Saint Petersburg State University

Department of World Economy

The US-China trade war and its consequences for the global economy

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I hereby certify
that this is entirely my work
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Introduction

The deep roots of Chinese economic development and further expanding of Chinese firms abroad provided the intensified trade between United States and China. The higher the value of trade – the more economies of countries become interdependent. However, with the new American president the relationship between countries deteriorated. The intentions to decrease the trade imbalance between China and USA lead to a trade war. Both countries throughout last decades were not in the conflict situation, specifically with regard to the trading, investment and economic issues. Both countries represent today two biggest economies that are in a competition for the world leadership. Thus, the investment flows with their specificity and significance as a result of trade war should be on in-depth analysis. For now, the problem hasn't been thoroughly analyzed.

One of the major roots of the trade war is the role of foreign direct investments between countries. The attraction of foreign direct investments was an important part of the whole economic policy of China. From the beginning of Chinese "Open Door Policy" this issue has passed through several stages, from the position of supporting economic development, modernization and transformation to the country's economic power and engine. The big role in the FDIs played American companies which established their production facilities in China, increasing and adding to the economy and thus to the trade imbalance between countries. Foreign-invested enterprises and state-owned enterprises activities created a basis of the expanding of Chinese economic interests and sustainable development. It should be underlined also that such activity further on influenced positively on Chinese trade policy both on the increase of the amount of export and import, and on the modernization of Chinese industry.

The increase of interdependency between countries before the presidency of Donald Trump come amid sharp and rapid increase and development of Chinese economy and its standing as a first economy by size.

The increase of cooperation and integration between countries would not be possible without China's Accession to the World Trade Organization. The overall decrease in tariffs rates and the opportunities to get access to all features of membership had a significant impact on the development of relationships between countries and thus was one of the steps of Chinese rising.

The actions of United States are guided by economic stability. It is always at the center of both economic and trade policy. When it comes to a decision-making politicians look at economic situation and more particularly at factors that can threat the economic stability. Thus, if we look at the situation from the perspective of domestic policymakers, such factors could possibly create instability which generates the desire to resort protectionist measures.

Research goal: to provide scenarios concerning future development of the trade war between China and United States analyzing economic impact on the world economy and economies of the countries.

Research objectives:

- To discover detailed the progress of the trade war development;
- To determine the key significance of China's Accession to the WTO for the trade war;
- To discover modern patterns of investment flows and influencing factors;
- To conduct retrospective analysis of the trade development between countries;
- To reveal the features of Chinese "Go out policy" and its impact on the trade war;
- To provide the forecast of the trade war development.

Object of the study: economic and trade policies of China and the United States

Subject of the study: interrelation between trade war instruments of countries and their economic impacts

Scientific novelty of the research

This research is a detailed study of economic relationships between United States and China which led to the trade war taking into account historical and recent changes in bilateral investment process and trade policy of the United States. The study is accompanied by an assessment of the results not only of the historical aspects and roots of the trade war but also of the last steps taken by countries in this trade war. It provides an analysis of possible outcomes taken in a classis scenarios approach.

Research structure

This paper is organized into tree chapters. Following the Introduction, in Chapter 1 we look at the suitable theory, the structure of the trade and trade policies between countries. Chapter 2 is devoted to the investment process between countries, its structure and impact on the trade war. In Chapter 3 we look at the trade war, involving the beginning of the war, countries' retaliations, possible outcome depending on hypotheses stated. The main problem concerned about Trump's "Make America Great Again" policy which leads to increase in protectionism of the countries and weakening of international institution, it can cause additional restriction not only on the analysis of the trade war and American policy.

CHAPTER 1. ANALYSIS OF BILATERAL TRADE BETWEEN CHINA AND USA

1.1 Theoretical background

Protectionism is a trade policy that allows the government to provide protection for domestic producers through the implementation of tariffs and non-tariff barriers to trade, thereby boosting domestic production. There are different types of protectionism. First – and is commonly used – tariffs imposition. Thought we should take into account that Members of the WTO negotiate their bound rates so they can apply higher duties on imports under certain conditions. There are also quotas, subsidies, non-tariff measures such as technical standards. Governments implement protectionist measures when they believe that there is an injury or a threat to a domestic industry coming from foreign competitors. The protectionism itself is a part of economic and trade policies of countries. There are no pure protectionism as well as no pure liberalism, they are combined in order to pursue more effective economic development.

The issue of economic stability always was at the center of both economic and trade policy. When it comes to a decision-making politicians look at economic situation and more particularly at factors that can threat the economic stability. Thus, if we look at the situation from the perspective of domestic policymakers, such factors could possibly create instability which generates the desire to resort protectionist measures. So in such cases, when the global economic instability arises countries are intent to implement more protectionist measures which affects negatively trading between countries. However, we should underline that protectionism itself is a policy that can adapt domestic economy to unfavorable conditions on the world market, adapt domestic producers to those conditions and protect them against threats making country's economy stronger. From this perspective, protectionism is an integral part of the whole economic system. The interconnection and interdependency between trade, economic policies and protectionism constructs a system with dynamic adaption to external conditions.

Protectionism is inextricably linked with the country's fiscal, tax and customs policies, which together constitute a means of macroeconomic stabilization aimed at stimulating or restraining activities of the *external sector* of the economy. The key factor in choosing direction of influence is creation of conditions under which national economy, through acquisition of competitive characteristics, arising on the basis of the formation of appropriate structure of the domestic economy, provides a sufficient level of external sector that can withstand the challenges of world markets. Thus, the application of protectionism to domestic economic policy reflects in the formation of competitive external sectors of economy, creating of efficient foreign economic activity.

Protectionism itself serves two purposes. First of all, it is aimed at improvement of domestic businesses, growth of competition in certain sectors. It's necessary because of various reasons. For instance, if the domestic producers are less competitive comparing to foreign ones, or if domestic industry is uncompetitive due to backwardness which requires not only implication of protectionist measures but also the development of industry through involvement of foreign experience, development of industry, technologies, etc.

It should be noted that within the framework of World Trade Organization protectionist measures are at the center of countries' interests. Hence, countries protect mostly those industries in which countries consider their national security interests. For example, agricultural and food sectors generally are more protected than others.

List introduced his view on the protectionism in his book "The national system of political economy". List's theory of "national economics" differed from the doctrines of "individual economics" and "cosmopolitan economics" by Adam Smith and J.B. Say. He built his theory on the basis of opposing the economic behavior of individual with nation. That is individual only concerns about his own interests but state fosters the welfare of all its citizens. An individual may prosper from activities which harm the interests of a nation [45].

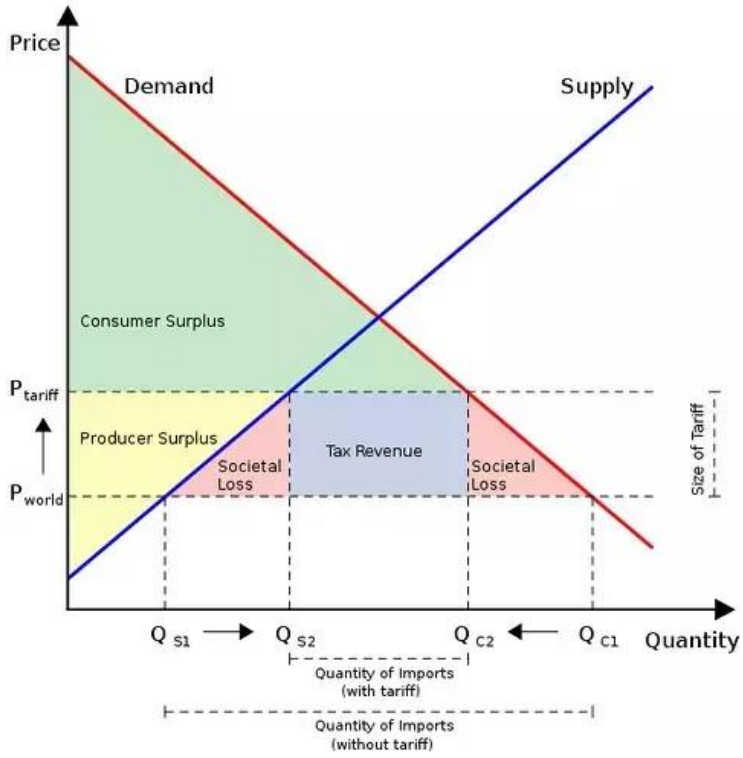
List stated that the free trade can only emerge in case if all nations would reciprocally follow the principles of free trade which implies the equity between countries. But in reality, the history of human development brought us to emergence of different states, different *nations.* Thus, countries act towards each other as a nation. "The system of protection, inasmuch as it forms the only means of placing those nations which are far behind in civilization on equal terms with the one predominating nation, appears to be the most efficient means of furthering the final union of nations, and hence also of promoting true freedom of trade" [45]. List perceived protectionism as a necessary tool to achieve economic development resulting in emerging of a full free trade between countries and emphasized its temporary nature, opposite to Mihail Manoilescu's and his theory of protectionism with permanent protection of the economy.

Most commonly states by implementing protectionist measures are guided by so called *forward-looking protectionism:* "This means that in this way continuity of economic development is achieved every time in new levels, taking into account achievements of national and world scientific and technological progress and preserving dominant position not only in the markets but also in the world as a whole" [51].

The modern age brought among common economic situation the issue of globalization. Governments and decision makers rely on current situation on global market. Moreover, under current conditions and due to globalization it is impossible to create a closed economy. From the other hand, it is clear that governments cannot refuse the implementation of protectionist measures since it leads to high economic and financial damage. Hence, it is important to analyze possible threats to economy, advantages and disadvantages from implementing liberalist and protectionist measures, needs for support of domestic producers.

Diagram 1 demonstrates the effect of placing tariff on imports from the perspective of welfare economics. There are winners and losers from the implementation of tariffs. Losers are: domestic consumers who pay higher prices, decrease in consumer surplus; foreign exporters that lose from decrease of imports; and net welfare loses to the domestic economy. Also, it is possible to be hit by retaliatory measures, in such case domestic exporters would also suffer from tariff implementation. Other firms can also be hit by imposition of tariffs – those firms that suffer from lowering demand for certain goods, mostly that were subject to import tariffs. The price for those goods rises and thus consumers have less disposable income to spend on such goods and it leads to a decline in demand. Winners: government which gains revenues from the tariff; and domestic producers by increasing producer surplus, firms are able to sell more quantity of products to domestic markets.

Diagram 1. Effects of tariff implementation [49]



Coughlin C., Chrystal A., Wood G. (1988) [30] examined the issue of protectionism and free trade. They argued that the effect of protectionist measures is mainly seen through the prism of domestic producer. Their position is improved relatively to foreign producers in the same industry by the increase in the price of foreign good in the domestic market relatively to that product produced domestically. It is important to note that authors underlined the role of protectionism in balancing the balance of trade. The main idea behind improving BoT is the mercantilists one that the larger trade surplus – the better it is for national economy. Coughlin C. et al. (1988) stated that neither trade surplus nor trade deficit are good in the economic sense. The faster economic growth of United States provides the emergence of trade deficit and in this case it is a good indicator of healthy economy. Jagdish Bhagwati in its book “Protectionism” noted: “The fact that trade protection hurts the economy of the country that imposes it is one of the oldest but still most startling insights economics has to offer. The idea dates back to the origin of economic science itself. Adam Smith's The Wealth of Nations, which gave birth to economics, already contained the argument for free trade: by specializing in production instead of producing everything, each nation would profit from free trade" [12].

Protectionism also influences the economy in other ways. First of all, it provides for domestic producers more opportunities to growth and increase their competitiveness with foreign firms in the international market. Secondly, and what is more important within our analysis framework – it simply allows to decrease the quantity of imports thus impacting in improvement of trade balance. This argument is largely used by United States in a trade war with China. Thirdly, it creates more jobs. Though, this issue is debatable, as well as believe that protectionism leads to an increase of domestic GDP because an overall effect of trade openness results in overall increase of GDP.

From the other perspective, protectionist measures can lead to a technological stagnation. Protectionism can be used in a way to encourage domestic producers to invest in R&D but usually the increase in tariffs results for domestic producers in a reduction of foreign competition and as a consequence in no need to worry about competition and technological improvement. As it was mentioned, consumers suffer from tariffs because it leads to less amount of foreign products and probably to choice limitation, also increase in price also negatively impact on consumers. What is more important among negative consequences of tariff raising – the reaction of trading partners. It is clear that foreign countries are not happy with new tariffs which can lead to a retaliatory tariff, damage to domestic producers and to political and economic tensions between countries as it is in the case with the trade war between China and United States. The analysis of tariffs in a perfectly competitive market demonstrates that if a large country imposes a relatively small tariff, or if it imposes an optimal tariff, then domestic national welfare will rise but foreign national welfare will fall. The partial equilibrium analysis shows further that national welfare losses to the exporting nation exceed the national welfare gains to the importing nation. The reason is that any tariff set by a large country also reduces world welfare [63].

Thereby, taking into account globalization process, evolved economic policies and macroeconomic conditions the protectionism progressed from common trade policy that is based on tariffs and non-tariff measures to a more comprehensive and complex state policy and mechanism that serves to increase the competitiveness of national economy on global market and protect the domestic economy in the process of globalization – neoprotectionism.

Neoprotectionism can be characterized by predominance of its offensive nature with pronounced aggressive expansionist features; emergence of “collective macro-regional protectionism” of modern integration unions; expanding the arsenal of tools through the use of relatively new, those that are harder to be subject to international regulation; the fast growth of developing countries, especially China; significant uncertainty in the markets and further shifts in global economic activity towards countries with emerging markets; to some extent the dependency of new protectionist measures on WTO law and rules (for instance, safeguard measures). Hereby, neoprotectionism also includes the issue of regional integration, and from here comes new consequence – changes in terms of trade. For example, the trade war impacted in changes of trading partners for countries.

Unlike “classical” protectionism, aimed at protecting national producers, individual branches of the economy, depending on their significance and the political power of the circles concerned, neo-protectionism has in its arsenal a toolkit that becomes a response to the new challenges of the “new norm”. In the updated form, the emphasis changes in the very goal setting: Not protection from foreign competition in their country, but stimulation of economic activity in response to reduction of aggregate demand is placed on the responsibility of the latter. Thus, these goals of defending economic sovereignty (for developing countries) or the struggle for conservation (for developed countries) or the spread of economic influence (for developing countries) become dominant transformations of classical protectionism into neo-protectionism [63].

Protectionism can lead to a possible trade war. The classical approach in analysis of trade wars includes the evaluation of welfares. Trade theory suggests that country’s welfare can be increased by the repatriation of profits from foreign firms to their domestic competitors. This view is based on macroeconomic equation of GDP: C+I+G+(X-M), where c – consumption, I - investments, g – government spending and x-m – net exports. One argument that is often brought forward against protectionism is the fear of retaliation, which could lead to a trade war. In such a scenario, both countries would raise their tariffs, and consequently the above-described positive effects would no longer be at work. If we consider such situation the aggregate effects of the trade war, rising of tariffs between countries are strictly negative. Rising of tariffs leads to increase in prices of imports for both countries and all consumers – consequently less consumption which slows the economy, less efficient production for both countries, changes in terms of trade. Thus, if in the case of our trade war there would be no retaliatory measures from China, the effect on economy of United States would be positive. But there are a lot of factors that influences this issue. First of all, in the trade war we should apply the game theory because the United States purpose is considered through the lens of Trump's "America first" policy. Winning a trade war means then a win case for United States. However, we should also take into account Phase One Deal and understand why China agreed on such demands from American side. If China agrees on this deal assuming that it is in the same path of developing Chinese economy (namely, the improvement of intellectual property rights issue), then should we consider a loss for China in a trade war (at least, in the first round of negotiations) [36]?

The relationship between trade wars and protectionism are quite clear. The rise of tariffs can lead to a retaliation, that's what occurred between USA and China. Taking into account Trump's policy and his concerns about place of United States in current global situation (meaning primarily its political and economic power), the rising political and economic power of China, its importance in the world, we should consider under analysis of trade war the game theory. The question arises is how it should be placed in the analysis.

First of all, in case of China and USA there is a non-cooperative game because countries rely only on their own actions, especially United States. The common application of game theory proposes a non-domination policies and thus two key options for countries with regard to protectionist measures: 1) to keep existing protectionism level or 2) to diminish the level of protectionism. In such case both countries are dependent on the action of another, there is no dominant policy. If one country decides to take 1 option, the second should do the same. However, we should take into account a zero-sum game and dominant policy for United States – to push Chinese economy to liberalization, more market openness, stop subsidizing, etc.

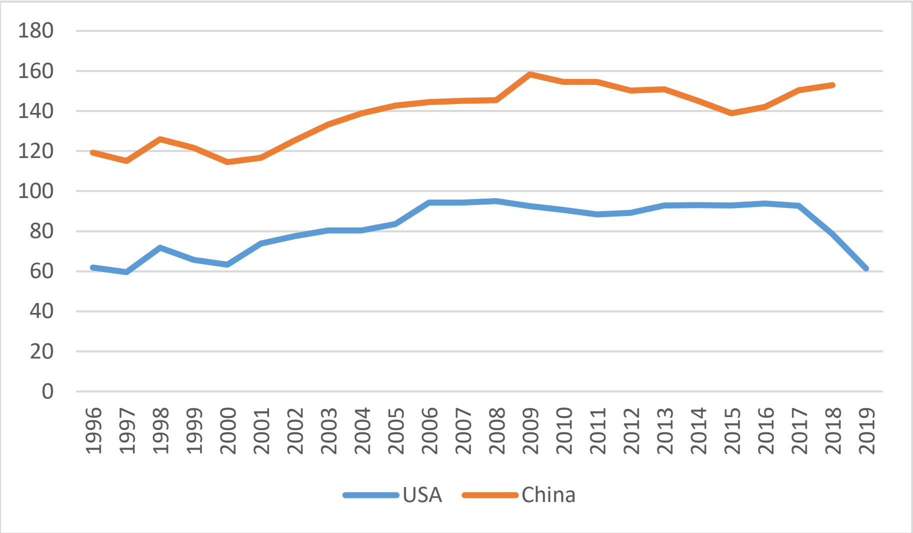
Under such circumstances where USA implements tariffs, the reaction of China is dependent on actions taken by United States, thus China retaliates. The position of China differs - For Chinese President Xi Jinping, threats in a trade war include the political risks associated with angry farmers, factory owners, consumers and a broader economy damaged by high tariffs, as well as nervous financial markets and the cost to his leadership if he miscalculates. For Trump such policy falls within his policy. However, domestic politics matters. Trade policies might be influenced by domestic interest groups and used to raise the welfare of specific groups instead of the entire nation. This point is more related to real situation, which will be discussed later.

