

**T.C.
ISTANBUL AYDIN UNIVERSITY
INSTITUTE OF GRADUATE STUDIES**



**THE TRADE WAR BETWEEN USA AND CHINA AND ITS EFFECT ON
GLOBAL ECONOMY**

MASTER'S THESIS

Laila Hannasi

**Department of Business
Business Administration Program**

MAY, 2023

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MAY, 2023

APPROVAL PAGE

DECLARATION

I hereby declare with respect that the study titled with: “The Trade War Between the USA and China and Its Effect on Global Economy” has been written by myself following the academic rules and ethical conduct. I also declare that all materials benefited in this thesis consist of the mentioned resources in the reference list. I verify all these with my honor.

Laila Hannasi

FOREWORD

I would like to take this opportunity to thank people who have made significant contributions to my achievement in my career and those who have also collaborated with me during the course of my studies.

First and foremost, all thanks to the Almighty Allah for making the program a success. Also, my profound appreciation goes to my thesis supervisor Dr. Öğr. Üyesi Murat UNANOĞLU for her unconditional support and motivation throughout all the process to make this research happen. My heartfelt thanks and appreciation go to my beloved parents for their unwavering love and support and encouragement to accomplish what I want in this life and reach my objectives and dreams.

I want to thank my sisters for being with me throughout this journey and who brought so much love and motivation during this time. I cannot forget to express my gratitude for my friends who encouraged me so much during the process of making this project. In this life, I have learnt to chase after what I have believed in and pray to get the best and the good in it. Life is about work with passion and dedication to reach what is beyond. I would like to tell the younger generation that always remember, THE SKY IS YOUR LIMITS.

January, 2023

Laila HANNASI

THE TRADE WAR BETWEEN USA AND CHINA AND ITS EFFECT ON GLOBAL ECONOMY

ABSTRACT

The USA and China are the most powerful countries in the global economy. They have been partners in international trade for almost twenty years and they represent more than 40% of global GDP. The two countries contributed in building one another's economy by constructing a solid relationship that helped in global economic growth. Throughout the history, the trade war that happened before had no winners. The trade-war between the US and China will contribute in global slowdown related to international economy that is based on international trade and global production as both of the parties contribute in a big share of the global production. The rise of tariffs was up to 17% between bilateral trade and had a decrease of only one percent in 2020. The trade war has resulted in a significant decline in trade between the US and China in 2019, as well as significant trade redirection to imports from other areas, resulting in a restructuring of Asian value chains.

The research consists on representing the reasons behind the tension between both countries and analyses the causes of it. In addition, we will look in the outcomes that might result on this trade war and how it will affect some certain fields and certain countries. This paper aims to represent the raise of tariffs related the imports-exports between China and USA in the past three years that lead to rise of tension between both parties.

Key Words: Trade war – US economy – Chinese economy – Trade tariffs – Global economy – Economic growth – Trade conflict.

ABD VE ÇİN ARASINDAKİ TİCARET SAVAŞI VE DÜNYA EKONOMİSİNE ETKİSİ

ÖZET

ABD ve Çin, küresel ekonomideki en güçlü iki ülkedir. Neredeyse yirmi yıldır uluslararası ticarete ortaklar ve küresel GDP'nin %40'ından fazlasını temsil etmektedirler. İki ülke, küresel ekonomik büyümeye yardımcı olan sağlam ve güçlü bir ilişki kurarak birbirlerinin ekonomisinin inşasına katkıda bulunmuşlardır. Tarih boyunca, daha önce de ticaret savaşları olmuş ancak kazananı olmamıştır.

ABD ve Çin arasındaki ticaret savaşı, her iki tarafın da küresel üretimin büyük bir kısmına katkısı olduğundan, uluslararası ticarete ve küresel üretime dayalı uluslararası ekonomi ile ilgili küresel yavaşlamaya da etki edecektir. İkili ticaret arasındaki tarife artışı %17'ye kadar çıkmıştır ve 2020'de sadece %1 azalmıştır. Ticaret savaşı, 2019'da ABD ile Çin arasındaki ticarete önemli bir düşüşe ve ticaretin ithalata önemli ölçüde yönlendirilmesine neden olmuştur. Asya değer zincirlerinin yeniden yapılandırılmasıyla sonuçlanmıştır. Ticaret savaşının en önemli sonucu, ticaret politikalarının hali hazırda süren belirsizliği olmaktadır.

Araştırma, iki ülke arasındaki gerilimin ardındaki nedenleri ortaya koymaktadır ve söz konusu nedenleri analiz etmektedir. Ayrıca bahsi geçen ticaret savaşının doğurabileceği sonuçlara, diğer alanlara ve konunun dışında kalan diğer ülkelere nasıl etki edeceği incelenecektir.

Bu çalışmanın amacı, Çin ile ABD arasında son üç yılda artan gerilimin neden olduğu ithalat ve ihracat ile ilgili tarifelerin yükseltilmesinin doğuracağı sonuçları anlamaktır. Ayrıca ikili ticaretteki belirsizlik ve etkileri de tartışılacaktır.

Anahtar Kelimeler: Ticaret savaşı, ABD ekonomisi, Çin ekonomisi, Ticaret tarifeleri, Küresel ekonomi, Ekonomik büyüme, Ticaret çatışması.

