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The winners of Sino-US trade dispute

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ABSTRACT

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Recently, the hot potato issue of Sino-US trade dispute has grabbed the headline in most newspaper. Due to the latest tariff policy or other trade barriers, there is some change in import and export, national economy, the global organizational structure of the multinational corporation, and global supply chain. This paper focuses on serving readers to have a better understanding of trade war and predicting the potential impact of this trade war on China, US and their circumjacent countries. Combined various related research, this paper elucidates the important position and changes of Brazil agriculture and Vietnam manufacturing through soybean import and export and multinational corporation examples. Finally, we draw a conclusion that the trade war will eventually turn out to be an internecine ending both China and the US. Brazil and Vietnam would gain the profit from agriculture and manufacturing respectively.

Keywords: Sino-US trade dispute, Trade war, Tariff policy, Brazil, Vietnam, Agriculture, Soybean import and export, Manufacturing, Supply chain.

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Introduction

a. Introduction

The purpose of this study is to explore the Sino US trade disputes and their stakeholders. We know that trade war is a double-edged sword. U.S. tariffs on Chinese imports may lead to changes in the supply chain of some industries in China. As a result, some neighboring countries will benefit from the trade war, especially Brazil and Vietnam.

First of all, this study will help readers understand the impact of the trade war on Brazilian agriculture and Vietnamese manufacturing industry and the corresponding changes. In March 2018, the United States imposed a 25% tariff on Chinese imports, including soybeans. China is the largest soybean importer and accounts for the largest share of U.S. soybean exports. In order to cope with this policy, China's soybean import will inevitably change. As a neighboring country of the United States, Brazil also plays an indispensable role in the field of soybean export. No doubt, the U.S. tariff policy has pushed China as a big customer to Brazil. There will be a sharp reversal in the global soybean industry.

In addition, the escalation of the trade war has increased tensions between China and the United States, which is a good opportunity for Vietnam's manufacturing industry to flourish. In order to save costs and reduce unnecessary investment in infrastructure and production capacity, many enterprises in developed countries outsource assembly and other businesses that need a lot of labor to other countries. This article will take Apple as an example to show that manufacturers are transferring production lines and assembly lines to Vietnam. In the early days, multinational companies chose to invest in building factories in China because of China's huge and cheap labor force, a stable economic environment and the gradual development of updated infrastructure. By comparing the current situation of China and Vietnam, this paper finds that the advantages of China in the past are no longer exist, while

Vietnam has a cheaper labor force. In addition, this paper also forecasts the economic development trend of China and the United States through the analysis of the status quo of manufacturing pillar industries.

This paper mainly consists of two parts. First of all, this paper compares the soybean export output of the United States and Brazil in recent years and then explains the impact of the trade war on Brazilian agriculture, especially soybean import and export from the perspective of China. Secondly, by comparing the actual situation of China and Vietnam, under the influence of the trade war, this paper discusses the transfer of the manufacturing industry chain.

The trade war is extreme protectionism. The damage caused by US tariffs or some other trade barriers to the two countries is worth pondering, whether we want to create a situation in which a third-party gains benefits from this fight. This study can help people understand the context of the trade war and provide a reference value for future investment.

b. Thesis Statement

This paper will reveal the changes in Brazil agriculture and Vietnam manufacturing under the background of Sino-US trade dispute. It designs to give readers a clear understanding of the potential consequences of Sino-US trade wars.

The hypothesis is that surrounding countries are profiting from the trade war between China and the US.

Literature Review

In mid-2018, US President Trump put tariffs on Chinese imports, and China gave the US the same counterattack. We know the trade war is a double-edged sword. The Sino-US trade war has intensified. However, the trade war measures include tariffs and non-tariff trade protection (Li et al., 2018). Therefore, there will be a change in the supply chain in some industries. Both China and the US will not be the winners of the trade war, but some surrounding countries will profit from the trade war. There are two typical beneficiary countries elaborated, Brazil and Vietnam.

As we all know, the world's major soybean exporters are the US, Brazil and Argentina. America is not only the world's largest soybean producer but also the world's biggest exporter. Changes in demand and market conditions in the international market will have a direct impact on the US soybean industry. Moreover, China is the biggest soybean importer in the world. The top five U.S. export goods to China are Soybeans, Civilian aircraft, Cotton, Copper materials, Passenger vehicles (small engines) (Moeller, 2018). Therefore, American soybean exports are highly sensitive to trade disruptions, especially from China (Adjemian et al., 2019). China will certainly not miss this great opportunity to retaliate against the United States. Therefore, China levies a tariff on US agricultural exporter commodity and the most affected are US soybean products.