Today, the tendency to reduce the level of tariffs became common since almost all countries are members of the WTO. Though temporary increase in tariffs is becoming a common practice. For example, Banana wars, EU’s protection of agriculture, Argentina food tariffs, anti-dumping cases, Trump tariffs, etc. The current situation with regard to trade and protectionism in global market includes the emergence of new forms of measures, namely – non-tariff measures. The most common are: technical barriers to trade, sanitary and phytosanitary measures, administrative barriers (making it more difficult to trade, for example, by imposition of environmental standards), competitive devaluation (manipulating currency to make exports cheaper) [60]. Those tendencies create additional obstacles to trade, requiring more legal regulation and thus, diminish the role of the WTO demanding its reform.

1.2 Overview of countries' trade profiles

Bilateral trade between countries became a traditional economic relationship. China for United States, as well as USA for China – is an important and strategic trading partner. Diagram 2 demonstrates the trade intensity index. It is supposed that if index is larger than 1 – the trade between countries is much intensive and larger than that expected given their importance in the world trade, their shares in the world export.

Diagram 2. Trade intensity index[1]



As we can see, the index is much greater than 1, especially for China which implies the key significance of US market for China and vice versa, though we see a drop for United States index from 2017 caused by Trump's actions. In average index for China is 139, for USA is 82 and for both about 110. Just to compare with indexes including European Union: for China-EU27 in average index equals 47,75 and for USA-EU27 in average equals 55,33. We compared with EU because both of the countries are included in top 2 trading partners of the region.

The large index indicates intensive trade relationships, but how they developed and how the trade imbalance emerged? Let us look at export\import numbers of the countries. The Diagram 3 and 4 demonstrate the development of bilateral export and imports of countries. As we can see, comparing to Chinese export to United States, USA merchandise export is relatively developed in a lesser rate than vice versa. The rapid growth of Chinese export was provided by the joining of country to the WTO

[1] Based on data from World Bank: World Integrated Trade Solution: https://wits.worldbank.org/

and Chinese economic policies such as “Go out”. The United States export is strongly small comparing to its imports and thus, by reason of such difference between exports the trade imbalance occurs. From the other side, China has strong trade surplus, at least in trade in goods (The U.S. services trade surplus with China was $40.5 billion in 2018).

Diagram 3. US-China export and import (current US $)[2]

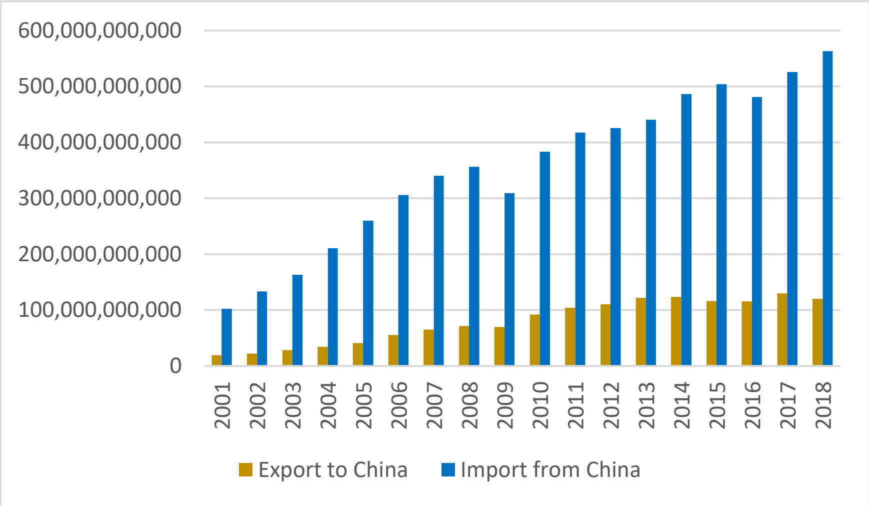
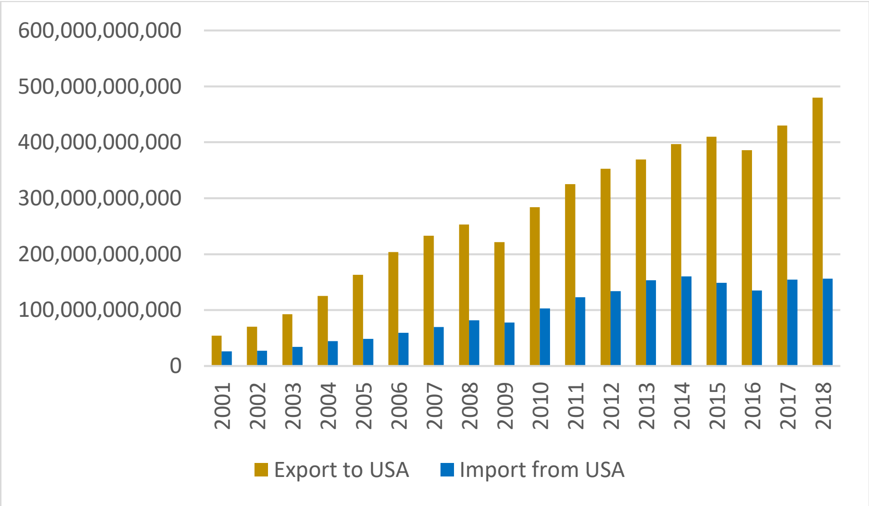


Diagram 4. China-US export and import (current US $)[3]

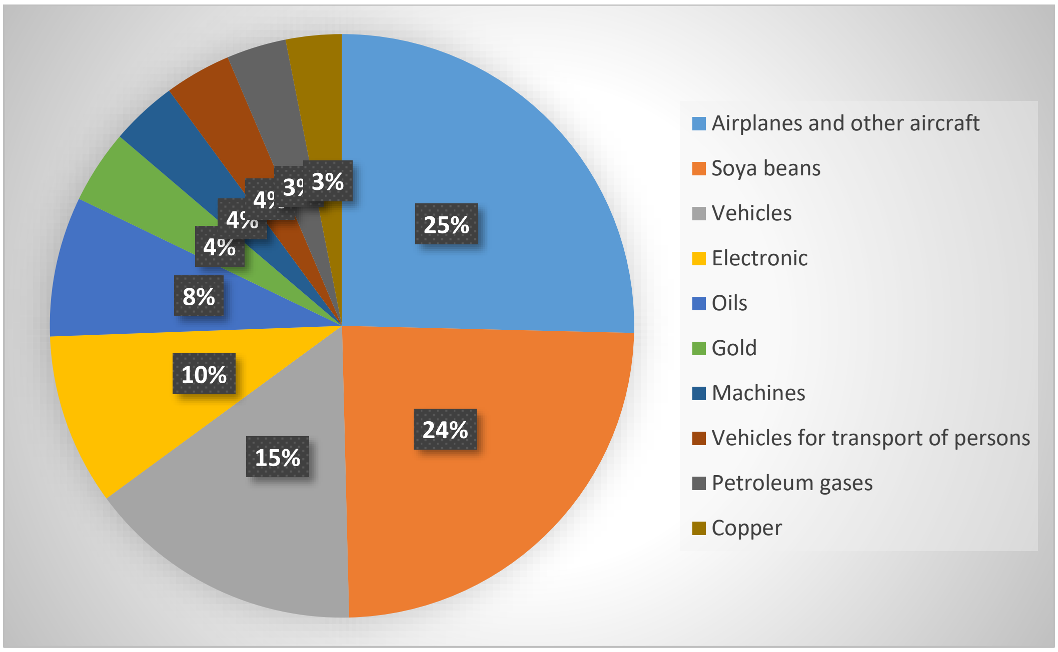


Graphs 1 and 2 are devoted to top 10 export and import products. Those products are main targets in US-China trade war. Further on we will present examples of threats by countries for example from Chinese side it is soya beans (however, China didn’t implement those measures). United States from its part hit Chinese telecom companies,

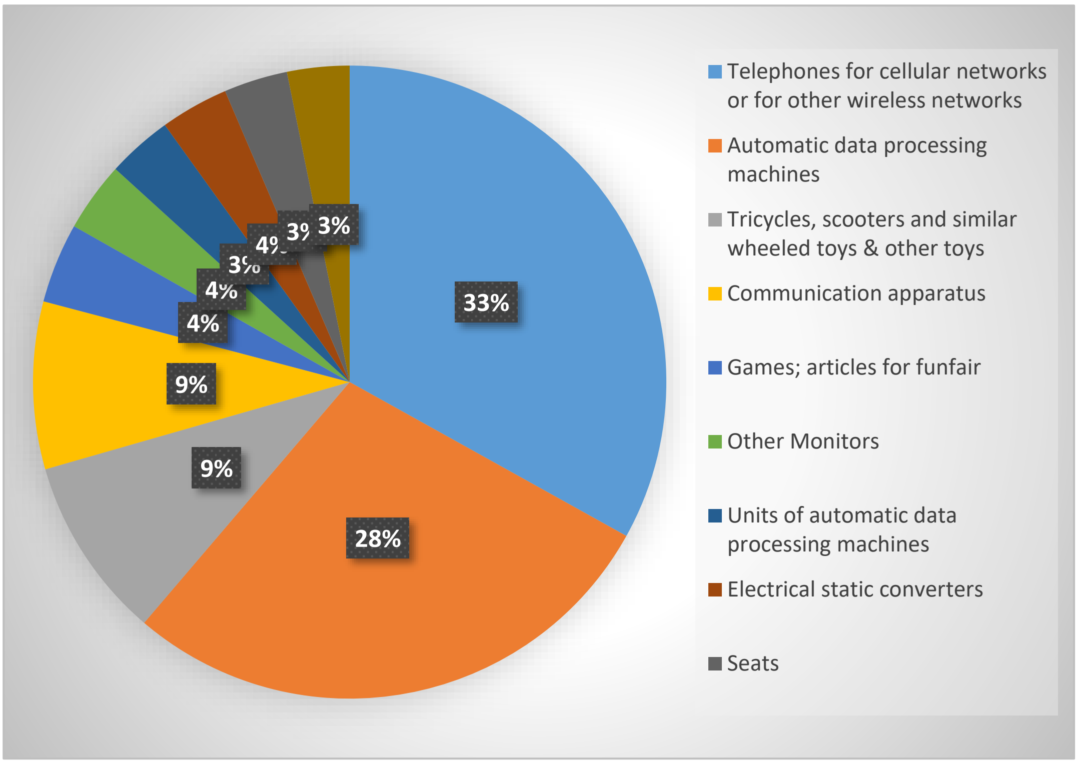
[2] Based on data from World Bank: World Integrated Trade Solution: https://wits.worldbank.org/
[3] Based on data from World Bank: World Integrated Trade Solution: https://wits.worldbank.org/

especially Huawei with its smartphone export to USA. The top import categories (2-digit HS) in 2018 were: electrical machinery ($152 billion), machinery ($117 billion), furniture and bedding ($35 billion), toys and sports equipment ($27 billion), and plastics ($19 billion). The top export categories (2-digit HS) in 2018 were: aircraft ($18 billion), machinery ($14 billion), electrical machinery ($13 billion), optical and medical instruments ($9.8 billion), and vehicles ($9.4 billion). So, mainly, the structural changes didn't occur. The trade flows in their structure are dependent on the types of economies and their position in Global Value Chains.

Graph 1. The top 10 exports from United States to China in 2017 (billions, current US $) [67]



Graph 2. The top 10 imports from China to USA in 2017 (billions, current US $) [67]



1.3 The trade policy between USA and China

The U.S.-China trade and economic relationship has expanded significantly over the past three decades. In 2018, China was the United States' largest U.S. merchandise trading partner (total trade at $660 billion), third-largest export market ($120 billion), and largest source of imports ($540 billion). China is also the largest foreign holder of U.S. Treasury securities (at $1.1 trillion as of April 2019 2018). However, tensions have grown sharply in recent years over a number of economic and trade issues. President Trump has complained about the U.S. bilateral trade imbalances with various countries, including China. The U.S. merchandise trade deficit with China in 2018 was $419 billion (up from $376 billion in 2017), and is by far the largest U.S. bilateral trade imbalance. Some U.S. policymakers view large U.S. bilateral trade deficits as an indicator of an "unfair" trade relationship. Others, however, view conventional bilateral trade deficit data as misleading, given the growth of global supply chains used by multinational firms. Products may be invented or developed in one country, assembled elsewhere (using imported components from multiple foreign sources), and then exported. In addition, most economists argue that the overall size of the U.S. trade imbalance deficit is largely a function of low U.S. domestic savings relative to its investment needs, rather than the result of foreign trade barriers.

Since 2018 countries introduced some restrictive measures aiming at bilateral trade flows between countries. The increase in tariffs is the main instrument used. Implementing measures by United States led to a response by China which also raised its tariffs. Trade policy becomes an important tool for national economic development. In competitive environment of global economy creation of successful trade policy was a route for national economy's revival, if not a question of survival. External economic policy is a complex of measures taken by the state and the nation in general aimed at regulating external economic ties and optimizing the role of the nation in international division of labor. Trade policy as an economic bridge built between various nations: well-driven trade policy might become a reason for improvement of the whole spectrum of international relations (including political). External economic policy as a necessary pre-condition for integration into global organizations and policy-making institutions. – The part of national foreign policy.

External Economic Policy (EEP) is a complex of measures aimed at creating competitive advantages for national companies on global market. At the same time, EEP should secure domestic market, building obstacles for aggressive interventions of foreign producers. So, in the sum, the EEP is dependent on: economic conditions, domestic political and business trends and actors, global economic environment: trends and cycles; Global actors: multinational companies, governments, international organizations. And the created EEP is a kind of compromise, taking into account the viewpoints of all the interested sides, their "pros" and "contras".

The basic trend throughout the history was protectionism. So, due to emergence of giant multinational corporations (or MNC) and globalization of the markets, a new dimension of protectionism – over-protectionism created. One of the specific phenomena of this period is monopoly's limitation mechanism (MNCs and their subsidiaries are mutually linked by a system of agreement which include market sharing, pricing, sale conditions, etc.). Regional integration created common MNC and thus led to creation of collective protectionism – the mixture of free-trade and protectionism.

However, such trend was not at the agenda of investment process as well as integration process between countries. It did not restrict the integration, moreover the presence of globalization at the moment results in increase of interdependency between countries. The fact is that the faster economic development is the more it requires to get access to foreign markets, new opportunities for new resources of development and thus – constant increase and maintain of competitiveness. Both – the United States and China was and still interested in economic development. The economy of China demonstrated sharp increase in development level and thus is in needs for access to big markets such as United States. Therefore, both countries need to support each other's interests and cooperate for the overall improving – according to globalization process.

Another point why protectionism (we mean primarily the protectionism of the whole economy – not its parts, and by protectionism we mean inverse tendency with regard to increase of interdependency between countries, we do not deny the existence of protectionism) did not emerge between countries is the existence of the World Trade Organization. The WTO is the only one international/global trade organization and moreover this is the only one organization that has dispute settlement system. Clearly that for now the WTO system is in crisis but the impact of the WTO cannot be separated from the development of the relationship and investment process between China and United States in 2000s. The presence of the WTO and participation of both countries in this organization created an ensured platform and institution for the development of economic relationships between Members.

There are also other institutions which maintained countries' relationship. The G20 – such initiative was a response to Asian financial crisis in 1997. Thus, the G20 initiative transformed into reliable platform for negotiations between big economies and particular between Asian countries and West. Within this platform United States and China (before the presidency of Mr. Trump) were in the good conditions of negotiations with regard to different issues. For example, in 2010 both countries discussed their currency policies, in 2016 – climate issue (since both countries represented up to

40 percent of carbon dioxide emissions), et cetera. But what is the most important here is to mention that both countries cooperated in order to reduce protectionism tendencies – it was an opposite force against neoprotectionism.

Asia-Pacific Economic Cooperation or APEC – another institution which had been a response to the sharp development of Asian countries and promotion of the cooperation and integration in Asia-Pacific region. This is another platform for negotiations on specific regional issues between China and United States. APEC's Host Economy of the Year is considered to be invited in the first place for geographical representation to attend G20 meetings following G20 guidelines – this creates and correlation between APEC and G20.

Such combination of institutions makes us clear why countries did not take wide protectionism measures against each other, especially during 2000s. The overall situation before the presidency of Donald Trump between countries was at the stage of strategic and economic cooperation. The cooperation within different organizations allowed countries to negotiate on different issues and thus circumvent possible negative consequences. Now the situation is opposite. Even before Donald Trump the accusation of China did not result in trade war or restrictions on trade. The fulfilling by China of its commitments under the WTO was not a debatable issue. But let us come back and analyze why the economies of countries so interdependent.

As it was noted before, the economies of countries are stand on different stages of development level including all factors: the structures of economies, endowment by resources. Consequently, the economies of countries have different advantages and strengths. Thus, we understand that countries act in different directions regarding their foreign trade and investment policies. The outcome of such behavior is high degree of complementarity between economies of countries and thus – another significant factor for intensification of cooperation between countries in 2000s.

The introduction of the New institutional economics reveals some causes of trade war with historical perspective. The NIE is based on three principles: institution matters, the behavior of people is not absolute rational and there are transaction costs in economic functioning. The acquisition process between countries mostly relates to the differences of institutional principles and to unequally distribution of property rights – in this real case the Coase theorem can be applied through reallocation of property rights [19].

With regard to the second principle we emphasize that the trade war per se represents the behavioral assumptions of NIE – the behavior of people is bounded rationally and can be opportunistic. The change of United States administration and president resulted in the beginning of trade war and thus can be interpreted as an action of bounded rationality since either there is no winner in war or only one – typical zero sum game.

The general assumption with regard to Chinese firms is that they are all dependent on central state. According to the study made by overall 10 researchers for the majority of Chinese firms the local state matters more than the central state, based on three core elements of China's institutional architecture: local regulatory autonomy, informal enforcement of property rights, and networks between state organizations and entrepreneurs. As result, informal institutions matter. Property rights can be protected without a strong central state and formal institutions – this implication arises from the institutional framework of Chinese economy. The protection of property rights as stated by authors depends on the performance of companies and thus on informal institutions – companies are offered contractual security on an informal basis if they are enough efficient. The same conclusion was made in other study. The author reminds about the paradox of the strong state and proposes the solutions based on institutional economics: first is constitutional constraints, second solution lies in the elaboration of the WTO and overcoming the WTO crisis.

