US President Donald Trump's Twitter Analysis and His Trade Policy Agenda*

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This paper makes a text analysis of the US President Donald Trump and his trade policy agenda at the national and international levels, followed by evidence-based statistical analyses of US trade. The results of President Trump's twitters reveal that overall, President Donald Trump's remarks contain his "populism" characterized by the use of easy-to-understand words as well as simple rhetoric, as shown most symbolically in the phrase "make America great again". This is what is meant by "populism", an important character of his administration (at the "meso" level) which exerts a large impact on the global (or "macro") political and economic landscape. Such large-scale impacts can be generated by "micro" (individual level) remarks by President Trump. In more concrete terms, his micro (individual) speeches will influence his meso (national) level policy as well as the macro (NAFTA) level policy stance of the US. All these levels are interconnected in a sensitive way. NAFTA as a regional integration among the three nation states is actually under a significant influence from meso as well as micro interactions, and President Trump's punitive trade stance may hit Chinese export negatively. Due consideration to the cross-hierarchical linkages is indeed a practical viewpoint when discussing the current, rather US-dominated trade deals.

Keywords: Donald Trump, Twitter, America first, trade policy, text mining

Background and Setting

This paper makes a text analysis of the newly elected US President Donald Trump and his trade policy agenda at the national and international levels. The focus is of utmost importance since the US trade policy affects other nations' trade regime to a great extent.

Indeed, there is a sort of hierarchical structure in the global society with the US at an important center. Several layers are then nested, since Trump's remarks have been reshaping people's inward-looking mindset away from embracing open trade and instead cherishing the value of "America First"; this trend then gives a boost to the Trump administration's further promotion of domestic-oriented policy.

It is an analytical conduct to give names to what seems to be the subjects of each level, such as individual → household → ethnic or local government → nation → regional integration body → super national system and international norms and to discuss the interaction only within each hierarchy. As usual, there are limitations to capture the reality of the global society with this approach, and it is impossible for various actions and ideas

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to be unpredictable among individuals' actions, part of the meso connecting micro and macro, and micro "individual." In other words, the US President Donald Trump's remarks, mostly done through tweets, can have a great influence on the meso (the US national) and the macro (global) levels in the form of the prevalence of "my country first", or "populism" put simply.

With the above observation (interactions among micro, meso, and macro levels) in mind, this paper makes a text mining analysis of Trump's Twitter-based remarks. For the period of April-July 2017, within the first term of Donald Trump's US presidency, there are totally 577 items of tweets (12,954 words in total) extracted for this study. This section investigates Trump's sentiments from these contents. And by conducting a comparative static analysis on his observed words, this study tries to provide related implications on Trump's domestic and international policies using a text analysis tool.

Text Mining Analysis of Trump's Policy Speeches

This paper uses the tool for text mining analysis which was developed by Nippon Telegraph and Telephone (NTT) Mathematical Systems (Japan). Generally speaking, text mining or text analytics means turning unconstructed text data into high-quality information or actionable knowledge (Zhai, 2018), which can be used for optimal decision-making. By applying a specific algorithm, we can extract meaningful information, which could be very useful. Among all of these, content analytics is widely applied in social science studies (Yu, 2015). It classifies those words in a prepared document by detective encoding rules to give them a new order.¹ Content analysis shows great value in observing change of public opinions (Stemler, 2001).

As Trump has been making extensive use of social networking services, most notably the Twitter service, we have extracted his tweets for language analysis. Natural language processing (NLP) requires common sense knowledge (e.g., about trade policy and its status). NLP based on statistical methods can be done using his tweet texts and is the main topic here. In this study, we are going to use statistical NLP as the basis and we will have humans for help as needed in various ways.

Content Analysis of Mr. Trump's Twitter

Word Frequency Analysis

Figures 1 and 2 show the results of word frequency analysis. Take a glance at these two figures, in contrast with tweets before getting elected (which is displayed in Figure 1), the tone of Trump's tweets in his first presidency term is changing a bit. During October 2016, "Clinton" was the most frequent word on the list. After the election, "Clinton" was obviously no longer a byword Trump talked about all day; instead, he seemed to turn his interest into lambasting mainstream media and spent more time on it. In Figure 2, we can see there are words like "fake", "news", and "medium" from his tweets. On the contrary, Trump spoke highly of the FOX News Network and gave an interview on the show "Fox & Friends" where he talked about Obama care.