According to the relative price of a substitute (RPS) method to exploit the Substitutability of U.S. and Brazilian Soybeans, it found the tariff shifted market preferences so that Chinese buyers favored Brazilian soybeans (Adjemian et al., 2019). Using an advanced Computable General Equilibrium (CGE) model, some experts also project that the new tariff structure will lead to the creation of new soybean cropland (Taheripour et al., 2019). Besides, the Argentina government imposes a heavy export tax to encourage domestic

consumption. At the same time, China changes the structure of tax and tariff to promote soybean import. Compared with Argentina, Brazil has the dominant position to export. Consequently, there is a sharp reversal in Brazilian soybean exports from Europe to China (Oliveira & Schneider, 2016). The global soybean industry is no longer centered on the United States and Europe.

China's economic structure focus on basic agriculture and manufacturing. And the trade war is essentially to promote the return of manufacturing, especially high-end manufacturing, to the United States to revive the US manufacturing industry. Thus, the manufacturing industry has occupied a pivotal position in the trade war. Given the slowing global economy, some academics pointed out that Southeast Asian countries are potential beneficiaries. That's because some business enterprises have tended to shift manufacturing business from China to China's neighbors. They believe that trade wars will lead to more benefits from trade transfers and foreign investment inflows. Foreign direct investment in China's manufacturing sector is declining on account of increasing labor costs and a dwindling workforce. The potential spillover effect of the trade war on foreign direct investment (Lu, 2018) will accelerate the shift. Based on comparative business system analysis theory and a mixed-method approach, it's easy to recognize that Vietnam is converted to the new China for the US enterprise (Mukherjee et al., 2017).

For many MNCs, poor infrastructure leads to an increase in enterprise cost. Furthermore, it isn't likely to increase the capacity much in the short term. They need to invest strongly in infrastructure as well as production capability. It's necessary to promote labor productivity and build a better business climate to draw the long-term investors. Nonetheless, numerous corporations outsource their operations to other countries for the sake of the lower production costs (Hoangova, 2016). Take a representative example, the iPhone

maker will be one of the most affected companies, as almost all of its products are assembled in China. Faced with various tariff retaliation, Apple company cannot stay out of Sino-US trade disputes. In order to diversify its supply chain to reduce its reliance on China, Apple will consider expanding the scale of its business in Vietnam. Moeller (2018) said that tariffs lead to trade diversion and the size of this effect depends on congruity between Southeast Asian and China production. In a word, Vietnam may suffer in the short term, but overall the repercussions on Vietnam may in the medium and long-term be positive (Moeller, 2018).

Ironically, the intention of the United States to raise tariffs should be to increase domestic industry activities by reducing imports and causing supply shortages to fill the demand for domestic industries (Dixon, 2017). But in the present situation, tariffs have increased exports from other countries to China and reduced US exports. The trend and development are unknown. Besides, Trump's trade sentiment is aimed at any country that has a significant favorable balance of trade with the US, not only China. As yuan breaks 7 in August 2019, U.S. designates China a currency manipulator. These behaviors will arouse concerns to the beneficiary countries. If the beneficiaries are treated this way, they should prepare for responding well to avoid the threats.

From the above, the trade war mainly impacts on American consumers, MNCs in China, and Chinese producers. Not only in China and the US, but the global economy has also shown signs of slower economic growth. It's clear to see that, the damage imposed by the United States on tariffs or some other trade barriers on both countries is creating a situation in which the third parties obtain benefits from the tussle. Similarly, Yu and Zhang (2019) also put forward their viewpoints about the US attempt to impose high tariffs on Chinese exports to eliminate the Sino-US trade deficit, resolving employment problem. They make it clear that reducing China's imports cannot increase U.S. employment. Furthermore,

the alleged trade deficit or trade surplus fails to precisely reflect the actual distribution of the trade benefits (Wang, 2019). Overall, the trade war will eventually end up with a lose-lose situation both China and the US. Brazil and Vietnam will benefit from it. In the short term, Brazil is the potential winner, while Vietnam has the most significant benefit in manufacturing in Southeast Asia in the long run. From externality, Brazilian consumers may suffer. In a word, there are a fake winner Brazil and a real winner Vietnam.

Research Approach

3.1 Research Design:

In the research study, a quantitative research design involving exploratory study is used, which designed to explain all aspects of the study in detail to guide understand the problem more effectively. Exploratory studies can meet researchers' curiosity and have a better and deeper understanding. It also has reference value for further investment. The exploratory study is the optimal choice to be applied. That's because the winners of Sino-US trade war are unknown. We can analyze the pertinent research and data to explore the ultimate possible winners.

3.2 Study Design

3.2a. Data

Longitudinal study design is proposed to be used in this research. This type of study design is carried out across various time durations in order to observe the subject's change and change trend. This research is aimed at detecting the global economy trend and the change of Brazil agriculture and Vietnam manufacturing.

The exploratory study relies on secondary research, which means that the researcher consults available literature and data. In addition, a formal qualitative research technique can be acquired in this study. Collecting the required data in this research will use Bloomberg and some official and authoritative websites of the data.