First of all, Chinese economy is the largest economy that produces manufactured goods. Already in 2005 approximately 25 percent of total manufacturing output belonged to China. Now, China keep up to 50 percent of total manufacturing output [76]. Deloitte's 2016 Global Manufacturing Competitiveness Index declared China the largest producer of 220 of 500 major industrial products, including iron and steel, coal, cement, electrolytic aluminum, and refined copper [13]. As a consequence, China has trade surplus in trade in goods while USA has trade deficit. These facts represent in which directions and patterns Chinese foreign trade and investment policy is aimed. Another point is that such economic specifies of China determined its position in the supply chain. Another source of Chinese advantage is labor. Country has the largest labor resources. At the same time, they are cheap enough. Chinese labor force accounted for almost 1 billion basing on data from the National Bureau of Statistics [33], if we take number of employed people then according to Statista the number is about 775 million [62], which is more than in both – Europe and United States. But at the same time, the labor force of USA is more expensive due to high level of skills and knowledge. For sure, it is not the only factors that determine foreign trade and investment policies. But with combination we can understand the general background of Chinese economy and why it is so interconnected with United States, even with such deep differences between countries.

On the other side of the Pacific Ocean is United States with its technological development. With no doubts, USA now is the world leader in developing of science and technology. Among 154 total world's largest tech companies 65 are located in United States [52]. The result of such facts is that United States are placed on the top of the global supply chain. The economy of United States has highly developed service sector. As a consequence, United States has a trade surplus in trade in services while China has trade deficit.

As we can see, the process of increase of interdependency between countries was inevitable, especially taking into account such tendencies as division of labor, global reallocation of sources and globalization. The technology-intensive production of United States with its high skilled labor and scientific researches is at upper level of vertical integration of supply chain and demands the lower cost of production which can be received in China. And this created a situation when two countries with their economies have common interests and highly integrated. The trade and investment policies of countries are bound to maintain the advantages and peculiarities of their economies. For example, Apple company decided to outsource the production to China due to lower production costs. The products of the company are designed in United States but at the same time thanks to foreign direct investment to China more than 80 percent of all company's products today are assembled in China [66]. FDI in this case allowed Apple to maintain its economic power and strengths and moreover, due to lower cost production, continue to develop products. It turns out that without making investments on time the company could possibly lose its position and the level of product development – without investments from United States to China American companies are less competitive then they are now. Also, while USA by outsourcing production, making innovations and investments supports the cheap labor force in China, China by allowing and promoting such investments, support and help of the government with regard to such kind of initiative supports the high-cost labor force in United States in service sectors. This makes more sense for the contribution of interdependency between countries. And so, the integration between countries is inevitable, through this process countries received a lot of benefits via two-way investment, bilateral trade, reciprocal support of labor, the contribution into development of service sector of USA and good sector of China, et cetera.

CHAPTER 2. THE DEVELOPMENT OF CHINESE INVESTMENT. THE ROLE OF USA FDI TO CHINA

2.1 The history of bilateral investment between USA and China

The existence of trade war between China and the United States represents deep differences between countries. The roots of such war appeared almost two decades ago when China was in the process of accessing to the WTO. Due to recent developing economy of China and interests of United States this process was difficult for China. China's Protocol of Accession and its Schedules of commitments for trade in goods and in services consisted of tough and heavy conditions which China had to agreed. However, even with such conditions further development of China, globalization and increase of interdependence between countries led to the inevitable increase in trade imbalance. Such imbalance between USA and China consists of the trade deficit of United States and interrelated trade surplus of China. The situation is vice versa for trade in services - USA has trade surplus, China has trade deficit. For sure, countries have their own opinion on the roots of trade imbalance, its consequences. But let us think in this way: one of the key roots of the trade war and trade imbalance is the presence of global value chains. That is Chinese big part of production in fact related to the production of American goods in American facilities. Thus it is necessary to estimate the value added in Chinese export and it was done by Goldman Sachs group. The findings argue that value-added counts for one-third of Chinese trade surplus. Such a relationship between American goods and Chinese export discovers he issue of investment process between countries and its impact on US-China trade war. Thus the investigation of this process with historical review is required. We also should look more attentive at Chinese Accession to the WTO.

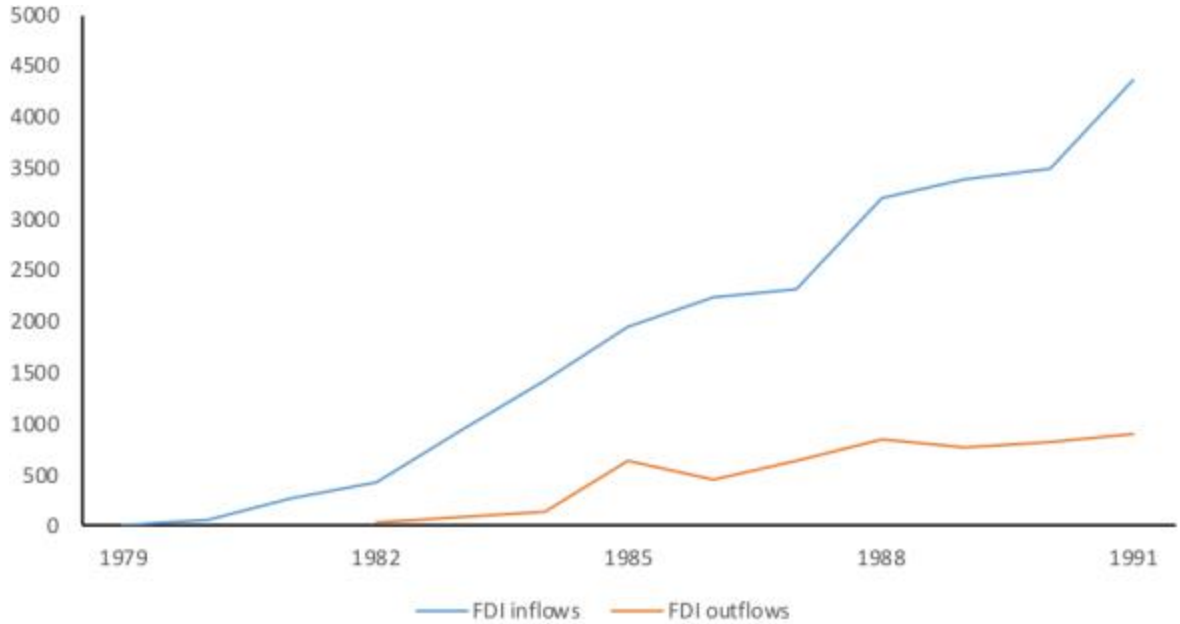
The history began in 1978, when Chinese government decided to change their economic policy in order to increase economic growth, GDP, living standarts, etc. This decision was aimed at basic reforms of economic policy and system. This policy was initiated by Deng Xiaoping and was called "Open Door Policy" – the attraction of foreign investments. Main principles include liberalization process regarding the market, trade policy and investments. Deng Xiaoping mentioned that: “Black cat, white cat, what does it matter what color the cat is as long as it catches mice?” [26]. It means that whatever system is applied (socialist or capitalist), it is more important how this system works and how it influences the economy as the whole. The working economy – good economy. We look more at reforms and changes regarding investments.

First of all, with respect to investments Chinese government created four economic zones that are more attractive for foreign investors. In 1979 the government decided to establish four economic zones including territories of Shenzhen, Zhuhai, Shantou and Xiamen. The result of the establishment was successful and the government decided to expand this policy on other 14 cities and establish there economic and development zones. It was the “bring in” issue meaning that the aim of the government at this period was the attraction of foreign direct investment to the economy of China. Additionally, cities were allowed to use free-market reforms for the purpose of attracting investment and their own development – a good example of how China adjusts its socialists type of economy to capitalist’s world market. As a result, due to those reforms the FDI flows into China in 1990s had significantly increased and were one of the key resources of China in the development of the economy. Secondly, the development of economy in 1970s increased costs of labor force in tiger Asian countries. This resulted in the movement of labor-intensive industries to China and their further development. It gave for China new opportunities for economic growth – and Chinese government decided to implement this policy across the country and increase country’s opportunity to growth.

As mentioned before, the “Open Door Policy” found its beginning after Deng Xiaoping took office in 1978 [1]. Later on, the issue on agenda was implemented by the Decision of the CPC Central Committee on the Reform of Economic System [3] and perceived as a national policy.

One of the questions regarding this period was the investment outflow. Why economy experienced outflow while the aim was vice versa? From my opinion, the outflow in this period cannot be represented as a significant part of the economy. The outflow at this time represented the investment to biggest state-owned companies (the amount of which was not so much) which participated in foreign trade. Only later on in 1990s when the outflow of country's foreign direct investment had got a momentum and experienced a sharp increase and rapid development the "Open Door Policy" impacted the rotation of FDIs flows from foreign trade companies to industrial, financial, insurance and technology firms and investment intensified in agriculture, transportation and energy [77]. Also, such process can represent a typical situation when companies gaining a foreign investments seeking for better opportunities outside the country and thus resulting in FDI outflows.

Diagram 5. Inflows and Outflows of Foreign Direct Investment of China between 1979 and 1991 (in million USD) [72][4]



The second stage of foreign investments attraction found its ground before the Accession to the WTO. The external economic and political situation at the moment was challenging. At the end of 1990s there was an Asian financial crisis. The dissolution of Soviet Union brought up uncertainty in the global area and United States became the most significant and strength power in the world. The experience of "Open Door Policy" introduced a positive tendency for economic development of China. Thus, the government of the country decided to follow this path.

[4] Based on UNCTADSTAT. URL: https://unctadstat.unctad.org.

Deng Xiaoping continued to maintain initiated by himself way of China's development. But with the new world order he aimed at the moving the direction of economy towards the development of overseas investment and the maintaining, creating and development of multinational corporation. Those intentions were aimed at creation of outward-oriented economy. Further on, the government came to the conclusion that both aspects – the implication of attraction investment by "Open Door Policy" and new initiatives with regard to overseas investments – should be combined in order to facilitate investment of capable firms and utilize local markets and resources. This is known as a two markets and two resources strategy. The implications of this strategy include the boost of domestic production capacity and simultaneously playing a decisive role in international supply chains in order to control the supply through imports. Two resources, two markets strategy calls for a mutually beneficial and complementary outcome in globalization, creating a diversified multi-supplier system for resources. It is a shorthand reference for the strategy of leveraging China's comparative advantage in certain resources for China's economic advantage and a strategy of leveraging China's reserves in rare earths and other raw materials to obtain advantages for China's manufacturers of downstream products. Also, with the promotion of this strategy Chinese government started to push companies to invest abroad. To the end of 1990s Asian financial crisis occurred. In order to somehow deal with this crisis and trying to handle this the government of China released the Opinions on Encouraging Overseas Processing Trade and Assembly Operation by Chinese Enterprises – this initiative was aimed at further pushing of Chinese companies to engage in international trade and expand the export of the country.

Almost the same pattern of behavior can be found in 10th Five-Year Plan on Economic and Social Development [56]. The strategy with regard to investments was proposed and raised to a national level. During the second period, Chinese companies were pushed by the government in order to *integrate* the economy of the country into the global value chain. Another interest of the government was to contribute the growth of the domestic market by internalizing through original equipment manufacturing and joint venture partnership. The overseas investments began with a small number of companies learning advanced technology and management system, as well as the international expansion of resource firms in the 1990s. All these actions, initiatives, efforts resulted in the shifting of trade and investment policy. The government of China took into consideration new capabilities and opportunities for country to move towards "go out" policy.

For sure, the government economic policy aimed at improving economy of the country was one of the most significant factors. The government supported state-owned enterprises and pushed them to participate in global trading processes. But one of the major forces or the major roles in the investment process as well as in the development of economy of China played foreign-invested enterprises or FIE's. The difference between enterprises lies in financial performance – FIEs are making more profits from financial instruments. In 1995 the share of foreign-invested enterprises in manufacturing sectors was large – 47 percent of manufacturing exports and 24 percent of manufacturing sales [36]. In 2005 their share in export and import was more than 50 percent. And still, their share is huge – 40.76 percent [64]. The presence of such form of enterprises brings up one of the differences between United States and China - a large share of FDI inflows into China finances foreign equity stakes in joint ventures - i.e., ownership alliances between foreign and domestic firms. There are usually only two investors in a joint venture, and unlike the diffused shareholding of publicly traded corporations, foreigners need to acquire a greater equity stake to establish "an effective voice in the management of the enterprise" in China. But not only FIEs had a strong impact on the development of investment process, another point or step of Chinese development after 1990s was the joining to the WTO.

China became the largest recipient of FDI flows as well as one the biggest country with regard to FDI outflows. The important policy proposed by the government of China and the China Council for the Promotion of International Trade - the so called "Go Out policy" or "Go Global strategy" – brought new strategy for enterprises which resulted in economic growth. Both with the developing of FIEs the investment process between China and USA as well as with other countries got a momentum for significant intensification. China has always been a country of great power reforms. Those reforms usually took place in domestic market and then were aimed at foreign. Thus, the domestic policy and domestic economic system forced the government to change its policy regarding finances and economic development overall. The old development model of economic system was not efficient anymore due to changes in the world market. Banks, the relationships between SOEs and government required new actions and development in the investment system. China had a huge amount of foreign finance reserves which influenced exchange rate and thus the public and foreign countries pressured Chinese government to change its economic policy. Another point was that an "aftermath of "Open Door Policy" was the competition issue. Companies required new technologies, new experience that can be derived from foreign companies. The government took into account country's needs and implemented new investment policy that allowed companies to get access to foreign experience and technology in order to compete with them on the domestic market. Another aftermath of "Open Door Policy" was the opening of domestic market in mainland China. It resulted in the competition process in domestic market between foreign and domestic companies which thereafter pushed government to change the policy and strategy with regard to economy.

Chinese "Go Out Policy" is an integral part of overall active foreign trade policy. The place of domestic economic policy here is the same – the creation of major driving force. The start of this policy found its place in 1999 [11]. One of the main issues that this initiative stated at the first place was the intensification of foreign direct investment outflows. And precisely they did accelerate and significantly increased during recent years. We are going to analyze features of such strategy and its impact on Chinese economy as well as on investment process between countries.

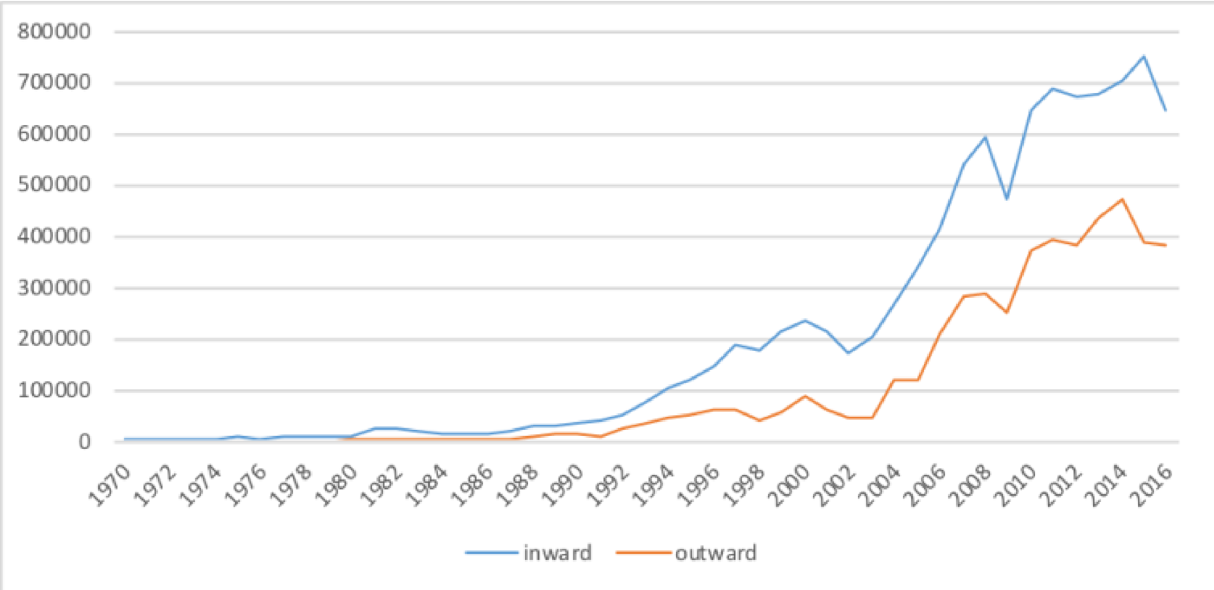
The investigation of Chinese economy per se requires paying attention to the institutional role of government and the impact of political implications on the economy [27] since policy and economy in China are deeply interconnected. Also, the political implication should be noted from the other side. As we know, different administration of United States treated China differently. For the last two decades the administration of USA changed two times.

With regard to the policy of United States towards China the presidency of George W. Bush at the beginning of 21 century brought on the agenda many issues. First of all, the world and the policy of many countries had changed due to several reasons and dissolution of Soviet Union. The United States became the strongest country that took leadership in global world both economically and politically. Then the globalization process intensified which led later to decrease in the power of United States. China got the momentum in the development of their economy. These issues created a large uncertainty in relations between countries. As a result, their relations at the first decade of 21 century can be characterized as a permanent conflict of interests and periodic cooperation. George W. Bush himself declared that China is a strategic competitor [65].

The beginning of the presidency of Barak Obama was complicated with the world economic crisis. It could influence his perception of world in political sense or saying otherwise influence his personality as a politician and economist. This led to the policy that more aimed at cooperation with China. China was a reliable strategic partner, vice versa with comparison as China was perceived by administration of George W. Bush. Many issues were touched: North Korea nuclear program, Iran, Taiwan, climate change, etc. The relations between countries followed the path of stabilization the world, certain regions and stabilization of global problems as climate change. Even G-2 was possible, proposed by Fred Bergsten and such politicians as Zbigniew Brzezinski and Henry Kissinger stated for this initiative [25]. Later on, changed administration and the new president Donald Trump started with the acquisitions China and more destabilized bilateral cooperation.

However, looking more from economic perspective with regard to FDI, it was subject to economical researches and in 1992 report of UNCTAD underlined that FDI became the driving force of economic development [5]. There was a tendency with regard to directions of FDIs. Usually, FDI are going from developed countries to developing [6]. However, for the last decade several developing countries (especially China) accumulated enough economic power and started to invest in developed countries end export capital – this has not resulted in absolute reverse tendency regarding the directions of FDI and actual statistics shows us that the FDI inflows to developed country members always fluctuated [7]. At the same time there exist the tendency with upward sloping FDI outflows from developing countries. The fact of the existence of such tendencies (especially among particular countries) gives the reasons for possible further inverted FDI flows.