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ABBREVIATIONS

ASEAN	: Association of Southeast Asian Nations
BEA	: Bureau of Economic Analysis
CAR	: Cumulative Abnormal Return
CBO	: Congressional Budget Office
CFTA	: Continental Free Trade Area
CGE	: Computable General Equilibrium
EU	: European Union
FDA	: Food and Drugs Administration
FDI	: Foreign Direct Investment
FDIC	: Federal Deposit Insurance Corporation
FTC	: Federal Trade Commission
GB	: Great Britain
GDP	: Gross Domestic Product
GLF	: Great Leap Forward
GNI	: Gross National Income
GNP	: Gross National Product
GTAP	: Global Trade Analysis Project
GVC	: Global Value Chain
ICC	: Interstate commerce commission
IMF	: International Monetary Fund
LNG	: Liquefied Natural Gas
MENA	: Middle East and North Africa

NAFTA	: North American Free Trade Agreement
OPEC	: Organization of Petroleum Exporting Countries
PRC	: People's Republic of China
RTA	: Regional Trade Agreement
SEC	: Securities and Exchange Commission
SEE	: State Economic Enterprise
SOE	: State Owned Enterprise
SSS	: Social Security System
UK	: United Kingdom
UNCTAD	: United Nations Conference of Trade and Development
USA	: United States of America
VAT	: Value-added Taxes
WTO	: World Trade Organization
WWI	: World War I
WWII	: World War II

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I. INTRODUCTION

The United States of America and China are known as the world's most powerful and strongest powerhouses' economies. Each country has contributed to the growth of the other one by their foreign trade relationships. Mostly, China's economy has expanded when it became a part of the world trading organization (WTO). However, the tension between the two countries started raising and becoming a real issue in 2018 due to the escalation of tariffs on one another's goods and becoming a major political issue. How did this trade war start? and what is the real cause behind it?

For a very long time, the United States of America (USA) was dominant in international trading. The history of this starts back to 1775 when the first trade made by the USA with other countries was with the kingdom of Morocco. The trade was made despite the power and position that Great Britain (GB) had. Years later, the USA has become significant with more allies that made it the strongest economy in the world and number one globally.

On the other hand, China got its recognition from the united nation (UN) and the USA as the People's Republic of China (PRC). In the early 1970s, diplomatic ties were formed between the two countries. 9 years later, USA and China establish new contracts for their relationships by the presence of US president **Jimmy CARTER** and Chinese vice president **Deng XIAOPING**.

The official trading bond between the two countries started in 2001 and China was admitted to the World Trade Organization (WTO) in 2001, and the most important trading partners for each other. Since then, the USA has imported from China more than it has exported to it.

The trade among the two countries has made China the second-largest economy in the globe, the USA's largest creditor with almost \$600 billion, and the dominant country in its continent by exceeding Japan with \$5.88 trillion in the total Gross domestic product (GDP) in 2010. In the same year, the USA sees the Chinese

improvement in their economy as a challenge to their economic and geopolitical position. As a result, under the guise of violating global trade conventions, US former President Barack OBAMA slapped quotas and levies on Chinese goods.

The tension between the two countries starts rising in 2018 and bring with its major issues to discuss related to politics, economy, and climate change. President Donald TRUMP intensified the conflict by imposing fresh tariffs on Chinese imports, accusing China of taking advantage of the trade regulations made between the countries.

The conflict between the two countries contributed to major losses for both parties. It has cost higher prices in consumption, financial crisis for manufactures and farmers, a slowdown in economic growth, shifting to other supply chain companies in other countries, and mainly the suffering of other nations have faced due to this conflict. Statistics have confirmed that global economic growth has lowered in 2019 from 3.6% to 3.3% than expected in 2018. The decision made on behalf of the US government did not only influence negatively the Chinese administrations and businesses but also American businesses, farmers, and manufacturers. These businesses suffered from a huge decrease in exportation from the USA to China, while China's trade deficit had increased while working with other countries.

In 2019, President Donald Trump raises tariffs again with an increase of up to 25% on Chinese goods. On the other hand, China has made an increase in American goods too. The disagreement this time did not include only the economic side, but also the national security of the USA that the American government saw was threatened by the Chinese telecommunications company "Huawei" for spying on American citizens. In addition, the violation of human rights and democracy in Hong Kong and being a currency manipulator for several years.

The tension got escalated in 2020 due to the spread of coronavirus and causing a global pandemic with each side accusing the other of being the reason behind the virus and adding to it more conspiracy theories. Many issues have shown up in the last two years that condemn China's behavior in countless aspects.

The stock market was also hit by the trade war. An immense amount of American businesses experienced a big fall in their stock prices such as **Boeing** and **Caterpillar Inc** due to the increase in tariffs.

Globally, a lot of other countries have suffered from this warlike Germany in the European Union (EU) even it still had a good relationship with both parties (the USA and China). Other countries like Great Britain, Canada, South Korea, and Japan have had a weak performance in manufacturing due to the damages caused by the raise of the tension. On the other side, the positive one, some countries had benefited from this silent war. For example, Vietnam had benefited the most in the Asian continent by manufacturing more for technology companies. Other countries had their fair share as well and had more job opportunities to offer also more manufacturing contracts that will help their economy grow.

II. LITERATURE REVIEW

A. The History of American Economy

Throughout the years, American history has been diverse in different fields. From the colonial era between 1607-1776, to present days in 2021. Having a glimpse on the economic history gives a clear outlook and understanding of the steps taken to grow a powerful economy such as the USA's one.

The USA's economic background is based on the European settlers back in the 16th – 17th century. During these times, the land of America was inhabited by native Americans only who are called “**Indians**”. These people were organized into tribes and build their own economic system that was based on trading among the tribes only and some others from south America.