Also, in Figure 1, Trump's tweets mentioned the traditional phrase "Drain the swamp", which is a major slogan unveiled for Trump's campaign on October 2016, implying Trump's commitment to promote tougher ethics reforms to eliminate the influence of lobbyists and corruptions incurred. It seems that Trump as an outsider before the election was willing to totally change the political atmosphere in the capital of the US,

¹ Usually, the setting up of a dictionary is a part of the content analysis, and those collections of words or dictionary can help you look up and extract specific words out of the documents, and then conduct statistical analysis on them, such as frequency analysis, matching and so forth.

cleaning up all the corruptions, cronyism, and backstage dealings². In this sense, this slogan aroused a great influence on the US because it appealed to the will of a large population. To some extent, the fast spread of this slogan successfully helped Trump's campaign win wide support among voters. Indeed, such a promise had been made by Trump's predecessor, Barrack Obama, who had carried out a policy to ban lobbying post-service. Trump therefore mentioned this again and no matter whether it would happen or not, this slogan triggered echo with voters. Responding to psychological demands of the majority, Trump did implement some measures, e.g., an executive order on a five-year revolving-door ban. However, some critics still pointed out there is a lack of records on his effort to promote a five-year lobbying ban, which is seen as even more aggressive than Obama's two-year ban³. However, trump's cabinet was criticized as the "richest in history" and the "least educated" in around 25 years (Lynch, 2017), which partially went against Trump's "corruption fighter" public image, and after Trump took the office, the number of registered lobbyists became even larger than that of a year ago (Overby, 2017). So far, Trump's promise has met with incredulity within the country. Corresponding to the skepticism, Trump has not given any further measures.

In Figure 1, several words, such as "election", "Clinton", "email", "win", and "thank" come out a lot of times, while those words cannot be seen from the second graph (see Figure 2) again. It seems that Trump stopped talking about Clinton's issue after he got elected. With the undergoing of Clinton's issue on her email, Trump's approval rate surpassed Clinton's for the first time before the election. To some extent, Clinton's email controversy was a main cause leading to her failure in this presidential election. At that time, Trump's team made good use of the opponent's weakness and gave a fatal blow. By comparing the difference between before and after the election, we can see the utilization of Clinton's email controversy was more like a good campaign strategy for Trump to get elected later.

Figure 1. Word frequency (one month before the election).

² See Has Trump drained the swamp in Washington? By Theodor Meyer.
<https://www.politico.com/story/2017/10/19/trump-drain-swamp-promises-243924>.

³ For example, some restrictions were removed, see
<https://www.politico.com/story/2017/01/trump-lobbying-ban-weakens-obama-ethics-rules-234318>.

Figure 2. Word frequency (after the election).

Analysis of Positive and Negative Words

Figure 3 demonstrates the positive words with frequencies. In Trump's tweets, we can see before the election, because he was always repeating his strong slogan in twitter, those words in the slogan appeared with highest frequency as usual. Trump also mentioned "poll", "crowd", "order", "rally", and "supporters" in positive expressions. Compared with Clinton, Trump expressed his gratitude to voters in a better way, more directly and more times. This is the advantage of a personal Internet media, and it makes Trump closer to his supporters, at least, it gives people such a feeling by doing so. Other positive expressions are used in compliment on his policy, which can be seen from words, like "border", "job", etc.

Figure 4 shows positively evaluated words by the order of frequency. Regarding the analysis on positive and negative meaning of words, high-frequency words with positive indications are mostly shown by this Figure. Here, except for "people" and "deal", other words are only of positive meanings, such as "justice", "optimism", "honor", and "luck". Meanwhile, there are many words for things Trump has given positive comments on, e.g., veteran, Israel, Trump's pick to lead the Securities and Exchange Commission (SEC), the Falcons (sports team), American, etc.

By contrast, from the perspective of publicity, we can see Twitter played a very useful role in Trump's campaign and after his election; it immediately became a good promotion instrument for advertising Trump's policies. It is free but powerful. By using Twitter, Trump's advertisement tended to be more efficient and effective than Clinton's. We can guess, in the near future, his every word will still be augmented by this media, that will be good for the monitoring of his presidential work on one hand, and on the other hand, he will have a greater influence on the public than his predecessors.

Figure 3. Positively evaluated words (one month before the election).

Figure 4. Positively evaluated words (after the election).

As for Figure 5, Trump made negative comments about his opponent (Clinton), particularly, on traditional media (Cable News Network [CNN]) and Obama care. Trump focus his criticizes on Democrats and everything relevant with that during this period.