The data acquisition of import volume of soybeans worldwide in 2018~19(by country) and export volume of soybeans worldwide in 2017~2018 and 2018~19(by country) is from Statista. The main destinations data of US soybean exports are gathered from USDA. The data label on the bar chart represents each country's share of US soybeans exports. They will be compared by country in every bar chart to work out the largest importer and largest exporter. Three charts (table1, table2, and table3) will work together with the changing trend of soybean imports and export. US and Brazil soybean exports to china in the recent year are used to show the change of China soybean supplier together.

Table 1: Import Volume of Soybeans Worldwide In 2018~19(By Country)

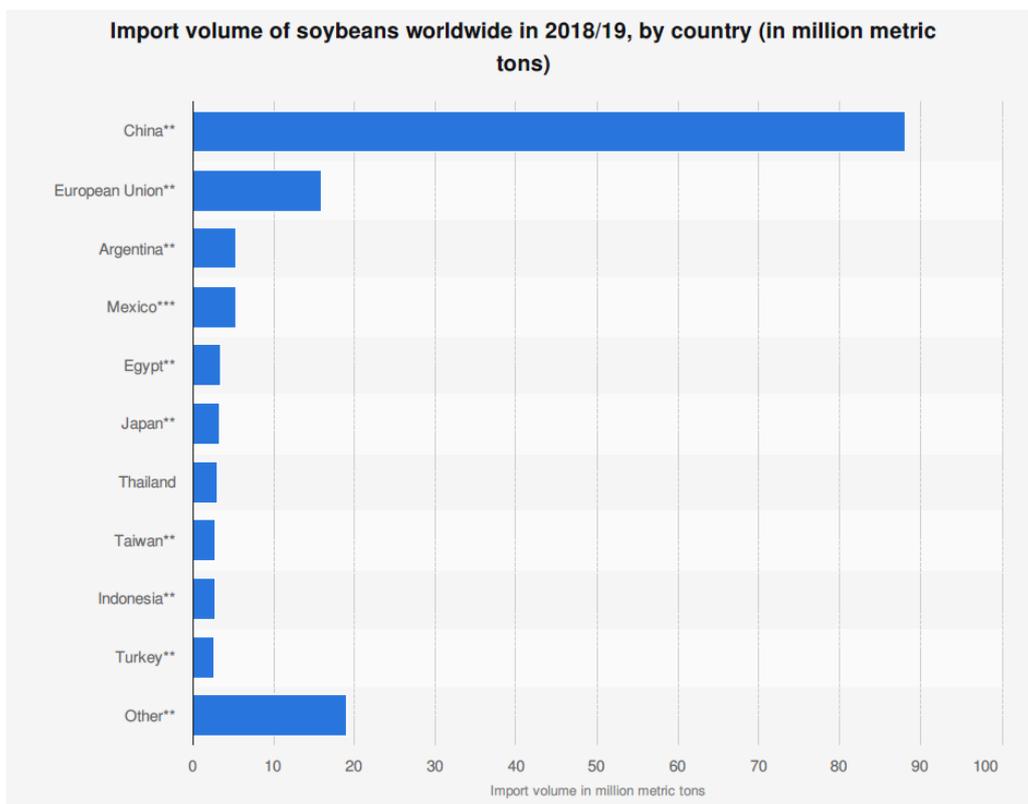


Table 2: Export Volume of Soybeans Worldwide In 2017~2018 and 2018~19(By Country)

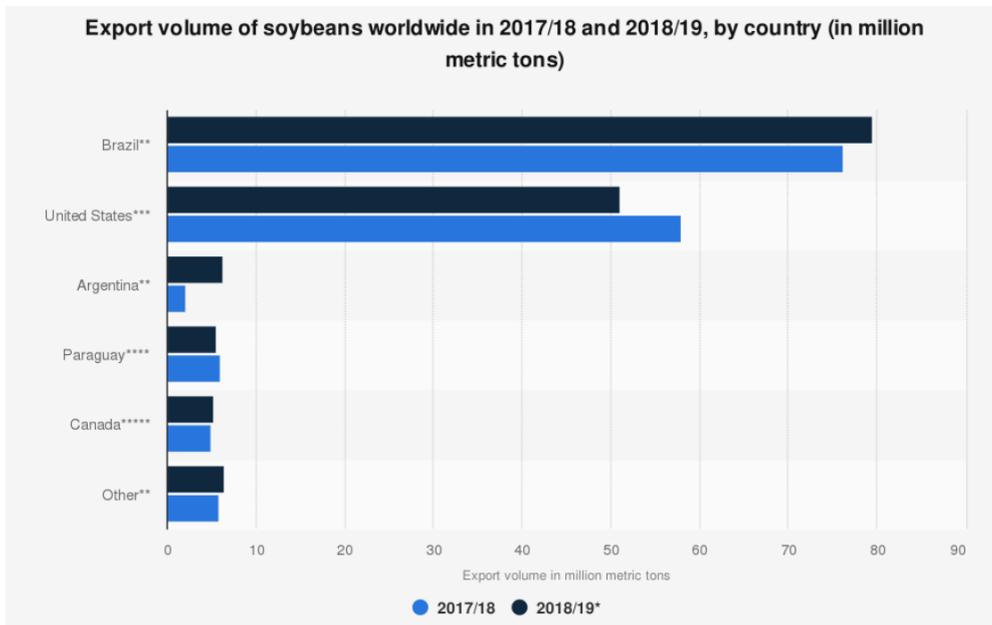


Table 3: U.S. Soybean Exports by Major Destinations (2017-2019)

