

# Exploring the Economic Ties Between India and the United States of America

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*Received June 27, 2024*

*Accepted May 09, 2024*

*Electronic access June 15, 2025*

The economic relationship between India and the United States plays a crucial role in global trade and investment. This study explores the interdependence between both economies, focusing on key aspects such as foreign direct investment (FDI), bilateral trade, and employment trends in U.S.-owned affiliates in India. It aims to identify the factors driving economic collaboration and their broader implications. The research utilizes data analysis of trade volumes, FDI flows, and employment statistics from official reports and financial institutions. It examines business activities, market trends, and investment patterns to assess the depth of economic integration. Findings indicate a significant increase in bilateral trade, with trade volumes reaching approximately \$128.55 billion in 2022-23. U.S. enterprises have expanded their presence in India, contributing to job creation and technological exchange. Additionally, India's exports to the U.S. continue to rise, strengthening economic ties. The study concludes that India and the U.S. share a mutually beneficial economic relationship, with increasing FDI and trade reinforcing their strategic partnership. The research highlights the potential for future economic collaboration and policy initiatives to sustain growth.

## Introduction

India's National Stock Exchange (NSE) is currently ranked as the 5th largest stock exchange in the world by market capitalization, with approximately \$5 trillion in market value as of late 2023. This positions it behind the New York Stock Exchange (NYSE), which holds the top spot with a market capitalization exceeding \$27.9 trillion, and NASDAQ, which follows closely with about \$25.9 trillion<sup>1</sup>. The U.S. has also emerged as India's biggest trading partner in 2022-23 due to increasing economic ties. Bilateral trade between India and the US rose to US\$ 128.55 billion in 2022-23, an increase of 7.65% compared to the previous year<sup>2</sup>. Thus, seeing that the NSE is ranked as the 5th largest stock exchange in the world by market capitalization and the USA has emerged as India's biggest trading partner, it may be possible that there is a correlation between the economies of India and the USA. I will be analyzing data on (i) the inward and outward activities of the US in India in terms of the number of enterprises, (ii) the inward and outward flow of Foreign Direct Investment (FDI) of the US in India, (iii) US's employment of majority-owned foreign affiliates in India (iv) share of India's input in the intermediate demand of US, (v) comparing India's imports into the US to that of Japan and China, and (vi) exchange rate from US dollar to Indian rupee. Through the data analyzed, as there are drastic changes in policies in the respective countries, there is an increase or decrease in the number of enterprises and inflow and outflow of FDI from the US to India, accordingly. Though the quality of the labor workforce has not changed between 2010 and 2020, the employment of Indians

in foreign affiliates of the US has increased. Due to inflation, products in the US have become more expensive than those in India, so more and more products will be bought from India by the US. Apart from this, India's share of the intermediate demand of the USA increased significantly between 2004 and 2014.

## Literature Review

The Indian stock market has been the second-fastest-growing economy and among the top-performing stock markets over the past 25 years. This remarkable growth positions India as a key driver for Asia and global economic expansion. Estimates indicate that India's export market will rise to 4.5% by 2031, double that of 2021, with broad-based gains across goods and service exports<sup>3</sup>. A research studies the market efficiency and causal relationship between the Indian Stock Market and various macroeconomic variables from 2005 to 2011. Various statistical techniques were employed to conduct this analysis, including the Ljung-Box Q test, the Breusch-Godfrey LM test, the Unit Root test, and the Granger Causality test. The findings revealed a unidirectional causality between several key variables:

- international stock market and the Indian interest rate
- the international stock market and the Indian exchange
- the Indian stock market and the Indian inflation rate]

Additionally, a bidirectional relationship was identified between:

- interest rate and stock market
- exchange rate and stock market
- international stock market and Bombay Stock Exchange (BSE) volume
- exchange rate and BSE volume.

Tripathy's study provides valuable insights into the relationships between macroeconomic variables and the Indian stock market during a specific period (2005-2011). However, the study is limited by its focus on a relatively short time frame. Future research could explore these relationships over a longer period<sup>4</sup>. India and the USA have substantial economic ties, particularly in the Information Technology (IT) and Business Process Outsourcing (BPO) sectors. The IT sector has become a pivotal area of service trade, with US companies increasingly outsourcing IT services from India. This trend has led to job creation in India while simultaneously increasing margins for American companies; however, it has also resulted in job losses for some blue-collar Americans. The interconnectedness of these economies has direct implications for employment in both countries: approximately 100,000 BPO workers in India are employed by North American companies, highlighting the dependency of the Indian workforce on US business operations. Moreover, the presence of BPO workers employed by North American companies in India illustrates how the health of the Indian economy directly affects American businesses. If the Indian economy experiences growth, it can increase service demand, benefiting US companies. Conversely, economic challenges in India could lead to reduced outsourcing, impacting American firms and potentially resulting in job losses in the US. The economies of India and the US are complementary, meaning that the strengths of one economy can support the other. For instance, India's large pool of English-speaking graduates and lower wage costs make it an attractive destination for US companies looking to outsource, thereby boosting the Indian economy through job creation and investment. The increase in Foreign Direct Investment from the US into India has grown from \$372 million in 1990 to \$8.5 billion in 2005. This influx of capital not only aids in the growth of the Indian economy but also provides American companies access to new markets and resources. Any changes in the Indian economy, such as economic downturns, could impact US investments' flow, thus affecting US companies operating in India. Furthermore, the synergy between these two economies means that economic policies or changes in one country can have ripple effects in another. For example, if India implements reforms to enhance its business environment, it could attract more US investments, benefiting both economies. Similarly, economic downturns in the US could decrease demand for Indian exports, affecting India's economic stability<sup>5</sup>. This analysis offers a comprehensive

