Research Paper

US-China trade conflict: The bottom line

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ABSTRACT

The two largest economies, US and China have engaged in trade war from 2018 and recently, in 2019, it has been refueled as the US President Trump has re-announced 25% tariff again on unlimited Chinese imports to the US. China has also threatened to impose similar tariff on $60 billion US products. The recent aggressive tariff attacks will weaken the net bilateral trade between the two nations. The study discusses the causes of recent trade war and its impact, and suggests some measures to avoid it. The sources of this descriptive study are the published news, articles and information in the web. The authors are hopeful that this study will come to the help of academicians wishing to investigate more on this recent issue and the policy makers of the business world who seek better alternatives of trade war.

Key words: China, US, tariff, import, export, trade war.

INTRODUCTION

The US President Donald Trump announced a 25% tariff on unstipulated imports from China worth USD 150 Billion in April, 2018 so as to reduce the US-China trade deficit by USD 100 Billion. It is not clear yet whether the decision is consistent with World Trade Organization (WTO) or how WTO reacts on it. One obvious prediction was that the Chinese exports to the US will fall and it had already begun. An increased deliberate trade between the two countries raises the combined welfare mutually, whereas a decrease in unintentional trade just reduces the collective welfare in both partnering countries, creating a lose-lose scenario (Lau, 2018) leaving no winner in such game.

In addition, the most probable net conclusion of such country specific trade tariff impose is the switch of imports by other importers from China on behalf of the US importers, resulting the decrease of trade deficit of US with China but increase with other countries not changing the overall US trade deficit as well as GDP or employment. However, in the long run, there is at least theoretically a possibility that some existing producers may relocate their production facilities from China to other countries to avoid US imposed tariffs and other restrictions (Lau, 2018). A good example is what the Japanese car manufacturers did in the past though it is very unlikely to occur in labor intensive industries.

LITERATURE REVIEW

The literature on most favorable trade policy dates back to Johnson (1953) who established that in a one shot game, two large countries would generate a Nash Equilibrium with tariff rates above their social optimum (Balistreri and Hillberry, 2017). In this perspective, a theory projected by Bagwell and Robert (1999) was the key roads through which the economists viewed these issues. In more current times, Ossa (2011) presented a new premise of trade discussions and the framework that guides them. Ossa (2014) has taken this hypothesis to the data and calculated most favorable tariffs. Later, Ossa (2016) carried out a more universal implement incorporating an additional theory of Grossman and Helpman (1994) highlighting a domestic political economy concerns in tariff setting (Balistreri and Hillberry, 2017).

The US-China trade deficit

The US-China trade deficit in goods was USD 375 Billion...
Thus, so far, the debate of the US-China trade war is based on the gross value of exports rather than value-added figures. Value added measures the amount of GDP actually created by exports in the exporting country and can considerably vary from gross value. For example, while the Apple iPhone is made in China, the domestic value added in China is less than 5% of the gross value (Lau, 2018). If the US-China trade deficit could be calculated on the basis of value-added rather than gross value, considering the service trade within the value-added framework, the deficit can be reduced by roughly a half, based on an earlier analysis of the 2015 bilateral trade data close to USD 150 Billion a year (Lau et al., 2017). The gap could be possibly narrowed down or even closed in a few years time if both China and the US work together.

Causes of trade imbalance and tariff dispute:

According to new figures from the US Department of Commerce, in 2017, the US trade deficit reached a nine-year high of USD 566 billion. Total US-China trade in goods was USD 635.97 billion, with US exports to China of USD 130.37 billion and US imports from China at USD 505.6 billion, leaving a trade imbalance of 375.23 billion (Table 2). Can this large trade deficit according to US figures be attributed to unfair trade practices by China? By looking to the principles of trade economics and the realities of China-US economic interaction, we can identify the following factors that shape the trade imbalance.