As for Figure 6, negative words are plotted in terms of their frequency. The negative word appearing the most frequently is “Obamacare”. Obviously, it became a hotspot when Trump and the congress passed the bill to replace and repeal Obamacare on May, and therefore surrounding this topic, there was a great deal of

discussions online that Trump tweeted and criticized this for many times, making it a high frequency word. Behind “Obamacare” is “immigration”. Since getting elected, Trump has promoted his immigration policies for several times to ban immigrations. Further, Trump also harshly criticized “NATO”, and that is why we can find NATO on this chart. We can find “fake” again, showing Trump’s negative attitude towards mainstream media again.

Figure 5. Negatively evaluated words (one month before the election).

Figure 6. Negatively evaluated words (after the election).

By comparison, the negative expressions became more frequent after the election. As a new president and fresh man in Washington, Trump’s administration was facing many challenges as imagined before. Trump then

Figure 7. Network Analysis (before the election).

Next, the word linkage analysis is made, as in Figures 7 and 8, showing the relationship of words circled. Those words at the beginning of arrows are the ones giving positive or negative evaluations; those at the end of arrows are the ones receiving evaluations. The word “great” is now associated with more words than before, implying Trump used this word more often in his tweets. With the emergence of new incidents, a variety of new words were also being used.

From Figure 7, one central word connects with a bunch of others. Positive and negative words account for half and half respectively. “Bad” is always being paired with “Obamacare”, “Clinton”, and “rating” again, the simultaneous occurrence of those words is another fierce attack to democrats. By contrast, Trump made positive comments to his own rally and never hid his real feelings or praise towards supporters by tweeting with words, such as “great”, “fantastic”, “beautiful”, etc. In this way, his image was improved a bit and attracted more attention from the crowd. On the other hand, he showed his confidence by encouraging supporters and praised himself even when he performed not so well in the debate. To this point, as an experienced public character, Trump is adept at advertising himself, which may be one of his capacities fostered during his

business career. He always emphasized himself as being rich and powerful and tried to educate the public that he is a successful businessman and he could get success in every area he could enter.

Figure 8. Network analysis (after the election).

From Figure 8, we can see the change. Trump seemed to become less aggressive than he was before the election. The number of positive words was increasing significantly. He began to speak something good in public and wanted to change his former image of cynicism. As a leader of such a divided society, dealing with so many people who are against him, Trump had to tone down his unscrupulous statements. He wanted to unify the broken country together and gain universal trust from the public. Changes can be easily observed in tweets, negative words were disappearing, and more positive statements were proposed to conciliate the anger groups. Trump firstly should wield his power and start a true presidency, and make himself a reasonable person, which means less aggressive.

Then, magnifying the central word in both network maps, the relationship would be seen more clearly. In Figure 9, we enlarge a part of the whole map centered with “great”, and then in Figure 10, we talk about the negative side.

From the word “great” in Figure 9 (the part for “great” magnified), there are so many relevant words shown around it, some of which refer to specific objects, for example, veteran, Israel, security, evening, crowd, etc., and some others refer to specific adjectives, such as “fantastic”, “success”, “wonderful”, and so on. From

The graph visualization shows a central cyan node labeled "great" connected to a large number of peripheral nodes. The peripheral nodes are labeled with words and phrases, many of which are enclosed in yellow boxes. The connections are represented by black lines (edges) of varying thickness. The nodes are distributed around the central node, with some clusters appearing more densely connected than others. The overall structure is a complex, multi-directional network.

Figure 11. Network analysis augmented with positive words (before the election).

Focus-Word Analysis

From Figure 13 on focus-word analysis, what is so-called Obamacare is in a network consisted by keywords showing by that graph including “death” and “deductible”. Trump accused democrats as being “obstructionist” when he tried to pass a health care bill to replace Obamacare, so this word appeared simultaneously with “Obamacare”. And we can see two words “spiral” and “death”, which are interplaying and linked with “Obamacare” within a similar distance. Indeed, “death spiral” is a phrase said by Trump, when he described Obamacare as a “death spiral”. “Deductible” and “Premium” are appearing, and at the same time, the word “Deductible” is much closer to “Premium” than “Obamacare”, because “deductible premium” is a phrase, quoted by Trump to advertise his health care plan for the people of the US.

Figure 13. Focus words analysis (with “Obamacare” as the focus).

As for Figure 14, “great” as the central word directly links words, such as “crowd”, “winner”, “champion”, “tonight”, “veteran”, “enthusiasm”, and so on. In contrast with the previous result, there are some new words

appearing, for example, there is a name “Gorsuch”, who actually is the justice of the Supreme Court of the US nominated by Donald Trump in April of 2017⁴, which is a big political success for him.

Figure 14. Focus words analysis (with “great” as the focus).

In Figure 15, in addition to the pet phrase “make America great again”, there are some new phrases “supreme” (court) and “center”, which is evident of the isolationism held by the Trump’s government.