Diagram 6. Foreign Direct Investment flows in developing countries between 1970-2016 (in million USD) [72][5]



A continuation of "Open Door Policy" has become the "Go Out policy" which impacted on FDIs. The transformation process of Chinese FDIs from 1980s till today has passed 4 stages: restricting, facilitating, supporting and encouraging [58]. This process as well as part of overall economic activity of China is aimed at maintaining, strengthening and increase of competitiveness of Chinese companies on international level and, of course, at the national development. The "Go Out" strategy changed the directions of Chinese policy with regard to investments and thus the investments moved from restricting stage to facilitating and supporting.

The State's Opinions on Encouraging and Regulating Foreign Investment and Cooperation by Chinese Enterprises in 2007 explicitly indicated the guidelines, objectives, principles and main tasks of "go out" policy. Among them such as: the intense for better utilization of resources and domestic and foreign markets, the promotion and

[5] Based on UNCTADSTAT. URL: https://unctadstat.unctad.org.

development of the international competitiveness of Chinese enterprises, the facilitation of fair and equal cooperation between China and its investment partners (especially with regard to outflow of FDI) and the promotion of the structural reform and development of Chinese economy. The first years of the development of this strategy brought in the connection of Chinese FDIs to technologies and innovations. In other words – the government and companies were in need of new knowledge in order to maintain competitiveness. There were mainly 4 strategies with regard to Chinese FDI. First strategy proposes the market seeking for companies because of increasing domestic competition and increased level of production. Second strategy is aimed at seeking of natural resources – this is the main strategy applied by China in Africa. Third strategy – is to gain access to new technologies and market-related experiences. Fourth – the seeking of effectiveness. Mainly this strategy is applied when company is trying to reduce its costs by outsourcing to countries with lower cost of production (like Vietnam) [80]. All this led to an economic development and development of Chinese competitiveness on global market. If we take the Global Competitiveness Index, we would see that the competitiveness of China starting from 2007 increased. Even the financial crisis 2007-2008 had not brought deviations as it was with United States.

The 2010 report of government of China [54] presented to deregulate approval process and support capable firms on overseas merger and acquisition, encouragement on capable and capital-rich big companies for M&A investment, international registration of intellectual property rights, global resource configuration and value-chain integration. "We will change the focus of the" opening up" of coastal areas from international manufacturing to research and development, advanced manufacturing and services" [2]. It also encouraged construction of R&D centers in technology-intensive countries and corporation with foreign R&D institutions and innovation enterprises.

Chinese "Go Out Policy" were aimed to achieve 5 objective policies [10]: First of all, country required to find new markets for their goods since domestic market became competitive enough and surplus of economic activity provided such tendency. Secondly, country required new natural resources. This policy has become business card of China, the FDI that goes to Africa are aimed at fulfilling this certain policy.

Thirdly, the search of strategic assets – Chinese investment policy from this side was aimed at getting new technologies, market brands, trademarks, trade and marketing experience, etc. Fourthly, FDI were aimed at reducing costs meaning that investment policy was aimed at outsourcing, opening facilities in countries with lower production costs. And finally, institutional environment of China (for example, the support of the government) provided a strong basis for Chinese companies to go out. [10].

Notwithstanding, further development of Chinese economy demonstrated slowdown. In 2015, China's foreign reserves diminished dramatically from nearly US$4 trillion to US$3.33 trillion. January 2016 saw another drop of nearly US$100 billion [73]. If this trend continues, it will undermine China's desire and capability to fund its outgoing FDI and aid. The economic slowdown and the financial market volatility in China are also decreasing the pace of RMB internationalization. The international use of the Chinese currency has expanded rapidly in the last few years. By 2015, the RMB had become the second-most-used currency in international trade and the fourth in global payment. Late last year, the International Monetary Fund agreed to add the Chinese currency to the basket of currencies that determine the value of the Special Drawing Right. But the RMB is not a currency widely held in the reserves of other countries. For the RMB to become an international reserve currency, China has to further liberalize its financial market. In fact, for many reformers in China, the main purpose of internationalizing the RMB is precisely to deepen financial liberalization in China.

China's fast-growing outgoing FDI and aid, in particular, its grand strategy of BRI, have generated great enthusiasm in China and serious concern in some other parts of the world. The official rhetoric in China describes these as win-win arrangements — connecting the world, helping other developing countries grow their economy and improving China's access to resources and markets abroad. Cynical outside observers view these initiatives and programs as part of China's plan to build its sphere of influence in Asia and beyond, threatening the dominance of the United States in world politics. Both of these perspectives may be underestimating the challenges for China's going out policy.

First problem or a challenge of Chinese "Go Out Policy" is the rational use of FDI to infrastructure projects. As we know, such investment became a central idea of the development of the "One Belt – One Road" initiative. The problem lies in the efficiency of such investments. Current estimated infrastructure investment gap is 15 trillion dollars [32]. Secondly, the existence of the trade war brings up the issue of political and security challenges that restrict and even threat the money of investors. Already now the investments from China to United States significantly and dramatically dropped to nearly zero [59]. At the same time both countries continue to grow up the tariffs rate which in turn again threat investments [18]. Thirdly, the countries that lie along the "One Belt – One Road" initiative are plagued by conflicts, corruption and political instability.

2.2 Investments to China after its joining to WTO

First of all, it should be noted that the World Trade Organization (WTO) is a multilateral trade organization which was created in order to ensure trade between countries, make trade flows more freely and create a negotiation platform. The organization is an emanation of General Agreement on tariffs and trade (which now is an integral part of the WTO law) and has more efficient dispute settlement system. China was among 23 founding members of the GATT but later on the Chinese government in 1949 decided to withdraw from the agreement. Later on, Deng Xiaoping initiated "Open Door Policy", liberalization process started and in 1986 China submitted an application to the GATT.

Chinese Accession process to the WTO became the most significant step in the development of Chinese economy. The accession of China to the WTO also affected interests of United States. USA was interested in possibilities to increase the investment process to China, to increase export, etc. For China the joining to the WTO was at the first place of countries' objectives since the benefits from accession resulted in the increase of economic development, opened up new opportunities for country to compete on foreign markets (for example – China was not subject to Multi-Fiber Arrangement of USA since the joining to the WTO and get free access to American cloth market), for intensification of investment process as well and overall decrease in tariffs rates. Especially important for China was better access to markets of United States and other countries. The most-favoured nation treatment allowed China to increase exports.

The process took 15 years of negotiations which were significantly politicized. The United States attempted to link the accession to the WTO with the requirements to protect human rights, determine the status of Tibet, privatize state-owned enterprises – the issues outside the competence of this organization. Moreover, the dominant position of USA in negotiations led to reciprocal concessions between China and USA. Despite the long process of negotiations, serious concessions from China (like consent to the recognition of the non-market status of the Chinese economy for 15 years after joining the WTO) and tensions, especially with United States, China joined the WTO which became one of the most significant factors in its economic development [9].

The access resulted in the increase of the share of exports in Chinese GDP between 2002 and 2007 by 5 percent [15]; Chinese export changed and moved from manufacturing primary sector which includes raw materials production, to the secondary sector – usable products or products involved in construction. The amount of agricultural labor force in China at the beginning of 21th century was half percent of total labor force, this amount decreased between 2001 and 2010 to about 37 percent [47]. So, as overall result of accessing to the WTO China benefited in almost all sectors of economy. From the other hand, United States also benefited from the accession of China as it was predicted [48]. But another question arose – whether the accession of China is a threat for United States?

This was and still one of the controversial questions. From the one hand, both countries benefited from Chinese joining. China as a developing country was a good platform for American enterprises to outsource the production, create facilities, etc. Especially taking into account Chinese “Go Out Policy”. From the other hand, China got access to better conditions for economic development and thus resulted in challenging of United States.

Looking at countries’ characteristics – their differences are significant. The United States to the beginning of 21th century and due to the dissolution of Soviet

Union became the world leader, the first power in the world. But USA was not only political leader but also economical, leader in technologies, etc. While middle class of labor in the United States accounted for more than half of the population of the country [48], the wages of half of labor force in China still lower than the wages of middle class labor [28]. This reveals the differences in national conditions for economic development and shows us that countries at the moment on different levels or stages of economic development as well as different stages of liberalization. If we take global value chains we see that at the moment United States are in "the front line" of value chains while China has to move along chain in order to be more efficient, developed, competitive. One of the roots of such positions in global value chains is the presence of deep differences of technological development. This can be revealed by the comparison of American and Chinese protection of intellectual property rights – one of the issues China was accused for by United States. USA economy is more aimed at improvement of its digital economy, technological knowledge (as well as their protection), maintain country's power and interests comprising such patterns of economic development. At the same time, China is more interested in decreasing or even removing barriers to trade in order to get better market access for Chinese products, maintaining and improving the place in value chain and attraction of investments in order to get access to know-how, technologies, etc.

If we take the issue of USA-China trade war – the trade imbalance, we see that investments between United Stated and China increased significantly over time, especially after China's accession to the WTO in 2001[61]. What are the reasons for such proceeding growth? To understand this, we should analyze the investment process between countries: how it was developing, what influenced on this process, decomposition of the process.

Diagram 7. Foreign Direct Investment from United States to China from 2000 to 2017 (in billion USD) on a historical-cost basis

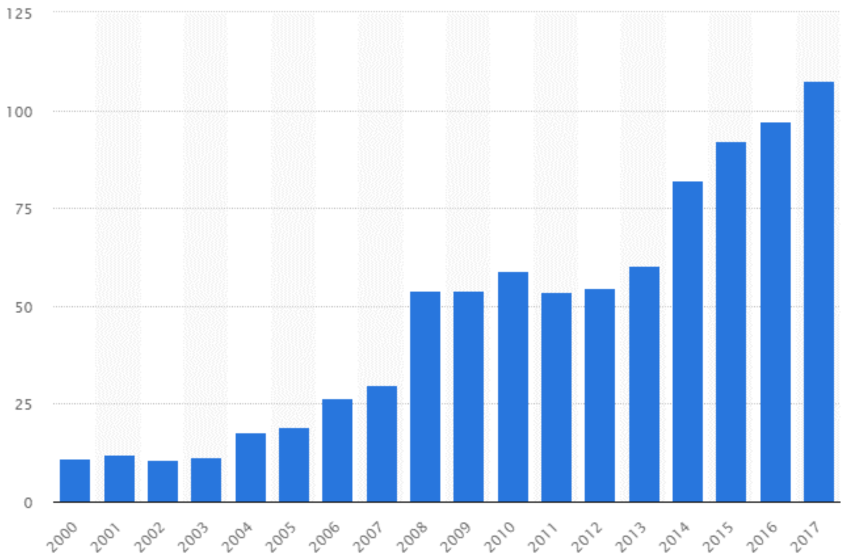
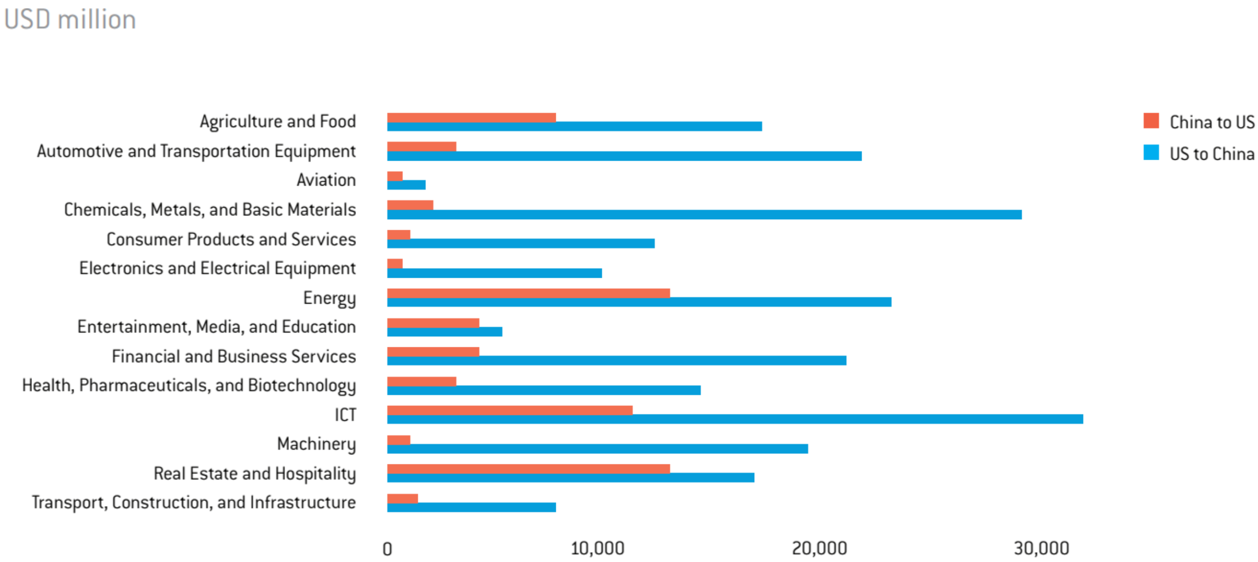


Diagram 8. The Cumulative Investment by Industry in China and the US between 1995 and 2015 [71]



Recently, two-way foreign direct investment (FDI) flows dropped nearly 60 percent year-over-year in 2018. This dropped consists of over 80 percent decline in Chinese FDI to United States, shifts of USA FDI balance. Non-FDI investment flows such as venture capital (VC) have become increasingly important drivers of US-China capital flows and were more resilient than FDI in 2018. Direct investment flows have historically dominated US-China deal making but other flows have become increasingly important in recent years. Venture capital investment in technology and other start-up companies is one such conduit. At an estimated $22 billion, two-way VC flows surpassed bilateral FDI for the first time in 2018. US venture investment in China has a long track record dating back more than two decades. In 2018, US-owned venture companies invested a record $19 billion in Chinese start-up companies - roughly double the previous record of $9.4 billion in 2017 and five times flows in the other direction.

In 2019 the situation looks a bit different. The big part of American FDIs are represented by the so called greenfield investment – new projects that are built from the ground up, the value is 200,39 billion US dollars. Another 83,75 billion dollars are acquisitions. About 250 billion US dollars are strategic ones. This reveals the purpose of the investments at glance – the investments made are those of companies along with their core business activities, not the financial investment for financial returns. This also confirmed by other numbers. USA companies deployed its production in China and more than half of investments are made by controlling stakeholders, meaning that company's ownership is more than 50 percent [69]. For example, the biggest greenfield construction in 2019 was in the automotive sector - Tesla's Gigafactory in Shanghai, which broke ground at the beginning of 2019 and began production in 4Q [34].

Current trends with regard to allocation of investments include, first of all, the investment in automotive ($4 billion or almost one-third of total 2019 investment) and health and biotech ($3 billion, due to Amgen's acquisition of BeiGene for $2.7 billion). Investment in ICT ($2 billion) and entertainment ($1.96 billion) experienced decline in 2019 comparing to the previous year. Graph 3 demonstrates the comparison in FDI flows with previous years. Investment into electronics jumped up this year mainly due to one large deal, KKR's acquisition of a majority stake in NVC Lighting's China business.

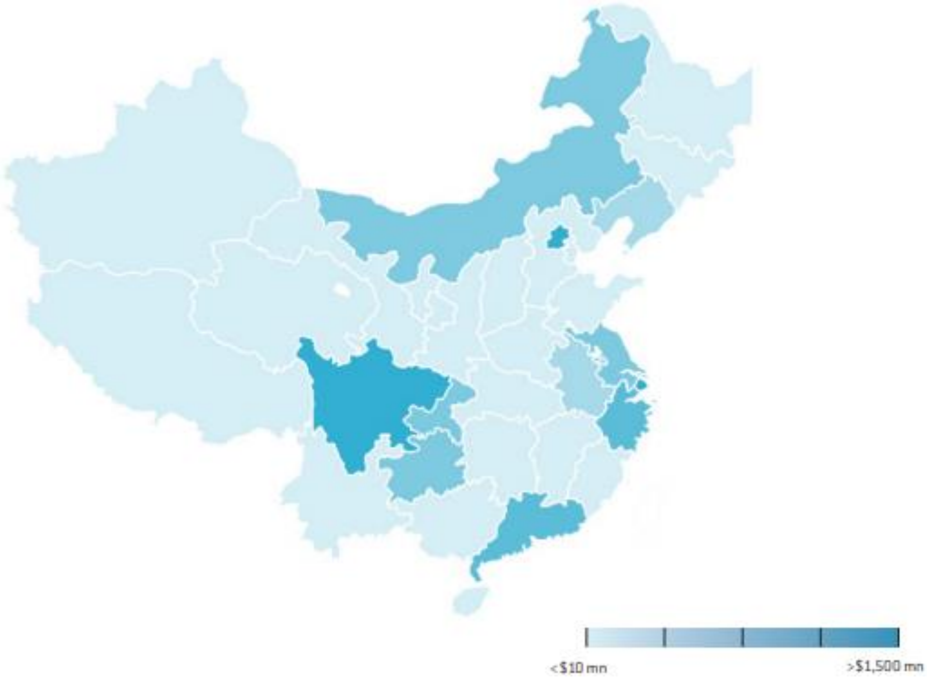
Graph 3. Change in US Direct Investment Transaction Value, 2019 Compared to Previous Years (USD billion, percent change) [34]

USD billion, percent change

	2019 (USD bn)	VS. 2018	VS. Avg 2016-2017
Agriculture and Food	0.5	-59%	-61%
Automotive	4.0	134%	190%
Aviation	<0.05	-34%	-87%
Basic Materials, Metals and Minerals	0.5	136%	-34%
Consumer Products and Services	0.1	15%	-89%
Electronics and Electrical Equipment	0.8	1504%	278%
Energy	0.1	441%	-84%
Entertainment, Media and Education	2.0	-3%	43%
Financial and Business Services	0.2	44%	-11%
Health, Pharmaceuticals and Biotechnology	3.1	406%	217%
Information and Communications Technology (ICT)	2.0	-26%	-51%
Machinery	0.05	-71%	-87%
Real Estate and Hospitality	0.6	-85%	-38%
Transport, Construction, and Infrastructure	0.2	-51%	-50%

American firms have historically located most of their direct investments in China's more populated coastal regions. In the early years of US FDI in China this activity focused in areas designated as free trade zones and manufacturing hubs for foreign-invested enterprises in provinces like Guangdong and Shandong. After China's WTO accession in 2001, US companies expanded rapidly into higher-income coastal cities like Beijing and Shanghai and moved into second-tier cities in Zhejiang, Sichuan and other provinces. Only in recent years have American firms shifted some of their interest to China's northern rust belt (e.g. Liaoning). In terms of the geographic breakdown, 2018 trends in US direct investment in China mirrored those from recent years. Large cities near China's east coast remained the top targets. Shanghai received the most investment of any Chinese region with a boost from a number of real estate transactions and Tesla's Gigafactory. Beijing was among the top investment recipients as well as the headquarters location for many companies and the site for the new Universal Studios Beijing theme park. Sichuan continued to log significant ongoing investment from the construction of GlobalFoundries' semiconductor plant. Coastal provinces Zhejiang, Guangdong, and Jiangsu also attracted strong interest.