In the colonial era between 1607 and 1776, the English settlement was dominant and initiated the industrial revolution years later. In the early years of the colonial era, the USA or as it was known back then as the “**new world**” suffered from poverty and it was a criterion of the norms as well as frequent wars. Before 1750, chronic hunger, malnutrition, diseases, illness and resulting early death were the norm for almost all people everywhere. Even wealthy people ate poorly. (Gary M. Walton, January 1, 2010)

Years later, the English colonies started building a new way for economic growth by financing small companies and constructing a new life with new rudiments. With the discovery of the new world, English colony settled down in cities on the shore like Maryland, New Jersey, New York, Massachusetts and Pennsylvania to make more investments in Trading. In the second half of the 18th century, they initiated a new industrial age. As a result of this revolution, there was a huge disparity in income and human rights allocation between sexes, races, and free individuals.

In the late years of the eighteenth century, one of the main founders of the United States of America and the first Secretary of the Treasury was Alexandre

Hamilton, has advocated to come up with an economic strategy that supports industries by imposing tariffs on imports and it was essential policy that was used until the middle of the 20th century. Hamilton also urged the creation of a national bank that was a huge success from 1791 until 1811. The economic growth at that period focused on other goods and services that showed the diversity in the new world.

In the meantime, each area involved in the production of a specific set of goods and services. For the southern colonies, economic growth was presented in producing tobacco, rice and indigo. Wheat became a main staple in the middle colonies, mainly in New York, Philadelphia and Baltimore. These cities were more into the production of a good quality of grains.

When the industrial revolution had its own peak in Europe late in the eighteenth century, the United States had a quick spread too. Manufacturing at that time was a big deal and it helped third of the nation to have a stable income. The main manufacturing industry was cotton cloth production, while shoes manufacturing, woolen clothing and machinery was rising slowly. These productions were mainly in the northeast.

Shipbuilding took a huge part of manufacturing production as well, Americans produced different types of ships from three-masted vessel to fishing boats of ten tons. Although, due to the expensive raw material for ship building in England, the colonies in the new world took advantage and made more manufacturing.

After the civil war, the USA started growing and expanding their industrial production. They discovered iron, copper and silver mines and opened massive factories for the production of steel and other goods like cement factories and starting a mass production in automobile field led by Henry Ford very early during the twentieth century. The United States started its import-export relationships with England mainly and some other European countries. Tobacco, rice and indigo was the main staples in top 10 of exports and brought a high revenue in the 17th century.

Table 1: Top 10 commodity exports and their average annual values in thousands of pounds between 1768 – 1772

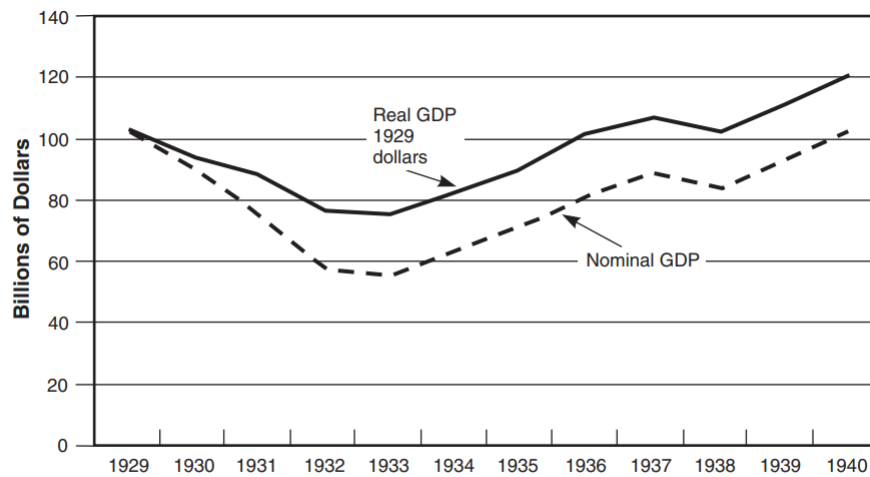
Commodity exports	Annual Values in £
Tobacco	766
Bread and Flour	410
Rice	312
Fish	154
Wheat	115
Indigo	113
Corn	83
Pine boards	70
Staves and headings	65
Horses	60

In the second half of the nineteenth century, the rise of the new world started to grow internationally and that's by growing their industries thanks to the new business men who collected their financial empires to benefit their communities by providing more job opportunities in different domains. The most known entrepreneurs: Henry Ford (Automobile) – John D. Rockefeller (Oil) – Jay Gould (Railways) - J. Pierpont Morgan (Banking) and Andrew Carnegie (Steel). As the industrial revolution reached its peak in the late 1980s and 1990s, the technological revolution started rising by the appearance of new tycoons like Bill Gates who built a vast fortune from computer software.

Since the beginning of the United States, political leaders have always involved federal government in private business. Therefore, US Theodore Roosevelt (1901-1909) and Woodrow Wilson (1913-1921) created regulatory agencies to have more control on the business and define the economy precisely. Among the agencies there is interstate commerce commission (ICC), the food and drug administration (FDA) and the federal trade commission (FTC). Some other programs and agencies are still related to the USA's economy until nowadays like: Securities and exchange commission (SEC) for stock and market regulations, The Federal Deposit Insurance Corporation (FDIC) for bank deposits guarantees and the social security system (SSS) for pension providing to elderly people.

