An Analysis of Trade in the It Sector Between India and the USA

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Abstract:

India is one of the fastest growing economies in the world. The USA being a capitalist friendly economy and the opening up of Indian economy through liberalisation meant that these nations have great linkages with the rest of the world. The trade between the US and India has grown steadily after the major economic reforms in the 1990s. India's trade relationship with the US has been there since ancient times. India has become one of the major trading partners for the USA, and the USA has also been one among the top international trading partners of India. The USA is a major free market economy in the world and India is slowly developing into an open market economy. One of the major aspects of bilateral trade between these nations is the Information Technology sector. Immigration of engineers and other tech-professionals to the US has become a longstanding trend in India, now. Hence, this paper aims at analysing the impact of the Indo-US Information technology trade on the growth of Indian GDP, and GDP per capita. This paper examines the percentage growth of India's import-export with the USA in the time frame of about three decades, from 1992-93 to 2018-19. A static analysis as to how various policy and political changes in either of the nations have caused a change in the import-export trends has been done. The dynamic analysis consists of regression of the time series data of import-export, population, Growth of GDP in India, and the exchange rate volatility to analyse the impact of the bilateral trade on the Indian Economy. The results show that dynamism in the politics and economic well-being of nations definitely caused changes in the amount of trade. We see a strong positive correlation between Bilateral trade of India and the USA and growth of Indian GDP with the value of correlation of over 0.9.

Keywords: bilateral trade, GDP, growth of per capita GDP, regression, time series

Introduction:

India is a signatory to the Information Technology Agreement-I (signed in 1997 and implemented from 2005) under the World Trade Organisation (WTO), which necessitates duty free imports under the 217 tariff lines consisting of information and communication technology (ICT) products and their inputs. As a result, Imports surged and the Indian electronics industry got trapped in a vicious circle of zero duty imports and high domestic production costs. This aligns with the submission by Murali Kallummal, 2012 which criticises the ITA led damage to domestic manufacturing capabilities in the ICT.

Preferential market Access policies are used as a tool to control the imports of certain products and boost domestic production; by creating localisation barriers for the foreign manufacturers to capture the market. The five different types of localisation barriers (to boost domestic production) are linked to production or sales, intellectual property (IP) or technology transfer, investments, standards or certification, or to data localisation. (Stephen Ezell, 2013). To mandate the growth of domestic production of electronic goods in a phased manner, India passed the Preferential Market Access policy in 2012. The policy is fundamentally protectionist in nature but however, Indian policy is less distortionary than it appears. The policy does not permit for the price preferences to the domestic manufactures as offered by other countries, but is only restricted to the government procurement of goods.
PMA holds the potential to be the "big push" towards the local manufacturing of electronic goods. Since high-technology procurement is majorly handled by the oligopolistic market due to the high switching costs & problems of lock-in, PMA would assure some protection to the domestic producers as well as boost the FDI in the country. (ICIRER 2014).

Furthermore, Foreign R&D was concentrated in the ICT sector in India as concluded by Basant and Mani that the ICT firms had a share of 86% of the total 1969 patents which were granted to the 59 firms during the period between 2006 and 2010. Also, "while India focuses on pharmaceuticals and chemistry related technologies, China has an important share of electronics and telecommunications, areas that are more amenable to design innovations". With the Indian share in the design patents being around 70% (Annual Report 2014–2015 CGPDTM) probably indicates that India has strengths in design innovations.

The demand for engineering education followed the growth in the IT jobs mirroring the ITC boom in the late 1990s. This has led to rapid growth of engineering colleges in India pursuant to the rise of the software industry. The resultant has been one major factor for the 'brain-drain' in terms of either quality higher education or higher paying jobs in the USA as the Indian diaspora (Roli Verma and Deepak Kapur). We see a massive spike in the engineering degrees since 1995, and hence greater human capital exchange of engineers and scientists with the USA.

Studies have shown that adverse conditions in developing countries "push" students out, while promising conditions in developed countries create a "pull" toward studying and possibly establishing residency and a career (Portes 1987; Khadria 1999). Even when they do not return to their home countries, they serve as intermediaries linking the United States and their home country, facilitating scientific and technical cooperation between the two (Saxenian 2005). The immigrants are moving to their native countries; applying the embraced ways of doing business at the Silicon Valley. And thus, evolving from the 'brain drain' towards a more complex 'brain circulation'. (Public Policy Institute of California (PPIC), 2002). Research on highly skilled migrants has been limited in focus by mainly examining them as economic agents moving only to maximise the return on their human capital (Beaverstock 2012; Ho 2011).