U.S soybean exports by destination			
	October 2017- February 2018	October 2018- February 2019	% change
EU	2,451,593	5,493,783	124
China	22,769,238	3,873,689	-83
Mexico	1,573,400	2,152,574	37
Argentina	255	1,808,203	708,999
Egypt	670,342	1,354,407	102
Japan	992,773	1,137,815	15
Taiwan	898,399	1,088,790	21
Indonesia	878,232	1,074,696	22
Thailand	1,048,736	1,042,999	-1
Pakistan	744,065	803,716	8
Other countries	3,005,539	4,327,817	44
<i>Source: USDA</i>			

The information below provided by USDA shows the overall trend of US soybean exports to China in recent years. In the line chart (table 4), we mark the point-in-time when China countered US tariffs. This more clearly and concisely reflects the impact of the Sino-US trade war on soybean exports. In the Brazilian soybean exports to China (table 5), we combined the relevant data from the United States to jointly show the changes and trends of Chinese soybean suppliers during the trade war.

Table 4: US soybean exports to China

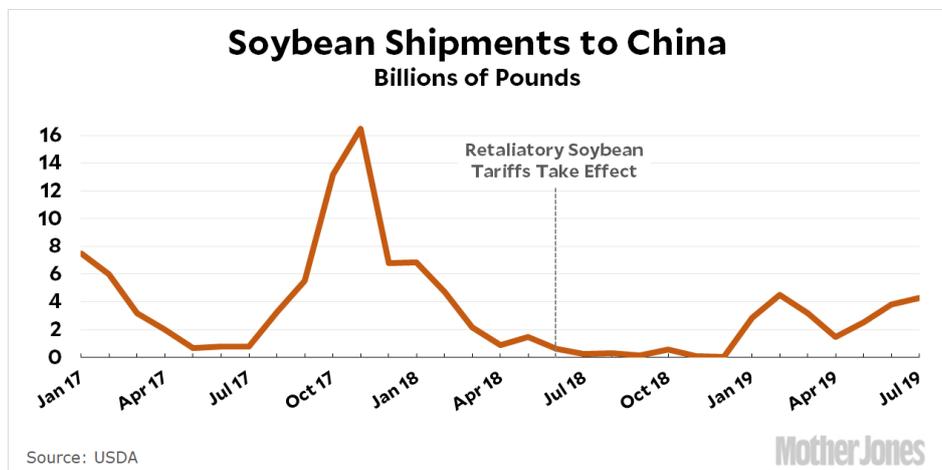
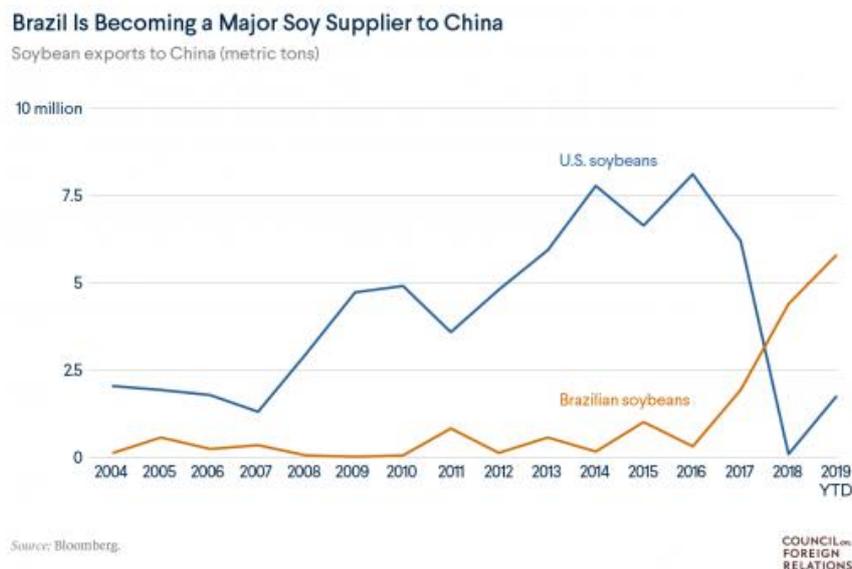


