

## A STUDY ON THE COVID-19 PANDEMIC'S IMPACT ON THE INTERNATIONAL TRADE OF THE USA AND INDIA

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### ABSTRACT

*For the year 2020, foreign trade was down, but by 2021, it had rebounded greatly. While global commerce is already above pre-pandemic levels, the consequences of trade on various commodities, industries, and trading partners are vastly different and exert pressure on certain industries. Usually, a four- to five-year shift in the organisation of commerce would occur as a result of the Coronavirus epidemic. However, not all of the losses from the prior sharp drops had been recovered when trade imbalances remained in 2021. Consumers, corporations, and the government all have a greater motivation to deploy new or reinforce existing risk mitigation techniques because of the vast range of trade consequences and trade flows between products and origins and destinations. In the literature review of trade in the USA and India, Economic and trade Challenges were discussed using different research papers. The research methodology of the paper is a secondary qualitative method. The result shows in all cases, the pandemic's negative demand repercussions outweigh its negative supply implications. Extra fixed effects are important since their absolute values diminish.*

**Keywords:** *International Trade, USA, India, Covid-19, Economy, Export-Import.*

### Introduction

In 2020, international trade declined, but it rebounded significantly in 2021. Even though total trade flows are already comfortably above pre-pandemic levels, trade effects on specific items, industries and trade partners are immensely diverse and exert pressures on specific industries and supply chains (Hayakwa & Mukunoki, 2021). The Coronavirus epidemic caused a significant shift in the commerce structure that would normally occur over four to five years in a single year. Trade imbalances remained at the end of 2021, but not all of the losses from the earlier steep declines had been recovered. There is a high degree of unpredictability and adjustment costs associated with the wide range of trade impacts and trade flows across products, origins, and destinations, which means those consumers, businesses, and the government all have an increased incentive to implement new or strengthen existing risk mitigation strategies.

To put it another way, 2020 was the year when trade and production volumes fell to their lowest levels since World War 2 (Pei et al., 2021). During the first half of 2020, both global industrial output and goods trade fell to levels not seen since the Financial Crisis bottom in 2008. However, the recovery will take a V-shape in 2020 as a result of their quick emergence and subsequent breakdown. It was in 2021 that trade grew fast, recouping some but not all of the losses that had been inflicted by the sharp declines that had occurred earlier. However, there was no drop in global merchandise commerce in 2020 of the magnitude predicted during the epidemic era. Towards the middle of 2020, global trade volume will begin to return to pre-pandemic levels.

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Coronavirus has had a significant impact on the global economy. Economic harm in several other countries was larger than in the United States in 2020, despite one of the harshest contractions in its history. We have seen a robust rebound in the United States thanks in large part to an early and rapid vaccination rollout, as well as substantial economic assistance. Strong demand, skewed toward commodities rather than services, combined with supply chain difficulties creates inflationary pressures in the United States and practically all of our major trading partners.

The U.S. trade deficit has grown as a result of the country's quick recovery compared to the rest of the globe. Imports have risen as a result of the resurgence of business and consumer demand in the United States, thanks in part to the strength of the country's economic recovery. The recovery of many of the countries that buy American goods has lagged behind that of exports, despite exports reaching historic highs. International travel has been hit hard by the latest outbreaks of infection, which has hampered the return of several key exports for the United States, such as travel and tourism. Long-standing economic challenges, notably those originating from the integration of the global economy, have been highlighted by the pandemic. Since many American workers and communities have had to bear the costs of transferring production abroad while not fully benefiting from it, widening inequality has resulted from a lack of supportive public policy in the past.

By establishing laws that expand the benefits of trade and level the economic competitive landscape across national borders, we can correct these mistakes. It's important to reduce uncertainty and engage with economic and commercial partners to ensure that all Americans benefit from global commerce. By applying these policy measures, this can be achieved.