overview of the economic ties between India and the US, highlighting the mutual benefits and dependencies. However, it may oversimplify the complexities of these relationships and not fully account for other factors that could influence these dynamics. Further research could examine specific sectors or industries to provide a more nuanced understanding. India's economic liberalization post-1991 has led to significant growth rates that have attracted US investments. However, if India experiences an economic downturn or policy changes that negatively affect growth rates, it could lead to reduced FDI from the US, impacting US companies that rely on Indian markets for expansion and revenue. For instance, India's increasing energy demands position it as an essential player in the global energy market. Changes in India's energy policies or its ability to secure energy imports can affect international oil prices, impacting the US economy especially sectors reliant on stable energy prices. If India diversifies its energy sources away from US suppliers, it could lead to shifts in energy market dynamics that affect US energy companies. The trade relationship between India and the US is significant; both countries benefit from exports and imports. Any changes in trade policies, tariffs, or regulations in India could affect US exports to India, impacting US businesses and potentially leading to retaliatory measures that could affect the US economy. Furthermore, strategic cooperation in technology and defense means that changes in India's economic policies could influence US defense contractors and technology firms. For example, if India prioritizes domestic production over imports, this shift could impact supply chains for US defense and technology products. Global economic trends also influence both economies; a slowdown in the US economy could reduce demand for Indian exports, adversely affecting India's growth trajectory. Conversely, if India faces financial challenges, it could lead to reduced imports from the US, impacting American businesses reliant on Indian markets<sup>6</sup>. While this overview provides valuable context regarding the impact of India's economic policies on US investments and trade, it is important to consider the time elapsed since its publication. The global economic landscape and the dynamics between India and the US have likely evolved significantly since then. A more current analysis would be beneficial to assess the ongoing relevance of these findings. A study also investigates trends, similarities, and patterns between activities on the New York Stock Exchange (NYSE) and the National Stock Exchange (NSE). By collecting data from official stock exchange websites, they employed statistical tools such as Johansen's co-integration test, Granger-Wal Causality test, and GARCH (1,1) model. The study concludes that while there is lesser co-movement between these markets compared to global counterparts like NYSE regarding returns earned from both stock markets, there is still a positive correlation observed. Both indices of NSE and NYSE exhibit similar movements during this study period; thus, it is concluded that NSE seems to have followed or moved in tandem with NYSE

more closely than previously understood. This suggests tighter co-movements between the US and Indian stock markets, reflecting their increased integration due to closer financial and economic linkages<sup>7</sup>). Chadha and Saxena's study provides a detailed analysis of the co-movement between the NYSE and NSE using robust statistical methods. However, the study's findings are limited to the specific period examined. Further research could investigate how these relationships have evolved in more recent years, particularly in light of increasing globalization and technological advancements. Additionally, the study could be expanded to include other stock exchanges or macroeconomic variables to provide a more comprehensive picture of global financial integration. Through this paper, I aim to explore further correlations between these two economies India and USA using macroeconomic variables such as foreign direct investment (FDI), number of enterprises, number of employees, exchange rate fluctuations, and India's contribution to US intermediate demand.

## Methods and Results

The methods used in this paper are quantitative data analysis and comparative analysis.

### India's Imports to the US

In this section, I will compare India's, China's, and Japan's imports into the US for 2012-2022 to show why it is essential to study the interdependent relationship between the Indian and US economies.

Figure I.I provides information about Indian imports into the US for the years 2012-2022.

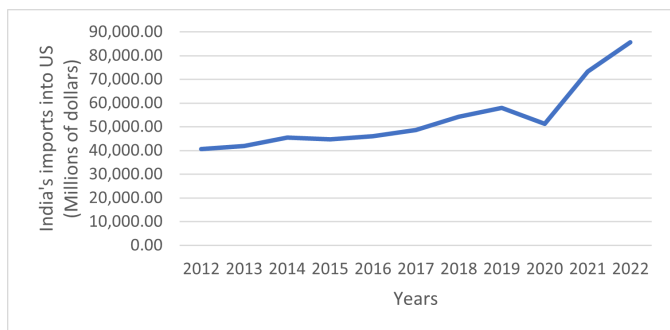


FIGURE I.I SOURCE: US CENSUS BUREAU

Figure I.II shows that India's imports into the US are not at par with China's imports into the US. However, for ten years, India did have a greater average growth rate of 111% than 26% that of China in terms of imports into the US<sup>8</sup>. Therefore, there will be a time when India's imports into the US will be at par with China's imports into the US.