⁴ See

<https://www.reuters.com/article/us-usa-court-gorsuch/trumps-supreme-court-appointee-gorsuch-plots-rightward-course-idUSKBN1EE0IJ>.

Figure 15. Focus words analysis (with “America” as the focus).

Trade Agenda

To make America great again, Trump has spent most of his time to express his own view about the US trade policy. US has been experiencing an increasingly significant expansion of trade deficit for last 20 years and which seems to be continued for coming years (see Figure 16).

From a simple theoretical view, it is a common sense that in an open economy, the economic output Y , referring to GDP is the summation of consumption (C), investment (I), government purchase (G), and net export (NX) which represents the difference of export (EX) minus import (IM), and it gives: $Y = C + I + G + EX - IM$. Moving EX to the left-hand side, it then becomes $Y + IM = C + I + G - EX$. Based on Trump's view, with all the components on the right-hand side held constant, then a growing import on the left-hand side will make Y a smaller value for the total equivalence. However, the coupling effects cannot be ignored in this case that an increasing import (IM) could lead to a movement of other items, such as C and EX in two different directions. That is to say, there could be a coexistence of a larger value of I and smaller value of EX , or a larger I and

larger C at the same time. Bearing this in mind, the output Y would not have to be affected significantly and an increasing of Y might be achieved.

Figure 16. Current account balance, NAFTA (US dollars per capita).

Source: World Economic Outlook, IMF DataMapper,

<http://www.imf.org/external/datamapper/BCA@WEO/CAN/MEX/USA/CAN/MEX/USA?year=1984>.

No matter whether it is from the international economics or political perspective, the election of Trump can be a turning point of the US-leading international system. His administration has set the direction of trade policy based on the principal of “Put America First”. In January of 2017, Trump enacted an executive order to withdrawal the US from the Trans-Pacific Partnership (TPP) shortly after he took the office, which was the first step carried out by Trump to fulfill his campaign promise and policy. Later, he called for a renegotiation with Canada and Mexico on the North American Free Trade Agreement (NAFTA) and tried to eliminate the deficit and create more domestic employment by doing so. Indeed, during his campaign, he had already claimed to impose a higher tariff on Mexico’s export to the US and use such tariff income to finance the construction project of border walls between the two countries. Trump also mentioned China as the biggest rival on the field of trade to the US, ascribed enormous trade deficit to China’s unfair trade practices including the manipulation of currency exchange rates. In his tweets, from November 30, 2016 to December 4, 2017, Trump mentioned China more than 40 times and many of which are about how China took advantage of the US and deteriorated the US-Sino trade relations. These facts partially demonstrated that Trump was abandoning what his predecessors did and leading America to be a protectionist country.

We applied clustering analysis on Trump’s tweets about trade issues. From a clustering analysis, we captured four groups (see Figure 17), “China” is clustered with “deficit” and “job”, and “NAFTA” is with “deal” all the time. “Mexico” is close to “border” and “kill”.

Figure 17. Word clustering analysis on Mr. Trump's tweets about trade issues.

Source: Mr. Trump's tweets from November 30, 2016 to December 4, 2017.

Trump never admits he is an opponent to free trade. Trump emphasized it is the unfair trade that he objects to and he is a keen advocate of fair and smart trade. Trump's idea of fair trade is totally based on pursuing "fairer" trade balance, and put American's interest as priority, creating job opportunities, strengthening the competitiveness of manufacturers, and further improving the economic growth in the US. Taking TPP as an example, there are several reasons why Trump show objections towards it: Firstly, he thinks of it as bad "deals" which may cause "mounting trade deficits and a devastated manufacturing base" (Schott, 2017). Secondly, Trump also thinks the cost is much larger than the benefit for America joining the TPP. And that the TPP would make China and other non-TPP countries free riders (Schott, 2017). Regarding these flaws, Mr. Trump preferred to adopt other instruments that can protect the US' trade interests better than joining the TPP, i.e., bilateral trade agreements. However, it may not be the whole story and there could be a few differences between the real case and Trump's understanding. First, although the relationship between free trade and employment is at times confusing and hard to figure out, it is too thoughtless to conclude that trade is the only answer to the problem of why unemployment and declining of industries took place in the US during past decades. For example, there is no doubt we witnessed a large-scale of job loss among American workers to competition with China. In total, however, the trade between these countries even improved employment level. Different from the traditional sectors, the export sectors associated with China brought a great deal of jobs during past years. It is reported that 350,000 and more new jobs supported by exports to China during 2009-2014 (Donnan, 2016). As for the trade deficit, Trump attributed that to unfair trade and he has his own definition and understanding of fair trade again. For instance, Trump once blamed Japan as making it impossible for American car makers to sell cars in their market, while exporting and selling a big number of cars to the US, which is unfair trade. This is only because he had imperfect understanding of the US-Japan