Figure 1. Geographic Distribution of 2018 US FDI Transactions in China [35].



The first modern era Chinese FDI in the US targeted coastal regions. California, New York and a few other large states including North Carolina, Michigan and Texas were the top targets before 2008. Chinese FDI subsequently spread to certain interior regions as investors targeted certain industry clusters – for example to the Midwest for its automotive clusters and to resource-rich states such as Wyoming, Colorado and Oklahoma. Chinese direct investment then gradually spread to a broader swath of US cities and states after 2013 as total investment took off, but the largest investments remained concentrated in big coastal economies. 2018 saw a departure from previous trends as leading coastal states such as California and New York failed to secure the top rank. California was dragged down by the absence of major technology or entertainment acquisitions, and New York did not see any big real estate purchases. Instead, Pennsylvania received the most Chinese investment in 2018 due to Primavera's $800 million acquisition of Nobel Learning Communities and Harbin Pharmaceutical's $300 million acquisition of GNC. Texas was second with Shandong Weigao's $940 million acquisition of Argon Medical Devices. Other top states included California, Massachusetts and Ohio.

The rapid rise of China in the world FDI market is creating both anxieties and opportunities. The principal anxiety comes from the suspect of China's intention of dominating the world market generated since the release of the “One Belt – One Road” Initiative. China has a different ideology from the west when it comes to the policy-making: it tends put forward the general idea first, then fill in it with details through practice.

The development of investments process between countries had got its momentum in the mid of 2000s after China’s Accession to the WTO. This stage was the ground of further and inevitable process of integration of countries’ economies. There are several factors that influenced the increase of interdependency and led to such high degree. The economies of countries as well as their political drive before the presidency of Donald Trump were aimed at mutual and reciprocal benefits. The most significant reason of flow of United States FDIs to China was the cheaper costs of production. FDIs were aimed at the development of information technologies, chemicals, basic materials – manufacturing while Chinese companies and especially government were interested in the development and maintaining of competitiveness, and thus in the increase of FDIs.

The investigation of relationships between countries should include the paying attention to political situation. Relations were always dependent on the behavior of United States. As we know, there was difference of how China was perceived by the administration of George W. Bush – China is a strategical competitor, by the presidency of Barak Obama – China is a strategic partner, and by the administration of Donald Trump – China is a competitor for leadership.

The current situation of FDIs between countries represented by a huge drop of Chinese investments into United States. Further contribution of such fact can be further widen the gap between cumulative FDIs from China to USA and from USA to China due to further asset divestitures, exchange rate changes, asset appreciation. Regulatory interventions and the deteriorating political relationship were the main culprits behind the sharp decline in two-way FDI. A deliberate tightening of liquidity in China's financial system further exacerbated headwinds, forcing firms to clean up their balance sheets instead of investing abroad.

The introduction of New Institutional Economics reveals problems within Chinese development of intellectual property rights and thus influences negatively on how trade war can be settled. Accordingly, one of the solution can lie in the rebuilding of Chinese firm development program – Chinese government should be aimed at lesser extent of its involving in firms' business and at increase of the performance of companies. This would result in increase of influence of informal institutions and higher extent of property rights protection. And this is only one of many propositions that can be derived from applying this theory.

CHAPTER 3. TRADE WAR AND ITS CONSEQUENCES

3.1 US waves of action against China?

We should start our analysis with the examination of trade war timeline [20] since it allows us to understand how countries react on each other's actions and which strategy they apply in the trade war. Of course, main instruments in any trade war are increase in tariffs, imposition of quotas, increase in other tariff and non-tariff barriers. President Donald Trump's trade war with the world involves multiple battles with US allies and others alike. Each battle uses a particular US legal rationale, such as calling foreign imports a "national security threat," followed by Trump imposing tariffs and/or quotas on imports. Subsequent retaliation by trading partners and the prospect of further escalation risk significantly hampering trade and investment, and possibly the global economy.

Since the 1980s, Trump has advocated tariffs to reduce the U.S. trade deficit and promote domestic manufacturing, saying the country was being "ripped off" by its trading partners; imposing tariffs became a major plank of his presidential campaign. Although some economists and politicians argue that the United States' persistent trade deficit is problematic, many economists argue that it is not a problem, and few advocate tariffs as a solution.

Though the trade war (or, more precisely, competition between countries) in fact began even before China joined the WTO, it's considered that it began from 2018 and imposing tariffs on solar panel and washing machines which in constant dollar terms, solar panels and washing machines would be the third ($8.5 billion) and seventh ($1.8 billion) largest import value cases, respectively, under the law's history to result in trade barriers.

The United States International Trade Commission (USITC) at 31th October 2018 announced remedy recommendations in its global safeguard investigation involving imports of crystalline silicon photovoltaic cells [68] following which president Donald Trump approved the imposition of safeguard tariffs. According to USITC the amount of solar panels and washing machines imported into USA is in such quantities that represent cause of serious injury to the directly competitive domestic industry. Those were the first industries that are touched by trade war.

Speaking generally about trade war instruments and legal basis, the imposition of safeguard tariffs in United States bases on US Section 201 - a section of the Trade Act of 1974. This section permits the President to grant temporary import relief, by raising import duties or imposing nontariff barriers on goods entering the United States that injure or threaten to injure domestic industries producing like goods. In general, this provision is similar or even analog of GATT Article XIX that allows GATT contracting parties to provide relief from injurious competition if temporary protection will enable the domestic industry to make adjustments to meet the competition.

In order to implement tariffs under Section 201 president must face two separate decisions. In the first one, the president must rule on policies that could affect imports of solar panels. In the second, the president is to decide on actions impacting imports of washing machines. Such actions could well affect the price that consumers pay for both items. And that is the moment when USITC is tasked to make its investigation process. The conclusion was that companies were injured by imports with regard to the first decision, and with regard to the second decision USITC made its recommendations to increase tariffs and impose quotas. USITC investigation gave the authority to president to impose new trade barriers. Of course, it's a controversial question since all the investigations made by national institutions could be made under the pressure of government or even just biased. However, it gives the authority.

When the USITC vote gives the president the right to proceed with a policy action, the Section 201 law provides a range of different options. There are variety of trade barriers that could be implemented: import tariffs, quantitative restrictions, the president could decline the imposition of trade barriers. Alternative actions that could be initiated by the president and could be a "target" for the government are economic policy actions. It means that government or president could seek for some type of economic policy or activity (such as cooperation with international institutions) that allows at least decrease the impact of the injury to the domestic industry. However, it's not an ordinary option and in USA it was rarely used (or even never) since economic policy is already built and could either already have some actions in injured industry or doesn't have at all, focusing on other aspects of the economy. But there is another alternative option which implies the restructuring of the economy in a long-term. President could trigger forward-looking policies that would assist workers out of declining facilities and into other areas of the economy that are growing. But those other alternatives president plays less or no role at all. Therefore, in this trade war the use of Section 201 was a step by Donald Trump in his intentions to act against China and keep his campaign promises.

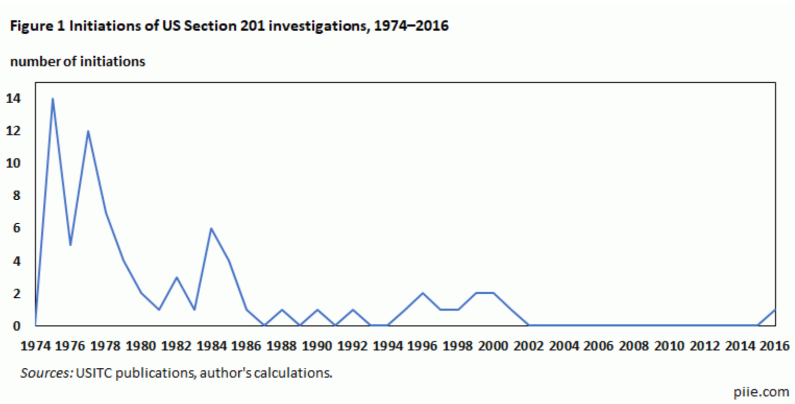
Among the consequences of tariff imposition on solar panels and washing machines we can underline that first of all, the consumers of United States have to pay for those tariffs since they increase the price of products. One of the worst consequences is that solar panels represent clean energy and increase in trade barriers has a negative impact on the development and extension of the green economy. Simultaneously, it gives more opportunity for domestic producers to sell their products. From the macroeconomic perspective, tariffs decrease consumer surplus and increases producer surplus, damaging overall total welfare and giving more money to government budget.

Second consequence in the case of rising trade barriers is international one. Adversely affected trading partners may seek compensation for new US import restrictions that curtail their exports. This could arise via a formal WTO dispute (but not anymore, only if countries can agree within the WTO framework since the WTO crisis and more precisely Appellate body crisis doesn't allow to complete disputes), if not through alternative means of retaliation that hurts other US companies and workers.

Another important consequence arises within the U.S economy. Intentions of president to protect domestic industry and moreover initiate a trade war could, in the first place, rise concerns among American producers and push them to fill in requests for protection to government. These will further increase business uncertainty, impose even more costs on the US economy, and increase the scope of trading partner retaliation. The direct protection received such products as for example canned tuna or sneakers – producers of those products were traditionally protected by high tariffs. Now, with the imposition of Trump's tariffs they are protected even more – those are industries and sectors that directly protected by US tariffs. The second group is represented by such industries as tobacco. Though tobacco is included in Trump's tariffs, China's retaliatory tariffs also hit American tobacco producers. And the third group is represented by such industries as: Automobiles, food and agriculture, tech sector, energy sector. The reason why those industries are mentioned in the third group is that the significance of their protection is doubtful. For instance, by implementing higher tariffs on aluminum and steel, the price for projects in those sector rises which influences, first of all, consumers that have to pay more. The American farmers are now struggling to find a market for their produce, which has, in turn, affected their productivity.

It wasn't the first time Section 201 was used by United States President, but recently this section was rarely invoked by presidents (Diagram 11). Two cases with regard to this section are important within our framework since they are showing how Chinese government reacts on measures by USA.

Diagram 9. The History of US Section 201 Use [19]



In March 2002, President George W. Bush imposed safeguards on imports of steel. It is the biggest trade case to date under this same US law. The global response to the Bush steel safeguard was twofold. The reaction was twofold. EU, China and other seven countries also applied safeguard measures to protect their domestic industries since safeguard by USA shape international supply chain moving it to those countries and overwhelming them with steel. In 2003 measure by USA was challenged within the WTO dispute, USA lost the case and withdrew safeguards.

Also, In September 2009, President Barack Obama confronted a similar request for protection. USA labor union wanted a tariff on imports of Chinese tires. With the global financial crisis still unfolding, the timing was worrisome. US unemployment stood at 10 percent, and there was some concern that the tariff might trigger a repeat of a 1930s, Great Depression–style trade war. Obama applied safeguards and China as in the case with 2003 safeguards brought the case against USA to the WTO. But this time, WTO Appellate Body upheld the measure taken by United States [8]. Thus, China could not retaliate against USA, at least, on the legal basis. However, as in the case with solar panels in 2018, China took another measure that could be legally justified and again, the hit-target was USA agricultural market but this time it was chicken. China launched its own investigation that resulted in a new antidumping tariff on hundreds of millions of dollars of US exports of chicken feet. China, which in recent years has been increasingly assertive about protecting its economic interests, has not been afraid to use tariffs as a tool against the United States. In 2010, it said it would impose tariffs on American poultry after its own anti-dumping investigation. China opened the investigation in 2009, less than two days after former President Barack Obama imposed steep tariffs on Chinese tires. So, one of the main targets for China in this war could be agricultural sector. As a result, American farmers were worse off, their export to China decreased significantly, Chinese market replaced American export to China with other countries such as Brazil. It implies that China could make the same step in nowadays' trade war. However, and what's the most important with regard to our research – Chinese measure was challenged in the WTO. USA brought the case and China had to withdraw its measure. Today, there is no functioning Appellate Body in the WTO and cases couldn't be challenged (except if countries agree on their own on cases), opening new opportunities and instruments for countries to continue the war.

But not only Section 201 can be used. The trade law in United States is divided in four major groups, each of them can be used to impose certain trade barriers. The logic is the same as in the WTO law: 1) the first group – antidumping measures, whether there are unfair low prices can cause threat to USA economy; 2) Countervailing duties – whether there is a subsidy (that's not allowed, illegal or not registered in the WTO subsidy committee/outside of the subsidy “boxes”) received by importing companies; 3) Safeguard measures – whether there is a sharp and unexpected increase in the import that cause a threat to an economy; 4) The fourth group allows to impose trade barriers if there is a threat to a national security. Those laws are governed by two institutions, both of them act as investigators and judges, defining whether there is an injury caused by imports: The Commerce Department and the International Trade Commission. In the United States, the ITC investigates whether the industry has been injured, and Commerce investigates the pricing—or “dumping”—question. If there is evidence of both, the US government imposes new trade barriers. The two agencies investigate similar questions under the countervailing duty law. With the safeguard, only the ITC has a role, ensuring that the harm from an unexpected surge wasn’t mostly caused by alternative explanations like automation, a natural disaster, a US labor strike, or bad managerial decisions. Finally, under Section 232 of the Trade Expansion Act of 1962, Commerce investigates whether imports “threaten to impair” US national security. Among those laws and applied measures safeguard are mostly used for achieving political objectives because anti-dumping and countervailing measures are handled by governmental institutions and bureaucrats, not the president. Graph 4 represents short version of trade actions between countries, it doesn’t take into account the Phase One Deal.

Graph 4. US-China trade war development [20].

2018

February 7
US Section 201 tariffs on solar panels and washing machines

March 23
US Section 232 tariffs on steel and aluminum

April 2
China's retaliation to US Section 232 tariffs

May 1
China's MFN tariff cut on pharmaceuticals

July 1
China's MFN tariff cut on consumer goods, autos, and IT products

July 6
US Section 301 tariffs ($34 billion) and China's retaliation ($34 billion)

August 23
US Section 301 tariffs ($16 billion) and China's retaliation ($16 billion)

September 24
US Section 301 tariffs ($200 billion) and China's retaliation ($60 billion)

November 1
China's MFN tariff cut on industrial goods

2019

January 1
China suspends retaliation against US autos and parts (Section 301) and reduces MFN tariff rates for 2019

February 7
US Section 201 tariffs reduced on solar panels and washing machines in second year of policy

June
US Section 301 tariffs (10% to 25% increase on $200 billion, effective June 15) and China's retaliation on some US products (subset of $60 billion, June 1)

July 1
China's MFN tariff cut on IT products

September 1
US Section 301 tariffs (15% on subset of $300 billion) and China's retaliation on some US products (subset of $75 billion)

September 17
China implements product exclusions on less than $2 billion of US exports

December 26
China implements product exclusions on less than $1 billion of US exports

2020

February 7
US Section 201 tariffs reduced on solar panels and washing machines in year two of policy

February 8
US Section 232 tariffs extended to imports that use aluminum and steel

February 14
US Section 301 tariffs of 15% imposed on September 1, 2019 (subset of $300 billion) cut in half, and China's retaliatory tariffs imposed on September 1, 2019 (on subset of $75 billion list) cut in half

Following imposition of tariffs on solar panels, Chinese government announced a self-initiated government investigation into whether about $1 billion of US sorghum exports to its market were dumped or subsidized – like it did in 2009. Officially, China didn't link this investigation with a trade war, however such an act implies this link. Why did China hit the sorghum market? Sorghum is a type of grain that is mostly used in China to feed livestock. It is also used to make baijiu, a clear liquor with a pungent aroma that sells well among the rich in China and is often served at banquets. More than three-quarters of the sorghum the United States exports goes to China, a grain export industry group. Soybean exporters are a powerful political constituency for Mr. Trump. China imported $14 billion worth of soybeans from the United States in 2016. After the investigation China's Ministry of Commerce announced provisional anti-dumping measures on grain sorghum imported from the United States. U.S. sorghum exports to China surged from 317,000 tons in 2013 to 4.76 million tons in 2017, while export prices have slumped 31 percent during the period, which led to a fall in domestic prices that hurt local industries. South Korea and China brought the case to the WTO against USA and its safeguard measures, but the panel still hasn't been established (although, there no AB that can rule). Measures taken by China were suspended after the meeting of USA and China's negotiating parties. Ministry of Commerce of China in its decision linked the suspension of measures with public interests: "In the course of investigation, the investigation authority received a large number of downstream users' reports, believing that the case investigation would increase the cost of the downstream breeding industry and anti-dumping and countervailing measures against imports of grain sorghum originating in the United States would affect the cost of living of consumers, which is not in the public interest. After investigation, the investigation authority found that the price of domestic pork has been declining in the near future, and the livelihood of many farmers is facing difficulties, in which case, taking of anti-dumping and countervailing measures against imports of grain sorghum originating in the United States is not in the public interest" [50].

The second step in the trade war involved not only China but also other countries and European Union. Steps taken are the same. Trump directed to the commerce secretary to initiate self-investigation of steel imports basing on whether it creates a threat to US economy basing on Section 232 of the Trade Expansion Act of 1962. After the investigation process was done it was clear that USA claims to restrict the importation of steel and aluminum products on *all* trading partners. However, among countries of origins of those products China had 6% share which implies that Trump's action was directed not against China but more to "Make America Great Again" campaign. This action hits one of the main and important markets in the world covering 48 billion dollars of American import, top countries that were injured are Canada, European Union, South Korea and Mexico. China suffered less than other countries due to anti-dumping measures previously imposed [24]. However, it doesn't imply that the measure is less importance within our research framework. The importance reveals in following subsequent events – after United States imposed tariffs it brought a series of tariff exemptions. On 23rd March 2018 the tariffs on steel and aluminum went into effect, but before it the United States issued tariff exemptions for Canada and Mexico on 8th March, but it was the outcome of NAFTA renegotiation talks and there were also ongoing expand of exemptions - on 22nd March Trump issued further exempting the European Union, South Korea, Brazil, Argentina, and Australia. Later on, USA extended tariff exemptions provided to the European Union, Canada, and Mexico. Yet, those tariff exemptions were granted till 1 June and after that, higher tariffs regardless of previously issued exemptions were imposed on steel and aluminum came into the effect, negotiations failed. South Korea agreed to reduce its export of steel and also received exemptions. Nevertheless, this exemption partly reveals the strategy of Trump in this war. By issuing exemptions United States de-facto imposed quantitative restriction on South Korea meaning that USA is not going to relax its trade policy (especially towards Asian region) and wants by any means to impose high trade barriers on Asia. As a retaliation measure Chinese government undertook the imposition of tariffs on aluminum waste and scrap, pork, fruits and nuts, and other US products [23]. The last measure imposed by United states is new tariffs on almost $450 million of steel and aluminum products to help industries suffering from his previous tariffs. They mostly hit imports from allies such as Taiwan, Japan, and the European Union, as well as China. The short version of trade

Calculations made by Peterson Institute for International economics demonstrated that the imposed tariffs raised the price of steel products by almost 10 percent. Higher steel prices will raise the pre-tax earnings of steel firms by $2.4 billion in 2018. But they will also push up costs for steel users by $5.6 billion. As we know, one of the consequences of rising protectionism lies in the field of employment. Actions taken by USA lead to a creation of 8700 jobs in the US steel industry. Though we can see that it led to a positive consequence, there are some doubts about whether such actions should be implemented by US. The point is that for each new job, steel firms will earn $270,000 of additional pre-tax profits but steel users have to pay an extra $650,000 for each job created [38].