Figure I.II provides information about Chinese imports into the US for the years 2012-2022

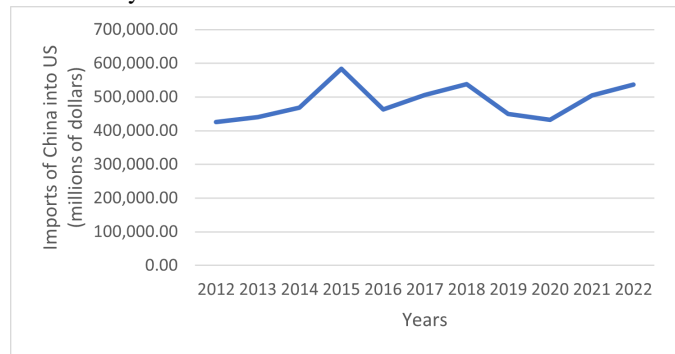


FIGURE I.II SOURCE: US CENSUS BUREAU

The methodology used for calculating this is:

$$\begin{aligned}
 & (\text{No. of imports into US in 2022}) + (\text{No. of imports into US in 2012}) \\
 & \times \left( \frac{\text{Overall growth rate (2012-2022)}}{100} \right) \quad (1)
 \end{aligned}$$

According to this, by 2062, India's imports into the US will be greater than China's imports into the US. Studying Japan's imports into the US is essential because the Japan Exchange Group, which operates the TSE, has a market capitalization of approximately \$4.48 trillion. This makes it a major player in global finance, following only the New York Stock Exchange and NASDAQ<sup>9</sup>. Japanese companies such as HeartCore Enterprises, Nomura Holdings, and ORIX Corporation are listed on the NYSE and NASDAQ<sup>10</sup>.

Figure I.III provides us with information about Japan's imports into the US.

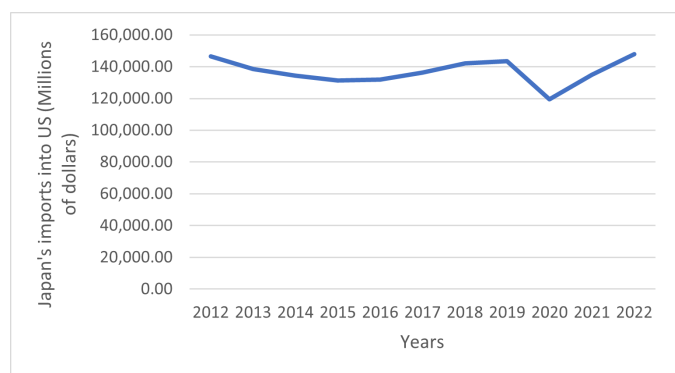


FIGURE I.III SOURCE: US CENSUS BUREAU

Figure I.III shows that Japan's imports into the US were greater than India's imports into the US for 2012-2022. However, for the ten years, the average growth of Japan's imports into the US was 1.11%, less than 111% of India's. Therefore, there will

be a time when India's imports into the US will be on par with Japan's.

Table I.II provides projections of India's and Japan's imports into the US for the next ten years. The methodology that has been used for the calculation of the projections is:

$$\begin{aligned} & (\text{No. of imports into US in 2022}) + \\ & (\text{No. of imports into US in 2022}) \\ & \times \left( \frac{\text{Overall growth rate (2012-2022)}}{100} \right) \end{aligned} \quad (2)$$

Table I.I

YEAR	INDIA'S IMPORTS INTO THE US	JAPAN'S IMPORTS INTO THE US
2032	180597.958	149714.4955

TABLE I.I CAUTIONARY NOTE: THESE ARE PROJECTIONS THUS, THEY MUST BE USED WITH CAUTION

Table I.I shows that by 2032, India's imports into the US will be greater than Japan's imports into the US.

From this section, we can see that even though Japan and China's imports into the US in 2022 were more significant than India's imports into the US, the overall growth rate of India's imports into the US during the ten years (2012-2022) was greater than that of China and Japan. According to the projections, India's imports into the US could be more significant than Japan's by 2032 and more important than China's by 2062.

### Number of US Enterprises in India

In this section, we will study the outward activity of US multinational companies in India regarding the number of enterprises.