automotive trade. Japan had already eliminated tariffs and barriers on car imports since 1978; in contrast, the US has been maintaining tariffs on vehicle imports from Japan, 2.5% for cars and 25% for trucks (Japan Automobile Manufacturers Association, 2016). Additionally, Japan also had voluntary export restraint (VER) on car exports since 1981 and welfare of American consumers was reduced (Feenstra, 1984). Thus, Trump cannot draw a simple conclusion that it is unfair trade between US and Japan damaged Americans' interest based on such knowledge, especially, he has little knowledge that Japan's car makers have invested in the US and created many jobs for years (Blake, 2017). Anyway, Trump still only drew hasty conclusions about the US commitments and gains from trade agreements. In contrast with his belief, reciprocal concessions in each market from many countries for lowering the barrier for American firms to get better access to Japanese, Vietnamese, and other TPP markets should be incorporated into each trade deal, and that is a reason why America made a great deal of gain from free trade, and which could induce even greater welfare than the commitment costs for the US. Further, TPP would have already made so-called commitment cost low enough to draw the US over to join in (Schott, 2017). As for the concern that China acts as a free rider, Trump did give a good answer to his own question. On the contrary, TPP itself could become an effective instrument to stop other non-TPP members from taking a free-ride action. Rules of origin has given criteria for commodities to qualify for preferential tariffs, if they are not qualified, then the most favored nation (MFN) principal will be applied, and a considerable tariff will be imposed as well, but Trump thought origin rules have made the US yield too much for foreign countries, even more than NAFTA (Schott, 2017).

So far, Trump's trade agenda in flavor of protectionism and conservatism was not fully implemented. Trump had many campaigns where he promised voters that he would reverse the trade condition with other countries, such as China, Mexico, etc., but he would encounter more barriers in initiating his policies. In Trump's view, free trade is not equal to fair trade. Up to now, Trump has promised to tear down NAFTA, which he called a bad deal, and set up trade barriers between US and China to turn it into being a fair competition.

Trump and NAFTA Renegotiation

When Trump talks about trade issues, NAFTA is absolutely a key word. His Twitter frequently includes "trade", and NAFTA and Mexico can be easily found on that list.

During the past 23 years, NAFTA has been making great influences on the northern American economy—Canada, US, and Mexico. As a big step of trade liberalization, NAFTA lowered import tariffs for most traded goods to zero between the three members. Investments barriers were eliminated as well to prompt capital movements. Protection of intellectual property rights and rules of origin help protect the member countries' common interest and enhance free trade⁵.

We can observe a dramatic leap of trade value consequently after NAFTA took in force. The trade value of US with Canada and Mexico has been tripled, which was \$340 billion in 1993 and \$ 1.2 trillion in 2016. Respectively, bilateral trade value between Canada and the US had reached \$549.24 billion, 2.6 times of which in 1993, and for the same period, the trade value between the US and Mexico reached \$527.82 billion, implying 6.4 times the size of such value in 1993 (Li, 2017). Value of investments also achieved a historical high; by 2016, the US investment in Mexico has become \$87.6 billion, and the number for Canada is \$363.9 billion

⁵ See examples from <https://www.thebalance.com/advantages-of-nafta-3306271> and <https://www.export.gov/article?id=NAFTA-An-Overview>.

(Statista, 2017); by 2015, the US has received investments of \$286 billion from NAFTA members as total (Bergsten & de Bolle, 2017). It makes Canada now the second trading partner and Mexico the third to US and Canada together with Mexico account for about 30% of the US' total trade in commodities and services during recent years⁶. Interdependence has been built among three economies, and the economic tie between them has become much stronger and tighter. That is to say, Mexico's economy is highly dependent on the US' economy today. Under a supply chain network formed then, US-Canada and US-Mexico trade of components also take an account for a large proportion in total, for example, 40% of US imports from Mexico were used in production process, and 75% components were exported from the US to Mexico (The US Chamber of Commerce, 2014). From the industrial level, manufacturing industries in these three members is highly related with each other by fast development in trade of components. In a nutshell, NAFTA has told us a beautiful story for all of them: the US got Canada and Mexico's market and expanded business; Canada gained a benefit from increasing exports and outward foreign direct investments (OFDIs), and Mexico had foreign capitals and received technologies and so on.