Structural issues caused by rapid development of the global economy

The trade deficit is an inevitable result of the dollar's status as the global reserve currency. US national investment exceeds national savings, meaning that funds must be absorbed from abroad to plug the gap, creating a trade deficit. In addition, due to the dollar global reserve currency system backed by the US government, the US has been able to print dollars to allow the US economy to maintain a consumption level greater than domestic production without fear of inflation. Meanwhile, the dollar has served as a public good supporting the international economy. Declining US household savings and rising national debt has exacerbated the trade deficit. The US household savings rate has continuously fallen over the past 20 years, from 8% in the 1990s to 1.75% in 2006, dropping to negative in 2007 H1. US federal debt dropped from 49% in 1994 to 34% in 2006 but then shot up to 70% by 2006. In 2017, US household savings dropped again to 3.6% and US federal debt exceeded 100% of GDP (Huiyao et al., 2018). Further, the international division of labor has shaped the trade deficit. The US has a comparative advantage in capital-intensive industries; while China's comparative advantage lies in labor-intensive sectors. Primary industries account for 8% of China's GDP and just 1% of the US economy, while

US trade in goods with China:

It is worthy noteworthy that all figures are shown in US dollars on a nominal basis, not seasonally adjusted unless otherwise specified. Details may not equal totals due to rounding. Table 1 shows only those months for which there was trade. However, a yearly difference of around USD 40 Billion has remained since 2004 (Hossain and Hosain, 2019). It cannot be just explained by the difference in timing of departure of goods from one country and arrival in another. Since the Chinese exports to the US have been growing progressively over time, it is possible that in any given year, the recorded Chinese exports to the US will exceed the recorded US imports from China because of transit time. Also, it can be the other way round; recorded US imports have consistently exceeded the recorded Chinese exports. One tentative source of this discrepancy may be the re-exports to the US of Chinese exports via ports other than Hong Kong. Another source might be a methodical valuation difference “customs basis” by the US Customs and F. O. B. as reported by Chinese exporters which reflects perhaps the under invoicing of Chinese exports by Chinese exporters in order to reduce profit and avoid taxes.

In this regard, it should be noted that, royalties and license fee payments to third country subsidiaries and affiliations of US corporations such as apple, Google and Qualcomm are not fully recorded. These are genuinely service revenues received by US entities but accredited to third countries such as Netherlands, UK and Ireland. The exact value of these payments is not entirely published anytime, though they are assumed to be considerably large. Therefore, the real value of the US-China trade deficit in goods and services, before adjusting to a value-added basis, is possibly not larger than USD 300 Billion yearly, still it is agreeably a larger number (Hosain and Hosain, 2019).
secondary industries make up 20% of China's economy and 12% in the US. In China, the tertiary sector makes up just over half (53%) of GDP, while this figure is 79% in the US. From this structure, we can see that China's economy is based on agriculture and manufacturing, in contrast to the US where services are the driving force of the economy. Lastly, the US export restrictions exacerbate the US-China trade deficit. The US decision to retain restrictions on exports of high-technology products to China is another factor that contributes to the US-China trade imbalance. In 2001, imports from the US accounted for 16.7% of China's imports of technology products, but by 2016 this ratio had fallen to 8.2% (Huiyao et al., 2018). This trend is not fitting with the US status as a technology power and key economic partner of China.

**Conventional measurement methods misjudge US-China trade deficit**

Chinese and the US economic interests are deeply entwined through the global value chain system. According to a report released by the US Congress in March of this year, under current global value chains, the US and Chinese production are deeply linked so that often Chinese products use US components, while US products use Chinese components. In a highly globalized world, Sino-US economic interaction is an inevitable outcome of international patterns of division of labor and resource allocation. While the US tends to occupy a mid-to-high level in these global value chains, China tends towards the mid-to-low end. With the vertical integration of industry value chains and cross-border development of supply chains, the US has oriented towards high value-added activities such as product design, production of core components and marketing. US companies extract the lion's share of the profit from these value chains. Second, US trade measurement methods do not capture the full picture of the trade relationship. The

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### Table 1: US trade with China in 2018 from January to October (physical goods only).