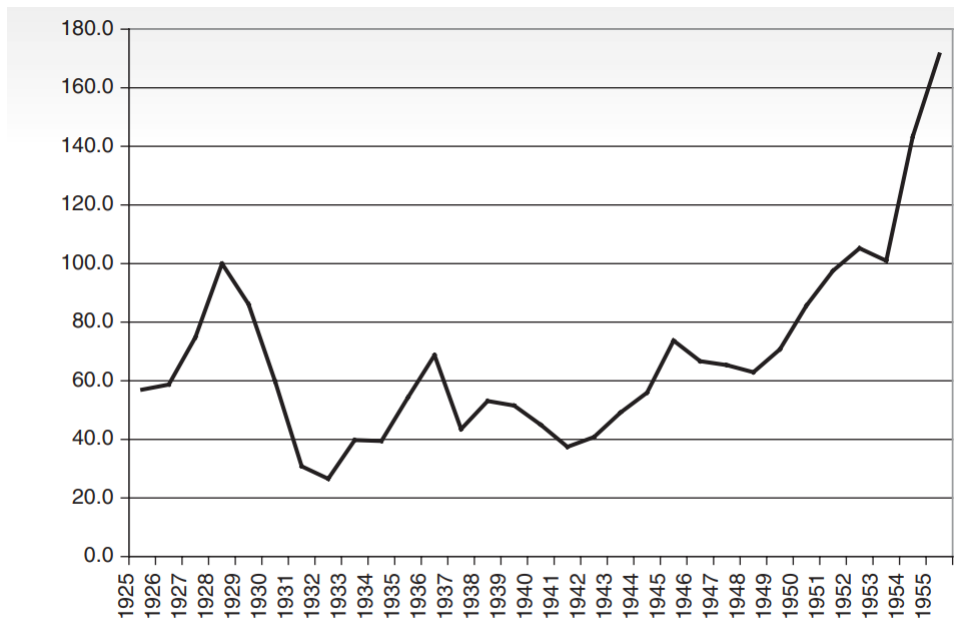
Following world war I, the USA suffered from a massive loss that led to face critical times called "The Great Depression". Started in 1929 and ended in 1933, the USA's economy collapsed and was one of the most difficult times in the American

economy.



Source: U.S. Bureau of Economic Analysis.

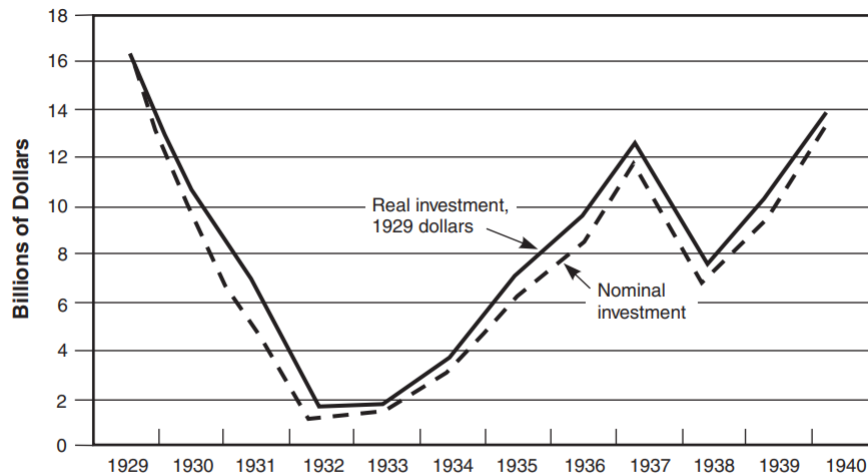
Figure 1: USA's gross domestic product 1929-1940.



Source: Historical Statistics 2006, Series CJ800.

Figure 2: Stock market prices evolution 1925-1955

The stock market suffered hardly in the great depression time, that it took investors 25 years later to see the value of their investments getting recovered.



Source: U.S. Bureau of Economic Analysis.

Figure 3: USA's GDP of investment in 1929-1940

By the end of the great depression era, Roosevelt's administration has come up with more changes to save the country from the biggest economic collapse at that time. President Roosevelt has made many reforms in different sectors to make changes and help in the rise of the economy again. The new deal is the recovery that came as a solution after the great depression. It was a mixture of multiple different programs that are consisted on: relieving distress, restoring employment and avoiding a repetition of the great depression. By following the right steps to the new deal, even small business achieved their goals and growth.

21 years later from WWI, the world faced another war that costed the USA an enormous human loss. The Americans had a deep fear of another "Great Depression" time. But instead, the economy got stronger due to the consumer demand. The automobile industry started manufacturing as soon as possible, other fields like electronic industry and aviation started growing in fast progress due to the immense amount of demand. Between 1940s and 1960s, the GDP increased by more than 16% of federal spending. At this time, more kids were born and they are referred to as "Baby Boomers" which lead to more consuming and demanding.

The USA also recognize the need to arrange the international monetary and creating the International Monetary Funds (IMF) as well as the worldwide bank by following steps of the economist John Maynard Keynes. In the meantime, businesses started merging separated firms to create a diversified and huge compound.

Agriculture had a massive demand and began to over produce, farmers

converted to big businesses and small farms had a tough challenge which is competing with businesses that contributed in their failures. Both number of farms and number of farm workers has declined.

In the 1960s and the 1970s, the USA witnessed a great time for change. A new president with new strategies, John F. Kennedy (1961-1963) had a new era of new plans for a strong economic growth. His strategy consisted on many programs like increasing government spending, cutting taxes, offering medical help for the elderly, inner cities aid, increasing education funds and space exploration. Some of these legislatives were put on action by the congress after his assassination, and Americans succeeded to do the first landing on the moon by 1969.

In 1982, many businesses faced bankruptcy, farmers suffered so bad, agricultural exports decreased and interest rate was rising. All these issues are caused by the increase of inflation. A year later, 1983, the economy started to rebound and inflation began to ease. It helped American economy to start a new period of economic expansion and remaining annual inflation under 5% for 1980s and 1990s.