Research Methodology

When talking about an economy and its growth, the most important parameters considered are GDP, Per capita income and savings rate. The objectives of this paper are to observe the trade pattern between India and the USA, and to find the impact of the same on the Indian economy. This will be done in the following manner.

It is necessary to consider anomalies in any trade partnership. Every time a regulation or law changes with respect to carrying out trade, it has an impact on the value and amount of goods being traded. Hence, firstly, considering the changes in tax regimes, quotas as well as the general perceptions becomes important. Tax and quota changes, along with changes in administration have been considered as important events and a static analysis has been carried out to find any sudden decline or rise in the value of the concerned trade parameter. The same analysis has been extended to real time to give insights about how the trends in immigration and trade can be expected to change

To build a more comprehensive relationship, an analysis is carried out which finds the impact of the bilateral trade on the Indian GDP. The same linear regression model is then extended to find the impact on the Per capita Income and savings rates, using a multi- step multivariate regression model. This model includes variables such as inflation rate in India, unemployment rate in India, the Balance of trade in the service sector, population growth rate and the rate of growth of GDP.

An analysis of the imports and exports between USA and India in the service sector, with special focus on Information technology

Graph 1: Imports and Exports between USA and India in service sector (USA - Reporter)
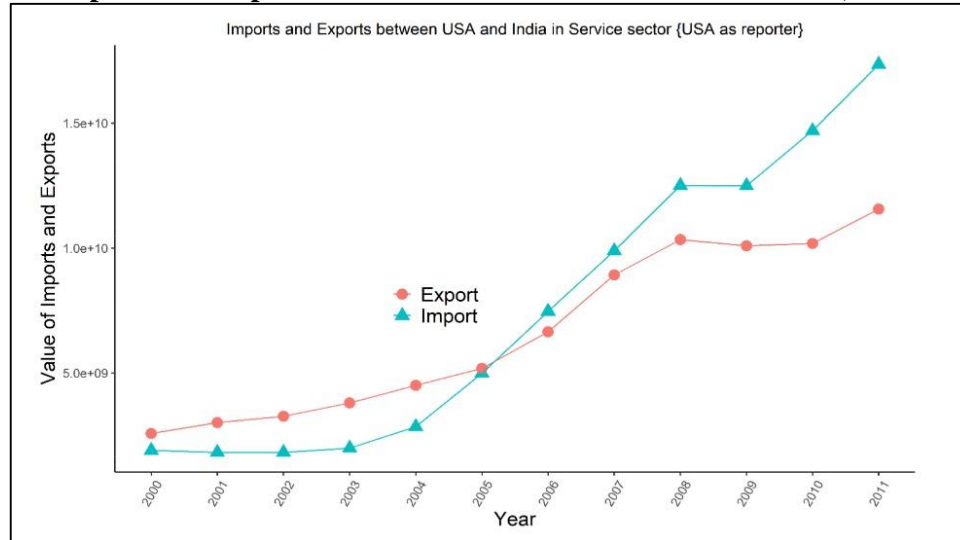
Since the 1990s, the information technology (IT) industry has been booming in India, in terms of both goods and services. The signing of defence agreements such as the Defence Technology and Trade Initiative (DTTI) and the Logistics Exchange Memorandum of Agreement (LEMOA) furthered cooperation between USA and India.

Trade between the US and India has grown dramatically over the last few decades. The US exports to India grew steadily & achieved the Zero Net exports in services in 2005. India overtook trade after 2005 and always had a positive balance of trade in the service sector after that, which is widening increasingly.