<table>
<thead>
<tr>
<th>Month</th>
<th>Export (in million $)</th>
<th>Import (in million $)</th>
<th>Balance (in million $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2018</td>
<td>9,835.3</td>
<td>45,788.0</td>
<td>-35,952.8</td>
</tr>
<tr>
<td>February 2018</td>
<td>9,806.1</td>
<td>39,067.6</td>
<td>-29,261.5</td>
</tr>
<tr>
<td>March 2018</td>
<td>12,382.1</td>
<td>38,256.7</td>
<td>-25,874.6</td>
</tr>
<tr>
<td>April 2018</td>
<td>10,268.0</td>
<td>38,230.0</td>
<td>-27,962.0</td>
</tr>
<tr>
<td>May 2018</td>
<td>10,610.8</td>
<td>43,797.4</td>
<td>-33,186.6</td>
</tr>
<tr>
<td>June 2018</td>
<td>11,115.6</td>
<td>44,599.5</td>
<td>-33,483.8</td>
</tr>
<tr>
<td>July 2018</td>
<td>10,261.7</td>
<td>47,096.0</td>
<td>-36,834.3</td>
</tr>
<tr>
<td>August 2018</td>
<td>9,294.3</td>
<td>47,863.9</td>
<td>-38,569.6</td>
</tr>
<tr>
<td>September 2018</td>
<td>9,789.1</td>
<td>50,032.1</td>
<td>-40,243.0</td>
</tr>
<tr>
<td>October 2018</td>
<td>9,130.5</td>
<td>52,233.0</td>
<td>-43,102.5</td>
</tr>
<tr>
<td><strong>TOTAL 2018</strong></td>
<td><strong>102,493.5</strong></td>
<td><strong>446,964.2</strong></td>
<td><strong>-344,470.7</strong></td>
</tr>
</tbody>
</table>

Source: US Bureau of Census.

### Table 2: Biggest US trade deficit by country in 2017 (Excluding services).

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>2017 (in billion $)</th>
<th>2016 (in billion $)</th>
<th>% change</th>
<th>Biggest import</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>China</td>
<td>375.2</td>
<td>347</td>
<td>+ 28.2</td>
<td>Consumer electronics</td>
</tr>
<tr>
<td>2</td>
<td>Mexico</td>
<td>71.1</td>
<td>64.4</td>
<td>+6.7</td>
<td>Autos, electronics</td>
</tr>
<tr>
<td>3</td>
<td>Japan</td>
<td>68.8</td>
<td>68.8</td>
<td>0</td>
<td>Autos, electronics</td>
</tr>
<tr>
<td>4</td>
<td>Germany</td>
<td>64.3</td>
<td>64.7</td>
<td>-0.4</td>
<td>Autos, transportation</td>
</tr>
<tr>
<td>5</td>
<td>Vietnam</td>
<td>38.3</td>
<td>32</td>
<td>+6.3</td>
<td>Rice, crops</td>
</tr>
<tr>
<td>6</td>
<td>Ireland</td>
<td>38.1</td>
<td>36</td>
<td>+2.1</td>
<td>Chemicals, drugs</td>
</tr>
<tr>
<td>7</td>
<td>Italy</td>
<td>31.6</td>
<td>28.6</td>
<td>+3</td>
<td>Machinery</td>
</tr>
<tr>
<td>8</td>
<td>Malaysia</td>
<td>24.6</td>
<td>24.8</td>
<td>-0.2</td>
<td>Consumer electronics</td>
</tr>
<tr>
<td>9</td>
<td>Nederland</td>
<td>24.5</td>
<td>23.6</td>
<td>+0.9</td>
<td>Chemicals, machinery</td>
</tr>
<tr>
<td>10</td>
<td>India</td>
<td>22.9</td>
<td>24.4</td>
<td>-1.5</td>
<td>Manufacturing, cloths</td>
</tr>
<tr>
<td>11</td>
<td>South Korea</td>
<td>22.9</td>
<td>27.6</td>
<td>-4.7</td>
<td>Autos, electronics</td>
</tr>
</tbody>
</table>