The program that Ronald Reagan (1981-1989) followed to reduce inflation was based on: these centered on a large tax cut achieved by lowering marginal tax rate, the removal of the federal deficit, a reduction in the federal government's expenditure and regulation function, and a rebuilding of the military services. (Gary M. Walton, January 1, 2010)

In the US, companies were brought by private investors who then tried to take them over by restructuring them. In some cases, they spent enormous sums to acquire their own stocks or pay off the raiders. Many of these reorganization plans were panned by critics, who claimed that they were destroying good businesses. From 1990s and beyond, the inauguration of a new democratic president Bill Clinton (1993-2000) brought fresh reforms that insisted on reducing defense spending and having a smaller government. By 1998, the GDP has fallen from 35% in 1993 to less than 33%. Furthermore, by the fall of eastern Europe and Soviet Union communism, trade options have increased dramatically and expanded widely. Technological developments have changed the industry completely and opened new opportunities to some companies to shine.

Among the new innovations, computer hardware and software industry made

the history by a new revolution and produced vastly to create a new era in economic growth as well as corporate earnings. Not only this, the inflation was low also the stock market has earned strong profits adding a marked wealth for American investors.

The USA showed a strong desire in economic growth in the 1990s and the 2000s. America was growing vastly while inflation rate stayed low giving an explanation that the “new economy” is showing a faster rate for growth. After creating the North American Free Commerce Agreement, this expansion was also predicated on developing trading with additional countries across the world, rather than just focusing on America's largest trade partners, such as Canada and Mexico (NAFTA).

Meanwhile, Asian countries started growing fast as well and bringing a strong competition to America specifically in technology industry, also making differentiation in the global financial system.

The first ten years in the 21st century, the USA faces noisy years starting by the terror attack in 09-11-2001, a severe downturn in the stock market, the massive economic crisis in 2008 and a 10% increase in unemployment among races and ethnicities in 2009.

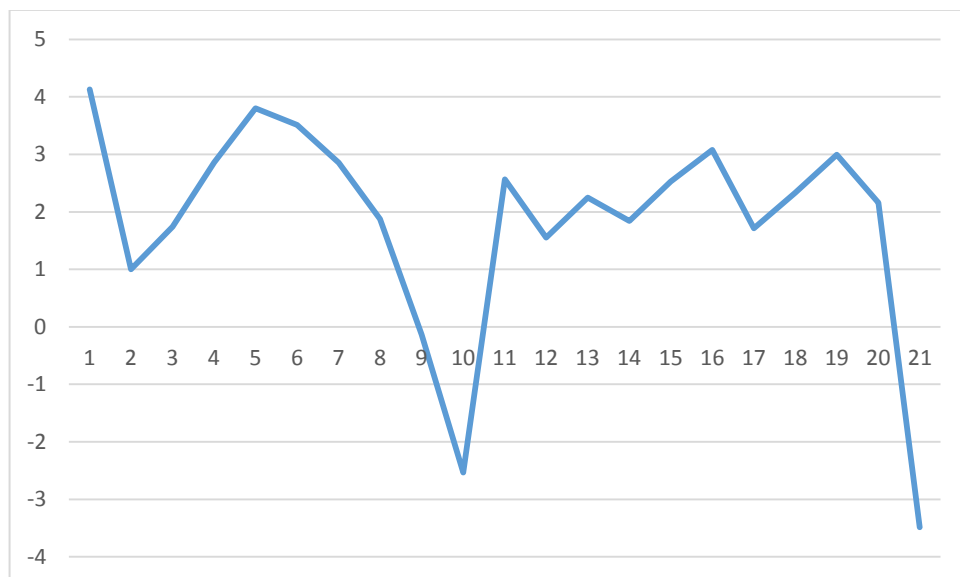


Figure 4: USA's annual GDP FROM 2000 TO 2020

Source: World Bank – www.worldbank.org

The financial crisis that happened in 2008, was mainly related to the US housing and financial markets. House pricing increased by 50% by 2006 and more while house income did not develop or had any increase. The high rate of mortgages initiated a collapse in the market and also creating confidence issues among financial establishments. The situation exploded into a full-blown financial panic only in September 2008 with 3 major events: the government takeover of Fannie Mae and Freddie Mac on 8 September, the Lehman bankruptcy on 15 September and the federal reserve's bailout of AIG on 16 September. (Barry Bosworth, 2009)

Since the Great Depression in 1930, the 2008 global financial crisis was by far the worst. The financial crisis did not only affect the USA but also many other countries suffered deeply from the collapse. For example, Iceland crumbled because their liabilities were ten times higher than their country's annual economic in the crisis period.

After 2008's financial crisis, American economy started recovering slowly and the country's GDP was in a steadily increase. Economic growth was rising, rate of unemployment was diminishing and under 5% by the end of 2018.