Another important sector in which trade war occurs is acquisition of China by USA in intellectual property rights violations and unfair trade practices conductions. US Trade Representative Robert E. Lighthizer self-initiates an investigation of China under Section 301 of the Trade Act of 1974, after President Trump's memorandum of

August 14, 2017, instructing him to consider whether to investigate any of China's laws, policies, practices, or actions that may be unreasonable or discriminatory and that may be harming American intellectual property rights, innovation, or technology development. The investigation found that China is conducting unfair trade practices related to technology transfer, intellectual property, and innovation under Section 301 of the Trade Act of 1974.

As result, United States as well as China published during some period of time different lists of products that could be hit after the imposition of tariffs. Before first phases of tariff impositions US Trade Representative released a revised list of products on which it plans to impose 25 percent tariffs, in two phases starting July 6, 2018. Compared with the original list proposed on April 3, 2018, the new $50 billion list targets even more intermediate inputs—95 percent of the products hit are now intermediate inputs or capital equipment used largely by American-based companies that are dependent on imports from China. It raises costs within American companies' supply chains. From the other side, China issued an updated $50 billion retaliation list of 25 percent tariffs. It targets roughly $45 billion of US exports to China in 2017, including a lot of agricultural and food products. China also planned a two-phase approach for this list, covering $34 billion of US goods starting July 6, 2018, including soybeans and vehicles. The remaining $16 billion of products would be covered later, likely pending the Trump administration's proposed second phase of tariffs released June 15. Compared with China's April 4 list, the country adds mineral fuels, some consumption goods, and medical equipment. Aircraft was taken from the list. The first phase took place on July 6th - US tariffs on $34 billion of Chinese imports went into effect, the first phase of its June 15 $50 billion list. In parallel with President Trump's tariffs, China's tariffs on the first $34 billion of its $50 billion list of US imports also went into effect.

The same pattern was followed at the second stage of tariffs imposition. On August 23th the Trump administration followed through with imposing tariffs on $16 billion of imports from China, the second phase of the revised $50 billion list released June 15. China immediately responded with its own revised tariffs on $16 billion of

US exports, also announced on June 15. These actions complete each country's first $50 billion of tariffs originally announced in April.

After that in September 17th USA announced finalized list of products on $200 billion of imports from China that will be subject to a 10 percent tariff that went into effect on September 24. The rate had increased to 25 percent on 10th May 2019. 50 percent are intermediate goods, like computer and auto parts, but 24 percent are consumer goods, up from the 1 percent of consumer goods targeted in the previous tariff phase.

Next day, China announced its plan to place tariffs on $60 billion of US exports if Trump goes ahead with his recently finalized tariffs on $200 billion of Chinese exports. These tariffs are mainly on intermediate inputs and capital equipment, and range from 5 to 10 percent, down from the 5 to 25 percent originally announced.

As it was announced, the next stage of tariff imposition went into action on September 24th. US tariffs on $200 billion of Chinese imports announced on September 17 took effect, along with retaliatory tariffs by China on $60 billion of US imports announced on September 18. The United States now has tariffs on 12 percent of its total imports during 2018, while the combined trading partner retaliation covers of total US exports.

After the G-20 meeting in Buenos Aires at 1st December 2018, Presidents Trump and Xi announce a deal to halt the escalation of tariffs that were expected in January while they negotiate over trade concerns. However, because there is no joint statement, a new tariff raising round was inevitable. In May, imports from China that were previously hit by a 10 percent tariff under the September 2018 action were subject to a 25 percent rate; from the Chinese side Retaliatory Tariffs were raised in June, covering $36 billion of the $60 billion list from September 2018.

In 2018, Trump's actions combined with already existing tariffs have resulted in 14.9 percent of US goods imports covered by some form of trade protection, based on 2017 import data. Trump's actions alone covered $303.7 billion, or 12.6 percent. Some products are being hit by multiple tariffs. China, Canada, the European Union, South Korea, and Mexico are the biggest targets [29].

The year 2019 brought even more escalation of trade war. Negotiations on potential deal between China and United States did not succeed. As it was mentioned, tariffs on Chinese goods were raised to 25 percent rate. Consequently, China raised its retaliatory tariffs. Immediately after another round of US-China trade talks, President Trump said the United States would impose a 10 percent tariff (not 25 percent as earlier threatened) on an additional $300 billion of imports from China, going into effect September 1, 2019. The list covers final consumer goods, such as toys, footwear, and clothing.

On August 23rd China released its plan to retaliate on $75 billion of US exports, effective September 1 and December 15, 2019, in response to Trump's forthcoming tariffs on $300 billion of Chinese goods. The most significant change is that China increases its average tariff on US autos from 12.6 to 42.6 percent. Later the same day, Trump said he would apply a 15 percent tariff, not 10 percent, on the $112 billion list on September 1 (includes clothing, shoes, other back-to-school items) and the $160 billion list on December 15 (includes toys, consumer electronics). He also said the current 25 percent tariff on $250 billion of Chinese goods will increase to 30 percent, starting October 1. However, tariffs raising on December and October were cancelled since the trade talks gave effect and on 15th January 2020 parties came to the Economic and Trade Agreement Between the Government of the United States and the Government of the People's Republic of China [4]. Nevertheless, the overall effect of trade war wasn't reduced since average US tariffs on imports from China remain more than six times higher than before the trade war began in 2018. Average Chinese tariffs on down only slightly from when the deal was announced in December 2019. Chinese commitments to buy an additional $200 billion of US exports will likely rely heavily on purchases by state-owned enterprises.

3.2 The influence of Trade War on world economy and international trading system

The increase in tariffs already impacted the global GDP growth. The world real GDP growth declined in 2018 from 3.9 to 3.6, in 2019 from 3.6 to 2.9, overall by 1 percent. Almost the same pattern for China – in 2018 from 6.9 to 6.7, and to 6.1 in 2019. For United States the situation differs: its GDP growth declined in 2017 was 2.4, then coming sharp increase to 2.9 in 2018 and in 2019 the rate dropped to 2.3. By the effect of coronavirus crisis, the world real GDP growth declined to -3 (1.2 for China and -5.9 for USA) [41]. The disputes between countries already slowed down the trade dramatically as well as FDIs between countries. The rise of uncertainty (Diagram 12) impacted not only FDIs flows but also financial market. The Purchasing Managers' Index (PMI) is a business cycle indicator for the Swedish economy, produced by Swedbank in cooperation with Silf. The PMI is produced both for the manufacturing and the service sector. The aim of the Purchasing Managers' Index is to get a quick measure of the current state of the economy. Each month, purchasing managers are surveyed and an index is calculated. An index level of above 50 indicates expansion, while an index level of below 50 signals a contraction. Looking at the PMI index we can draw a general conclusion on the impact of trade war. Even before the coronavirus pandemic the PMI index for global economy was declining since 2018. Particularly, for the United States the index became from positive to neutral in the beginning of 2019 and negative in the February of 2020 (as a consequence of coronavirus spread). For China it became neutral in July 2018 but then recovered in September of 2019 that could be impacted by progressions in the trade talks between countries, cancellation of new tariffs impositions by USA in October and December. However, with coronavirus index fell extremely. Also, we could make a conclusion that index reveals trade war impact on EU economy since from the beginning of 2019 it became neutral and then negative but we have to take into account also other issues, for instance, Brexit which also could significantly contribute to the index fall [14].

Diagram 10. Economic Policy Uncertainty Index [31].

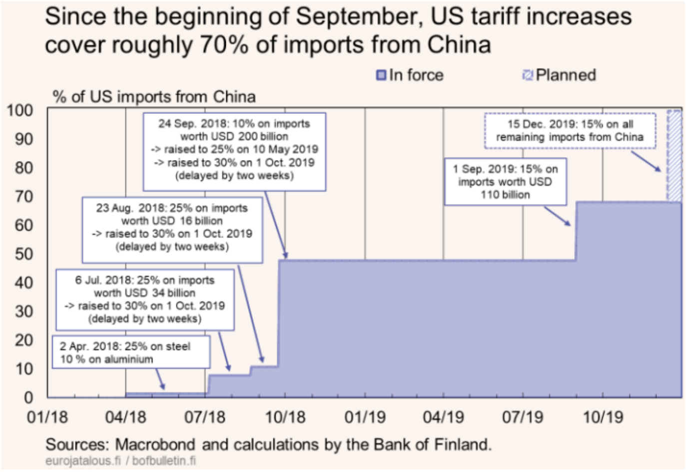
The growth of uncertainty has been reflected in investment sentiment, and manufacturing purchasing manager indices have fallen globally. News updates on the current negotiation situation have caused volatility in share prices and securities market risk premia, but significant disruptions on the financial markets have so far been avoided. In an adverse scenario calculated by the Bank of Finland, further escalation of the trade war and subsequent widespread disruptions to the financial markets would slow global GDP growth by a further two percentage points. Before the global financial crisis, world investment soared to almost $2 trillion. A decade later, global flows of foreign direct investment have fallen by almost 20 percent below the pre-crisis peak [7]. In 2017, world merchandise trade recorded its strongest growth in six years. But due to rising trade tensions and increased economic uncertainty, the WTO warned that global trade growth is losing momentum and that downside risks have grown in the global economy [42].

In the first half of 2019, business advances into China, Asia and Europe decreased 30% from a year earlier and those into Japan logged a drop of more than 20%. Although Africa is expected to mark a steep population increase as the "last frontier," GFIs on the continent scored a decline of nearly 10% [46]. Increasing U.S.-China tensions over tariffs and technological hegemony are dampening business sentiments. The number of business advances into China from the U.S. in the first half of 2019 decreased more than 10% from a year earlier to 104. In particular, direct investments for the purpose of "production," such as building plants to take advantage of local inexpensive labor, decreased more than 30%, clearly reflecting the effects of higher tariffs imposed by the U.S. on imports from China [46]. The number of direct investments in the U.S. from China marked an even sharper fall of more than 50% to 30. In particular, investments for the purposes of designing and R&D plunged due to pressure created by strong U.S. concern about China in competition for technological hegemony.

The Congressional Budget Office (CBO) reported their estimates of the U.S. economic impact of tariffs (applied to China primarily but other countries as well) in August 2019. By 2020, tariffs would reduce the level of real U.S. GDP by about 0.3%, real consumption by 0.3%, real private investment by 1.3%, and real household income by $580 (about 1%). Real U.S. exports would be 1.7% lower and real imports would be 2.6% lower. CBO explained tariffs reduce U.S. economic activity in three ways: 1) Consumer and capital goods become more expensive; 2) Business uncertainty increases, thereby reducing or slowing investment; and 3) Other countries impose retaliatory tariffs, making U.S. exports more expensive and thus reducing them. CBO estimated the U.S. had imposed tariffs on 11% of imports by January 2018. As of July 25, 2019, retaliatory tariffs had been imposed on 7% of all U.S. goods exports. CBO expects the negative consequences will remain but have a smaller impact in 2029, as businesses adjust their supply chains (i.e., source from countries not affected by tariffs) [4]. The number of GFIs in the Asian region, including Japan and China, dropped to a 16-year low of 1,365 in the first half of 2019. Investments are sluggish almost across the board. Even in Vietnam, which is drawing strong attention as production shifts out of China to avoid higher U.S. tariffs, GFIs decreased 50%. Taiwan witnessed a 30% fall.

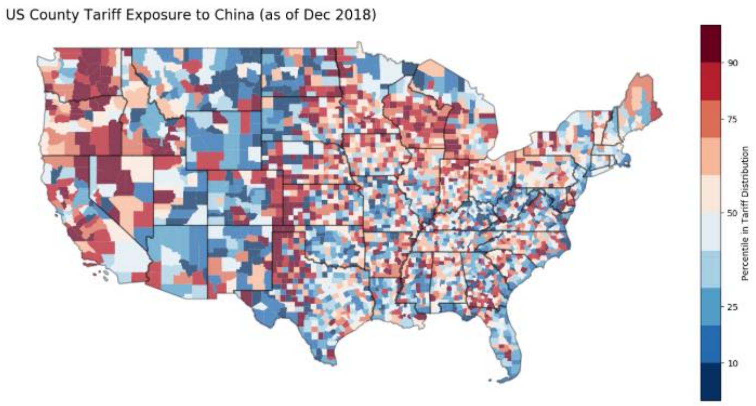
To date, additional tariffs placed by the United States cover around 70% of total imports from China (Diagram 11). China has countered by introducing its own additional tariffs, leading to a situation where the tariff increases cover a majority of trade in goods between the two countries.

Diagram 11. Share and % of tariffs' covering Chinese imports [40].



With regard to the burden of China's retaliations – It is concentrated among the territory of United States (Figure 2). It plots the change in a county's tariff (which is an employment weighted average of the tariff at the sectoral level) between December 2017 and December 2018. In this map, a county is colored according to its position within the distribution across counties: red indicates that a county's tariff increased significantly; blue indicates that a county's tariff did not increase significantly.

Figure 2. Tariff exposure by county in the continental US [74].



There are several industries that were hit by tariffs. Let us look at how companies behave in a trade war, how they react to new conditions. American automakers sell most of their products in the Chinese market. In 2018, as a countermeasure, the Chinese government raised tariffs from 15% to 40% for all automobiles entering its market from the US. This hasn't affected the Chinese so much, bearing in mind that the Asian nation has a thriving automobile sector that can satisfy the local market. On the other hand, American electric automakers including Tesla Inc. (TSLA) will be feeling the pinch in the long run if the China-US trade tension deteriorates. Auto parts sellers will also stand to lose if the situation won't improve. That being said, things are looking up for this industry as the Chinese government promised to suspend the tariffs as an act of good-will. If the US could return the gesture, fortunes are likely to turn in favor of American automakers.

The Chinese government cut off imports of corn, soybeans, nuts, lobster, and other farm products from the US. The American farmers are now struggling to find a market for their produce, which has, in turn, affected their productivity. Tractor manufacturers and farm input sellers are also feeling the pinch. Processed food companies in the US might be forced to lay off workers and close some of their processing plants if things remain as they are.

Most tech companies in the US have opened shops in China, some of them including NVIDIA Corp. (NVDA) and Intel Corp. (INTC). Chinese tech manufacturers, on the other hand, depend on American semiconductor suppliers to run their businesses. An escalation in the U.S.-China trade war could really hurt tech traders in both countries.

Polaris (PII) makes snowmobiles, all-terrain vehicles and boats. Its management team has scrambled to offset the higher costs of tariffs through 60 different initiatives. The company has absorbed about $5 million of tariff-related costs this year by moving to source parts outside of China and negotiating with suppliers, among other things, CEO Scott Wine said on the company's most recent earnings call.

Harley-Davidson's (HOG) tariff trouble was a $21.6 million hit to third-quarter earnings, up sharply from last year. Once hailed by President Donald Trump as the kind of American company his trade war was meant to protect, higher costs for steel and aluminum to make its bikes in the US has coincided with a demographic shift that favors big new markets in Asia, and fewer Americans buying Harleys [55].

But companies acted already while trade war began. On August 23th 2019 president Trump demanded USA companies to move their production out of China. Given the proximity to China, Southeast Asian countries including Vietnam, Indonesia and

Malaysia have attracted attention in recent months as potential alternative sourcing destinations. A handful of firms have successfully shifted some of their production to these countries, but many have been stifled by a dearth of specialized supply chains and labor shortages (in Cambodia, over 40% of all goods inspected last quarter did not meet inspection standards).

For example, Boeing didn't move its production from China since it creates more than 1 billion dollars for Chinese economy. Apple is another prime example. Most of the technology giant's products are built in China, and its largest supplier Foxconn produces the lion's share of the company's iPhones in 29 factories in the central province of Zhengzhou. Taken in total, roughly 50% of Apple's supplier locations are based in China, up 5% just in the past four years. It would take years for Apple to leave China altogether and could clear the way for competitors like Samsung to eat into its market share. Computer makers HP Inc. and Dell Technologies are reportedly contemplating moving up to 30% of their notebook production out of China. Japan's Nintendo is also going to pull a portion of its video game console production from China to Vietnam. Not only are foreign companies rethinking its production location, a handful of Chinese companies are also leaving China. Chinese multinational electronics company TCL is moving its TV production to Vietnam, while Chinese tire maker Sailun Tire is transitioning its manufacturing line to Thailand, Nikkei reported. Thus, Vietnam wins from trade wars since several firms already moved its production to country and more are coming [53].

Brooks Sports is relocating its running shoe production to Vietnam. Sketchers, an American shoe company, is in India now; Asics, a Japanese footwear producer, is also looking at Vietnam, Nikkei reported; Steve Madden, the footwear and handbag maker, shifted its production to Cambodia, the company said; Gap, the clothing and accessories retailer, has started up new factories in Indonesia, Vietnam and Bangladesh, the company said. Komatsu, a Japanese company that makes construction and mining equipment, has already relocated some production from China to the U.S. and Thailand. Panasonic moved its in-car equipment production to Mexico, Nikkei reported [78].

For the world economy the trade war brought the issue of WTO activity and its importance. From our perspective, the WTO is in need of reorganization, update because the system simply doesn't work. The future of Doha round remains uncertain. The functioning of the Appellate Body is under question as well as the future of dispute settlement mechanism. At the same time, we experience the growth of bilateral trade negotiations which also sometimes handle trade disputes issue. For example, the US-China Phase One deal does include the mechanism. So, it is clear that WTO need to update its economic policy but the question of how to do it – remains unanswered. The growing tensions between China and United States could possibly provide a new wave of rising protectionist measures, especially taking into account the absence of DSM.