Post the cold war and India's liberalisation, US and India saw pragmatic approaches to synergise the convergence in their mutual interests. Asserting on India's advanced nuclear technology, US extended various forms of co-operations in the high-technology sector. In 2000, both nations established India-**U.S. Science & Technology Forum** (IUSSTF) to facilitate mutually beneficial bilateral cooperation in science, engineering, and health. Later on, the gravity to counter terrorism under the Bush's administration led to developing a bilateral link between the two countries. Gradually, the co-operation areas expanded to defence and high technology. In September 2004, the countries announced their co-operation in the form of "**Next Steps in Strategic Partnership**" (NSSP) initiative in the 'trinity' sector- Civilian nuclear activities, Civilian space programs and High-technology trade. This enabled the US to ease up its export licencing policies for Indian entities including ISRO to promote co-operative space programmes and allow certain exports to the nuclear powerplants. In 2005, the countries resolved to establish a 'global partnership' through the **Bilateral trade Agreement**, extending the initiative under NSSP towards energy and the environment, on non-proliferation and security, on democracy and development, and on space and hightechnology.

India's imports of products under ITA-1 (that mandates duty free import of products under 217 tariff lines) has increased from USD 1 billion in 1996 to 32 billion in 2015, growing at an average rate of 20%. On the other hand, exports have only increased from 0.5 billion to 2.2 billion in the same period. The ITA didn't prove to be advantageous for India as a manufacturer and hence harmed the domestic manufacturing capabilities. However, ITA led to increased innovations and research as evident by the increasing share of ICT in the total exports.

To boost domestic production, India steadily increased the tariff rates; flouting the WTO obligations. Besides this and the widespread belief that pervasiveness of IT has led to increased cyber-attacks & hence, a threat to national security; India developed its Preferential Market Access (PMA) policy in 2012. India imposed local content requirements on procurement of electronic products by government and private sector entities with "security implications for the country" and must, therefore, be procured from a domestic manufacturer to the extent prescribed. The contentious policy was put under review with the request of the US-India Business Council (USIBC) and a revised policy was notified in December 2013, completely exempting the private sector from compulsory domestic procurement of ICT products included as security sensitive under the policy. This policy will be valid for a period of ten years. The policy despite being benign after the 2013 amendments, was however criticised by the US for hampering the global free trade and encouraging other nations for such protectionist policies. The Indian policy in its current form comply with India's all international commitments and obligations. India being an observer to the Agreement on Government Procurement (GPA),1996, that regulates the government procurement of goods and services; has no legal obligation to comply with the provisions. It is mostly adopted by the developed countries and India among the other observer countries is still battling with some domestic challenges that need government support. WTO doesn't mandate any provisions to discourage the development of domestic market as has been done by other countries; and especially for the developing countries.

With regard to India's surging introduction of policies that create market barriers, USA removed India from the list of eligible countries to avail **Generalized System of Preferences** (GSP) in June 2019. GSP provides nonreciprocal, duty-free tariff treatment to certain products imported from qualifying developing countries. Given the structural issues such as the clause of being non reciprocal in nature means that the beneficiary country holds no right and it cannot hope to enjoy such concessions for the long term. Thus, India seeks to remove reliance from such schemes.

Demographic analysis of immigrant population

Immigration to the US from India began in the early 1960s for the 'higher studies' and soared steadily as the ITC sector saw a boom in the 1990s. To begin with, population of Indian immigrants in the US has grown tenfold between 1980, the first time when US census included Indian ethnicity, and 2010. Indian immigrants grew from 1.9M in 2000 to 3.9M in 2015, showcasing a growth rate of 109%. India is the largest source of international migrants. With over 4M strong Indian diaspora, USA stands as one of the major human exchange partners to India. The Indian diaspora in U.S evolved in a phased manner from the pursuit of education and employment to major source of remittances ($10.657 Billion annual remittance from US to India in 2017).