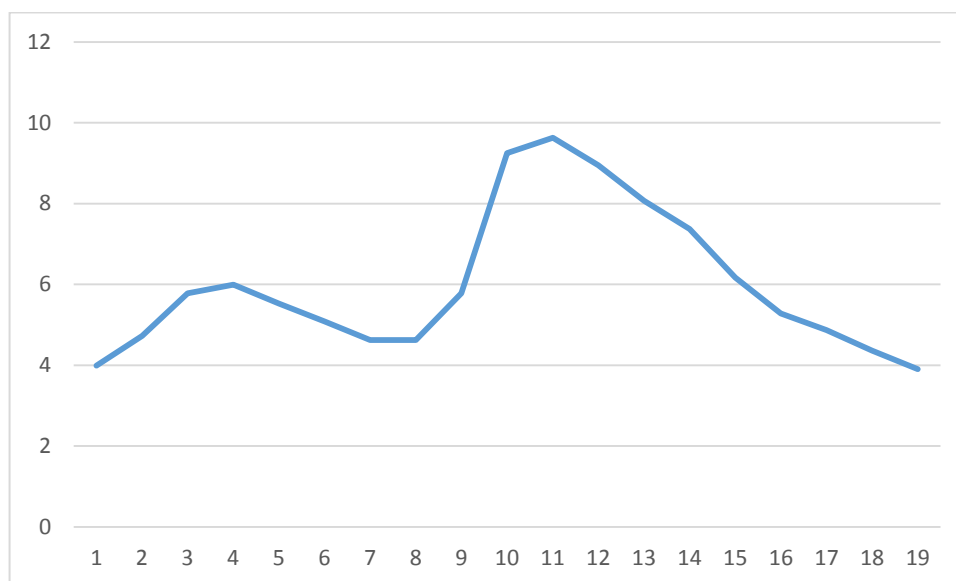


Figure 5: Rate of Unemployment in USA between 2000-2018

Source: Unemployment, total (% of total labor force) (national estimate) - <https://data.worldbank.org/indicator/SL.UEM.TOTL.NE.ZS?end=2018&locations=US&start=2000>

The USA's government worked on how to provide more job opportunities and boosting growth productivity and providing a good living and housing for

citizens. According to the congressional budget office (CBO), the GDP rose to 20.2% in 2020 when it was only 11% in 2012. The rest of the increase is coming largely from improvement in conditions of economy, as well as rising financial assets, corporate profits wages and salaries will rise rapidly.

During the global pandemic of 2020, the USA has seen a massive decline in economic growth and global GDP. The pandemic caused a health crisis as well, the hospitals capacity was on its limits and many lives were wasted. The side effects of the economic crisis resultants from the pandemic manifests in demand, supply and financial shock, all at one time. According to the bureau of economic analysis (BEA), GDP has dropped with 9.1% in the second quarter of 2020 during the recession of covid-19 and that drop was the highest in American history since 1947.

Employment has witnessed a downfall with 20.5 million jobs and the most impact was on women, non-white employees, lower-wage jobholders and less educational people. At the beginning of the pandemic and according to the US census Bureau retail sales has declined with a percentage of 8.7 points within one month in 2020 (March). As some states lifted the pandemic measurements of safety, retail industry started covering and earning up to 63% by the end of summer 2020 (August). Other sectors like industrial production did not remain safe, it has dropped sharply and put the states in big challenges regarding manufacturing field.

For some industry subsectors, like machinery construction did not experience a big loss like in the recession of 2008-2009, due to the government's backup plan that consisted on taking precautions for any future crisis. For other subsectors, like machinery tools, plastic machinery and steel equipment production have been affected negatively more.

The USA experienced a recovery in the third quarter of 2020 by a growth of 33.4%, and it was estimated to grow more with a 6.4% at the beginning of 2021. Furthermore, the WTO made a call to its members to increase production by vaccinating manufacturers and reduce restrictions on vaccines and exports for the global economic growth does not face an intense crash and take down many countries and nations.

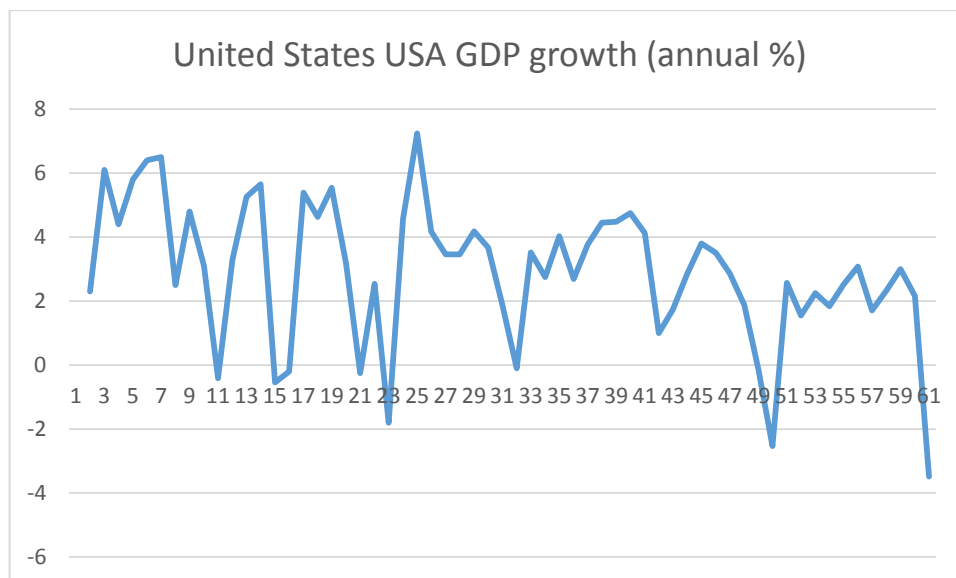


Figure 6: Annual GDP growth for USA since 1961-2020

Source: World bank data -

<https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=US>

B. The history of Chinese Economy

China was always known as the fastest country in economic growth. China's GDP represents 17% of the global economic growth. If it was not for coronavirus pandemic, China could have achieved more. By the end of January 2021, China has signed more than 19 free trade contracts with 26 countries to strengthen their trade economy and be the world's first and large contributor in global economic growth. Furthermore, China has super passed the world's most contributing countries in economy such as France, Germany and the UK in a very short run. Today, China is in the middle of processing to economic development with a transformation from rural to urban community.

As a country that has a long history, it went through different phases not only historically but also economically. The People's Republic of China (PRC) was founded in 1949 after going through a tremendous process, from revolution, socialism, radicalism of Mao, the reform of economic growth, civil war, war until strong dominant poverty and famine in 1978. China has witnessed a revolution that changed people's lives.

