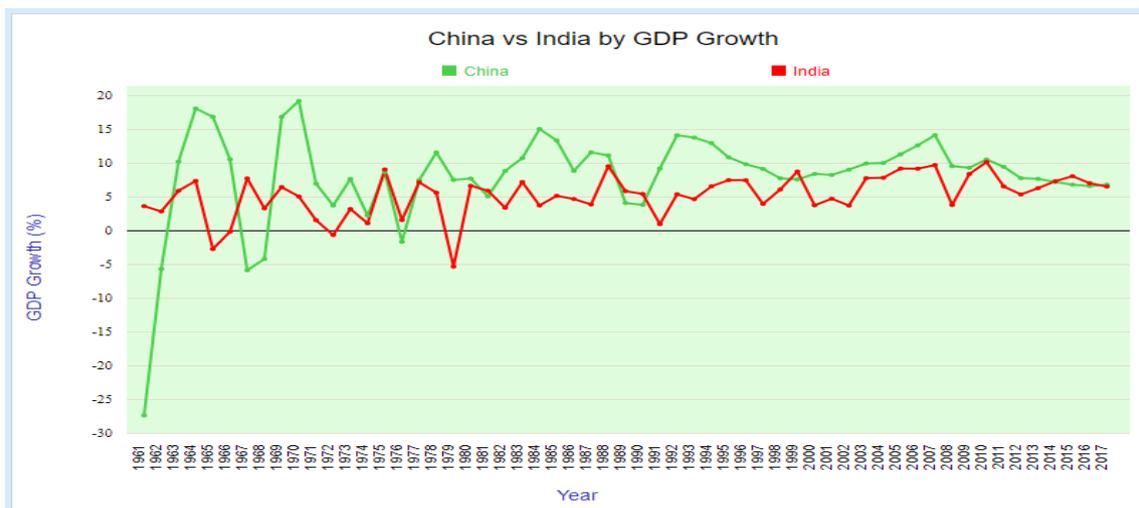


Figure 2: Comparison of China vs India by GDP growth

Source:IMF and World Bank statistics

Analysis: GDP growth of China and India since 1961 are plotted in Fig. 2. It is observed that China maintained a higher growth rate with respect to India since 1980. It slightly dipped in the year 1989-90 and thereafter sharply increased till the year 2007. In the recent years, from 2015 onwards GDP growth of India is observed to be higher than China's. This is a good sign in favour of India. If the growth rate is maintained higher than China, in long run India will be able to minimize the GDP gap between these two countries.

4) The comparative analysis on China and India on the export- import and various other factors are studied. The data is collected from World Bank for the year 2017.

Table 2: Major Economic Indicators, as per 2017

#	Indicators	India	China	Analysis
1	Export	294,364,490.16 (in thousands of USD)	2,263,370,504.30 (in thousands of USD)	China is very much ahead in export
2	Import	444,052,353.84 (in thousands of USD)	1,843,792,938.80 (in thousands of USD)	China's Import is less than its export, whereas, imports of India is much higher than its exports
3	Trade Balance	Negative trade balance of -149,687,863.67 (in thousands of USD)	Positive trade balance of 419,577,565.51 (in thousands of USD)	India has -ve trade balance
4	Effectively Applied Tariff Weighted Avg.(customs duty)	5.78%	3.83%	India imposes more custom duties to discourage imports
5	Most Favoured Nation Weighted avg. tariff	6.85%.	4.89%.	Most Favoured Nation (MFN)
6	Trade growth	-1.10%	is 2.43%	world growth of 1.50%.
7	GDP	2,600,818,243,559.65 (in USD)	12,237,700,479,375 (in USD)	China is 2 nd largest in the world
8	Services export	185,294,014,276.93 in BoP (in USD)	206,453,137,562.27 in BoP, (in USD)	Services export of India is getting closer to China
9	Services import	109,371,141,905.17 in Bop, (in USD)	471,870,408,771.02 in Bop, (in USD)	China's services import is higher
10	Exports of goods and services as % of GDP	19.05%	19.76%	Almost similar in %
11	Imports of goods and services as % of GDP	22.03%.	18.05%.	India's import is higher in % of GDP

Analysis: It is observed, although the trade balance is negative for India but there is a significant share in the Services export which is close to China's Services export. Also observed, India's import as (% of GDP) is higher than China's. Thus, India needs to focus much on exports in the goods and services to reduce the -ve trade balance.