From graph II.I., there has been a growth in the number of enterprises (total of business sectors) for most years, except for 2015 and 2020. Apart from this, there are big jumps in the number of enterprises in 2014 and 2019. The two reasons for an exceptional increase in the number of enterprises for the year 2014 could be because of the favorable policies defined by the Indian government in the Company Act of 2013 and the introduction of the eBiz portal, which made doing business in India conducive for foreign enterprises. The Company Act of 2013 could have encouraged more enterprises in the USA to be established in India because of streamlining and introducing concepts such as reverse mergers, which is the merging of foreign companies with Indian companies. Apart from this, The Company Act of 2013 allows existing Indian shareholders to grant higher veto rights for amending provisions in a company's articles, thus attracting foreign investors<sup>11</sup>.

The eBiz portal aimed to transform and develop a conducive business environment in India. The portal is a one-stop shop

Figure II.I provide us with information about the outward activity of multinational companies (MNCs) of the USA in India regarding the number of enterprises from 2010-2020.

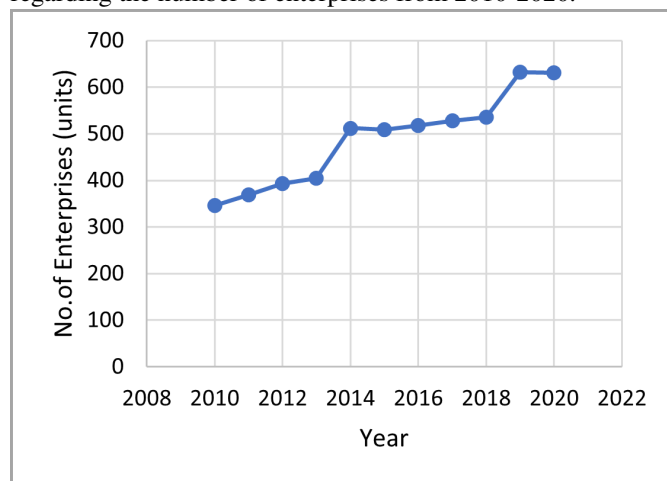


FIGURE II.I SOURCE: OECD.Stat

for providing G2B services to investors and business communities in India. It reduces delays and complexities in obtaining information, making it easier for foreign companies to obtain licenses, approvals, clearances, no-objection certificates, permits, and even filing returns<sup>12</sup>.

The exceptional increase in 2019 could be the introduction of the Goods and Service Tax (GST) in 2017. The introduction of GST eliminated the need to pay several indirect taxes, which were there under the earlier system. Most of these indirect taxes were now subsumed into one tax, GST. This would lower the cost of goods and services and mitigate the ill effects of cascading, thus improving the competitiveness of the Indian Industry. Apart from this, exports are entirely exempt from taxes, unlike the previous system of indirect taxes, in which some taxes were not refundable. Any taxes paid on exported goods or services and the inputs used in their production will be refunded<sup>13</sup>.

Based on the data given in Fig 1.2, we can see a pattern of a massive increase in the number of enterprises every five years. Therefore, the average growth rate (approximate) for 2010, 2011, 2012, 2013, 2015, 2016, 2017, 2018, and 2020 is 2.58%, and the average growth rate for 2014 and 2019 is 22.17%.

From this, we can obtain the projected number of enterprises (total business sector) of the USA in India. The methodology used for calculating the projection for the year 2025 is:

$$\begin{aligned} & \text{No. of enterprises in 2020} \\ & \times (1 + \text{The overall growth rate for the years not having big jumps})^5 \end{aligned} \quad (3)$$

The methodology used for calculating the projection for the year 2030 is as follows:

(No. of enterprises in the year 2020)

$$\begin{aligned} &\times (1 + \text{The overall growth rate for the years not having big jumps}) \\ &\times (1 + \text{The overall growth rate for the years having big jumps}) \end{aligned} \quad (4)$$

Therefore, there would be 716.8598865 units in 2025 and 969.851789 units in 2030. Therefore, when the stock market is more volatile, the number of Indian enterprises in the US must decrease; companies with low caps will be risk averse and shut down their enterprises. From this section, it can be concluded that with drastic changes in India's policies, the number of enterprises established by the US in India has changed, depending on whether the policies would benefit or hurt the business.

### Number of Indian Enterprises in the US

To understand the interdependent relationship between the Indian and the US economies, it is essential to study the number of enterprises established by the USA in India and the number of enterprises established by India in the USA. In this section, we will examine the latter aspect.

Figure III.I provides information about the number of enterprises established by India in the USA as a percentage of the total business sector from 2010 to 2020.