### **Literature Review**

A pandemic of Coronavirus has entrapped the planet. As a Chinese and Southeast Asian problem, it was initially misunderstood. In the wake of earlier epidemics, such as SARS, decision-makers around the world felt that the disease could be confined and controlled inside the affected area (Socrates, 2020). Because of natural, political, and regulatory causes, the illness quickly expanded over the world and was eventually recognised as a pandemic by WHO. The expansion was undoubtedly made easier by the already-existing ties between countries.

Since the outbreak began, the pandemic has been considered a public health issue. As of April 3 2020, there have been more than a million confirmed cases worldwide, with nearly 60,000 deaths documented (Hayakwa & Mukunoki, 2021). Shortly, these numbers are likely to climb significantly. While some nations look to be gaining control of the problem, are either still fighting to prevent the spread of the disease or are in the early phases, which are often characterised by explosive increases in cases (eg the USA and India). There are, however, several possibly far more significant repercussions that will only become apparent as time goes on. Economic and political crises that are mutually reinforcing may lead to major significantly interfere as the costs of the pandemic will not only be large but also unfairly distributed, both within countries and among different social groups in states.

As far as the economy is concerned, most experts foresee a global recession in 2020 that could be severe in some nations or areas. Between -10 and -25 per cent, JP Morgan Research expects a two-quarter GDP drop in the United States, and between -15 and -22 per cent, for the Eurozone (Pei et al., 2021). The amount and pace of healing are still unanswered questions. The political crisis can spread beyond the country's borders and affect governments at the regional or international level. As a result, several analysts are concerned about the survival of the European integration effort, citing the European institutions' inability to respond. Coronavirus is viewed as a danger to liberal democracy by some. Autocratic tendencies are already showing symptoms of strengthening in the future, as some early indicators suggest.

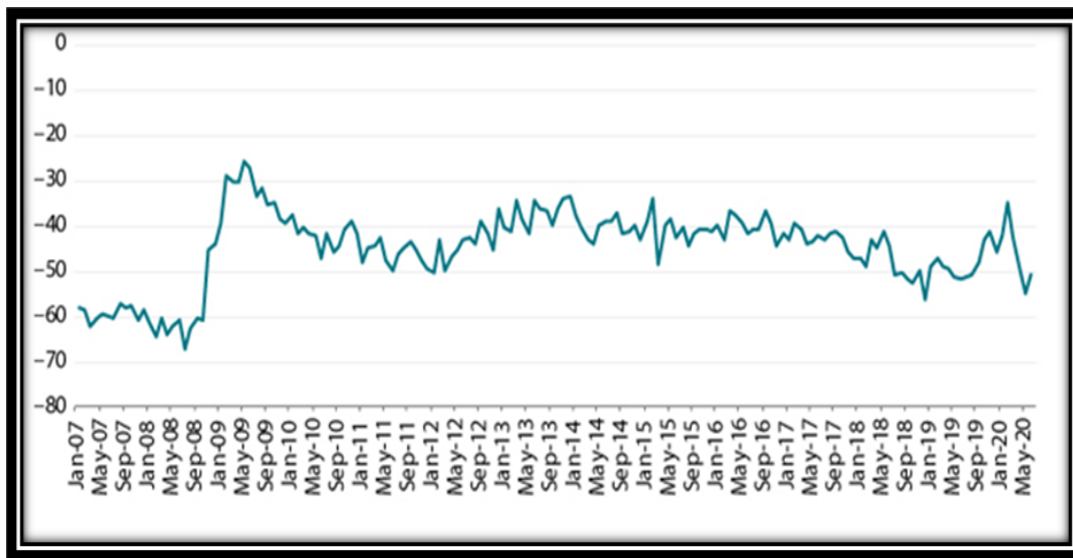
The present pandemic has the potential to harm global commerce as well. Because it is too early to know the full impact of the numerous processes now taking place, this text's goal is limited (Berthou, & Stumpner, 2022). A probable course of action that appears to be evolving in the field will be highlighted rather than multiple possibilities being identified and analysed for their probabilities.

