

The Impact of COVID-19 on National Economic Development: Evidence from China and Japan

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ABSTRACT

The outbreak of COVID-19 at the end of 2019 has significantly devastated the global economy from country to country. Different countries utilize distinct methods to prevent tragic economic loss. This essay evaluates two countries that share a similar trading strategy of importing raw material, China and Japan, under the sudden pandemic outbreak through a variety of indicators, such as the trend of their GDP, crude oil imports, and suppliers weights of their imports. The results of the data evaluation reveal the difference between the decline in the Japanese economy and the surge in the Chinese economy is mainly caused by the fact that China has significantly more diverse raw material suppliers with reasonable weights along with its substantial economic domestic storage and immediate adjustments on trading policy right after the outbreak of the pandemic. Our findings echoed previous studies on how each country should alter in the future, where globalization will continue to take place. Developing countries need to establish more trading partners who would prevent them from being solely dependent, while developed countries should use their advantage of strong and stable economic status around the world and enhance their mobility by establishing trading intermediates.

Keywords: Covid-19, Economic Development, China, Japan.

1. INTRODUCTION

1.1. Research Background And Motivation

The surprising outbreak of the COVID-19 pandemic has greatly altered the global situation in a variety of ways. For instance, the previously existing trade wars between China and the United States seem to be kind of easing due to the enforcement of social distancing, which has made the negotiation harder than ever. In fact, some of the existing stable global trade between certain countries is decreasing because there is not enough raw material and products under the infectious pandemic. As a result, to recover the formidable outcome of the trading deficit, some countries implement policies like increasing money supply by sending money from the government to stimulate the domestic economy. However, the government policies might be effective in the short run. There is still much thinking behind in the long run that if the pandemic did not get controlled in recent years. This pandemic is actually occurring in our lives and already has or will even change our lives dramatically if the pandemic keeps closing down the global economy. It is worth researching and determined

to search for possible solutions to deal with this emergency by looking for existing governmental policies from different countries around the globe. By thinking about theoretical solutions might not be effective in real life. However, it is still worth evaluating how the world economy will change from the trend of globalization since the 21st century and what kind of economic crisis is waiting for our generation in the future.

1.2. Literature Review

Alvaro Espitia et al. point out that there are significant negative trade effects following the COVID-19 by analyzing trade data for 28 countries on a monthly basis. Specifically, the distance enforcements and severe infectious cases at the beginning of the pandemic have closed down factories around the globe. The closure of factories among major exporting countries experienced a dramatic decrease of their products and disruptions in global value chains and the curtailed spendings of consumers and firms. COVID-19 destroyed the existing exporting, importing economy or third countries completely. After analyzing the depressive trade loss, the article also reveals that it seems more and more firms should expand or exploit their remote work

sessions in the future due to the fact that those remote sectors which involved little or even no physical contacts are more amenable compared to regular working experiences when encountering infectious pandemic like COVID-19[1]. Gruszczynski, L. agrees with the partial comments made by the first article that the impact of the pandemic has made firms wonder whether they should alter their structural changes as a result of increasing their remote working section. However, it also provides another perspective that despite the short-term consequences of the COVID-19 pandemic has greatly traumatized the global trades. They do not appear to be unmanageable that once the pandemic disappears or at least getting control, the international business will come back to normal [2]. Gereffi, G. and Evenett, S. J. took a rather novel approach that mainly focuses on how the US domestic firms should learn from this traumatic pandemic loss. As they pointed out, the causes of medical shortages in 2020 due to insufficient imports made the governments realize that they seem to be too dependent on Chinese supplies. Even though trading with major manufactured countries like China is lucrative, the authors advise that an increasing number of firms should meticulously alter their approach that instead of following the previous trend that heavily relied on the cheap labor and raw material from China, they should establish more trade routes to other manufacturing countries, such as India. By following these trend called "China Plus one" strategy mentioned by the author of the sixth article, governments will no longer be stuck into a dilemma they encountered this time that they were immediately facing shortages and barely had solutions when the supplier country had their own problems because there are multiple suppliers for their desirable items [3-5]. Guerin, P. J. et al. and Alexander, G. C et al. can be seen as how global countries and specifically the United States have been or should perform in order to remedy the shrinking economy. Generic drugs that are often classified as knock-off products seem surprisingly useful during this unusual time, as mentioned by Article 6. Although generic drugs are not authorized, their price is significantly lower, and their quality produced in India seems to be unusually similar to the actual one. It seems that generic drugs can fulfill the demand in the short run, thus saving up more money and energy for various countries to research the virus [6,7]. Ayati, N et al. sum up that the short term effect of the pandemic results in demand changes, regulation revisions, research, and development process changes and the shift towards telecommunication and telemedicine while in the long run, it seems that the pre-existing global value which has not changed for a long time begin to shift[8].