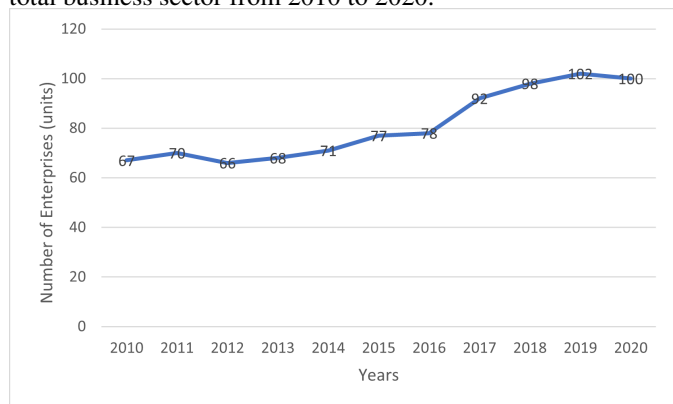


FIGURE III.I SOURCE: OECD.Stat

Figure III.I shows that the number of enterprises in the business sector has grown for most of the years, except for 2011-12 and 2019-2020, when it decreased. Apart from this, the most significant decline of 5.71% can be seen in 2012.

One of the reasons for this could be the US fiscal cliff, which was to begin in January 2013. It refers to scheduled reductions in the US budget deficit by expiring tax cuts and mandatory spending cuts. It was predicted to affect emerging markets, such as India, by slowing US and global economies. The export demand would also be low, and dollar devaluation would reduce trade competitiveness. Additionally, these markets will incur losses on currency reserves invested in US dollars and bonds issued by the US government. This could be a reason for the decrease in the number of enterprises in India in the USA<sup>14</sup>.

We can also see an exceptional increase of 17.95% in the number of enterprises in 2017. A reason for this could be the Tax Cuts and Jobs Act of 2017, which was to be implemented in 2018. This gave businesses and investors provision for a reduced corporate tax rate of 20%<sup>15</sup>.

From this section, it can be concluded that when the US policies for setting up enterprises change, the number of enterprises established by India in the US changes, depending on whether the policies make it easier for the business to be established.

### FDI Inflow from the US to India

Foreign Direct Investment (FDI) can inform us about the amount of investment from the USA to India and vice versa. If more and more investment is being made from the US to India, then it could be that the US economy is affected by the changes in the Indian economy. To understand this effect, we will study the FDI inflows from the US to India in this section.

Figure IV.I provides us with the trends in foreign direct investment (FDI) inflow from the US to India.

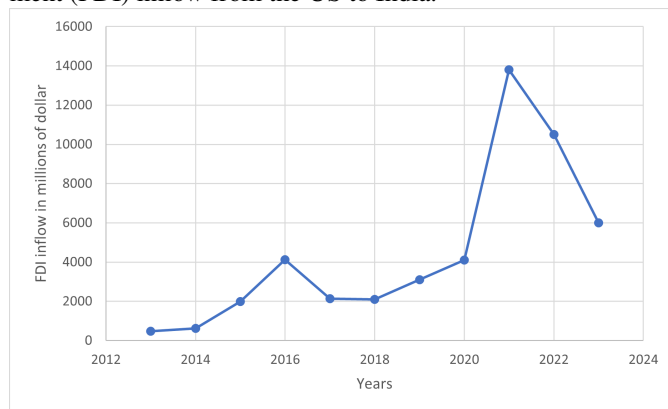


FIGURE IV.I SOURCE: STATISTA SOURCED FROM BUREAU OF ECONOMIC AFFAIRS (DEPARTMENT OF COMMERCE, USA)

The FDI inflow from the US to India has increased for most of the years except 2017, 2018, 2022, and 2023.

Figure IV.I shows an exceptional increase in the FDI inflow from the US to India in 2021. There is an increase in FDI by a percentage of 221.07%. One of the reasons for this could be the introduction of the Make in India initiative. It is an initiative that the government of India has launched to encourage industries to manufacture their products within India's boundaries. Under this initiative, they have introduced new processes to make it easy for businesses to function within the limits of India and provide better availability of modern and facilitating infrastructure<sup>16</sup>.

Similarly, there has been an exceptional increase in FDI inflow from the US to India in 2016. One of the primary reasons for this is reforms in the FDI policy. The reforms that were introduced are mentioned below:

- (i) In the defense sector, up to 49% of FDI was allowed without special permission, and up to 100% of FDI was allowed with government approval.
- (ii) up to 100% FDI was allowed in broadcasting carriage services.
- (iii) In civil aviation, up to 100% FDI was allowed.
- (iv) In pharmaceuticals, Greenfield projects were allowed up to 100% foreign ownership, and foreign ownership of 74% was automatically allowed for existing projects.
- (v) Foreign investors can now fully own the trade in food products made in India.
- (vi) In single-brand retail trading, foreign investors can own up to 49% of the businesses without special permission.
- (vii) Foreign investors can have 100% ownership in e-commerce platforms.
- (viii) Asset Reconstruction Companies can now have 100% foreign ownership without special permission.
- (ix) FDI in pension and insurance sectors is allowed up to 49% under the automatic route<sup>17</sup>.