Graph 2: Indian Population in the USA from 2000 to 2015
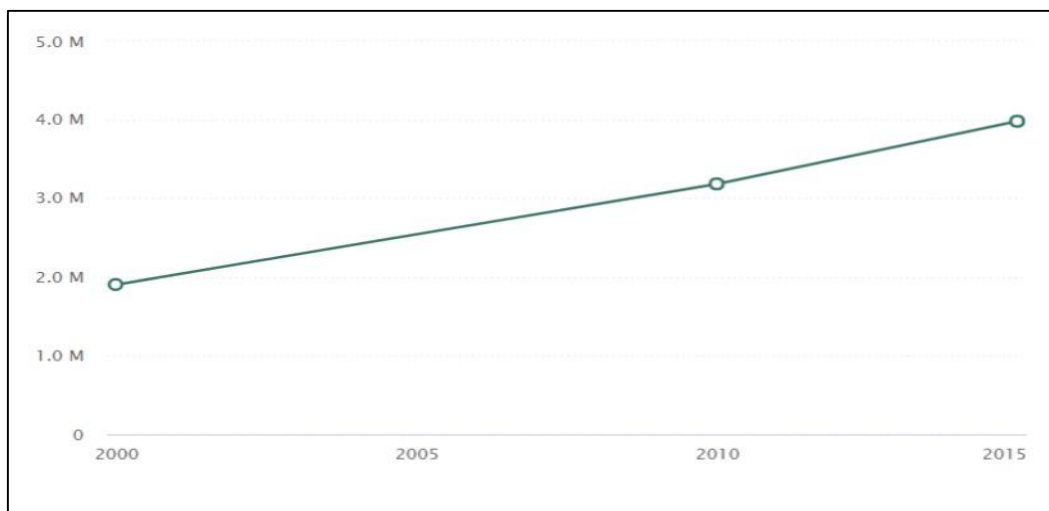
  Source: Tradingeconomics.com

Recently under Trump's administration, strict restrictions on the temporary visa policies severely affected the Indian nationals moving to work there.

India is challenging U.S. fees for worker visas in the WTO, and monitoring potential U.S. action to revise the H-1B (specialized worker) visa program. Indians hold 46% of the H-1B visa recipients. This program is associated with the richest and 'highly educated' immigrants; three fourth of which are working in the companies like Apple, Google, Microsoft etc at the Silicon Valley. High uncertainty prevails regarding the visa polices given the economic reasons; as the Silicon Valley is highly dependent on the foreign based employees i.e.,70%, out of which 40% are Indians.

With the elections turning the administration blue or Democrat led, the policies relating to immigration to the USA will likely take a turn for the better. The election campaign from the Democrats clearly indicated a welcoming open heart for immigrants and quoted that immigration is core to the economic growth of the USA, and renewal and development is greatly aided by the immigrants. The Obama-Biden led administration from 2009-17, had emphasized on the importance of immigrants in entrepreneurship and innovation. The reform brought by the government in 2014 enabled legalised stay of more than 40% illegal immigrants to the USA who contributed to the economy positively. They also were against the parent-child separation or the family separations which were caused due to indefinite detention of people in camps.

The US President elect also plans on making screening effective and concentrating on the root causes of irregular immigration rather than detaining people in the nation. The reforms taken in the Obama administration, also focused on the Northern Triangle countries of Central America, relating to bringing peace, resolving conflicts and putting a check on the drug cartel mafia in the region. After being awarded the Nobel Peace Prize, the Obama-Biden led administration, took it as a call for action, and ensured cooperation and diplomacy between nations. Following the same path way, this administration to be led by Biden-Harris, also promises people that refugees and asylums along with immigrants will be welcomed into the USA, and will be allowed to positively impact the community. This will likely cause a surge in the number of immigrants from India into the USA, and will also hence increase the Indian population in the USA.

Dynamic Analysis

In order to find a comprehensive impact of the IT trade between India and USA on India, we build regression models with the GDP in real terms as the dependent variable, and the independent variables as under.

1. Imports from USA in the IT sector
2. Exports to USA in the IT sector

To ensure that the exchange rate volatility does not have an impact in the above models, we use a regression model which considers the impact of the exchange rate between Rupee and Dollar, on the Growth of Indian GDP.

It is as follows:
$\log (\text{Rupee}) = A + B_i \log (\text{Dollar}) + E_i.$

The model gives the following regression equation:
 $\log (\text{Rupee}) = 3.297 + 6.788 \log (\text{Dollar})$

R- square: 0.1405 p-value:0.2679.

Since the R-squared is less than 0.5, and the p-value is large, we can say that the exchange rate does not have a sizable impact on the changes caused by imports and exports on the Indian GDP growth rate.