From the view of employment, then it turns out a different story. Studies have showed that the US unemployment rate was significantly smaller after the NAFTA took into force and trade with Canada and Mexico supported about 14 million job opportunities in the United States (The US Chamber of Commerce, 2017). According to the US Labor Department, about 414,000 jobs were replaced during the period of 1994-2002 caused by the NAFTA in effect, 2% of the total during that time (Hufbauer & Schott, 2017). According to an Economic Policy Institutes' study, there was net displacement of 682,900 US jobs by 2010 (Hufbauer & Schott, 2017). So, it seems that the severe unemployment is partially induced by the NAFTA, and job displacement happened with higher possibilities in those states which today are being called the "rust belt" area. Generally, NAFTA affected American workers through several ways. Firstly, Mexico absorbed enormous jobs, as a result, jobs move from the US to Mexico. People working for manufacturing and living along the border suffered a huge loss for this reason. There is a large population of unemployed, and unemployed workers easily bought the theory that Mexicans robbed their jobs. Another impact of the NAFTA tells us that the bargaining power of trade union became weaker (Singh & Dasgupta, 2011), that is to say, forming NAFTA in effect may be one reason to explain why employers are more powerful in deciding whether they want to give a person a job and how much they are willing to pay for this. More, workers will find there are more difficulties having a larger amount of salary and only holding less bargaining power to confront the corporate side, and then workers had to accept less payment and a lower standard of living. Thirdly, NAFTA has led to a large amount of unemployment in Mexican agricultural sector and minor business in some other sectors; then, through a dislocation of such work forces mentioned above, it stimulates a significant increase of the population of illegal workers in the US. Those newcomers from Mexico induced more competitions into the US labor market (Singh & Dasgupta, 2011). This reason can also be used to explain why the wage level became lower in the US, particularly wage level for unskilled workers. In this sense, such competition brought by these undocumented workers further made the US workers' situation even worse. The last but not the least, under NAFTA, a flow of benefits has the same direction as the flow of investments. Thus, benefit or welfare of trade was not distributed equally to different social classes within the recipient country and the gap between rich countries and poor countries is still great. In this case, the current economic framework seems to do nothing

⁶ See <https://www.census.gov/foreign-trade/statistics/highlights/toppartners.html>.

with wage convergence between member countries. On the other hand, the Figure 18 describes that the GDP per capita differed much between three nation states. It implies the economic contribution of NAFTA is totally different, and per capita GDP of US witnessed the largest increase during two past decades.

However, if Trump wanted to solve this problem just by abandoning the NAFTA, then it would be a disaster and the problem cannot get solved. Without NAFTA or with a branch of total tariffs implemented by the US, the scenario will be totally different. Withdrawal from NAFTA may drive the US into a worse condition by burdening American firms and residences, and the current supply chain network may be undermined as well. If that is the case, the US consumers and firms would be the biggest victims and the US economy could be more vulnerable than people imagine. By estimation, tariff rate for imports from Mexico may rise to 3.7%, and the tariff for exports from US to Mexico will become 7.4% on average (Kolb & Cimino-Isaacs, 2017). Without NAFTA, US exporters will find it getting much more difficult to conduct export. No matter what perspectives we have, the idea of eliminating NAFTA is likely to be a rather harmful way to deal with the current issue and solve trade deficit, since it makes nothing to do with the motivation to lower the trade deficit; instead, it may lead to a much larger deficit for countries. One core point Trump may not understand is that the trade agreements themselves are not the main cause of US' big trade deficit. Without the free trade agreements, the situation could be much worse than it is now, and a predicted higher tariff would not do good to a smaller deficit. Changes could be done to the current clauses to improve US citizens' benefit and protect the national economic interest; by doing so, it can be much better than giving up an opportunity for a long-lasting free trade agreement anyway. After all, a renegotiation on NAFTA was discussed and carried out by Trump's administration.

The idea of revising NAFTA is not Trump's innovation; Obama proposed it before during his administration⁷. After being elected, aiming for a reduction of the US trade deficit, the Trump administration called for the US-NAFTA renegotiations. It began on August 16, 2017, and currently the latest round of renegotiation has been held. There are several measures that can be applied, including to eliminate unfair subsidies, create new chapters for labor and environment, and so on (Bédard, Nelson, & Sharma, 2017). Updating the current agreement and leading trade towards a right direction is the focus.