Again, there was an exceptional increase in FDI inflow from the US to India in 2021, with a percentage increase of 108.18%. One of the reasons for this is the release of the Consolidated FDI policy, which was to be effective from the 15th of October 2020. The benefits introduced are given below:

- (i) In Air Transport Services, FDI up to 49% is allowed automatically.
- (ii) Foreign Institutional Investors/ Foreign Portfolio Investors can now invest up to 100% in security receipts issued by Asset Reconstruction Companies<sup>18</sup>.

There was an exceptional decrease of 48.16% in the FDI inflow from the US to India in 2017. One of the reasons for this is the demonetization of 500 and 1000 banknotes and the issuance of the new 500 and 200 banknotes in 2016. Due to this, the stock market prices dropped to a six-month low in the week following the announcement. As the Purchasing Managers Index fell, there was a slowdown in both the manufacturing and service industries. Both the Nifty Realty and Nifty Auto indices experienced a downward trend post-demonetization<sup>19</sup>.

Similarly, in 2023, there was a decrease of 42.86% in the inflow of FDI from the US to India. While India has made significant improvements in ensuring that businesses have ease in doing business,<sup>7</sup> there has also been an improvement in enforcing contracts, registering property, starting a business, and paying taxes. Apart from this, reforms are needed in judicial

processes to provide a digital and paperless court system, rapid digitalization of land records, further simplification of Goods and Services Tax (GST), and establishment of a one-stop shop for central and state government approvals. This could be a potential reason for the decline<sup>20</sup>.

From this section, it can be concluded that as changes in Indian financial or fiscal policies are made that could benefit foreign investors, the FDI inflow from the US to India increases. However, if there are gaps in the financial aspects of a business (e.g., strict contract enforcement), the FDI inflow from the US to India decreases.

### FDI Inflow from India to US

In this section, we will study the FDI inflow from India to the US to better understand the interdependent relationship between the Indian and US economies in terms of FDI inflow.

Figure V.I. shows the trends in FDI inflow from India to the US (in billions of dollars on a historical cost basis) from 2013 to 2023.

Figure V.I. shows the trends in FDI inflow from India to the US (in billions of dollars on a historical cost basis) from 2013 to 2023.

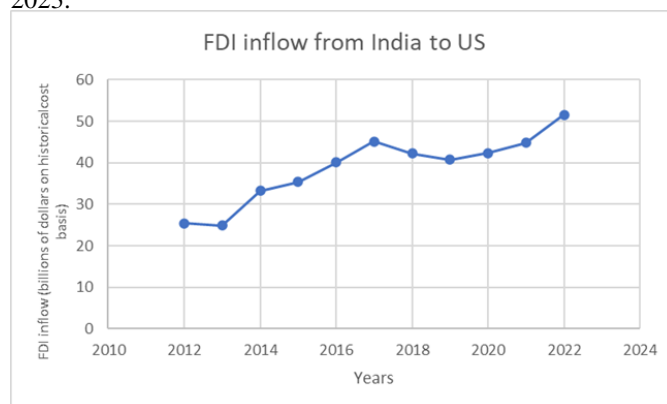


FIGURE V.I SOURCE: STATISTA SOURCED FROM BUREAU OF ECONOMIC AFFAIRS (DEPARTMENT OF COMMERCE, USA)

The graph shows an upward trend for most years, except for 2012-2013, 2017-2018, and 2018-2019.

There was an exceptional increase in the FDI inflow from India to the US in 2014 by 33.76%. This could be because the Gross Domestic Product (GDP) was estimated to have increased at an annual rate of  $3\frac{3}{4}\%$  in the second half of 2014. Apart from this, consumer price inflation remained low. Household net worth rose further, credit became readily available, and interest rates remained low<sup>21</sup>.

However, there was an exceptional decline in the FDI inflow from India to the US in 2018 by a percentage of -6.55%. One of

the reasons for this could be that a couple of corporate restructurings are purely tax and regulation-driven and could affect the equity portion of direct investment flows. Furthermore, since there might have been corporate tax planning, it would have resulted in a reversal in intercompany debt flows<sup>22</sup>.

This section concludes that when GDP increases, inflation remains low, and US financial aspects (e.g., interest rates) are doing well, as well as FDI inflow from India to the US. However, if corporate restructurings and corporate tax planning changes do not benefit foreign investors, the inflow of FDI from India to the US decreases.

### Number of Indian Employees in Foreign US Enterprises

If more and more employees from India are employed in the US, it means that more and more human resources from India are being used in the US. Since we are using more and more resources from India, any changes in the Indian economy could influence the US economy. Therefore, to understand this better, this section covers the number of Indian employees in foreign affiliates of US companies.