Model 1: log (Growth) = A +B_i log (Exports) +E_i

The model assesses the relationship between Exports from India to US in the IT sector and the growth in the GDP of India from the years 2000 to 2011. The model gives the following regression equation:

log (Growth) = 22.0649 + 0.2578 log (Exports)

Adjusted r-squared: 0.9513 p-value:
4.253e-08

Model 2: log (Growth) = A +B_i log (Imports) +E_i

The model assesses the relationship between Imports to India from US in the IT sector and the growth in the GDP of India from the years 2000 to 2011. The model gives the following regression equation:

log (Growth) = 8.754e+11+ (5.184e+1) log (Imports)

Adjusted r-squared: 0.959 p-value:
1.807e-08

Graph 3: Regression model showing the relationship between Exports from India to US in IT sector and Growth of Indian GDP
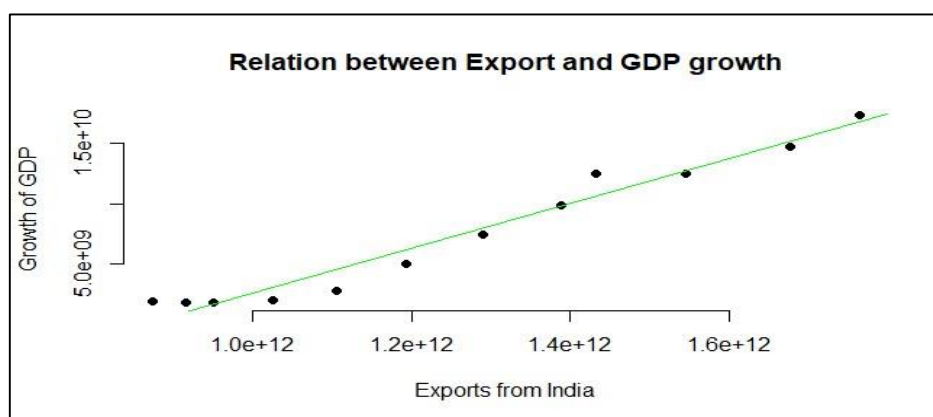
Source: World Bank

From the two regression models and the Graphs 3,4, it is very clear that there is a strong positive correlation between the bilateral trade between India and the USA, and the Growth of Indian GDP. Although this does not indicate a post hoc fallacy that the rise in exports or imports (with USA as the trade partner) have caused a rise in the GDP, it would not be a stretch to say that the trade partnership with the USA, is specifically fruitful for the Indian economy.

Graph 4: Regression model showing the relationship between Imports to India from US in IT sector and Growth of Indian GDP
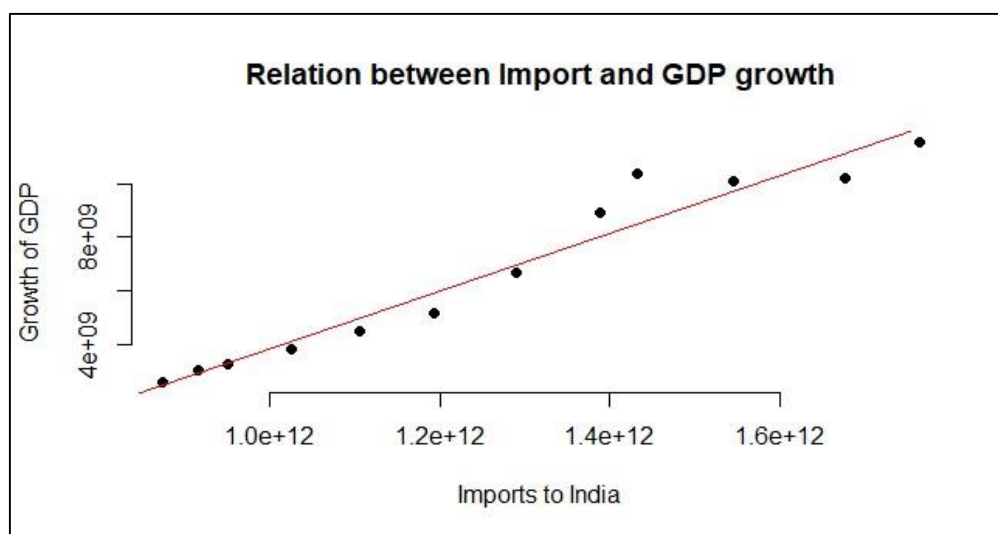
Source: World Bank

Here, one should also note the difference in the kind of imports and exports between India and the USA. The major export from India to the USA in the technological domain was majorly the items under the Commerce control list, and the man power, which although not indicated in the direct value of exports, has a substantial role to play here. The imports from USA in the sector were comprised by ATP or the Advanced Technology Products, with an average annual value of over $2.5 Billion, from early 2000s till date.