### **The US Trade**

The world's biggest producer of petroleum products as well as an important exporter and importer. Each year, more than 10% of the total trade balance from the U. S. is made by American companies. In the first ten months of 2021, crude oil and natural gas prices rose considerably, with WTI crude oil completing the year more than 55percentage points above its end-2020 level and global natural gas prices increasing approximately several folds between November and November 2021(Berthou,

& Stumpner, 2022). The dollar value of U.S. petroleum exports was approximately 50% higher than its 2020 level, while the dollar value of imports was up more than 75% as a result of rising prices and increasing volumes of imports and exports.

In 2021, both domestic and international causes were responsible for the rise in energy prices. Government efforts to reign in the use of coal were stifling overall supply in the US, but the energy consumption of manufacturing facilities soared as production increased. US's increased demand for natural gas has resulted in an increase in natural gas prices throughout Europe and Asia. Due to the decline in demand caused by the pandemic, OPEC+ (Organization of the Petroleum Exporting Countries Plus) cut oil output in 2020 by 10 million barrels per day (approximately 10% of global production), which pushed up global energy prices. Investments in new energy sources in the United States were sluggish in 2020, which had an impact on energy supply in 2021, when the economy was recovering (D'Aguanno, et al., 2021). Another factor affecting U.S. oil production was the abnormally cold winter in Texas and the hurricanes Ida and Nicolas in the Gulf of Mexico.



**Figure 1: US Decline in Trade**

The return of travel as well as some commutes as a result of vaccines becoming widely available in the spring of 2021 increased demand for gasoline on the supply side (Hardy, and Logan, 2020). Car travel and commuting soared in the wake of the H1N1 pandemic, which shifted people away from mass transit and plane travel in favour of driving.

#### **US Economic and Trade Challenge**

It's easy to see how America's strong financial support aided our economy's swift return to health after the Coronavirus outbreak when viewed from across the globe. The demand-driven recovery, however, has a darker side. Unfortunate deaths occurred as a result, and prices rose as a result. The prior year's global economic trend is best understood in the context of the current coronavirus outbreak. This is by far the most obvious indication of the number of individuals killed by Coronavirus is an important indicator of the pandemic's impact on the world population. By the end of 2021, the virus had claimed the lives of more than 5 million individuals. In the United States alone, there are more than 827,000 persons (D'Aguanno, et al., 2021). The true global death toll is likely to be much higher as a result of the data collection.

If the United States is not the only country dealing with these issues, many other countries may be in a similar situation. Under-reporting has been a major problem. Consider the figure of \$1 billion, as an example. About 4 million people died in India alone as a result of the disaster. The pandemic and the US economy are intertwined. In addition to Subramanian, in the year 2021. As a percentage of the entire population, death rates are more accurate. The global financial crisis has disproportionately impacted low- and middle-income countries. Asia, the Middle East, and South America. Different countries have varying death rates, which might be obscured by looking at total deaths.