Figure VI.I provides information about the US's employment of majority-owned foreign affiliates, country by industry of affiliates (in thousands of employees) for the years 2010-2020

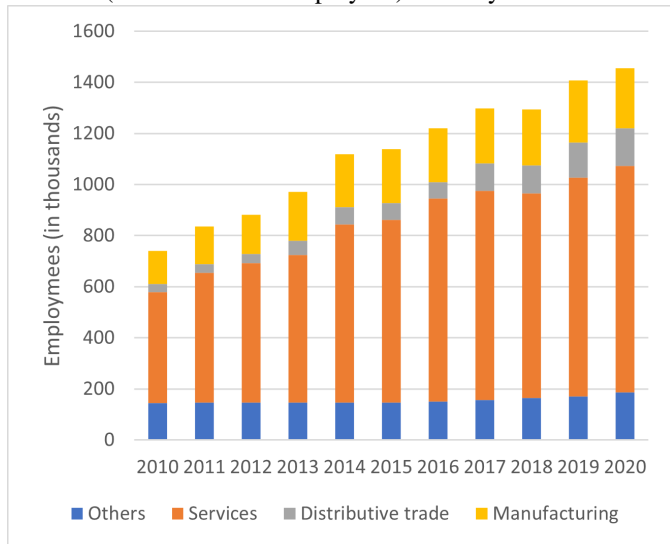


FIGURE VI.I SOURCE: BUREAU OF ECONOMIC AFFAIRS (DEPARTMENT OF COMMERCE, USA) CAUTIONARY NOTE: AT EMPTY DATA POINTS, I ASSUMED AS MUCH FEASIBLE

From the graph, we can see that for the ten years (2010-2020), there has been a growth in the number of employees for each sector. The growth is shown in Table VI.I have given below:

Though India has increased its economic growth and has a massive population of around 1.4 billion, the quality of the labor

TABLE VI.I

OTHERS	SERVICES	DISTRIBUTIVE TRADE	MANUFACTURING
28.06%	104.12%	360.31%	82.64%

workforce has remained the same. Despite this, there has been increased employment from India in the US<sup>23</sup>.

### Share of India in US's Input

In the previous section, we saw that from 2010-2020, the number of Indian employees employed in foreign affiliates of US companies increased. Therefore, it could be that India's share in the US's input might have also increased. In this section, I will show India's share in the US's input compared to China's and Japan's.

Table VII.I provides information about the USA's intermediate demand and the supply of India, USA, China, and Japan to the intermediate demand for 2004. It also provides information about the USA's total intermediate demand, excluding the USA's supply from the demand.

TABLE VII.I DATA SOURCED FROM WIOTS

USA'S TOTAL INTER-MEDIATE DEMAND	CHINA'S SUPPLY TO THE DEMAND	JAPAN'S SUPPLY TO THE DEMAND	INDIA'S SUPPLY TO THE DEMAND	USA'S SUPPLY TO THE DEMAND	USA'S TOTAL INTER-MEDIATE DEMAND, EXCLUDING USA'S SUPPLY
9,374,146	33,712	44,982	7,416	8,562,795	811,351

Now, Table VII.II provides India, China, and Japan's share of the intermediate demand for 2004.

TABLE VII.II

CHINA'S SHARE	JAPAN'S SHARE	INDIA'S SHARE
0.04155	0.05544	0.00914

Table VII.III provides information about the USA's intermediate demand and the supply of India, USA, China, and Japan to the intermediate demand in 2014. It also includes information about the USA's total intermediate demand, excluding the USA's supply from the demand.

CAUTIONARY NOTE: THESE ARE PROJECTED VALUES, SO THEY SHOULD BE USED WITH CAUTION

Table VII.I to table VII.IV, we can see that while India does not have as much share in the USA's intermediate demand as Japan and China, there has been a significant growth of 1591.79% for the ten years (2004-2014). On the other hand,

**TABLE VII.III**

USA'S TOTAL INTER-MEDIATE DEMAND	CHINA'S SUPPLY TO THE DEMAND	JAPAN'S SUPPLY TO THE DEMAND	INDIA'S SUPPLY TO THE DEMAND	USA'S SUPPLY TO THE DEMAND	USA'S TOTAL INTER-MEDIATE DEMAND, EXCLUDING USA'S SUPPLY
13,554,177	130,243	61,228	21,495	12,164,099	1,390,078

Now, Table VII.IV provides India, China, and Japan's share of the US intermediate demand for 2014.

**TABLE VII.IV**

CHINA'S SHARE	JAPAN'S SHARE	INDIA'S SHARE
0.093695	0.044047	0.015463

Japan experienced a decrease of -694.5%, and China experienced a growth of 125.50% in the share of the intermediate demand for the USA.

From Table VII.V, we can see that India's share in the USA's intermediate demand is more significant than China's and Japan's. Therefore, India's influence in supplying the USA's intermediate demand is increasing.

**Exchange Rate from USD Dollar to Indian Rupees**

To better understand the relationship of causality from the Indian stock market to the US stock market, it is essential to study the exchange rate from USD to INR and how the rate of USD fluctuates against INR.