5) Comparative Analysis on economic and other socio-graphic factors

Table 3: Major Economic and Socio-demographic Indicators

Indicators	Year	China	India	Analysis
Economy				
Annual GDP	2018	13,407,400M.\$	2,716,750M.\$	India's GDP is 1/4th of China
GDP per capita	2018	9,627\$	2,009\$	4.8 times of India's Per capita GDP
Debt	2018	67,65,793	18,96,129	Debt of China is 3.56 times of India, but less in %
Debt (%GDP)	2018	50.46%	69.79%	Debt of China is less % in GDP
Debt Per Capita	2018	4,858\$	1,402\$	Per capita debt of China is 3.5 times higher
Deficit (M.\$)	2018	-6,44,444	-1,81,573	Deficit: China is 3.54 times higher than India
Deficit (%GDP)	2018	-4.81%	-6.68%	India has higher deficit in %GDP
Expenditure (M.\$)	2018	45,57,728.20	7,41,300.70	Expenditure of China is 6.14 times of India
Gov. Health Exp.(M.\$)	2016	3,24,339.30	21,299.10	In health care China is 15.22 times of India
Gov. Health Exp. (%Bud.)	2016	9.05%	3.14%	More concern on health care
Defence Expenditure (M.\$)	2018	2,50,173.60	65,719.10	Defence exp. of China, 3.8 times of India
Defence Expenditure (%Bud)	2018	5.49%	8.74%	India spends more in % of GDP
S&P Rating	2017	A+	BBB-	China is much higher in Rating
Markets				
USD exchange rate	2019	6.8925	68.48	Exchange 1Yuan = 10 INR
Stock ExchangeYTD %	2019	17.25%	5.12%	
Trade				
Exports	2017	2,263,370 M.\$	299,163M.\$	China is much ahead in exports

Exports % GDP	2017	18.62%	11.61%	18.62% of China's huge GDP means a lot
Imports	2017	1,843,790M.\$	447,003M.\$	
Imports % GDP	2017	15.17%	17.35%	China has lesser imports in % of GDP than India
Trade balance	2017	419,580M.\$	(-) 147,840M.\$	Shows +ve balance for China and deficit for India
Trade balance % GDP	2017	3.45%	-5.74%	
Socio-Demography				
Birth Rate	2017	12.43%	18.78%	Higher birth rate may lead India the highest populous country
Population	2018	1,392,730,000	1,352,617,328	Not so major in difference
Life expectancy	2017	76.41	68.8	Higher Life expectancy of China

Source: countryeconomy.com

Analysis: Along with economic indicators, socio-demographic indicators are also compared. In the beginning of 2018, population of these two countries were found be close to each other. India's population is slightly lesser than the population of China. This is important to note that the population of India is growing at much higher rate, in India. Birth rate of India is almost 50% higher than China. This indicates within a decade India will supersede China in population. Apart from that, Human Development Index (HDI) of China is much better than India. It is observed that the govt. health expenditure of China is much higher and S &P rating of China is A+.

6) Comparative analysis on yearly growth rate on Real GDP of China and India in the past one decade.