And undoubtedly, the changes in the system of EXIM trade with India, where exceptions under the Special Economic Zones and Economic Processing Zones, fall in place, has given a boost to the competitiveness of Indian industries in the international market and has had a positive effect on the economy of India. It is imperative here to note that Growth of GDP is an incomplete measure of growth or development of an economy. Many experts consider GDP per capita a more comprehensive measure than GDP. Hence, in the next segment, GDP per capita is considered as the dependent variable with a myriad mixture of independent variables to find the impact of the trade between India and USA on the Indian Economy. GDP per capita, more commonly known as per capita income is the quotient of the GDP of the nation divided by the population. This variable, seemingly simple is dependent on many other factors too. Few of them include land area, inflation, unemployment, the number of people below the

poverty line and of course, international trade relations. For our analysis, we consider the following variables:

- GDP Per capita (in USD PPP)
- GDP growth rate of India
- Population growth in India over the years
- Exports and Imports, with USA as the trading partner
- Unemployment rate in India

Although there are many other variables, they have been narrowed down to the above listed ones as they seem the most likely to have direct interaction with imports and exports and also the growth of GDP in a country. In a nation like India, the savings rate also greatly determines the course of the growth of income, which will be looked at in the next step of the model.

First, a regression model with per capita income growth as the independent variable and the dependent variables taken are: GDP growth, Inflation, Population Growth, Unemployment rate, Imports, and Exports (with USA as the trade partner, and only service sector included), is built. The time series is taken from 2000 to 2011.

Model 3:

GDP per capita growth = $A + B_1$ GDP growth + B_2 Inflation + B_3 Population Growth + B_4 Unemployment + B_5 (Exports-Imports) Let the following variables stand for growth rates of:

g – GDP per capita

u – Unemployment rate in India

d – GDP

p – Population growth

e – Imports to India from USA in service sector

n - Inflation rate or GDP deflator in India

i – Exports from India to USA in service sector

Upon running the above regression model with necessary conditions for stationary datasets being satisfied, we reach the following summary of regression: g ~ n + p + i - e + u + d
Coefficients:

	Estimate	Std. Error	t-value	Pr (>|t|)
Intercept	5.156e+04	1.010e+04	5.10	0.00376
n	2.489e+02	1.041e+02	2.390	0.06240
p	-2.749e-03	5.461e-04	-5.034	0.00399
i-e	8.669e-07	4.142e-07	2.093	0.09054
u	2.118e+03	3.654e+03	0.580	0.58723
d	3.233e+02	9.058e+01	3.569	0.01606

Multiple R-squared: 0.9769

From the model it is clear that about 98% of all variation in GDP per capita growth is caused due to the changes in GDP growth rates, inflation, population growth rate, unemployment rate, and the bilateral trade in service sector between India and the USA.

The below graph (Graph 5) shows the relationship between the fitted values and the residuals of the model. There is almost a linear relationship between these variables and hence it is concluded that the data fits closest to a normal distribution. This helps further in strengthening the relationship between the explanatory variables and growth rate of per capita income in India. Upon finding the Cook's distance, we can see that none of the values exceed 0.5, making the model a very relevant one.

Graph 5: The residuals vs fitted values graph of the multiple regression model
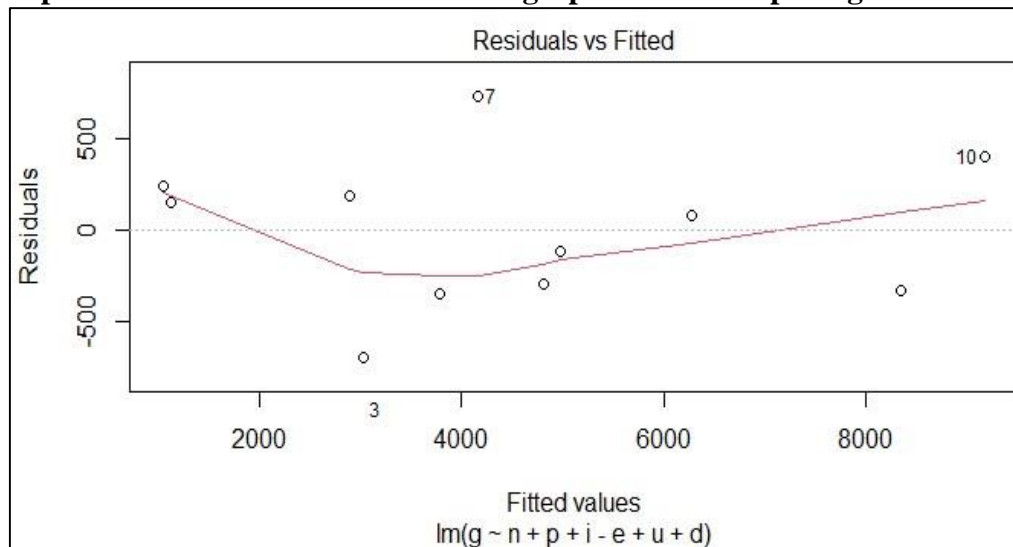
Source: World Bank