The reform of the Chinese economy focused on providing the good standards of living for the nation as well as a moderate social condition. Moreover, the reform

embodied the radical change in politics and economic ideologies, reshaping institutions and rebuilding a new material basis for economic progress.

China's leaders adopted socialist system in 1950s thinking that this system will help the country to become rich and strong, but the Great Leap Forward (GLF) and cultural revolution, the country has collapsed and the system did not work. Today, China's successful growth is constructed and influenced by three factors, and they are: structural, traditional and transitional.

1949 was a remarkable year in China's history. It has never seen a drastically change and fast economic growth before this, despite some disastrous policies forced in the Maoist time.

Before that, in the nineteenth century China's economy was not at its best and it was described mediocre at its best. Since 1127, China was following a very traditional economy that was based on traditional agriculture that consists on farmers labor. The traditional economy contains production of rice, their technology in farming embraces three elements: Variation of selected seeds, organic fertilizers and irrigation. The production was not enough, many farmers produced only what they needed to feed their families. Even production was supported, the number of populations was too high that consumption and incomes were low. Governmental institutions supported labor by opening more opportunities in working fields for tea, textiles, coal and iron and that also helped the country open up to competitive markets for land and labor efficiency.

The rise of China that opened many doors to globalization was mostly coming from tea production and exportation in 1880, the industry grew dramatically but faced issues in the area regarding competition with Japan and India mostly in the 20th century. Not long enough, in 1920 the tea industry exportation has declined and tea production was out of the game again.

By the end of the 18th century, population started growing drastically and it was immensely vulnerable to any breakdown due to the poor agricultural system that it was too traditional. During the 1800s, China already had a surplus exchange in tea, silk and porcelain exportation to Europe and other world countries. A pressure was created from the west causing an economic crisis in China despite the political and the military challenges that were present.

Japan took over China from GB gradually in 1895, economically, politically and militarily. China's GDP was representing 32% of the world's GDP in 1820. As the population started increasing in the early years of the 20th century, the GDP has dropped to 9% by 1913. After 1911, the nation was divided due to a circle of events like civil war and political fragmentation. When the nationalist party took over in 1927, they united the nation and started making a difference not only for the country but also for citizens. That period was called "**The Nanjing decade**", the investments in education and agriculture started growing and offering services to the majority, also the creation of new technologies for new crop strains that will ease the future in many ways. Furthermore, industry sector began growing as well by creating new opportunities and grew annually with a percentage of 8.9 points from 1912 till 1936, it has also contributed with 2% GDP and more labor force.

Subsector industries like textiles and food products grew rapidly and had an output of over 30% each. During 1930s, China stopped importing textiles completely as it was a productive country now. Chinese industrialists created their own factories and opened up to foreign skills, experiences and businesses to lead to a success for a modern productive industry. Shanghai was among the successful cities that grew dramatically during 1930s, started with a ship repair station to a machinery production for textile, cotton and flour mill factories.

After the war and civil war in 1949, China needed a radical change to have an established economy and offer peace to Chinese population. The communist party created the PRC and started working on a new on a new economy strategy that will provide a good living to citizens and building a strong defense and mostly preventing from a foreign intervention. The government focused mostly on industrialization by adopting the Five-year plans based on Soviet style. Shortly after, another model was adopted that focused on industrialization and agriculture at the same time, the name of the new model was "**walking on two legs**" strategy. This model did not work as well and led to another disaster and caused an immense starvation, this period was known as the GLF.

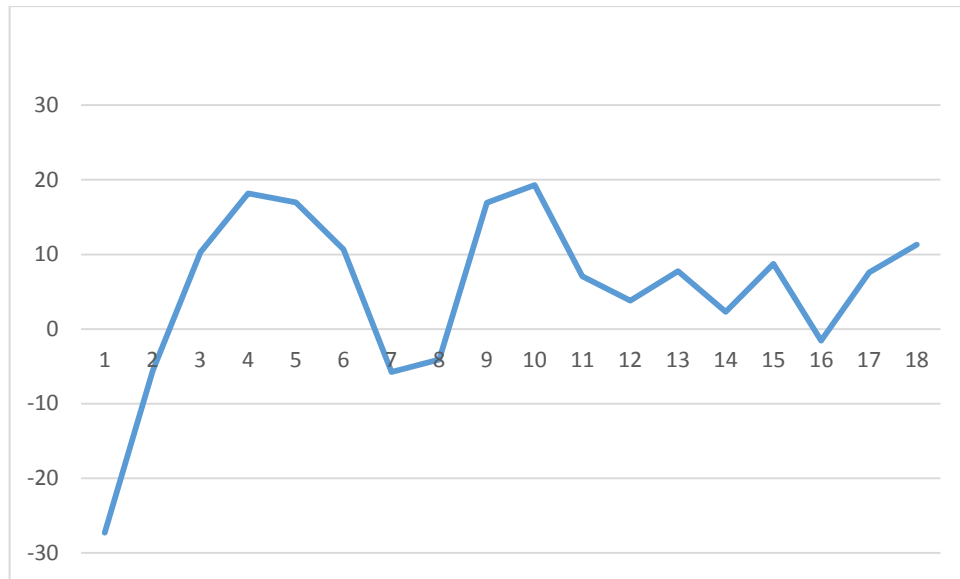


Figure 7: China's GDP (annual %) between 1960-1978

Source: World Bank Data - <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?end=1978&locations=CN&start=1961>

As the GLF took the economy down, a new strategy had taken place based on three key elements: Readjustment, Consolidation and Improvement. Giving priority this time to agriculture, the government provided lands to small farmers and sent about twenty million workers to the countryside to reinforce the agriculture yields, in addition to raise wages and salaries all over the country. These changes helped the agriculture sector to recover slowly in 1964. As for the industrial sector, it was reserved to support the agriculture field by producing chemical fertilizers and agricultural equipment. By the year 1965, Chinese economy recovered slowly from the loses caused by the GLF.