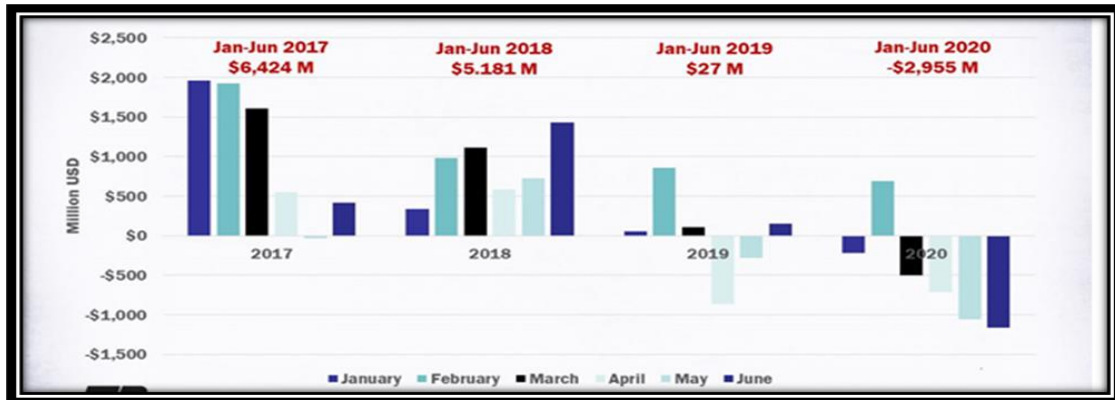


Figure 2: US Export and Import

Many storms have hit each with a different level of intensity. A country's fortunes have fluctuated dramatically at any given time. The verified facts the US, the UK, and the EU have each at one point had the greatest number of cases per thousand people recorded. In the early phases of the epidemic, the United States had the largest number of cases per capita. There were more deaths in the United Kingdom than in any other country. In the second half of 2021, things began to turn around. True. In addition, the Eurozone recorded the highest number of illnesses per capita in the spring. Most major economies will have some variation in this by 2021.

At some point, the epidemic had a significant impact on you. Even the pace of vaccination has changed throughout time (Hardy, and Logan. 2020). To or from a different country U.S.A. and the United Kingdom were successful in expediting vaccine rollouts and have made them the most populous countries. There was an increase in deployments in Canada and the European Union. Both locations' immunisation rates will soar by summer 2021. Exports from the United States have grown dramatically in recent years when compared to other major trading partners.

The second half of 2021 should see an increase in the vaccination rate in many middle-income countries. In countries like Mexico, the rate of inflation has overtaken that of the United States. In low-income developing countries, it stays much lower (not depicted). According to the OED, the year is 2021.

**Covid 19 and Indian Trade**

The textile, clothing, and transportation industries account for about 18% of India's total exports, making them the most exposed sectors in India to COVID-19. More than 40% of India's exports are made up of the top three categories of fuels, chemicals, and stone and glass, all of which have a moderate level of exposure (Anderson & Wincoop, 2021). Vegetables, rubber products, animals, food goods, etc., face the lowest danger of exposure to foreign markets. India's minimal reliance on US's intermediary imports makes it less vulnerable to US's economic power. An additional cushion will be provided by the low price of crude oil, India's largest import (Campbell et al., 2021). Demand shocks, not supply shocks, have the greatest influence on the economy in the countries hardest hit by COVID-19.

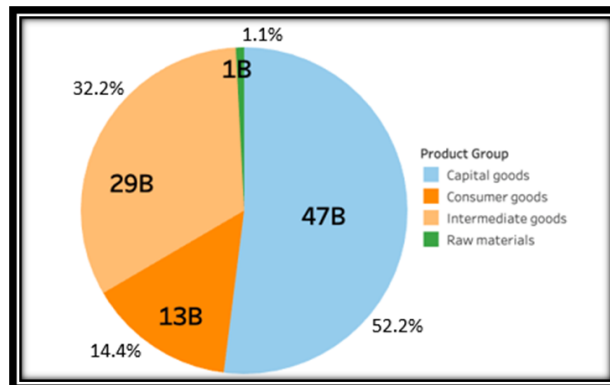
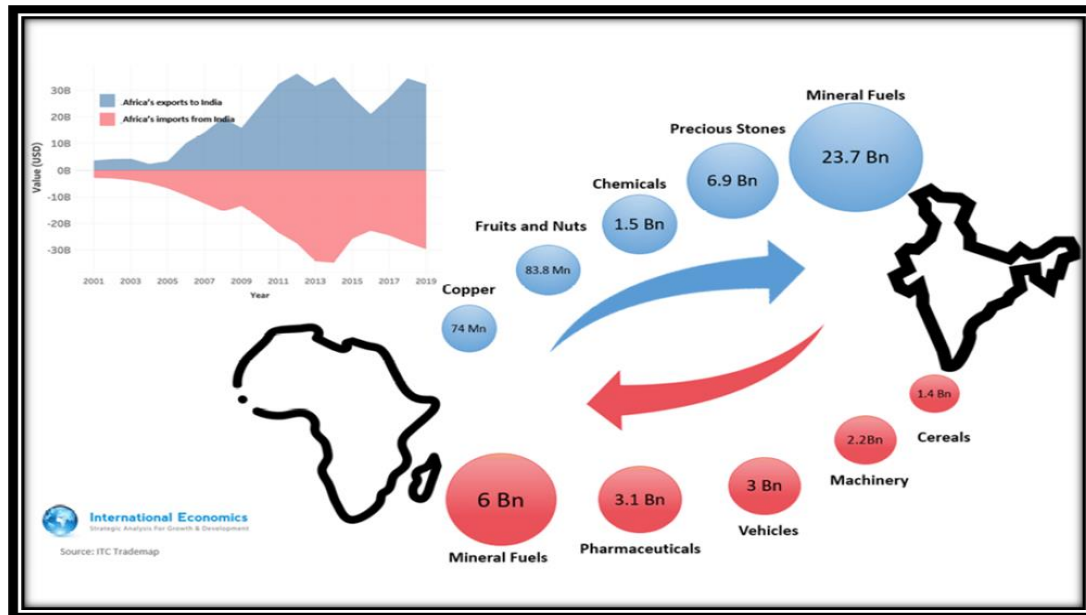