Source: Bureau of Economic Analysis, US census.
Trump administration has continuously held up the supposed USD 375.2 billion US-China trade deficit as “just cause” for launching the trade war. It is worth re-assessing this figure according to empirical data. Firstly, there are large discrepancies in estimates of the trade deficit. Secondly, according to US “country of origin” principle, the US has a trade surplus of $32 billion with Hong Kong and exports over $100 billion worth of goods to mainland China via ports such as Hong Kong and Macau (Huiyao et al., 2018). However, these figures are not accounted for in the US-China trade balance. In addition, if trade figures were measured according to the “value added” principle, China’s trade surplus would shrink significantly. Third, the US enterprises earn the overwhelming majority of profits from the Sino-US trade relations. According to MOFCOM data, in 2017, 59% of China’s trade surplus came from the export processing trade, and 57% was accounted for by foreign companies. Foreign companies also dominate Chinese exports to the US. Research findings from the Asian Development Bank show that in sectors such as clothing, textiles, shoes and accessories, US companies and retailers claimed around 90% of the profits from US imports from China. Under global value chains, China enjoys a surplus in trade but the US acquires the real surplus in profits. Last of all, the US surplus in services trade is large and growing. The US trade balance calculation based on exports minus imports takes no account of the growing bilateral trade in services. Over the past ten years, US exports of services to China have increased five-fold. In 2017, China-US trade in services reached USD 118.2 billion, of which USD 90 billion was US services purchased by China (Huiyao et al., 2018). However, this figure does not show up the official US-China trade balance. The US-China Business Council points out that China is the second largest destination for US exports and calculates that the US enjoyed a trade surplus in services of 53 billion ($54.7 billion according to Chinese figures) over China in 2017. This surplus is typically ignored in discussions on the bilateral trade balance.

**Changes in the domestic and international political/economic environment are a key factor in recent trade frictions**

Changes in US domestic politics are a major cause of current tensions. Recent trade frictions are closely linked to changes in the political underpinnings of China-US economic relations. Harvard economist Rodrik (2018) emphasizes how trade policy impacts the distribution of income within a country. Economic globalization has created both winners and losers within the US, and over many years the cumulative impacts of income distribution patterns have created a deep rift between economic elites and those that feel left behind in the US, a rift that played into the election of President Trump. Thus, to a certain extent, Trump is a reflection of popular discontent in the US. Secondly, direct drivers of the rapid structural shift in China-US economic relations are responsible for this. In 40 years of the Reform and Opening-up period, China’s economy has shifted from a planned economy to a market economy. This transformation, which will see consumption replace investment as the major driver of economic growth, requires continuous optimizing of the industrial structure and industrial upgrading via technology and innovation so that China can climb up the global industrial chain. This transformation is taking place as China’s economy shifts from “high-speed” economic growth to “high-quality” economic growth.

While, on the other side of the Pacific, the US also faces economic headwinds. Trump’s initiatives to revive US manufacturing, seen by many as out of sync with the realities of the US economy, is an attempt to rectify the wrong course that some see globalization as having led the US economy down. Thirdly, Competitive-cooperative relations have reached to the new era where the US contributed 29.1% to global growth; while Western developed economies contributed 76%. By comparison, in this period, China and emerging markets/developing economies (EMDEs) overall contributed 9% and 23.9% respectively to global growth. For the period of 2008 to 2016, contributions by the US and group of developed countries to global growth fell to 7.4 and 23.9% respectively, while the share contributed by China and EMDEs rose to 35.6 and 77.7%, respectively reflecting the relative shift of economic gravity from West to East. China’s GDP overtook the UK in 2005, Germany in 2007, and Japan in 2010 to become the world’s second-largest economy. In 2012, China’s economy was around half the size of the US economy, but by 2017, it had reached two-thirds the size (Huiyao et al., 2018). Although there remains a large gap between the two countries regarding GDP per capita, they are converging in terms of GDP, with China catching up to the US in terms of technological development and exerting a growing influence on the global stage. In the eyes of US elites and the public, China has been clearly branded as a competitor of the US. Lastly, Structural tensions behind the China-US economic dispute are at a higher level. One cannot escape the deep structural tensions that exist in the China-US relationship. Some commentators doubt whether the two countries can get along with each other under the existing international order and worry that they may fall prey to the Thucydides Trap. In light of geopolitics and the experience of rising great powers, some Western scholars believe China and the US could fall into a new Cold War and see the trade war as part of efforts to contain China’s rise. In reality, there is a qualitative difference between now and the Cold War between superpowers the US and USSR. First, at that time, the economies of the US and USSR were separate from each other, whereas today, US and Chinese economic interests are deeply intertwined. Secondly, amidst the superpower rivalry, the USSR used its armed might to expand outwards, whereas China adheres to a path
of peaceful development and does not seek hegemony but rather strives for a new type of great power relations with the US that avoids conflict and seeks mutual benefit. In addition, although Sino-US competition is marked by differences of economic system and developmental model, it does not involve the type of deep-seated ideological conflict that characterized the US-Soviet Cold War.