Table 5: Brazil soybean exports to China

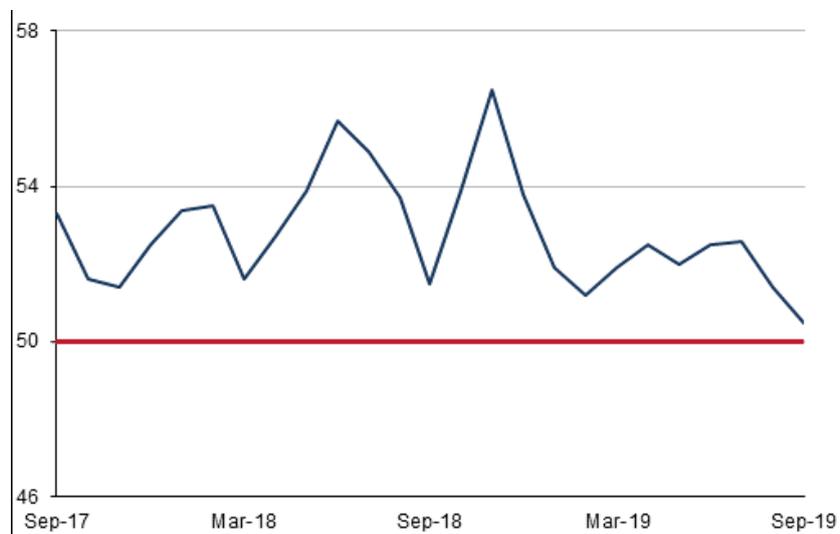


Manufacturing directly reflects a country's level of productivity. Therefore, the US manufacturing industry situation indicated by US manufacturing PMI (purchasing managers index), which provided by the Investing website. And the Vietnam manufacturing industry situation indicated by Vietnam manufacturing PMI (purchasing managers index), which provided by IHS Markit. This composite index reflects overall growth or decline in manufacturing.

Table 6: U.S. Manufacturing Purchasing Managers Index (PMI)

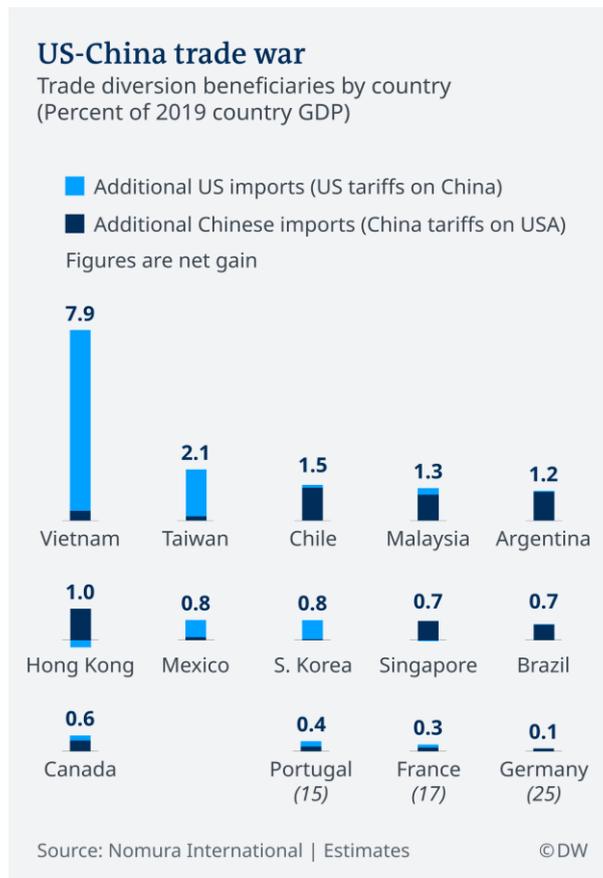


Table 7: Vietnam Manufacturing Purchasing Managers Index (PMI)



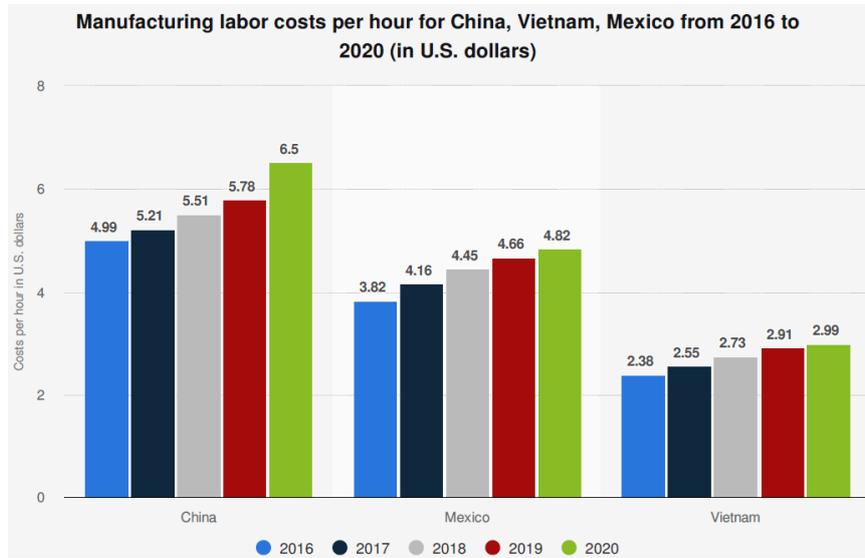
U.S. tariffs on Chinese goods have led U.S. importers to look for alternative locations primarily for electronics, like assemblers of some products and even suppliers in the value chain. The chart from Nomura International shows the net gains of those beneficiary countries which profit from U.S. tariffs on China and China's "counter-attack tariffs" on the United States.