Evaluating Trump's action – the main purpose of those tariffs was to protect domestic industry of United States. However, by imposing tariffs and aiming them against Mexico, China, European Union, in a word – big economies, those tariffs also affected poor and small countries. From this point of view, the basis for imposition of tariffs – Section 201 of the Trade Act of 1974 – looks unreasonable. Additionally, such actions following the main trend of new US Administration and policy – as we know, United States threatens the international trading system. Particularly, United States blocked the appointment of new judges of the WTO Appellate body which makes WTO Dispute Settlement mechanism not functioning. The same path we can derive from here – the imposition of tariffs in fact is against WTO commitments to protect, provide favorable conditions for developing countries, especially the small ones.

Since that moment countries were at negotiating process. Already in 2018 in December after the first round of tariff escalations both sides announced their intentions to negotiate in order to halt the escalation of tariffs, especially with regard to following tariffs that were expected to enter into force in January 2019. However, there was no joint proposition from both sides but proceeding negotiation countries delayed the imposition of tariffs which was a good sign.

At the same time, on July 2018 the US Trade Representative releases a list of $200 billion of imports from China to be subjected to new 10 percent tariffs after public hearings in August. Intermediate goods, like computer and auto parts, make up 47 percent of the list. Consumer goods are more heavily targeted than in the previous June 15 list—including telephones, computers, furniture, lamps, and luggage. Later on, the date of imposition of new tariffs was initially moved and then the plan of imposition of those tariffs changed. First of all, the tariffs were increased to 25 percent and then the date was removed – it became a part of negotiation process. And in January 2020, almost after 1.5 year after first tariffs impositions countries signed a Phase One Deal. This Agreement officially included the rollback of tariffs, expansion of trade purchases, and renewed commitments on intellectual property, technology transfer, and currency practices.

So far, the US has slapped tariffs on US$550 billion worth of Chinese products. China, in turn, has set tariffs on US$185 billion worth of US goods. On December 13th both countries announced that they had reached an agreement – Phase One Deal. The decision was announced just before the new tariffs expected to enter into force which could affect large amount of consumer goods. The US has agreed not to proceed with 15 percent tariffs on US$160 billion worth of consumer goods scheduled to take effect December 15, and will reduce the September 1 tariffs on US$120 billion of Chinese goods – halving it from 15 to 7.5 percent. However, the 25 percent tariffs on US$250 billion of Chinese imports will maintain, and further reductions will be linked to progress in future trade negotiations. China, on its part, has agreed to increase the purchase of US goods and services by at least US$200 billion over the next two years, suspend retaliatory tariffs also scheduled for Sunday, implement intellectual property safeguards, and have a tariff exclusion process in place. It appears that among its potential purchases, China will import US agricultural products worth US$40 billion to US$50 billion – in each of the next two years. China's Customs Tariff Commission of the State Council announced Thursday that it had released the second set of US goods to be excluded from the first round of additional tariffs. The exemption will be effective for a year, from December 26, 2019 to December 25, 2020.

Previously, in September, China had announced two lists of goods to be excluded from its first round of counter-tariffs on US products. Tariffs that were already imposed will not be refunded. The Commission also stated that it would not be excluding more US products that were subject to the first round of additional tariffs – for now.

Finally, on January 15th US and China finally signed the phase one trade deal. As it was noted, China, on its part, agreed to purchase at least an additional US$200 billion worth of US goods and services over the next two years – above a baseline of US$186 billion purchases in 2017.

This includes:

• US$ 78 billion in additional manufactured goods;

• US$ 54 billion in additional energy purchases;

• US$ 32 billion in additional farm products purchases; and

• US$ 38 billion worth of services.

Details on specific product purchases in each of the categories will not be released as both sides feel such disclosure could risk distorting markets. The phase one deal, also touches upon issues long-disputed by China and the US, such as: intellectual property, technology transfer, currency, and foreign exchange.

Following this action, on February 7th China's Finance Ministry announced that it will halve tariffs on 1,717 US goods, lowering the tariff on some items from 10 percent to 5 percent, and others from 5 percent to 2.5 percent to take effect February 14, 2020. The tariff cuts will apply to a list of additional tariffs that took effect on September 1, worth US$75 billion. The announcement reciprocates the US commitment under the Phase One Trade Deal to slash tariffs from 15 to 7.5 percent on US$120 billion worth of goods on the same date.

Crude oil, meat products, and soybean are among products that stand to benefit from the tariff cuts. The reductions will see crude oil tariffs drop from 5 percent to 2.5 percent, soybean tariffs from 30 percent to 27.5 percent, and tariffs on pork, beef, and chicken, drop from 35 percent to 30 percent.

Also, China's Tariff Commission announced that 696 US commodities will be exempted from Chinese additional tariffs, as the Chinese government seeks to fulfill the commitments made in the trade deal with the US. The 696 products include pork, beef, soybeans, wheat, corn, sorghum, ethanol, liquefied natural gas, crude oil, steel rails, and some medical equipment.

From March 2, 2020, the Tariff Commission will accept applications from Chinese companies that intend to sign contracts to purchase and import related goods from the US. China's Tariff Commission unveiled two new lists to exempt some of the US imports from additional Chinese tariffs. The two lists will both be effective for one year from February 28, 2020 to February 27, 2021. Exemptions include timber, presswork, hydraulic motor, diaphragm pump, aircraft parts, and medical equipment like non-invasive ventilators and temperature sensors.

The deal is supposed to present a win-win situation first of all with regard to escalated conflict. It is aimed at easing tariff escalation and somehow elaborate the ways out. However, as we can see, Chinese side took big part of commitments in the deal. Country's state-owned enterprises have to take the burden and spend money. Will it bring to de-escalation? Probably not. The problem here is that the deal is directed at tariff escalation itself but not the roots of the escalation. The deal should be expanded and include certain areas in which negotiation process should take place.

First of all, we should mention the issue of state-owned enterprises and "Made in China 2025" initiative. United States is concerned about this program and sees it as one of the main threats to US economy. One of the main aims of the program is the development of SOEs and making them the world-class companies. What is more important, this initiative includes subsidies from Chinese government. It can represent in future a new basis for United States to impose new tariffs on Chinese imports. The question is whether there be special sector or any kind of commitments on this issue in possible Phase Two Deal.

Second important issue, also linked with the first one, Huawei company. It was fast expanding company, but this trend dramatically changed. By the moment, the company is at the center of trade war. President Trump issued an order to ban all United States companies from utilizing information and communications technology from any party considered a national security threat. This implies that under such principle more companies could be a target in China-US trade war. For sure, the agreement needs an expansion of this issue. Not particularly Huawei, but the inclusion of national security threat with regard to Chinese telecommunication companies.

Third, one of the issues that was touched by Phase One Deal is Chinese financial market. During last decades, this sector of Chinese economy was one of the most protected as well as transportation, agriculture, etc. So, foreign companies had low level of investment shares in Chinese firms. By introducing the opening of financial services sector, Chinese side is giving up too much because it gives more opportunities for foreigners and moreover, it can reduce significantly the share of Chinese domestic companies. At the same time, there was no such commitment made by United States and it can in turn arise a new set of concerns for Chinese government. Still, United States and particularly Trump accused China for unfair trade practices. The situation with financial sector could be the same – as far as Chinese side wouldn't agree on some commitment on fair practices (namely, threatening equally foreign and domestic firms), USA wouldn't open its financial sector. Of course, this issue will be discussed during next round of negotiations, however, it's still represents a part of concerns within USA-China trade deal.

Fourthly, Phase One Deal includes the dispute resolution mechanism under Chapter 7 "Bilateral evaluation and dispute resolution" [16]. The basis of mechanism is consultation process which should take place once a complaint has been made. First concern about this mechanism is that there are no particular provisions on monitoring. For example, if United States finds that there are violations with regard to intellectual property rights – there is no provision on how to detect this violation, especially from Chinese side because it leaves place for both parties not to follow their obligation. So, it's mainly gentleman's agreement (which is not surprising). Moreover, there may be some different interpretations of juridical language within the agreement. Both issues are typical for any type of agreement which includes disputes resolution mechanism. Within the WTO framework those issues were covered, but since its crisis, parties have to make such provisions.

Fifth, and final issue – there is no explicit statement within Phase One Deal about future tariff reductions. It could be again resulted in future increase of protectionist measures, especially taking into account current global economic situation and coronavirus crisis.

The future development of the trade war is dependent on many factors but there are certain scenarios that we can derive within our research.

First of all, it should be noted that recent trends in global economic system is driven by rising protectionism. There a new cluster of protectionist measures that are not full enough covered by the WTO law. Nontariff measures should be incorporated into a legal framework and it requires WTO reformation. The multilateral trading system in its current stage is threatened by the WTO crisis and United States actions and statements towards the WTO. Coronavirus crisis provided new tensions between countries with regard to trust, especially between China and United States due to reciprocal accusations regarding the nature of the virus. Trade war provided political and economic uncertainties. All those issues could influence the tendency to an even more global protectionism emergence.

Speaking explicitly about trade war, there are some discussions on what is the better way to perceive and analyze the future of trade war, from which position. One of the ways is typically apply game theory. We could analyze the situation from the position of a game theory, but there are some problems arise within such model. We construct the matrix representing possible outcome reveals us some peculiarities of the case.

Figure 3. Zero-sum game matrix.

		China	
		Deal	Escalation
USA	Deal	(1;1)	(1;0)
	Escalation	(1;0)	(1;-1)

In this matrix we typically put two countries, two ways of actions and the outcome. We put 1 in the escalation-escalation situation for United States since the actions of Trump are guided by the intentions to change the situation. Simply, we say that

Trump would not agree on de-escalation of conflict. But such model does not allow to take into consideration external factors influencing both countries – coronavirus crisis, internal factor such as presidential elections. At the same time, there is no reason for Chinese side to escalate the conflict. Moreover, China's traditional strategic approach to trade negotiations is always aimed at making a deal. That's why this model is hard to apply and we present all possible scenarios within such context: 1) USA tends to escalation and deal, 2) China tends to make a deal; 3) Taking into account the influence of other suitable factors. It leads us to three possible ways of future trade war development: 1) Reaching a new status-quo, 2) Escalation of conflict, 3) Reaching a new trade deal.

The first scenario – is the most possible one. The reasons behind this are following: COVID-19 crisis resulted in a huge economic drop and decline in economic activities. Economies need time to normalize after the crisis. Thus, China could delay the fulfillment of Phase One Deal and at the same time prolong the trade negotiations attempting to agree on new conditions. The bilateral talks in this case doesn't lead to any agreement but as far as trade talks continue – there is no further escalation. Taking into account forthcoming presidential elections in United States, it's not likely for Trump to initiate new trade tensions due to the same reasons provided by crisis. It is possible that countries relax their trade restrictions and at least keep it that way till economic recovery.

The second scenario assumes, first of all, harsh actions by Trump as he wishes to win in elections by demonstrating himself as a politician who cares about his statements and plays a zero-sum game. Another reason, why this scenario is included – the Phase One Deal does not include a variety of issues which are at the center of, first, US accusations against China, and second, are essential to address economic basis for trade war. If there is no agreement between two sides, the escalation of trade war results in even more protectionism and make impossible for firms to do business in both countries. The higher prices for products significantly hit producers and consumers. Firms already began the process of reallocation of their investment in other countries (such as Vietnam, Taiwan). Taking into account crisis – for firms, investors, producers it's not likely to locate their money in the areas which are covered by the trade war. In other words, it's not likely to place your money where economic uncertainty and risks remain high. To deal with economic consequences, China would more invest in Latin America, Europe. Spillover effect, changes in terms of trade lead to changes in Global Value Chains. Also, the reelection of Trump could result in this particular scenario as he would have more time to implement political decisions which usually take aggressive form.

The new trade deal can be negotiated by including at least some issues mentioned above. The deal should be developed and the second phase has to include significant issues. The recovery phase after crisis requires from sides to act mutually and it leads to proceeding trade talks. This scenario is highly dependent on elections in United States. Clearly, that trade tensions in case if Trump is not reelected would decrease, though the main trade towards conflict between countries remains the same as no significant and basic issues are not solved or negotiated. The Chinese economy in its current conditions still can represent a threat to US economy and certain issues (like liberalization of Chinese economy, state-owned enterprises, intellectual property rights) should be included in trade deal in order to settle the conflict.

Conclusion

The emergence of trade war was provided by several reasons coming from the rapid development of Chinese economy and increased economic ties between countries. Though, the trade imbalance itself is a good sign for American economy as stated by Coughlin. There are several reasons behind the trade war. From American perspective, the initiation of protectionist measures is justified by reduction of trade deficit, protection of domestic industries and jobs, and, what's more important and significant, address Chinese economic policies such as IP protection, state-owned enterprises and subsidies.

The most important period which influenced the trade imbalance and thus trade war emergence – the Chinese Accession to the WTO. After China's Accession its economy got a momentum for rapid economic development. The Go Out Policy played in this period the most important role as it influenced the export growth from China. Both, Open Door and Go Out policy had an impact in increasing the role of China as FDI recipient. The process of increase of interdependency between countries was inevitable, especially taking into account such tendencies as division of labor, global reallocation of sources and globalization. The technology-intensive production of United States with its high skilled labor and scientific researches is at upper level of vertical integration of supply chain and demands the lower cost of production which can be received in China.

The rapid rise of China in the world market created anxiety from American side with regard to leadership in global economic system. Also, this reveals why Trump's actions are so aggressive, especially taking into account his "Make America Great Again" policy. This conflict is not simply economic one, it is a multidimensional conflict that reveals cultural, political and economic differences between countries that has an impact in emergence of a trade war.

The deep roots of trade war reveal the importance of FDIs to China. More investment to China lead to more American companies operating in China. It provides value-added in Chinese export and thus increase in trade deficit. The development of investments process between countries had got its momentum in the mid of 2000s after China's Accession to the WTO. This stage was the ground of further and inevitable process of integration of countries' economies. The most significant reason of flow of United States FDIs to China was the cheaper costs of production. FDIs were aimed at the development of information technologies, chemicals, basic materials – manufacturing while Chinese companies and especially government were interested in the development and maintaining of competitiveness. The current situation of FDIs between countries represented by a huge drop of Chinese investments into United States. Further contribution of such fact can be further widen the gap between cumulative FDIs from China to USA and from USA to China due to further asset divestitures, exchange rate changes, asset appreciation.

Also, the trade war creates a trade diversion effect. First of all, both countries now buying products from other origins rather than from each other. Secondly, firms are seeking new places to deploy their production. Thus, the winners in this case are Southeast Asian countries such as Vietnam and Taiwan. As the trade war has dragged on, companies have had to consider finding alternative sources of inputs for their production chains. Less simple than buying completed goods from new vendors, switching to new component suppliers comes with friction costs as well as, potentially, higher prices. Lower demand and the fragmentation of production chains caused by the trade war have diminished the foreign trade flows of goods from China's neighbouring countries as well. The rate of import growth decreased, especially from United States and this caused as well less import from neighbors.

The increase in tariffs already impacted the global GDP growth. The world real GDP growth declined in 2018 from 3.9 to 3.6, in 2019 from 3.6 to 2.9, overall by 1 percent. Almost the same pattern for China – in 2018 from 6.9 to 6.7, and to 6.1 in 2019. For United States the situation differs: its GDP growth declined in 2017 was 2.4, then coming sharp increase to 2.9 in 2018 and in 2019 the rate dropped to 2.3. The continuation of the trade war has increased uncertainty globally and has raised the World Trade Uncertainty index for trade policy. For the world economic system, the trade war brought the issue of WTO activity and its importance. From our perspective, the WTO is in need of reorganization, update because the system simply doesn't work. The future of Doha round re-mains uncertain. The functioning of the Appellate Body is under question as well as the future of dispute settlement mechanism.

The Phase One Deal in its current status does not provide the solution to settle the trade war. It does not include significant issues as IP protection, financial market openness, etc. So, to somehow develop the process and decrease trade tensions countries have to negotiate those issues and include in the second phase. However, up until now the second phase is under doubt because of coronavirus crisis and because it should include issues that are important for both economies.

We developed a classical scenario analysis of future trade war development. Several factors are included in the analysis that influence the possible outcome the most, namely: the 2020 United States presidential election in November, coronavirus crisis and roots of the trade war. The last has an impact on Trump's policy in general. Three scenarios were provided: 1) reaching a new trade deal, 2) escalation of conflict, and 3) reaching a new status-quo.

The negotiation of a new deal requires the adjustment of critical issues surrounding, for instance, Huawei or Chinese subsidies to state-owned enterprises and technology control. The recovery phase after crisis requires from sides to act mutually and it leads to proceeding of trade talks. This scenario is highly dependent on elections in United States. Clearly, that trade tensions in case if Trump is not reelected would decrease, though the main trade towards conflict between countries remains the same as no significant and basic issues are not solved or negotiated.

Talking about escalation of conflict we still consider the absence of crucial issues in the Phase One Deal which are at the center of, first, US accusations against China, and second, are essential to address economic basis for trade war. If there is no agreement between two sides, the escalation of trade war results in even more protectionism and make impossible for firms to do business in both countries. Though we don't know yet who wins in elections, the reelection of Trump has highest effect in this scenario. Trump's policy usually takes aggressive form and thus, the escalation is possible result. The higher prices for products would significantly hit producers and consumers and firms already began the process of reallocation of their investment in other countries (such as Vietnam, Taiwan).

From our position, the most likely outcome is the reaching a new status-quo. As it was mentioned, China could delay the fulfillment of its obligation under the deal. Further trade negotiations also dependent on the recovery countries' economies. In this case, even with Trump's reelection the recovery phase takes a long time and governments are not likely to initiate new trade tensions but still, the protectionist measures remain in place for protection of domestic producers after damage caused by crisis.

Thus, providing a scenario analysis of future trade war development, the most likely outcome is the delay of trade negotiations on the Phase Two, renegotiation of Phase One Deal conditions and obligation because of coronavirus impact on the global economy, and coming to a new status-quo.

References

Official documents, agreements

1. BeijingReview. The Third Plenary Session of the 11th Central Committee of the Communist Party of China. — http://www.bjreview.com/nation/txt/2009-05/26/content_197538.htm (accessed: 01.06.2019).

2. China's Twelfth Five Year Plan. — 2011. — URL: https://cbi.typepad.com/china_direct/2011/05/chinas-twelfth-five-new-plan-the-full-english-version.html (accessed: 30.05.2019).