TRADE CONFLICT: IMPACT ON BOTH SIDES

Trump has previously tweeted that “trade wars are good, and easy to win.” In his eyes, trade wars are a zero-sum game of “you lose, I win.” In fact, the trade balance that Trump demands between the US and China does not accord with economic principles and would not be beneficial to either country. Effectively, the US and China now find themselves in a Prisoner's Dilemma, where both sides raise tariffs to inflict damage on the other, when in fact both would be better off by cooperating and canceling tariff measures. However, neither side is able or willing to call a truce unilaterally as this would result in a larger loss. Ultimately, this drags both sides in to a trade war in which both sides lose.

Impact on Chinese economy

Detrimental to China’s long-term interests

While China is not afraid of engaging in a trade war, this action would entail costs that go against national interests. MOFCOM official points out that, to a certain degree, China’s trade surplus with the US indicates that it is more reliant on the US market than vice versa. This puts China at a disadvantage in Sino-US trade relations and means that China may suffer more if the two economies are to decouple.

Limited impact on China’s GDP growth

As the dark clouds of trade war gather, financial institutions at home and abroad are trying to gauge the losses China would incur due to a trade war. In scenarios under which the US applies tariffs of 15, 30, or 45% to all Chinese goods, what would the relative damage be to Chinese exports to the US and total exports? Morgan Stanley estimates that the relative decline in exports to the US under the three scenarios would be 21, 46, and 72%, respectively while the total exports from China would fall 4, 8 and 13%. Similarly, industrial securities estimate that if tariffs of 30% are applied, the negative impact to China’s GDP will be 0.64 percentage points (Huiyao et al., 2018).

Impediment to China’s deepening reform and economic upgrading

Aside from the impact of reduced exports and deferred investment, China’s central bank has implemented “targeted easing” measures three times since January to aid US multinationals become victims of the trade war

A trade war would severely hurt the interests of US companies in China. Recently, the US Chamber of Commerce openly criticized President Trump’s approach in provoking the trade war and opposed the administration’s threats to impose major tariffs measures on imports from China, which could hurt the interests of US consumers and US companies investing overseas while substantively distorting US trade relations with other major economies.

In 2016, China imported $16 billion worth of US movies. This year, China and the US will reopen negotiations on a 2012 WTO movie agreement. Originally, the US film industry had expected to increase the quota for US movies to enter the Chinese market, but it now seems that Hollywood too has become a victim of the trade war, to the extent that it may even be the target of retaliatory measures. The trade war will likely impair US competitiveness in new emerging markets. In 2016, Chinese consumers bought 44.9 million Apple iPhones and a total of 510 million cars from the big three US automakers of GM, Ford and Chrysler, accounting for 21 and 33% of global sales of Apple and these automakers, respectively. Sales of GM’s Buick brand in China reached $42 billion, higher than the $39 billion achieved in the US, while Apple’s sales in China came to $46 billion, making China the second largest market for Apple after the US. GM has already publicly expressed opposition to the trade war, concerned that it will impair US competitiveness.

Impediment to China’s deepening reform and economic upgrading

Aside from the impact of reduced exports and deferred impact on the US economy

Reducing the major contributions of China-US trade to the US economy

From China’s WTO entry in 2001 to 2016, US exports to China have increased by 500% (Huiyao et al., 2018). According to economic principles, any country that escalates tariff measures will hurt its own citizens and also cause unemployment through the impact of retaliatory measures. Ultimately, those who pay the cost of Trump’s trade war are US consumers and workers.
Impact on US industries and employment

Conservative US think tank the Tax Foundation claims that the trade war has already lowered US worker’s wage levels by 0.3 percentage points while reducing 365,000 job opportunities, with the new round of tariff measures announced in July estimated to be equivalent to 40% of the impact of the Tax Cuts and Jobs Act promoted by conservatives. The US Chamber of Commerce has warned that 260,000 jobs could be at risk. These impacts are due to the double shock of downwards pressure on exports and upwards pressure on costs.