Table 8: Net Gains of Beneficiary Countries



The data about manufacturing labor cost per hour from Statista support that the manufacturing is shifting from China to Vietnam, which causes a movement of the supply chain.

Table 9: Manufacturing Labor Cost Per Hour



The figures about China minimum month wage and Vietnam minimum month wage respectively provided by Ministry of Human Resources and Social Security (China) and Ministry of Labor (Vietnam) reveal the current situations of two countries in the labor market from 2009 to 2019.

Table 10: China Minimum Monthly Wages (CNY/Month) from 2009-2019

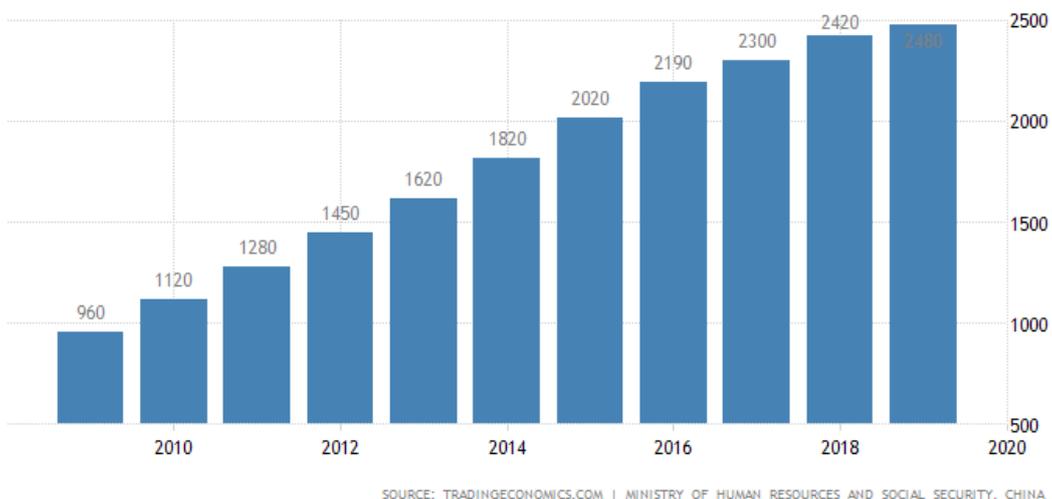
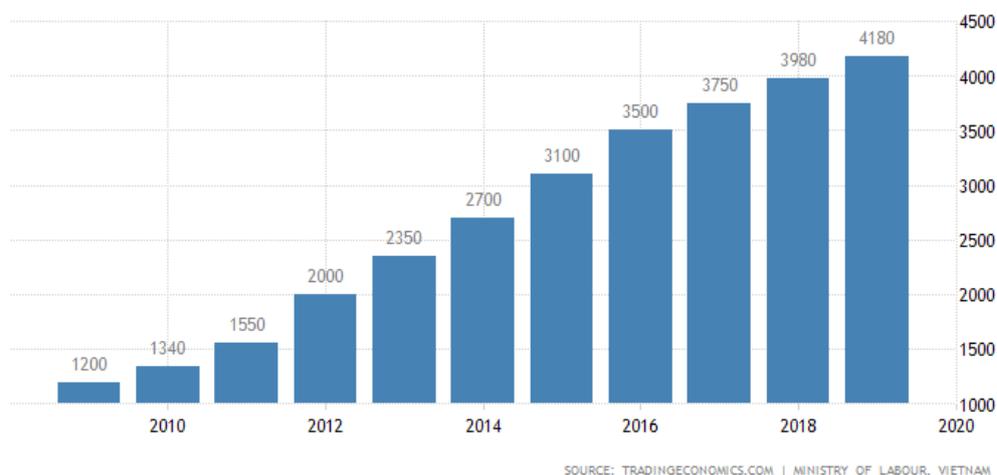


Table 11: Vietnam Minimum Wages (VND Thousand/Month) from 2009-2019



The factors mentioned above may affect Vietnam foreign direct investment. And the related data are resulting from Ministry of Planning and Investment, Vietnam. It also indicates the change of Vietnam FDI from 2017 to 2019. And The contribution ratios of these three, (the existing project registered to adjust capital, capital contribution plus shares purchasing, and new project) to 2019 Vietnam FDI are shown in the pie chart. At the bottom of picture, the country of origin of 2019 Vietnam FDI and these specific investment amounts are also listed in detail.