Among all missions, it is worthy to note the issue of e-commerce is given a high priority, making a so-called E-NAFTA become possible. E-commerce and digital trade are now some innovative points attracting widely attentions, shedding light on the updated version of NAFTA, modernizing the NAFTA for today's economy. There are several ways to promote the e-commerce and digital trade in the proposed new NAFTA, including to encourage governments to stimulate free flow of information, prevent data localization, open digital markets, and so on (Aaronson, 2017). There is no doubt that today's economy is inseparable with the web and ICT technologies, from the app economy, artificial intelligence, sharing economy, online payment system to application of big data, machine learning, and Internet of things (IoT), leading today's business to a different style. In this regard, the Internet sector in the US has been already accounted for 6% of the total GDP and a growing proportion of employment (News Room, 2015), and trade in services created an enormous surplus for America, as digital trade has gained great benefit for the US that the surplus is assumed to be \$159 billion (Lynch, 2017). Besides, manufacturers earned profits by making a good use of online channels. Similarly, although the market in Canada is not as large as the US, Canada is catching up with it during these

⁷ See from <https://www.theguardian.com/world/2009/feb/19/barack-obama-stephen-harper-canada-visit>.

years. Retail e-commerce revenue in Canada is estimated to be US\$ 20.2 billion by 2017 and may go up to US\$ 28.66 billion by the year of 2021 (Statista, 2018). It reveals that 80% of Canadians had at least one-time online shopping in 2016 (Canada Post, 2017) and 10% of them purchasing products from online retailers once per week in January 2016, who are recognized as frequent online buyers (Statista, 2018). A large proportion of online spending is for foreign goods and services, especially purchase from the US and China, which further stimulated cross-border trade.

A steady growth trend of B2C e-commerce can be observed in Mexico, too; it reveals that turnover of ecommerce in Mexico has grown by a two-digit rate of 31% from 2012 to 2016, making this country the largest ecommerce market among Latin America countries (Agriculture and Agri-Food Canada, 2017). However, compared with Canada and the US, the Mexican market is still in her infant period and the value of online shopping is much smaller to those in the US and Canada, recorded at US\$ 4.56 billion for the year of 2016 (Agriculture and Agri-Food Canada, 2017). Responding to this, e-commerce in North America is playing a crucial role to regional economic growth, has potential for future prosperity, and makes three countries prioritize this issue in their to-do list. One main objective of the renegotiation is to eliminate current barriers of digital trade, for example, many governments require foreign enterprises comply with regulations of localization of data for national security purposes and economic interests. In the age of big data, multinational enterprises are heavily dependent on information transfer, a freer transfer of data without too much foreigner governmental intervenes thus become a concern, and about this viewpoint, debates between governments is foreseeable. Hence, protection of cross-border data flow and prevention of data localization should be incorporated into the agenda, and perhaps there should be a common space for such a talk between three countries (Aaronson, 2017).

If the new NAFTA forbids excessive data protection, some big names, such as Amazon, e-bay, Google, and Microsoft would be more advantageous and further increase their profit, and may offer more jobs to Americans and further narrow trade deficit by undertaking more cross-border trading with Mexicans and Canadians. As expected, the US would be the biggest beneficiary of a new NAFTA chapter on facilitation of E-NAFTA because of their obvious comparative advantage of trade embodied by advanced ICT technologies and those US-based Internet services providers in Silicon Valley. On the other hand, inconformity of product regulations, licensing requirements, and conformity assessment among countries might make it very hard to put into practice, and regulatory cooperation need to be done. Mexican and Canadian government may also consider information security and economic interest in this field. Canadian government may be worried about a freer flow on cross-border products because they prefer their residences buy "Made in Canada" to buying US products from US platforms. From Mexico's concern, although burgeoning ecommerce experienced fast development, they still are concerned about the consequence of a freer online commerce that would open a back door for products made in other developing countries. If the boom of ecommerce opens the door for those cheap products from other part of the earth, then some weak industry in Mexico will encounter greater competitions, which is a disadvantageous influence (Angulo, 2017).

Figure 18. GDP per Capita, NAFTA (US dollars per capita).

Source: Retrieved from World Economic Outlook, IMF DataMapper,

<http://www.imf.org/external/datamapper/NGDPDPC@WEO/CAN/MEX/USA/CAN/MEX/USA?year=1984>.

From the view of Mexico and Canada, a sustainable low tariff level for export to the US is important and through a stable trade agreement can they keep exporting merchandises across the border as they have been doing for decades, as both of Mexico and Canada have economic sectors which are overly dependent on trade with the US.

Trump's threats of pulling the US out of NAFTA pressured the trilateral talks. During the 6th round, only one chapter was concluded, only little progress achieved up to now. NAFTA talks have been ready for the 7th round, and there are still many goals that cannot be reached. Perhaps it is still a long way for multilateral talks in the future. There could be some results: First, if three countries failed in renegotiation, Trump has the power to push the US to withdraw from the current trade pact. Second, a revised trade pact would come into being in replacement of the current one.