Figure 3: Indian Trade 2021

India's share of trade in GDP is 43 per cent, which indicates a moderately open economy compared to other nations. US, on the other hand, has a huge food trade deficit with India (Hanson, 2021). The percentage of Coronavirus cases in India is also low. India, on the other hand, is more likely than the other countries in the group to suffer a high number of human casualties as a result of the pandemic due to its high population density and inadequate access to healthcare facilities, as demonstrated by the low population of doctors. To meet the global post-pandemic demand, US industries are preparing to reopen as soon as possible and in time.



IEC; Data from ITC Trade Map

The resumption of activity would give the US a first-mover advantage, which could hurt Indian MSMEs (Socrates, 2020). In the event of a financial constraint caused by the pandemic, many small businesses will be unable to make up for a lost market share. Uncertainty in the Indian financial market has been exacerbated by mounting doubts about the future and the consequences of COVID-19, which has resulted in massive crashes and the depreciation of capital. The stock fell by 4,000 points in a single day on March 24, 2020, when the increasing uncertainty of business activity caused the most significant market crash in India's history. A low point of 77.60 Indian Rupees against the US Dollar was also set in April 2020.

#### Research Gap

- What kind of economic impact and challenges on the United States and India during Covid?
- The impact of Coronavirus on Indian and US exports and imports.

#### The Objective of the Study

- To research "India and the United States of America: Implications of the Coronavirus Pandemic on Global Trade"

#### Research Methodology

##### Gravity Approach

Using national COVID incidence, national lockdown limitations, and the same parameters for the nation's major trading partners, we do a gravity-like calculation. Imports from the US for all locations to which the US exports in 2019 and 2020, at the item (HS 6-digit) level, are our dependent variable. There is a definite negative correlation between COVID incidence (the number of fatalities per capita) and COVID-inducing government measures (an index of the strictness of lockdowns). Our baseline specification suggests that a country with the largest per capita number of Coronavirus deaths attained in our sample will see a 13 per cent drop in imports from the US in 2019. 17.6 per cent of imports would be reduced by switching from 0% lockdowns to maximum lockdown stringency.

Studies that focus on the US are few and far between and their data only go up to the middle of 2020, meaning that they halt before the end of the first wave of the pandemic. In other cases, researchers use data from other nations, such as India or data from several different economies. International trade has been adversely affected by the outbreak.

The research uses both Coronavirus death instances and lockdown procedures when most other studies only use one or the other (Campbell et al., 2021). Lockdowns are enforced in response to the pandemic, usually when the number of deaths is high or predicted to climb, even if Coronavirus deaths are an obvious proxy for its impact. In other words, the occurrence of COVID drives the implementation of lockdown measures. A lack of lockdown measures in the study of Coronavirus deaths, for example, can lead to falsely inflated negative effects related to Coronavirus deaths and vice versa. Because we include both variables as regressors, our analysis is resistant to this form of endogeneity.

In addition, we specifically consider the impact of the epidemic on international trade flows in the paper. (Anderson & Wincoop, 2021) discussed multilateral resistance, and yet most existing works have not explored the influence of other countries on gravity estimation. 6 Quantitatively, they're critical, as we've discovered.