On the whole, there is much literature on the strategic research of the countries concerned in international trade, and the analysis angle is more and more comprehensive, and some research results have been obtained. Novel coronavirus pneumonia has been studied less since the outbreak of the outbreak. Based on this, we are trying to study the current development of the international trade system in the post epidemic era and the adjustment of China's strategy in this transaction

process. This study enriches the research results in international trade system research and provides some reference value for the relevant research scholars.

1.3. Research Contents

This essay will compare and contrast how effective of distinct countries' s policies to encounter the COVID-19 in the short run along with analyze the outbreak of the epidemic, the status quo of the development of various countries in international trade relations, the adjustment of nationalist strategies, and combines the current international environment for a comparative analysis, along with establishing the possible development of the country in the future international relations in the end. The structure of this article is as follows: the first part is the introduction, the second part is the methodology, the third part is the results and discussion, and the fourth part is the conclusion.

2. METHODOLOGY

Since the beginning of the new century, based on changes in the structure of international economic power and economic concepts, the international economic system has also undergone major adjustments and changes. The international financial system has become better and better, which has strengthened the international community's ability to deal with financial risks, and has promoted developing countries. Representation and voice in the global financial system; economic globalization, and regional integration are developing in-depth, and the debate surrounding international trade and development issues has become increasingly fierce. Based on this, this article focuses on analyzing the adjustment of the trade strategies of some major countries in the international trading system before and after the outbreak of the COVID-19.

2.1. Data Sources

This article selects crucial indicator data in the international trade process of China and Japan for a detailed analysis and compares the adjustments of the two countries' international trade strategies before and after the coronavirus outbreak. By comparing and contrasting the specific imports and GDP data provided by the World Bank for China and Japan, this article attempts to explore the main direction and the particular strategies for developing and developed countries to adjust and implement in the future in the process of international trade transactions after the outbreak of the COVID-19.

2.2. Data Analysis

Japan is a developed country famous for its reputation as a strong economy. In fact, it has constantly

been ranked the third strongest economy right after the United States and China around the globe. It might be a surprise for individuals that do not know the Japanese economy from the inside since Japan is suffering from long-term limited natural resources and even being viewed as one of the biggest debtors of the World Bank after WWII. Thanks to its successful implementation of the meticulous economic strategy, Japan has established close economic relationships with the United States, European Union, Latin America, China, and many others. It is worth noting how Japan encountered its prosperity and natural resources obstacles. By focusing its imports mainly on raw material along with exporting well-manufactured products, the natural resource dilemma seemed to resolve brilliantly. However, the pandemic strike shifted the existing working strategy due to the difficulty of getting the original amount of imports which has been significantly harder. One of the effects can be exemplified by the graph below well.

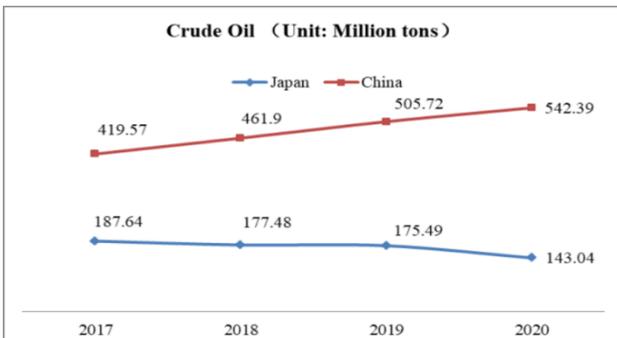


Figure 1 The trend of crude import from China and Japan from 2017 to 2020

Figure 1 reveals that China’s crude imports surprisingly surged rather than decreased compared to Japan in 2020. The 7.3% surge on the imports of crude oil from China influences its strong economic growth in this unstable time. It seems rather strange that crude imports for China did not decline but rather increased during the pandemic when it is comparatively more complex for the country to get the raw material compared to past years. Simultaneously, it reveals that crude oil, one of the Japanese crucial natural resource imports, has decreased significantly. In fact, the crude imports from 2020 have been considered the lowest in decades commented by the Petroleum Association of Japan President Tsutomu Sugimori. More depressingly, despite the desperate demand for crude has not declined significantly (from 100% to 95%,) it is doubtful for Japanese to import oil more this year compared to the past year because the pandemic is still out there. In fact, it is possible that Japan’s crude imports will once again drop by around 5 to 10 percent in 2021.