Trump and the US-China Trade War

As his campaign promised, Trump wants to fix the unbalanced trade relationship with China. Currently, a possible trade war seems to be approaching between these two powerful economies after he signed the presidential memorandum in March of 2018 stating Washington will impose tariffs of \$60 billion on China's goods imports based on investigation claiming China's violations of intellectual property rights. After Trump rejected to admit China as a market economy, he called China a currency manipulator, the announcement of levying such a tariff is another anti-China action taken by Trump's administration. Beijing responded to Washington with their strong opposition and expressed their resolution to hit back via tough measures, condemned the US for ignoring the regulations and aggression against China's proper rights. In addition to verbal protests, China also determined to slap punitive tariffs on \$3 billion in American imports of goods ranged from agricultural products to steel pipes as retaliation. Meanwhile, China may seek for legal actions and an open bilateral dialogue with America for possibly settling this dispute.

US-China trade conflict is essentially a rivalry for the unique role of leadership of international trade order. China's extraordinary rise over recent years has challenged the current international trade order which has been established and enhanced by the Western world for a long period of time. On the surface, US-China dispute looks like an economic conflict, while this coming trade war literally implies a deeper contradiction that is not only about economic issues but hegemonic dimensions. The interesting part is that the two parties have switched their roles with each other in the new round of game where the US casts a conservative gesture and China looks more like a supporter of free trade.

Of course, China will defend for her benefit and challenge the ongoing system. China's economic success is inseparable from being integrated into the global value chain and trade system. Thanks to globalization and open policy, can China access the global market and become a vital part of the whole network. Today's China even shows greater potential and ambitions in burgeoning industries. Industrial updating will consolidate China's advantage in bilateral trade. Thus, China is less likely to have a trade war with US at this point in time.

On the other hand, free trade does not necessarily mean fair trade. From the US' perspective, China has been playing the game unfairly in many ways including forced technology transfer from US firms and questioned severe theft of intellectual property rights. More, many believe that China's unfair trade practice harms the US economy and further make damage to the established international trade order. Indeed, the US has long criticized China for unfair trade practices and failure to fulfill promises, but those problems remain to be solved. That is the main reason why Trump's administration must carry on strong measures to protect core interest of Americans.

Economic ties have been increasingly strong between US and China so far, to be more specific, complementarities have set the tone for the US-China trade relationship, though China's export is evolving after experiencing a long-term adjustment of industrial structure. During the past decade, trade interdependence level was growing steadily with a fast expanding trade volume. Vertical specification explained a large proportion of interindustry trade, but now China tends to export more capital products instead of labor-intensive products (Caporale, A.Sova, & R.Sova, 2015).

Generally speaking, Trump's punitive means may hit Chinese export severely. Now, both US and China are just taking their first step carefully by imposing tariffs on limited types of goods which seemingly are not so influential on bilateral trade. There might be a talk between China and the US before the condition worsens, and both sides will exercise great restraint, and solve it peacefully.

Regarding an increasing regional political tension, it is unlikely that Trump wants to use such strategy to threaten Beijing to give up their current diplomatic policy towards North Korea and force China to be more cooperative, because before this issue, Trump has emphasized the US cannot expect to depend on China in solving the North Korea problem. In his mind, the US should take all measures possible to handle the "hot potato" on their own and he is very confident with it. From this view, starting a trade war between China and US may be a decision after a great deal of thought, and this time, Trump's administration seems to be doing it for real. Trump's action has both positive and negative effects for the US economy. If the trade war came into being, then it will take a longer time to be ceased.

Conclusion

Overall, Donald Trump's remarks on Twitter reveal his "populism" characterized by the use of simple words and simple rhetoric, as shown most symbolically in the phrase "make America great again". The text

mining method applied in this paper discloses Donald Trump's method of appealing to people's heart simply and directly; this indeed is what is meant by "populism", an important character of his administration (at the meso level) which exerts a large impact on the global (or macro) political and economic landscape. Most importantly, such large-scale impacts can be generated by micro (individual level) remarks by Donald Trump. Put differently, the macro, meso, and micro interaction, as shown in Figure 19, can be observed by analyzing Donald Trump's Twitter texts. In concrete terms, his micro (individual) speeches will influence his meso (national) level policy as well as the macro (NAFTA) level policy stance of the US. All these levels actually are interconnected. NAFTA as a regional integration among the three nation states is actually under a significant influence from meso as well as micro interactions.

Figure 19. An interactive "field" among macro, meso, and micro

Note. The arrows indicate a causal direction.

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