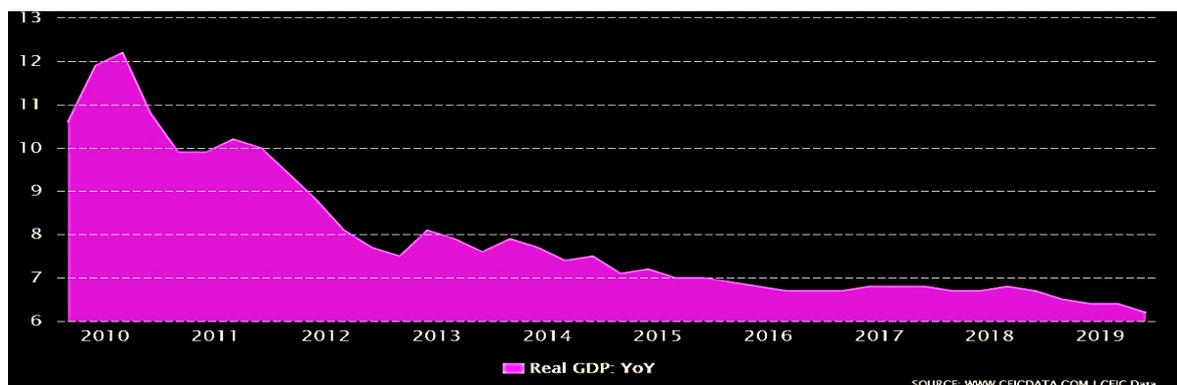


Figure 3: China's Real GDP growth rate of the last 10 years

Source: ceicdata.com

Analysis: In the past 10 years real GDP growth of China found maximum in the year 2010 and thereafter observed sharp decline to 6.2 % in April 2019.

7)Comparative analysis on yearly growth rate on Real GDP of India of the past one decade.

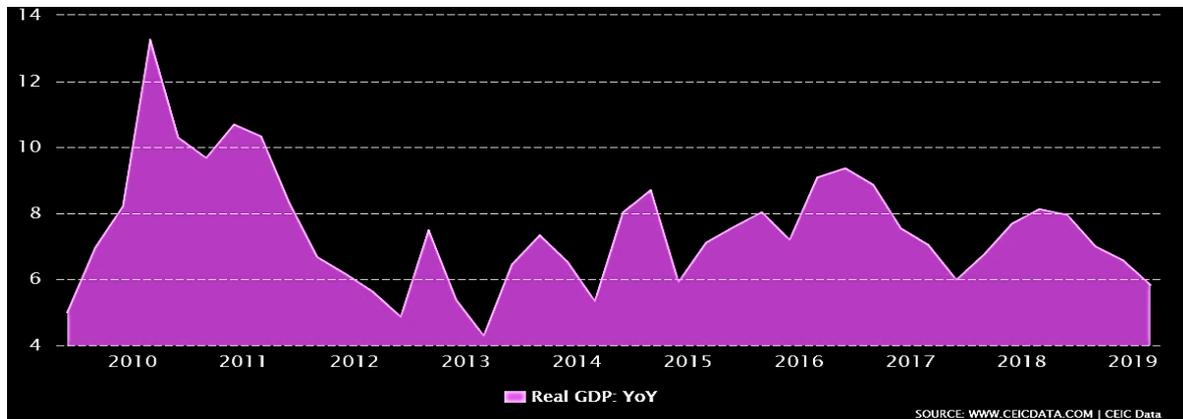
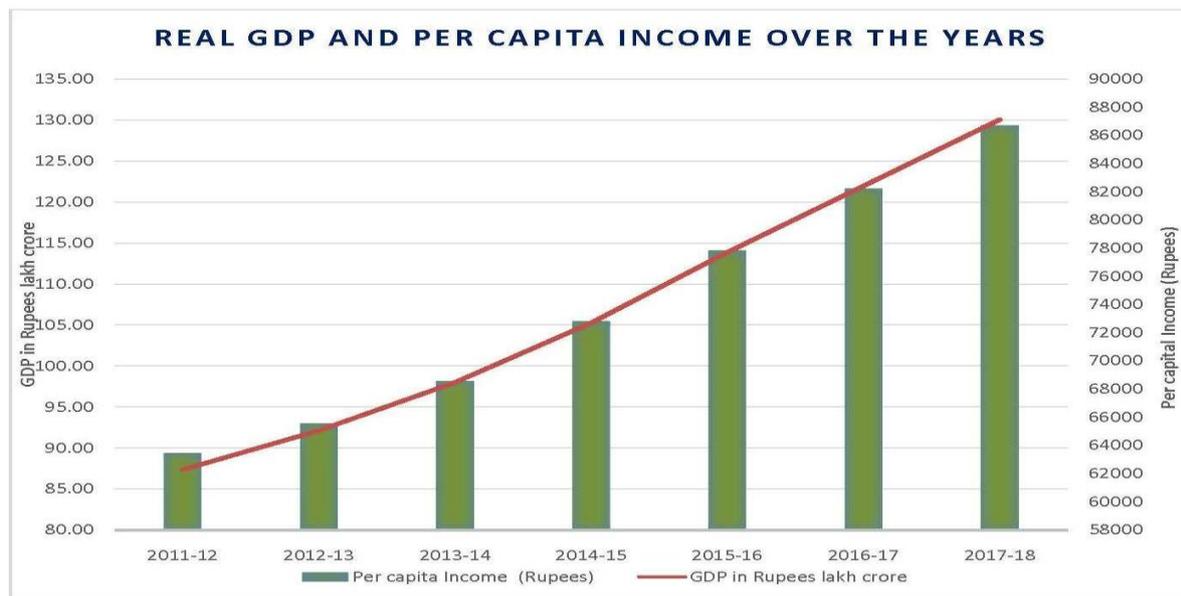