The curtailed imports of natural resources have failed to fulfill the domestic demand and contributed to the first decline of Japanese GDP since 2015. The positive correlation between the decline in imports of

natural resources and decline in national GDP seems to make sense under the pandemic environment. Specifically, the curtailed imports are one of the main reasons that Japanese exports have decreased. Without sufficient raw material to build manufactured products, Japanese exports decreased significantly. Decreasing exports has significantly curtailed the new exports of Japan, which is the main component of the computation of GDP. Not to mention the unfulfilled domestic demand and Japanese citizens and firms being more cautious when dealing with buying or investment under the pandemic background, the consumption and investment, which are two main parts of the computation of GDP, decreased. All of those factors explain why a strong economy of a developed country like Japan experienced its first decline for a long time.

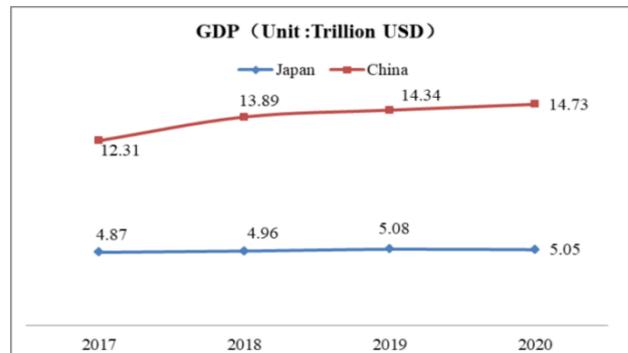


Figure 2 Trend of GDP from China and Japan from 2017 to 2020

Compared to Japan, it is surprising that China's neighboring country is not suffering during this horrendous pandemic. China, in some ways, is rather similar to Japan, which prefers to import raw material and export manufactured products. It seems that both raw material imports are paramount for the development of their countries. However, the data shown in figure 2 reveals its GDP differs significantly during 2020. That Japan’s lack of enough raw material significantly curtailed its ability to manufacture enough products, which decreased while there is an increase in China’s GDP. It could not help but wonder what strategy China performed on the import perspective that surpassed the Japanese. One clear reason is demonstrated in the first graph, which compares the crude imports from Japan and China respectively.