3. Decision of the Central Committee of the Communist Party of China on Some Major Issues Concerning Comprehensively Deepening the Reform. — China Internet Information Center. — January 16, 2014. — URL: http://www.china.org.cn/china/third_plenary_session/2014-01/16/content_31212602.htm (accessed: 01.06.2019).

4. Economic and trade agreement between the government of the united states of America and the government of the people’s republic of China. Office of the United States Trade Representative. — 15 January 2020. — URL: https://ustr.gov/sites/default/files/files/agreements/phase%20one%20agreement/Economic_And_Trade_Agreement_Between_The_United_States_And_China_Text.pdf (accessed:16.04.2020).

5. UNCTAD. WORLD INVESTMENT REPORT 1992. URL: https://unctad.org/en/pages/PublicationArchive.aspx?publicationid=623 (accessed: 29.03.2019).

6. UNCTAD. WORLD INVESTMENT REPORT 1993. URL: https://unctad.org/en/pages/PublicationArchive.aspx?publicationid=640 (accessed: 04.04.2019).

7. UNCTAD. World Investment Report 2018. URL: https://unctad.org/en/PublicationsLibrary/wir2018_overview_en.pdf (accessed: 12.06.2019).

8. World Trade Organization. United States — Measures Affecting Imports of Certain Passenger Vehicle and Light Truck Tyres from China. — URL: https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds399_e.htm (accessed: 15.11.2019).

Bibliography

9. Попова, Л.В. Присоединение Китая к ВТО: опыт переговоров и первые результаты. — Вестник СПбГУ, 2006. — Серия 5: Экономика. №2. — с. 109-120. — URL: https://cyberleninka.ru/article/n/prisoedinenie-kitaya-k-vto-opyt-peregovorov-i-pervye-rezultaty (Дата обращения: 26.05.2020).

10. Попова, Л.В. Прямые зарубежные инвестиции КНР: основные тенденции и перспективы для мировой экономики. — Вестник СПбГУ, 2011. — Серия 5: Экономика. №2. — с. 52-63. URL: https://cyberleninka.ru/article/n/pryamye-zarubezhnye-investitsii-knr-osnovnye-tendentsii-i-perspektivy-dlya-mirovoy-ekonomiki (accessed: 20.06.2019)

11. Backler, J. China Goes West: Everything You Need to Know About Chinese Companies Going Global. — Palgrave Macmillan, United States. — 2014 — p. 190. — ISBN: 978-1-137-41012-2.

12. Bhagwati, J. Protectionism. — The Massachusetts Institute of Technology Press, United States. — June 1988. — p. 163. — ISBN: 9780262022828.

13. Biliang, H. China’s economic transformation. — Dialogue of Civilizations Research Intitute. — January 16, 2018. — URL: https://doc-research.org/2018/01/chinas-economic-transformation/ (accessed: 10.12.2018).

14. Bloomberg. How the World’s Purchasing Managers See Current Business Conditions — URL: https://www.bloomberg.com/graphics/global-pmi-tracker/?srnd=economics-vp (accessed: 14.04.2020).

15. Boden, G. China's Accession to the WTO. — Economic Benefits. The Park Place Economist. — 2012. — Volume 20. — p. 13-17. — URL: http://digitalcommons.iwu.edu/parkplace/vol20/iss1/8 (accessed: 06.04.2019).

16. Bown C., Jung E., Zhang E. Trump Has Gotten China to Lower Its Tariffs. Just Toward Everyone Else. — Peterson Institute for International Economics. — June 12, 2019. — URL: https://piie.com/blogs/trade-investment-policy-watch/trump-has-gotten-china-lower-its-tariffs-just-toward-everyone (accessed: 15.06.2019).

17. Bown C., Jung E., Zhang E. Trump's Steel Tariffs Have Hit Smaller and Poorer Countries the Hardest. — Peterson Institute for International Economics. — November 15, 2018. — URL: https://www.piie.com/blogs/trade-investment-policy-watch/trumps-steel-tariffs-have-hit-smaller-and-poorer-countries#_ftnref1 (accessed:16.04.2020).

18. Bown C., Jung E., Zhiyao L. Trump and China Formalize Tariffs on $260 Billion of Imports and Look Ahead to Next Phase. Peterson Institute for International Economics. — September 20, 2018. — URL: https://piie.com/blogs/trade-investment-policy-watch/trump-and-china-formalize-tariffs-260-billion-imports-and-look (accessed: 30.11.2018).

19. Bown C., Junie J. Solar and Washing Machine Safeguards in Context: The History of US Section 201 Use. — Peterson Institute for International Economics. — URL: https://www.piie.com/blogs/trade-and-investment-policy-watch/solar-and-washing-machine-safeguards-context-history-us (accessed: 15.11.2019).

20. Bown C., Kolb M. Trump’s Trade War Timeline: An Up-to-Date Guide. — Peterson Institute for International Economics. — URL: https://www.piie.com/sites/default/files/documents/trump-trade-war-timeline.pdf (accessed: 13.03.2020).

21. Bown, C. China’s Latest Trade Maneuver Is Worrying. — Peterson Institute for International Economics. — February 6, 2018. — URL: https://www.piie.com/commentary/op-eds/chinas-latest-trade-maneuver-worrying (accessed:16.04.2020).

22. Bown, C. Donald Trump’s Solar and Washer Tariffs May Have Now Opened the Floodgates of Protectionism. — Peterson Institute for International Economics. — January 23, 2018. — URL: https://www.piie.com/commentary/op-eds/donald-trumps-solar-and-washer-tariffs-may-have-now-opened-floodgates (accessed:16.04.2020).

23. Bown, C. Steel, Aluminum, Lumber, Solar: Trump’s Stealth Trade Protection. — Peterson Institute for International Economics. — URL:

https://www.piie.com/system/files/documents/pb17-21.pdf (accessed: 18.11.2019).

24. Bown, C. Trump's Steel and Aluminum Tariffs: How WTO Retaliation Typically Works. — Peterson Institute for International Economics. — URL: https://www.piie.com/blogs/trade-investment-policy-watch/trumps-steel-and-aluminum-tariffs-how-wto-retaliation-typically (accessed: 15.11.2019).

25. Brzezinski, Z. The Group of Two that could change the world. — Financial Times. — January 13, 2009. — URL: https://www.ft.com/content/d99369b8-e178-11dd-afa0-0000779fd2ac (accessed: 07.06.2019).

26. Buckle, M. Black cat, white cat... — ChinaDaily. — August 2, 2018. — URL:

27. Child J., Rodrigues S. The Internationalization of Chinese Firms: A Case for Theoretical Extension? — Management and Organization Review, Cambridge University Press. — November 2005. — p. 381-410. — ISSN: 1740-8776.

28. China Power. How well-off is China's middle class? — URL: https://chinapower.csis.org/china-middle-class/ (accessed: 01.06.2019).

29. Congressional Budget Office. An Update to the Budget and Economic Outlook: 2019 to 2029. — URL: https://www.cbo.gov/publication/55551 (accessed: 14.04.2020).

30. Coughlin C., Chrystal A., Wood G. Protectionist Trade Policies: A Survey of Theory, Evidence and Rationale. — Federal Bank of Saint Louis. — January 1988. — URL: https://files.stlouisfed.org/files/htdocs/publications/review/88/01/Protectionist_Jan_Feb1988.pdf (accessed: 18.05.2020).

31. Economic policy uncertainty. Economic Policy Uncertainty Index. — URL: https://www.policyuncertainty.com/ (accessed: 14.04.2020).

32. G20 Initiative. — Global Infrastructure Outlook. — 2019. — URL: https://outlook.gihub.org/ (accessed: 15.06.2019).

33. Glenn E., Stella Q. China working-age population shrinks, presenting pitfall for pension plans. — Reuters, Beijing. — February 28, 2018. — URL: https://www.reuters.com/article/us-china-economy-population/china-working-age-population-shrinks-presenting-pitfall-for-pension-plans-idUSKCN1GC18C (accessed: 11.12.2018).

34. Hanemann T., Rosen D., Cassie G., Lysenko A. Two-Way Street: 2020 Update US-China Investment Trends. — URL: https://arraysproduction-0dot22.s3.amazonaws.com/rhodiumgroup/assets/icon/TWS-2020_Report_8May2020_Final.pdf (accessed: 21.05.2020).

35. Hanemann T., Rosen D., Gao C., Lysenko A. Two-Way Street: 2019 Update US-China Investment Trends. — National Committee on United States-China Relations. — May 2019. — p. 50. — URL: https://arraysproduction-0dot22.s3.amazonaws.com/rhodiumgroup/assets/icon/RHG_TWS-2019_Full-Report_8May2019.pdf (accessed: 11.05.2019).

36. Harrison G., Rutström E. Trade Wars, Trade Negotiations and Applied Game Theory. — The Economic Journal, Oxford University Press. — May 1991. — Volume 101 (406). — p. 420-435. — DOI: 10.2307/2233549.

http://www.chinadaily.com.cn/a/201808/02/WS5b728ae4a310add14f385b4a.html (accessed: 01.12.2018).

37. Huang, Y. The role of foreign-invested enterprises in the Chinese economy: an institutional foundation approach. URL: https://www.rand.org/content/dam/rand/pubs/monograph_reports/MR1300/MR1300.ch7.pdf (accessed: 01.06.2019).

38. Hufbauer G., Jung E. Steel Profits Gain, but Steel Users Pay, under Trump's Protectionism. — Peterson Institute for International Economics. — URL: https://www.piie.com/blogs/trade-investment-policy-watch/steel-profits-gain-steel-users-pay-under-trumps-protectionism (accessed: 20.11.2019).

39. Ianchovichina E., Martin W. Trade Liberalization in China's Accession to WTO. — Center for Economic Integration, Sejong University. — Journal of Economic Integration — 2001. — Volume 16 (4). — p. 421–445.

40. Ikonen P., Kerola E., Vilmi L. The trade war has significantly weakened the global economy. — Bank of Finland. — November 12, 2019. — URL: https://www.bofbulletin.fi/en/2019/4/the-trade-war-has-significantly-weakened-the-global-economy/ (accessed: 14.04.2020).

41. International Monetary Fund. Real GDP growth, annual percent change. — URL: https://www.imf.org/external/datamapper/NGDP_RPCH@WEO/WEOWORLD/CHN/USA (accessed: 20.05.2020).

42. International Monetary Fund. World economic outlook update January 2017 infographic. — URL: https://www.imf.org/en/About/infographics/World-Economic-Outlook-Update-January-2017-Infographic (accessed: 14.04.2020).

43. Johnson, H.G. An Economic Theory of Protectionism, Tariff Bargaining, and the Formation of Customs Unions. — Journal of Political Economy, The university Chicago press. — June 1965. — Volume 73 (3). — p. 256-283. — ISSN: 00223808.

44. Krug B., Hendrischke H. China'S Institutional Architecture: A New Institutional Economics and Organization Theory Perspective on the Links between Local Governance and Local Enterprises. — Erasmus Research Institute of Management. — April 17, 2008. — URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1131026 (accessed: 04.04.2019)

45. List, F. National System of Political Economy. — URL: https://oll.libertyfund.org/titles/list-the-national-system-of-political-economy (accessed: 10.04.2020).

46. Manabe, K. Trade war hammers foreign investment in China and Southeast Asia. — Nikkei Asian Review. — August 25, 2019. — URL: https://asia.nikkei.com/Spotlight/Datawatch/Trade-war-hammers-foreign-investment-in-China-and-Southeast-Asia (accessed: 14.04.2020).

47. Martí, L., Puertas, R., Fernández, J. Industrial productivity and convergence in Chinese regions: The effects of entering the world trade organization. — Journal of Asian Economics, Elsevier. — April 2011. — Volume 22 (2) — p. 128-141. — DOI: 10.1016/j.asieco.2010.12.001.

48. Martin, E. Nearly 70% of Americans consider themselves middle-class-here's how many actually are. — CNBC. — September 26, 2018. — URL: https://www.cnbc.com/2018/09/26/how-many-americans-qualify-as-middle-

class.html (accessed: 05.04.2019).

49. Meyer, J. What is optimal tariff theory? — March 14, 2018. — URL: https://www.quora.com/What-is-optimal-tariff-theory (accessed: 11.05.2020).

50. Ministry of Commerce of China. MOFCOM Announcement No.44 of 2018 on Terminating the Anti-dumping and Countervailing Investigation against Imports of Grain Sorghum Originating in the United States. — URL: http://english.mofcom.gov.cn/article/policyrelease/buwei/201805/20180502746783.shtml (accessed: 15.11.2019).

51. Panchenko V., Reznikova N. From Protectionism to Neo-Protectionism: New Dimensions of Liberal Regulation. — International economic policy. — October 2017. — Volume 2 (27). — p. 91-111. — URL: https://www.researchgate.net/publication/326424326_From_Protectionism_to_Neo-Protectionism_New_Dimensions_of_Liberal_Regulation (accessed: 10.05.2020).

52. Ponciano, J. The Largest Technology Companies in 2019: Apple Reigns as Smartphones Slip and Cloud Services Thrive. — Forbes. — May 15, 2019. — URL: https://www.forbes.com/sites/jonathanponciano/2019/05/15/worlds-largest-tech-companies-2019/#6ea54314734f (accessed: 11.06.2019).

53. Reed, J. President Trump ordered US firms to ditch China, but many already have and more are on the way. — CNBC. — Sep 1 2019. — URL: https://www.cnbc.com/2019/09/01/trump-ordered-us-firms-to-ditch-china-but-many-already-have.html (accessed: 15.05.2020).

54. Report on the Work of the Government of China in 2010. — URL: http://www.gov.cn/english/official/2010-03/15/content_1556124.htm (accessed: 12.06.2019).

55. Romans, C. The trade war is destroying American profit. — CNN Business. — October 23, 2019. — URL: https://edition.cnn.com/2019/10/23/business/trade-war-companies/index.html (accessed: 15.05.2020).

56. Rongjy, Z. Report on the Outline of the Tenth Five-Year Plan for National Economic and Social Development. — URL: http://www.gov.cn/english/official/2005-07/29/content_18334.htm (accessed: 12.06.2019).

57. Rosen, D. China and the World Trade Organization: An Economic Balance Sheet. — Peterson Institute for International Economics. — June 1999. — URL: https://piie.com/publications/policy-briefs/china-and-world-trade-organization-economic-balance-sheet (accessed: 06.04.2019).

58. Sauvant K., Chen V. China's regulatory framework for outward foreign direct investment. — China Economic Journal. — February 2014. — Volume 7 (1). — p. 141-163. — DOI: 10.1080/17538963.2013.874072.

59. Schott J., Chorzempa M., Lu Z. Investment from China into the United States Has Fallen to Nearly Zero. — Peterson Institute for International Economics. — May 21, 2019. — URL: https://piie.com/research/piie-charts/investment-china-united-states-has-fallen-nearly-zero (accessed: 25.05.2019).

60. Sereda, V., Andreyuk N. Modern tendencies of use of protectionism in regulating international trade (in Russian). — Saratov University, Russia. — Economy, management, laws. — 2013. — Volume 3 (1).

61. STATISTA. Direct investment position of the United States in China from 2000 to 2017. — URL: https://www.statista.com/statistics/188629/united-states-direct-investments-in-china-since-2000/ (accessed: 01.06.2019).

62. Statista. Number of employed people in China from 2008 to 2018 — URL: https://www.statista.com/statistics/251380/number-of-employed-persons-in-china/ (accessed: 20.05.2020).

63. Suranovic, S. Policy and Theory of International Trade. — Saylor Foundation. — May 2010. — p. 338. — ISBN: 978-1-4533-2732-6.

64. The Foreign Investment Department of the Ministry of Commerce of China. Express on Imports and Exports by FIEs. — May 20, 2019. — URL: http://www.fdi.gov.cn/1800000121_49_4922_0_7.html (accessed: 30.05.2019).

65. The Guardian. Bush views Beijing as strategic competitor. — 8 March 2001. — URL: https://www.theguardian.com/world/2001/mar/08/usa.guardianleaders (accessed: 28.05.2019).

66. The manufacture of the iPhone. — Ohio State University. — URL: https://u.osu.edu/iphone/3-the-manufacture-of-the-iphone/ (accessed: 11.06.2019).

67. The observatory of economic complexity. United States profile. URL: https://oec.world/en/profile/country/usa/ (accessed: 17.04.2020).

68. The United States International Trade Commission. USITC announces remedy recommendations in its global safeguard investigation involving imports of crystalline silicon photovoltaic cells (whether or not partially or fully assembled into other products. — October 31, 2017. — URL: https://www.usitc.gov/press_room/news_release/2017/er1031ll857.htm (accessed: 15.11.2019).

69. The US-China investment hub. — URL: https://www.us-china-fdi.com/

70. The World Bank. TCdata360. — URL: https://tcdata360.worldbank.org/ (accessed: 30.05.2019).

71. Two-Way Street. 25 Years of US-China Direct Investment. — National Committee on United States-China Relations. — 2016. — p. 7. — URL: https://www.ncuscr.org/sites/default/files/page_attachments/Two-Way-Street-2016_Exec-Summary.pdf (accessed: 25.05.2019).

72. UNCTADSTAT. URL: https://unctadstat.unctad.org/EN/ (accessed: 14.06.2019).

73. Wang, H. A Deeper Look at China’s “Going Out” Policy. — Centre for International Governance Innovation. — March 8, 2016. — URL: https://www.cigionline.org/publications/deeper-look-chinas-going-out-policy (accessed: 15.06.2019).

74. Waugh, M. The US-China trade war is harming communities in the US. — Centre for economic policy research. — November 19, 2019. — URL: https://voxeu.org/article/us-china-trade-war-harming-communities-us (accessed: 14.04.2020).

75. Wenbin H., Wilkes A. Analysis of China’s overseas investment policies. — Center for International Forestry Research. — Working Paper 79. — p. 32. — DOI: 10.17528/cifor/003697.

76. Xiao, M. “Made in China” Facing Multiple Challenges as Manufacturing Industry Enters Pivotal Moment. — Interact Analysis. — URL: https://www.interact-analysis.com/made-in-china-facing-multiple-challenges/ (accessed: 30.11.2018).

77. Yushan Li. China’s go out policy – A review on China’s promotion policy for outward foreign direct investment from a historical perspective. — Centre for Economic and Regional Studies HAS, Institute of World Economics. — 2001. — Working Paper 244. — p. 1–44.

78. Zhang Y. Apple, Dell consider moving China production in trade war. — Who else? — USA TODAY. — July 24 2019. — URL: https://www.usatoday.com/story/money/2019/07/24/trade-war-tariffs-prompt-companies-pull-china-production/1768515001/ (accessed: 15.05.2020).