Figure4: India real GDP growth in the last 10 years

Source:ceicdata.com

Analysis:In the past 10 years real GDP growth of India seen fluctuating up and down. Maximum growth is seen in the year 2010 and in the year 2015 -16 Indian GDP growth rate crossed China.

8)Real GDP and Per capita income of India from the year 2011-12 to 2017-18 and analysed through the graph below. (Amount shown for GDP is in Rupees lakh crore and per capital income amount are in Rupees.)



Source: National Accounts Statistics 2017; Press Note on First Revised Estimate on National Income FY 2016-17 dated 31.01.2018 and Second Advance Estimate of National Income 2017-18 dated 28.02.2018.

Figure5: Real GDP Vs Per Capita Income

Analysis: A sharp increase in GDP and Per capita income is observed in the Indian economy year after year since 2011-12 to 2017-18.

9) Analysis of Exports and Imports between China and India for the last 10 years.

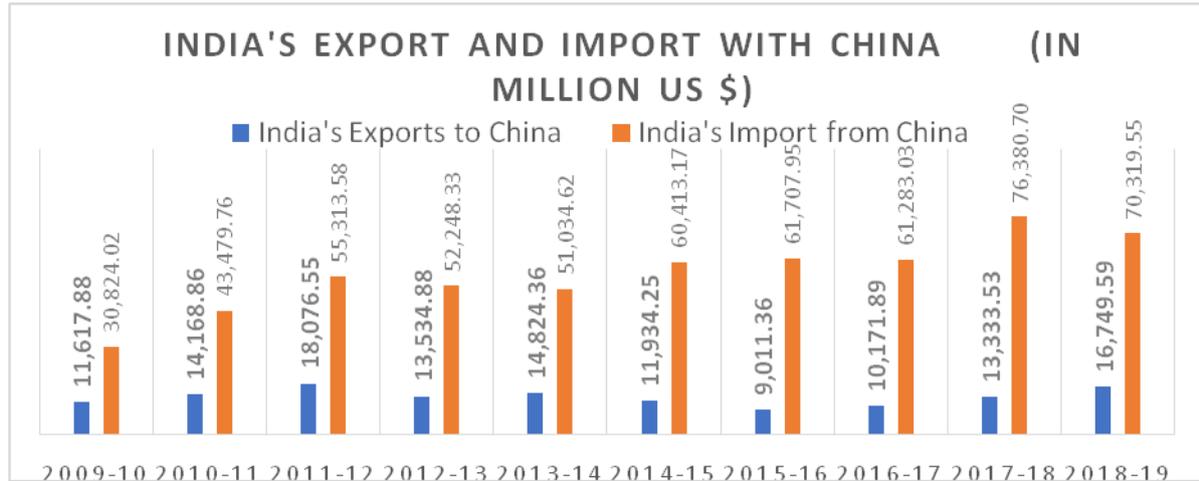


Figure6: Trading (Export-Import) between India and China

Analysis: It is observed that India's export to China is increased by only 44% in the last 10 years. Whereas, India's import is increased more than double i.e. by 128% in last 10 years.