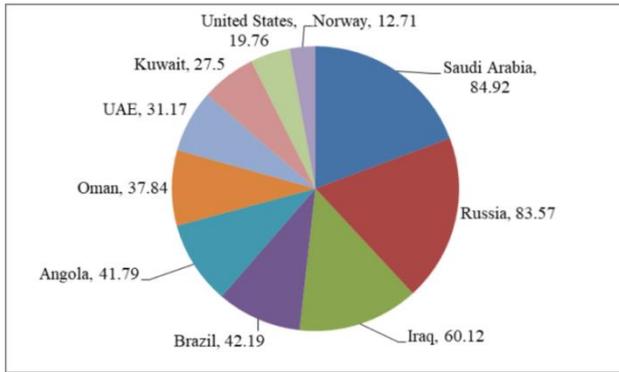


Figure 3 Chinese crude imports distribution by countries

However, a few reasons exemplified the stable trend of economic growth from an import perspective, which is not based on luck for China. Firstly, compared to its neighbor, Japan, China has a great number of crude suppliers. The third graph shows the three major crude suppliers for China are Saudi Arabia, Russia, and Iraq, while Angola and Oman also play a major role in the contribution of China’s crude imports. The bar graph reveals how there are diversified ways China imports and shows how equally distributed their suppliers’ contributions are. Specifically, Saudi Arabia and Russia almost shared the same amount of 83 million tons while Brazil and Angola weighed approximately the same, around 40 million tons. The equal weights among diversified producers are significantly helpful because it provides a decent amount of choices for China to pick and can even help China establish reasonable price ranges that make them more beneficial. On the other hand, Japan relied heavily on Saudi Arabia. As a result, during an emergency such as this pandemic, limited resources will cause severe competition among different buyers towards one buyer, making the price even steeper compared to normal ones. The other reason that ensures China’s economic growth during this time is that it took great usage of the worried atmosphere during this chaotic time period. Specifically, during the first quarter of 2020, the pandemic’s impact and the OPEC decision to cut production caused the price of a great variety of raw materials to drop deeply in a short amount of time. That short period of panic time enabled China to purchase a great deal of raw material in a greater amount than usual at a considerable price. Furthermore, China also utilizes its geological advantages efficiently. For instance, the close border between China and Russia and the good relationship allow China to import around 83.57 million tons of crude from Russia. The number is shocking due to the fact that it surged around 7.6% compared to the previous year, making the percent increase in the same period even higher than the one with Saudi Arabia, which has been the lead supplier for Chinese crude imports for a long period of time.

3. RESULTS AND DISCUSSION

From the previous data analysis, it seems clear that developing countries are not entirely vulnerable to the sudden outbreak of the coronavirus, while developed countries are also not fully prepared for natural crises like this virus. In fact, various strategies performed by developing countries and developed countries might alter their economic reputations and status permanently in the future. For instance, developing countries with strong economic storage such as China utilize their resources efficiently to prevent themselves from economic loss and improve steadily while all other countries are suffering economically. Whereas Japan, a developed country that shared a similar importing strategy as its developing neighbor, China, seems to have taken a hard blow from the pandemic outbreak and failed to implement its existing importing strategy due to lack of suppliers during the unstable time. Recall from figure 1, the COVID-19 pandemic facilitates the first drop in the number of crude imports for Japan for years. The decline of the crude imports is not determined by the Japanese lack of willingness to trade, but instead is because, under the more forceful competition and lack of crude, Japan failed to import the amount it needed. The lack of imports needed does not end Japanese’s misfortune but instead leads to a greater disaster than from graph 2, it is pretty clear that Japan also encountered its first loss in GDP for such a long period of time. It is not hard to notice the direct correlation between the lack of needed resources due to the failed implementation of the existing imports strategy under these emergency circumstances and the decline in its GDP. As common sense, developed countries are well-known for having a stable domestic economic situation, and an existing trade strategy has already been established and practiced successfully for a long time. The decline in the economy among Japan and other developed countries around the globe was a wake-up call that even developed countries still need to refine their strategy in case of the pandemic like natural disasters happening again. In both figure 1 and 2, China served as a perfect comparison towards Japan that due to its reasonable weights of imports among its diverse suppliers (as shown in figure 3) along with its ability to change its trading strategy quickly, it successfully prevents itself from the economic decline in the pandemic which seems formidable.

4. CONCLUSION

Throughout the essay, the major aim is to evaluate how the world economy altered from the trend of globalization since the 21st century, how it has impacted the global economy, especially under the unstable emergency like pandemics, and in which way should countries shift their trade strategy after they encountered the significant loss under pandemic. This essay

specifically reveals and analyzes a detailed comparison of China and Japan as the representatives of developing and developed countries respectively from indicators their crude imports and suppliers weighted along with GDP. By analyzing the data, the essay explores how the developing and developed countries adjusted their trade directions under pandemics and predicts how they will shift in the future international trade. The results of the data analysis revealed that even though the pandemic undoubtedly undermined the economy around the globe to an unimaginable extent, but it can also be viewed as an opportunity to decrease the gap between the developed and developing countries if the latter successfully seized this opportunity. In order to stabilize the domestic economy in a healthy growing way, developing countries should first implement expansionary fiscal by decreasing tax, or increasing government or monetary policy by decreasing the required reserve ratio, or sell government bonds to close up the recessionary gap in the short run, encourage and sustain citizen's positive attitudes towards purchasing. The developing countries can also learn to expand the diversity of their imported material suppliers. By attaining a diverse resource of suppliers, developing countries are able to close the deal with a comparatively beneficial price without the worry of undersupply. Whereas developed countries should use its advantage of a well-known reputation as being stable and reliable economically and seek a chance to establish trading intermediates by proving trading intermediates fair benefits from the trade. Trading intermediates will significantly increase their mobility in trading. Especially during an emergency when a long-distance seems too difficult to implement.

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