Table 12: Vietnam Foreign Direct Investment in 2019

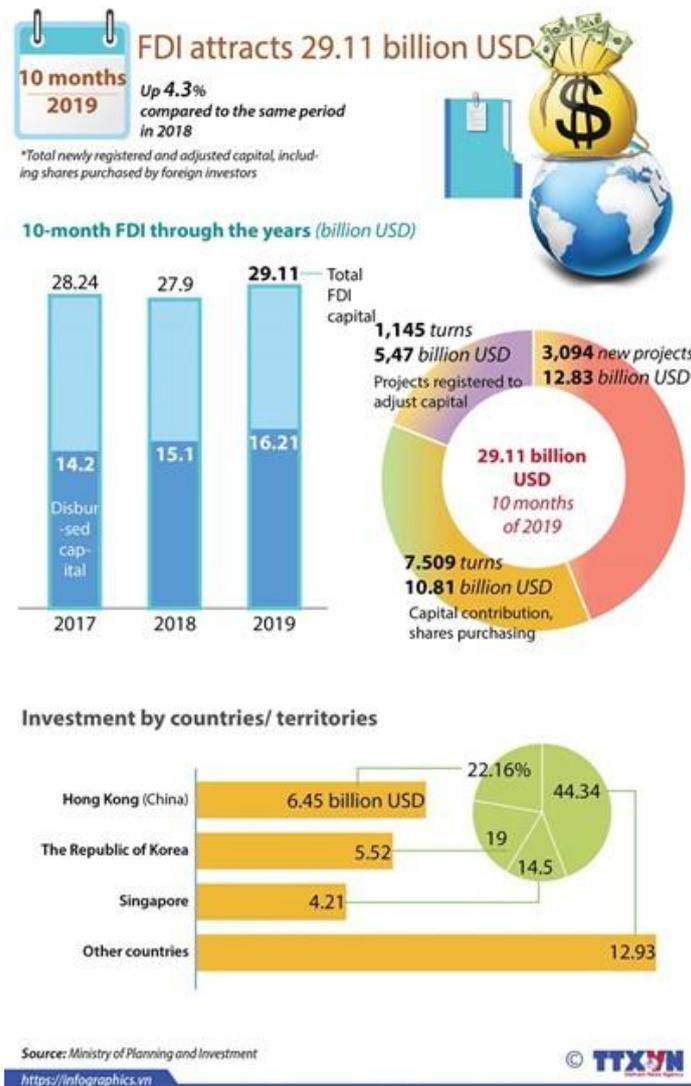


Table 1, table 2, and table 9 hail from Statista.com. And table 3 derives from USDA as well as table 4. The Bloomberg Lab provides Table 5. Table 6 originates from Investing.com. IHS Markit contributes to table 7. And table 8 could be found in Nomura International website. In addition, table 10, table 11, and table 12 root in TRADING ECONOMICS website.

3.2b Selecting Data

In order to contrast the change of export volume of soybeans between the US and Brazil, we use two years (2017~2018 and 2018~19) to figure out the increase or decrease.

The change is calculated from the formula:

$$\frac{(\text{Export in the current year} - \text{Export in the previous year})}{\text{Export in the previous year}}$$

Furthermore, for purpose of comparing the changes in minimum monthly wages between China and Vietnam in the past ten years, we have compared the data of the two countries with a bar chart in US dollars.

3.2c Analyzing Data

The chart 13 in Excel shows that Brazilian soybean exports increases, while American soybean exports are down from last year. According to calculated data, between 2018 and 2019, Brazil is the world's largest soybean exporter, with a year-on-year increase of 4.36% to 79.5 million tons. And US exports now rank second, with a drop of 11.94% to 51.03 million tons.

Table 13: The Change of Soybean Export of Brazil and US

The Change of Soybean Export(in million ton)			
Country	2017-2018	2018-2019	Change
Brazil	76.18	79.5	4.36%
US	57.95	51.03	-11.94%

This bar chart in Excel says that, although the minimum monthly wages of two countries have been increasing year by year, China's minimum monthly wage has been more than double that of Vietnam.

Table 14: Minimum Month Wages of China and Vietnam



Analysis and Findings

a. Data Evidence

According to the comparative analysis of relevant data we collected, we reach the rudimentary conclusion that there is a negative and significant impact on US and China economy with the more complicated and intense Sino-US trade dispute. Combining table 1 and table 3, the comparison of China imports and other countries demonstrate China is the biggest soybean importer in the world. China accounts for the largest share of U.S. soybean exports before 2018. Therefore, American soybean exports are highly sensitive to trade disruptions, especially from China. But this position changed in 2018. During 2018~2019, Europe became the largest soybean export destination of the United States with an increase of

124%, while China fell to second place with a decrease of 83%. It can be seen how significant the impact of the trade war on China and the United States is. By the way, the trade war began to intensify in March 2018 with additional tariffs.