10) Comparative analysis amongst four major goods that India imports from China, since 1991.

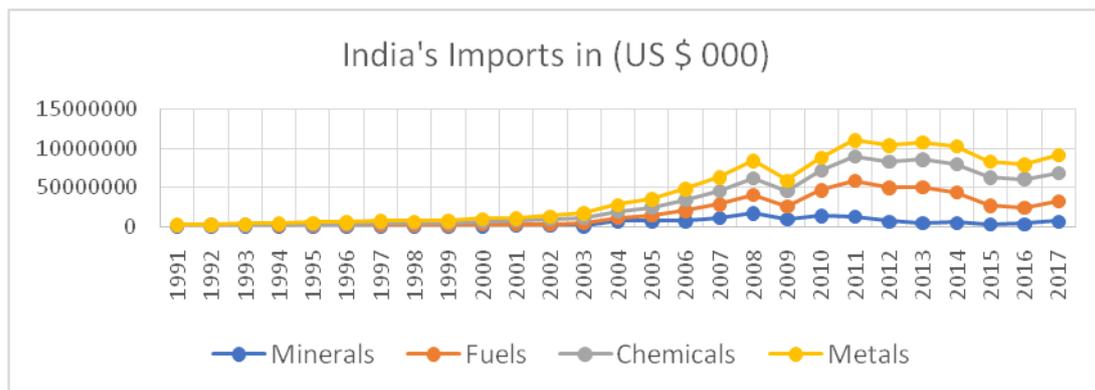


Figure7: Comparative analysis of India's imports

Analysis: Data is retrieved from the worldbank.org and analysed on India's import trend on the 4 major indicators i.e. Minerals, Fuels, Chemicals and Metals. Analysis is done since 1991 and found imports on Metals stand the highest throughout amongst those indicators, followed by chemicals then fuels and the least is minerals amongst all four. A sharp continuous increase is noted in imports in all these four indicators till year 2008 and declines slightly in 2009, which can be attributed to the Global Financial Crisis. Post 2009, the trends have been increasing.

11)Comparative analysis amongst four major goods that India exports to China, since 1991.

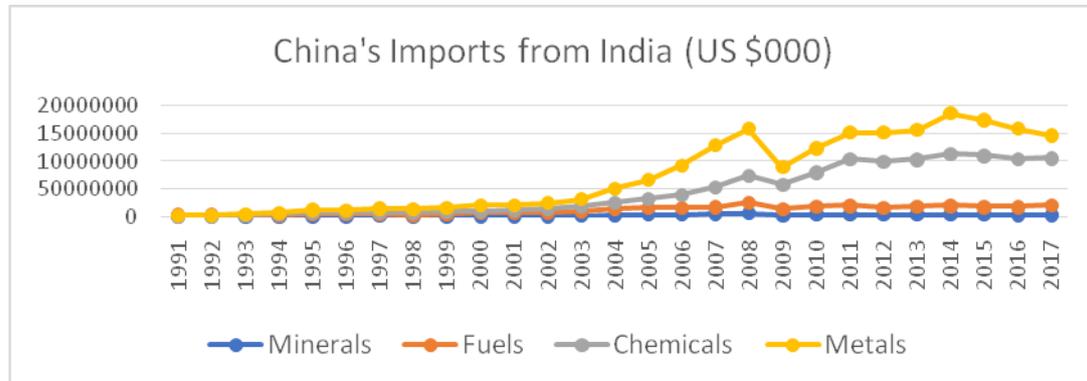


Figure8: Comparative analysis of China’s imports from India

Analysis:Data on China’s import from 1991 to 2017 is retrieved from the worldbank.org to analyse the trend on the 4 major indicators i.e. Minerals, Fuels, Chemicals and Metals. A similar trend like India’s import pattern is observed. Here also found that the imports on Metals stand the highest throughout amongst those indicators like India, followed by chemicals then fuels and the least is minerals amongst all four.A sharp continuous increase is noted in imports in all these four indicators till year 2008 and declines slightly in 2009, which can be attributed to the Global Financial Crisis. Post 2009, the trends have been increasing.