But just building a model with high coefficient of correlation is not sufficient. It is important to look at the explanatory variables and check if there is any correlation between those. For the same, we use the Pearson correlation coefficient.

Pearson correlation coefficient is given by:

$$r = \frac{\sum (x - \bar{x})(y - \bar{y})}{\sqrt{\sum (x - \bar{x})^2 \sum (y - \bar{y})^2}}$$

The Pearson correlation coefficients between the following variables are:

- ✦ u, p: 0.3146279
- ✦ u, n: -0.3344164
- ✦ u, d: 0.4927482

✦ u, i-e: -0.1184835
✦ p, n: 0.1075639
✦ p, d: 0.2438245
✦ p, i-e: -0.6718092
✦ n, d: -0.2400672
✦ n, i-e: 0.4279142
✦ d, i-e: -0.4125683   (Here, the balance of trade in the service sector is considered instead of considering the variables exports and imports separately, so as to assess the impact of the bilateral trade all together, instead of each of them separately.)

It can be seen that the Pearson coefficient is significant for none of the parameters, except for population growth and trade balance, meaning there is no autocorrelation for any other variables and hence, there is no need for making adjustments to the parametric values except the above mentioned two. The need arises adjust the values of these two parameters and find the value of the adjusted correlation coefficient or r^2. The adjusted r^2 is **0.9537**. This means that, now the parameters considered in the model explain more than 95% of the changes in the GDP per capita.

In the next step of the model, personal savings rate in India is included. Upon including personal savings rate, the following are the results obtained.

Model 4:

GDP per capita growth = $A+B_1$ GDP growth + B_2 Inflation+ B_3 Population Growth + B_4 Unemployment +B_5 (Exports-Imports) + B_6 Savings rate

$g \sim n + p + i + u + d + n + s$

where s stands for rate of Personal savings in India **Coefficients:**

	Estimate	Std. Error	t-value	Pr(>|t|)
Intercept	4.393e+04	4.546e+03	9.663	0.000642
n	1.063e+02	5.277e+01	2.015	0.114166
p	-2.355e-03	2.445e-04	-9.634	0.000649
i-e	2.944e-07	2.105e-07	1.398	0.234555
u	-3.840e+03	1.966e+03	-1.953	0.122541
d	2.533e+02	4.087e+01	6.199	0.122541
s	1.250e+00	2.553e-01	4.898	0.008058

Multiple R-squared: 0.9967

In the above model too, upon finding the Pearson coefficients it is seen that there is autocorrelation only among the two aforementioned variables. Hence, adjustments are made to those variables and an adjusted r^2 is found. The value of adjusted r^2 is **0.9917**.

The explanatory variables in the model account for more than 99% of all changes that cause a change in the Growth of per capita income in India. With this, an inference can be drawn that, the international trade between India and the USA, in the service or IT sector has helped the Indian economy.

But, in case of this bilateral trade, it is necessary to proceed with caution. With good diplomatic relationship with the USA, Indian BOP gets stronger, as well as competitiveness in the international market rises.

Conclusion

In conclusion, one can say that the bilateral trade relationship between the USA and India is a multifaceted economic tool that favours both the nations when diplomatic ties flourish and immigration constraints are not unfavourable to the Indian skilled labour force.