In 2013, 1 dollar was equivalent to approximately 62 rupees, approximately<sup>24</sup>. In 2013, the Consumer Price Index for the US was 107<sup>25</sup>. In 2013, India's Consumer Price Index was 131<sup>26</sup>. Suppose a product cost 100 rupees in India in 2013. Therefore, the price of the product would be approximately 1.61 dollars. Now, in 2023, 1 dollar is equivalent to approximately 83 rupees<sup>24</sup>. In 2023, the Consumer Price Index for the US is 136<sup>25</sup>. In 2013, India's Consumer Price Index was 207<sup>26</sup>.

Therefore, the price of the same product specified in the previous example would be 158 rupees in 2023, or approximately 1.9 dollars. From this, it can be concluded that US inflation

Table VII.V shows a ten-year projection (2024) of India, Japan, and China's share of the USA's intermediate demand.

**TABLE VII.V**

CHINA'S SHARE	JAPAN'S SHARE	INDIA'S SHARE
0.211281	-0.26186	0.261599

is higher than that of India. Therefore, US products are more expensive than Indian products. This explains why the presence of Indian products would increase in the US market.

**Results**

In section I, we see that while India's imports into the US are not as much as that of Japan and China's imports into the US for 2012-2022, the average growth rate for that period of India is greater than that of China and Japan. According to the projected values, India's imports will be at par with China's and Japan's imports approximately by 2062 and 2032, respectively. With the increase in India's imports into the US, any changes in India's economy will impact the US economy.

In section II, we see that since more enterprises from the US are being established in India, any changes that would take place in the Indian economy would influence the business operations of the US enterprises based in India. If these so-called enterprises are listed on the US stock exchange, it would, thus, lead to the US stock market being affected because of the changes taking place in enterprises due to the changes taking place in the Indian economy. Similarly, in section III, we can see that there has been an increase in the number of enterprises from India that are being established in the US. As drastic changes in the policies of the US lead to an increase or decrease in the number of enterprises being established, This means that the policy changes that are taking place in the US have an impact on the Indian enterprises being established in the US and could, thus, affect the stock market of India if these enterprises are listed on the stock exchange(s) of India.

We can see this in section IV, as shown in Figure IV. The graph for the FDI inflow from the US to India keeps changing. As we can see, whenever any policy is introduced by the government of India that could negatively impact an enterprise, it leads to a decrease in the FDI inflow from the US to India. However, if FDI policies are changed or incentives are provided, the inflow from the US to India increases the FDI inflow. Similarly, in section V, we see that whenever there is an increase in the GDP of the US, the FDI inflow from India to the US increases. However, if any drastic changes are brought about to the US's economic structure of the US, it leads to a decrease in the FDI inflow from India to the US. This shows that if an individual or business invests in an enterprise in India or the US, any changes in the enterprise would impact the individual or business's FDI. If the enterprise is listed on the stock exchange, it would lead to the respective country's stock exchange either having a positive turnout or a negative turnout, depending upon the change in the host country.

In section V, we can see that during 2010-2020, employment from India in foreign affiliates from the US increased despite the quality of the labor workforce remaining the same. Chadha and Saxena (2014) also discuss the US's high dependency on

labor from India, regardless of whether the labor is skilled or unskilled.

In section VI, we can see that from 2004 to 2014, the share of India's input in the intermediate demand of the US has increased significantly compared to that of Japan and China. This goes to show that if the share of India's input in the intermediate demand of the US continues to increase in such a way, then if there is a sudden decrease in the share of India's input in the intermediate demand of the US, it could lead to the US economy suffering a negative impact, due to the lack of input. The supply wouldn't be sufficient compared to the demand.

Section VII shows that from 2013 to 2023, the US Consumer Price Index increased more than India. As a result, products in the US became more expensive than those in India during this period. This means that the US could start purchasing more products from India, as they are available at a cheaper rate.

## Conclusion

The economic ties between India and the United States exhibit a strengthening interdependence, evidenced by key indicators analyzed in this study. India's growing significance as a trade partner is underscored by an 111% average growth rate in imports to the U.S. between 2012 and 2022<sup>8</sup>, with projections suggesting that Indian imports will surpass those of Japan by 2032 and potentially those of China by 2062. This growth is further supported by an increase in the number of U.S. multinational enterprises operating in India, particularly following the implementation of the "Companies Act of 2013" and the "eBiz" portal, which streamlined business operations for foreign entities. While the number of US enterprises in India saw a decline in 2015 and 2020, overall growth remains strong. These trends highlight the potential for increased trade and investment; however, projections assume that current growth rates will continue. To capitalize on these opportunities, policymakers in both countries should focus on further streamlining regulatory processes for foreign investment or promoting skill development programs to enhance India's export competitiveness. Continued monitoring and strategic policy adjustments will be crucial to maximizing the mutual benefits of this evolving economy.

## Acknowledgments

Thank you for the guidance of Ms. Tacye Hong from Cambridge University and Bo Yuan (Bernice) from Cambridge University in the development of this research paper.

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