Secondly, the above table 13 illustrates that trade war brings about the increase of Brazilian soybean exports increases and the decrease of American soybean exports. What's more, the US is no longer the world's biggest soybean exporter. From a series of information and data of Table 4 and 5, we can objectively state that China's imports from Brazil have increased relative imports from the United States in soybean. It's clear that Vietnam has gradually replaced the United States as the first supplier of Chinese soybeans in recent two years. Besides, from the point in time shown in Figure 4, the trade war facilitated this transition.

Thirdly, the manufacturing is the country's foundation of economic development and pillar industries. A reading above 50 indicates expansion in manufacturing, while a reading below 50 indicates a manufacturing recession. From the observation of table 6, we see that the US actual manufacturing PMI (purchasing managers' index) was 49.9 in August, which is below the neutral 50.0 boundary. In other words, US manufacturing is undergoing depression. According to our investigation, this index is also the lowest since June 2009. This is mainly due to the decline in US exports in the context of the escalating trade war. However, figure 7 shows that Vietnam's PMI index was above the 50-boundary line during the period from September 2017 to September 2019. It means that Vietnam manufacturing is experiencing expansion. The trade war has boosted it to some extent.

Finally, it's clear that China manufacturing will suffer the potential threatens from Vietnam in figure 9 and in table 14. Many multinational enterprises choose to invest in China because of its huge population, working-age, potential consumer demand, increasing

infrastructure investment and relative political stability. As far as the present situation is concerned, its advantages are gone. The manufacturing labor cost per hour in Vietnam is only half those in China. And China minimum month wage is almost more than double Vietnam's. Furthermore, for one thing, among the many beneficiaries, Vietnam has the largest net gain from the Sino-US trade war in table 8. For another, Vietnam's foreign direct investment in the first ten months of 2019 attracted 29.11 billion USD. That is to say FDI increased by 4.3% over the same period last year. All above factors will contribute to this phenomenon together, which Vietnam begins to become an emerging global manufacturing center.

b. Experts Evidence

Brazil Soybean:

TS Lombard analysts Elizabeth Johnson and Larry Brainard (2019) mentioned in a research report that in the context of the current US-China trade war, China's dependence on Brazilian goods will continue to increase.

Vietnam Manufacturing:

Vu Tien Loc (2018), chairman of the Vietnam Chamber of Commerce and Industry (VCCI), expressed his views on the issue of the transfer of production from China to Southeast Asia. He said that in the eyes of these foreign investors, Vietnam will be the most promising country with its high growth potential one of the attractive markets. Adam Sitkoff (2018), executive director of the American Chamber of Commerce in Hanoi, also mentioned in a VIR (Vietnam Investment Review) interview that some companies may consider moving production from China to Vietnam to avoid raising tariffs. What's more, economists at Japanese investment bank Nomura (2019) have found that high U.S.-China tariffs make

Source: FINANCIAL TIMES; Vietnam Investment Review; DW.com

suppliers in other parts of the world more competitive with US and Chinese companies, so trade transfers may occur. The benefits of trade transfers may greatly boost exports from third countries with smaller economies. Vietnam meets these conditions.

Conclusion

a. Conclusion

This paper finds that Brazil and Vietnam have become the biggest beneficiaries as Chinese and American importers want to reduce tit-for-tat tariffs. Due to the impact of tariffs, China reduced its imports of US soybeans and increased its imports of Brazilian soybeans. In manufacturing, multinational companies have shifted production from China to Vietnam, Vietnam has benefited from trade transfers, and China has been hindered by trade frictions with the United States. In summary, surrounding countries take advantages from the ensuing conflict after two of China and the US squaring off.

b. Implications of Research

This research is with the purpose of helping people know trade war backwards and forwards and pay more attention to it. For one thing, it's obvious to notice the significant role of agriculture and manufacturing under the influence of trade war. For another, combined with the study analysis, readers can predict the changing trend of some industries and provide some investment reference. Furthermore, the main purpose is to warn and enlighten people that "When the snipe and the clam grapple, it's the fisherman who stands to benefit".

c. Limitations of This Study

Through the study has achieved the established objectives well, but there are also many shortcomings and limitations in this research still need to be further improved. First of all,

the winners of Sino-US trade war are not limited to these two countries. Because the tariff policy affected numerous industries, and one industry might involve in more than one country. For instance, Southeast Asian countries have very reassembly situation. Therefore, it's possible for Thailand and other southeast countries to be on the list of winners in the trade war. Secondly, the forecast of soybean imports and exports just underlies the current situation. Once the trade war is over, China and the United States are very likely to continue soybean trading. the change and impact of Brazil agriculture may be no longer in existence. Finally, uncertainty factors lower the study and conclusion reliability. The global economic market is dynamic, the tariff policy updated frequently in recent, and the counterattack acts of China and US are inscrutable.

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