Of all immigrants, more than 100,000 people immigrate to the USA and Canada as permanent residents, from India. Immigration to the USA has been consistently rising since the last two decades, and with the government being a democratic one, which has always been liberal with regards to immigration policy, once can expect a higher proportion of immigrants heading towards the states. In the USA, the largest number of foreign students from Asia, head from China and India. This helps India by providing ample employment and educational opportunities to the learned population. These NRIs help by contributing to the economy, as they add value to the Gross National Product of India. Tourism sector also benefits from these residents abroad, causing a rise in revenue. The number of visas under this category peaked in 2017 and have been declining ever since.

The current system of immigration policy imposes a 7% per country quota on allotment of permanent legal residency or the green cards; which Harris has been consistently suggesting for amendments. Kamala Harris is in favour of a more friendly immigrant policy as evident by the 'HR 1044' policy that she co-sponsored to grant the permanent resident status to Indians and other Asian working immigrants with pending green card requests. We expect to see more welcoming approaches to the immigration policies under Kamala-Biden administration as they recognise that restriction on the immigration of high skilled labour would lead to loss of innovation and productivity.

This international trade between the USA and India also helps in improving the standard of living of the people in India due to job creation, catering to the EXIM business as well as the FDI and establishments made by the USA in the country. There is a positive relationship between the amount of trade with the USA and the personal savings rate of the Indian people, which points to the possibility of further growth of the per capita income, and hence, a path to a better lifestyle to the skilled Indians.

Appendix

Table 1: Imports and Exports in the IT sector between India and the USA (USA as the reporter)

Year	Imports	Exports
2000	1901000000	2580000000
2001	1821000000	3016000000
2002	1817000000	3270000000
2003	1989000000	3804000000
2004	2848000000	4504000000
2005	4989000000	5185000000
2006	7466000000	6648000000
2007	9889000000	8925000000
2008	12505000000	10338000000
2009	12494000000	10090000000
2010	14697000000	10184000000
2011	17350000000	11560000000

Table 2: Imports from the USA in service sector and GDP growth rate in India

Year	Imports	Growth
2000	2580000000	8.73357E+11
2001	3016000000	9.15488E+11
2002	3270000000	9.50313E+11
2003	3804000000	1.02501E+12
2004	4504000000	1.10622E+12
2005	5185000000	1.19387E+12
2006	6648000000	1.29011E+12
2007	8925000000	1.38894E+12
2008	10338000000	1.43181E+12
2009	10090000000	1.54438E+12
2010	10184000000	1.67562E+12
2011	11560000000	1.76344E+12

Table 3: Exports to the USA in the service sector and GDP growth rate in India

Year	Exports	Growth
2000	1901000000	8.73357E+11
2001	1821000000	9.15488E+11
2002	1817000000	9.50313E+11
2003	1989000000	1.02501E+12
2004	2848000000	1.10622E+12
2005	4989000000	1.19387E+12
2006	7466000000	1.29011E+12
2007	9889000000	1.38894E+12
2008	12505000000	1.43181E+12
2009	12494000000	1.54438E+12
2010	14697000000	1.67562E+12
2011	17350000000	1.76344E+12

Table 4: Data of all the explanatory variables and GDP per capita in India from 2000-11

Year	GDP per capita	GDP	Inflation	Population	Unemployment	Imports	Exports	Savings
2000	20253.03	3.840991	3.64497	1056575549	5.66	1901000000	2580000000	4288.51
2001	21537.14	4.823966	3.215616	1075000085	5.66	1821000000	3016000000	4637.5
2002	22798.63	3.803975	3.715684	1093317189	5.72	1817000000	3270000000	5452.88
2003	25123.45	7.860381	3.867798	1111523144	5.73	1989000000	3804000000	5641.61
2004	28207.03	7.922937	5.725413	1129623456	5.67	2848000000	4504000000	6575.87
2005	31649.47	7.923431	5.621903	1147609927	5.6	4989000000	5185000000	7636.84
2006	36505.18	8.060733	8.400938	1165486291	5.45	7466000000	6648000000	8689.87
2007	41401.48	7.660815	6.944418	1183209472	5.32	9889000000	8925000000	9943.96
2008	45925.64	3.086698	9.19397	1200669765	5.28	12505000000	10338000000	11183.46
2009	52281.1	7.861889	7.040365	1217726215	5.57	12494000000	10090000000	13308.72
2010	61853.59	8.497585	10.52603	1234281170	5.64	14697000000	10184000000	16307.98
2011	69874.51	5.241345	8.733578	1250288729	5.64	17350000000	11560000000	18001.7

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