### Data and Empirical Strategy

As developed by the "Oxford" Coronavirus Government Response Tracker (OxCGRT) compiles publicly available information on several COVID incidents and policy indicators. For example, nine indicators monitor containment strategies, such as the closures of schools, workplaces, and international borders. 10 One way to gauge the degree to which "lockdown style" laws restrict people's freedom of movement is by creating an index using these indicators (Hobijn, and Şahin 2021). The original strictness index is between 0 and 100. To aid in the comprehension of regression coefficients, then divide the original index by 100. An increasing number of restrictions are placed on individuals and businesses when the shutdown methodological rigour index is high.

### Discussion

When comparing death rates between nations and across time, the Coronavirus mortality data obtained by "OxCGRT" appears to be the most accurate. Testing capacity and reporting process have a significant impact on other outcomes, such as the total number of tests and positive instances. The capacity of governments to do so has changed dramatically in 2020. Our proxy for Coronavirus prevalence is based on the number of deaths per thousand persons (Covid) (Hanson, 2021). "OxCGRT's" original Coronavirus data is updated every day. When data are unavailable for a day, the number of new deaths is averaged across the last seven days. To arrive at a monthly average, we gather all of the data.

$$Stringency\_Row_{ipt} = \frac{\sum_{j=1}^N M_{ijp,2018} Stringency_{jt}}{\sum_{j=1}^N M_{ijp,2018}},$$

### Result

It examines the impact of our key factors on monthly log differences in Chinese imports, defined at the 6-digit level. Just two variables in columns 1 and 2: Stringency and Covid. We simply include month dummies in the first column to get a sense of how they relate to the dependent variable. Our second column then includes fixed impacts for both countries and products (absorbed). As a result, the regression is better able to capture the data. The pandemic's adverse demand consequences outweigh its adverse supply implications in both scenarios, showing that the negative demand effect is stronger. For this reason, it is critical to take into account extra fixed effects, as their absolute values drop significantly.

### Limitations

Primary data can now be acquired, thanks to Covid; hence, research can be based on secondary resources. so its credibility and validity are not sure. Internet-based communication tools (e.g., email, an online survey platform) are used to collect data from participants who reply to the research link (e.g. E-mail, online survey platform). Because of the COVID-19 pandemic, academics have been increasingly interested in adopting internet-based data collecting methods to gather information. This is demonstrated by the rise in the number of studies that have used online surveys to gather information since the epidemic began.

### Further Scope of this Study

Expansion of the scope of the research This study will be used in a variety of projects in the future to help reduce the negative effects that Covid has on trade. In addition, students use this study to improve their understanding of the subject of COVID-19. The merchants from both the United States and India used this research to get a better grasp of export and import during the worldwide pandemic, given that this study discusses the commerce that occurs between the two countries.

### Conclusion

Trade is a vital part of the economy, and governments must weigh the benefits of limiting the spread of a pandemic against the costs incurred by abandoning commercial activity in the fight against the virus. A pandemic like Coronavirus made it clear that anticipating the health and economic implications of disease and governments' responses to it is a challenging endeavour, in part because there are few parallels. As a result of the global epidemic, we've come up with the initial estimations of how it will affect international trade in 2020. Estimates like this are essential to establish the most effective policies to handle future pandemics. For example, many systemic models have been created since the beginning of the Coronavirus dilemma. As part of this endeavour, our findings can serve as valid benchmarks for direct pandemic effects and efforts to avoid their spread on trade flows. These estimations could be used to calibrate the models using the elasticity derived from these estimates. As a result of our findings, we believe that any conceptual framework should consider the influence of the pandemic in other nations on bilateral trade flows. Indeed, the third-country effects show that the best approaches to cope with a pandemic need to be synchronized across nations. These interdependencies can be intuitive, but accurate estimations are needed by policymakers. We use data on the US's exports to every country and area of the world to estimate trade flows at the country-product level. This enables us to detach the pandemic's impact on countries that import it.

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