Shock to the US financial system

Since the second quarter of 2017, the US PCE (personal consumption expenditure) indicator has been rising. The Federal Reserve predicts that it will reach 1.9 and 2.0 in 2018 and 2019 respectively. Inflation caused by rising tariffs could force the US Federal Reserve to increase the interest rate to 3.5% in 2019, impacting US capital markets. The trade war will also hit stock markets and impact US investors.

Increasing costs and impeding US innovation

According to estimates in a recent report by the Information Technology and Innovation Foundation (ITIF), imposing tariffs of 25% on US imports from China of information and communications equipment will cost the US economy $332 billion over the next ten years. The intensifying US-China trade war is casting a shadow over technology talent of Chinese descent in the US. While China’s drive for entrepreneurship and innovation is a pull factor attracting Chinese talent back to China, pressure and restrictions on Chinese technology talent and overseas study students constitute a push, expanding the flows of talent back to China. Talent is the driving force of US innovation, and negative impacts on this dimension due to a trade war should not be overlooked.

Impact on the global economy and multilateralism

Uncertainty creates problems for transnational production, forcing business leaders to consider political factors as well as economic efficiency when configuring global supply chains. This impacts the workings of the global economy and may even lead to serious global recessions. Trade wars hit the confidence of investors and could weaken the foundations of global growth, potentially leading to large-scale unemployment.

TRADE WAR: COULD IT BE AVOIDED?

However, there is always a better alternative or alternatives. The US trade deficit with China can also be reduced by US trying to increase its exports to China which is the largest single market for all kinds of goods and services in the world. It can be done in two ways: the first is rerouting the existing exports to other countries in China as a replacement and the second one is to produce new outputs to export in China using the current resources that are still underutilized. The first way is mostly aesthetic. US GDP and employment as the two reasons argued by Mr. Trump for imposing tariff, will not necessarily rise even if the US-China trade deficit will fall down. There is very insignificant net short term economic benefit on the part of the US, apart from the claim that the trade deficit has been effectively reduced. This is more political benefit for the US rather than long term economic one. The second option, however, has a strong possibility to genuinely increase in sustainable economic welfare benefit for the two parties. US producers will be happy and the Chinese importers and consumers can have a taste of newer, quality products (Hosain and Hosain, 2019).

Additionally, tariffs against China may not even lower the overall US trade deficit with the rest of the world as the US importers may substitute for Chinese products by importing from other countries. In this regard, we can put forward an example from the US apparel trade history. Between 1989 and 2017, the combined apparel imports from Hong Kong, Taiwan and South Korea to the US declined from 36.9% to only 1.7% which was replaced by Chinese imports rising from 11.7 to 36.6% (Lau, 2018). The new tariffs will force the US apparel importers to refrain importing from China sharply and the gap will be replaced by importing from India, Bangladesh, Vietnam and Cambodia. The interesting fact is that due to the same demand remaining, the overall US apparel import will remain the same even after imposing new tariff.

CONCLUDING REMARKS

Whether or not the tariffs that the US and China have imposed on each other will direct to a full blown trade war between these two largest economies is yet to be seen. The business environment would be more challenging for the producers of agricultural, automobiles, aircraft and chemical products if China really impose retaliative tariffs (in fact, China already imposed on a few items already). However, at least in the near future, the US economy will not be that much affected due to the small portion of its value-added exports to China. But there could be other knock-on effects, difficult to quantify in numbers that could raise the pain for US exporters. For example, the stock market is obviously going to be weak (that happened already several times) that would reduce the net wealth of American households and bond yields could rise if China started to unload some of its sizable holdings of US Treasury securities.
In summary, a full blown trade war between the US and China will not benefit any party but both parties might be at risk of losing in a substantial manner. In this study, some alternatives have been suggested that would narrow the trade deficit between the two largest economies and would have positive brim over effects for the rest of the world. The policy makers should think of long run welfare effects rather than thinking with short sighted vision.

REFERENCES


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