III. CONCLUSION

India & China are the two fastest growing countries in Asia and have population of more than 1.3 billion.It is found that India has lagged far behind in terms of GDP from 1991-2018. China’s GDP has been increasing at a faster rate. One of the main reasons for the sharp growth of China could be early reforms and better economic performance. While India’s GDP growth is observed fluctuating since 1991. Growth rate of China’s GDP is observed higher till 2005.One of the major reasons for the sharp growth of China is mainly for changing the focus from agricultural platform to manufacturing hub.This paper points to the large deficit in trade balance in India, whereas China shows a huge surplus in trade balance. Through comparison of economic indicators between India and China it reveals that China’s economy is far beyond the reach of India, although India is progressing with higher rate of GDP growth than China since 2015.

This paper observes that China is far ahead of India except there is not much difference in the population, however higher birth rate may lead India to become the highest populous country in the world within few years.Secondly, the economic reforms in Chinese economy took place in well ahead, since 1978, whereas in India economic reforms started more than a decade later, in 1991. Thus, this study concludes that performance of China is found much efficient and better in comparison to India since early 80’s.

Analysis is not only limited to these two countries, even compared with the world’s GDP and export-imports, percentage of share of top 10 economy of the world. Both China and India are the largest countries in Asia as

well in BRICS (Brazil, Russia, India, China and South Africa). It is observed, in imports and exports India has not been able to compete with China. In short run it is not possible for India to surpass China. But in near future, may be after 2 decades India may compete with China, by considering the opportunities of higher growth rate of India. India is doing extremely good in IT, IT and service sectors as analysed that services export of India is increasing and getting closer to China. India is also claimed as the country with largest youth population with high intellectual capabilities. India needs to switchover from agricultural economy to a knowledge-based service economy at a faster rate. Thus, knowledge economy may help to boost Indian economy and may bring closer to the economy of China in long run.

REFERENCES

- [1] Rezwanul Hasan, A Comparative Analysis of the Economic Growth of China and India, *Social Science Review*, 30(2), December 2013.
- [2] Dr. Jadhav and Dr. Janak Raj, Financial System in India and China – A Comparative Study, *International Conference on Economic Reforms in India and China -Emerging Issues and Challenges*, 2005.
- [3] Dipasri Ghosh, Soumen De, Dilip K. Ghosh, Overtaking the U.S. Economy by China and India: How Sound Are the Expectations? *International Journal of Business*, 23(1), 2018, 1-16.
- [4] Geetima Das Krishna & Sakshi Bhardwaj, Impact of China Slowdown on India, *Centre for Policy Research*, Feb 2016, 1-9.
- [5] Dr. Sana Naseem, Economies of Two Asian Giants India and China: A Comparative Study, *International Journal of Business and Social Science*, 8(9), September 2017, 44-48.
- [6] Deepika Kumari, Neena Malhotra. Trade-Led Growth in India and China: A Comparative Analysis, *Journal of International and Global Economic Studies*, December 2014, 68-88.
- [7] Manmohan Agarwal & John Whalley, *China and India: Reforms and The Response: How Differently Have The Economies Behaved*, Working Paper, National Bureau Of Economic Research, Massachusetts Avenue, Cambridge, MA, 2013.

WEB REFERENCES

- <https://data.worldbank.org/country/india> For India GDP, retrieved on 10th July 2019
- <https://data.worldbank.org/country/china> For China GDP, retrieved on 10th July 2019
- <http://statisticstimes.com/economy/gdp-growth-of-india.php> retrieved on 15th July 2019