For industrialization and modern economy, China's first five-year plan focused on the expansion of the heavy industrial production. the Chinese experience therefore illustrate that in predominantly agrarian economy, the build-up and expansion of heavy industry for the sake of further expansion of heavy industry may bring about impressive economic growth in a short period, but such growth is not sustainable and is bound to slow down. (Cheng, 1971)

The reform of Chinese economy took the country to another level from being poor after many revolutions, wars and downturns to the way of achieving high standards living and being ranked near the high-income countries.

In 1978, China's communist government presented a new reform of economy that includes an international opening strategy. The focus was mainly on a new economic program than political movement. During the same year China has initiated to open up to international trade and market exchange for an international economy success. The start was with establishing special export zones in different provinces for attracting foreign investments, uplifting exports and importing high technology products. Moreover, citizens were also encouraged and allowed to begin their own companies. Coastal areas were dubbed "open cities" and "evolution zones" for their willingness to experiment with free market reforms such as tax cuts and trade stimulus in order to attract more foreign investment. The reform consisted on trade liberalization for China's success, as trade barriers are removed, the competition began to expand and Foreign Direct Investment (FDI) began to flood.

The reform showed a faster growth than the pre-reform period and has avoided vital economic disturbances. Since the reform, China's annual GDP was at 9.5% average. The reform boosted the output to offer an increase in the investment and resources for economic growth by focusing on two major factors:

1. Large-scale capital investment.
2. Rapid productivity growth.

As China focused on its savings, the domestic savings reached and stood by 32% in 1979. These savings were generated from State Owned Enterprise (SOE) profits that are used for domestic investments. Verily, China's gross domestic savings has exceeded its domestic investments and made from the country the largest net lender globally.

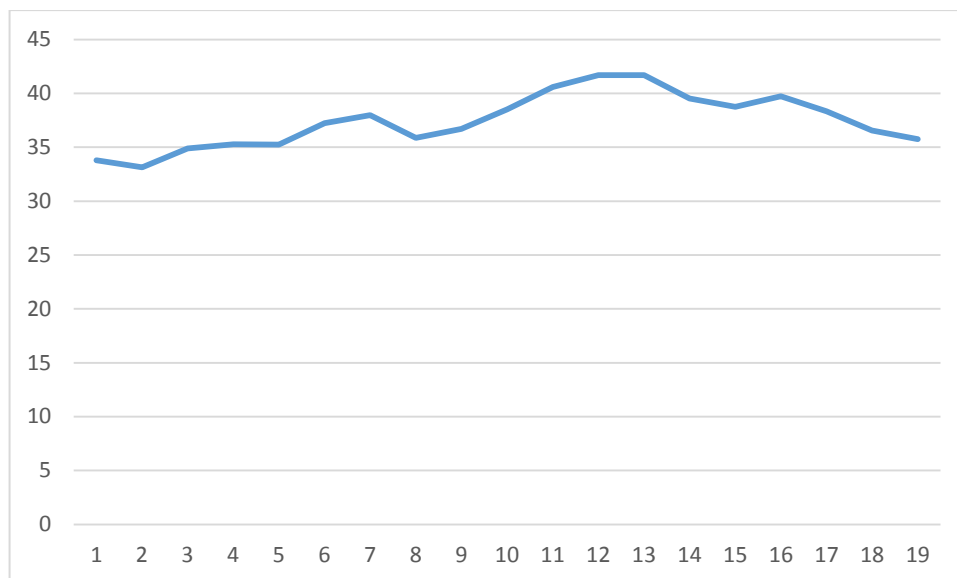


Figure 8: Chinese [Gross savings \(% of GDP\) 1982-2000](https://data.worldbank.org/indicator/NY.GNS.ICTR.ZS?end=2000&locations=CN&start=1982)

Source: World Bank Data-

<https://data.worldbank.org/indicator/NY.GNS.ICTR.ZS?end=2000&locations=CN&start=1982>

Another Chinese success for economic growth is “Productivity Gains”. Furthermore, for productivity was designated in reallocation of resources for more productive advantages mostly in agriculture, trade and services. Additionally, a greater share of the economy was exposed to competitive forces, local and provincial government were allowed to establish and operate various enterprises without interference from the government. (Morrison, 2019)

The table below shows the differences between the two reforms:

Table 2: The main outlines of the Chinese reforms in two different periods.

1980s reform	1990s reform
Zhao Ziyang: cautious, consensual decision-making	Zhu Rongji: Rapid, personalized decision-making
Introduce markets where feasible; focus on agriculture and industry	Strengthen institutions of market economy; focus on finance and regulation
Dual-Track strategy	Market unification, unite dual tracks
Particularistic contracts with powerful incentives	Uniform rules: “Level playing field”
Competition created by entry; no privatization	State-sector downsizing; beginnings of privatization
Decentralize authority and resources	Recentralize resources, macroeconomic control
Inflationary economy with shortages	Price stability, goods in surplus
“Reform without losers”	Reform with losers

Source: (Naughton, 2007)

The major key changes for the new reform consisted on prerequisites, regulatory changes and outcomes. For each key change, there were a crucial focus on some elements to sustain the reform. For the prerequisites, the measurement taken was related to finishing the dual-track system, recentralization of monetary resources and macroeconomic austerity.

For regulatory changes, the restructure contained the banking system, the tax system, the corporate governance system and the external system presented in a membership of WTO.

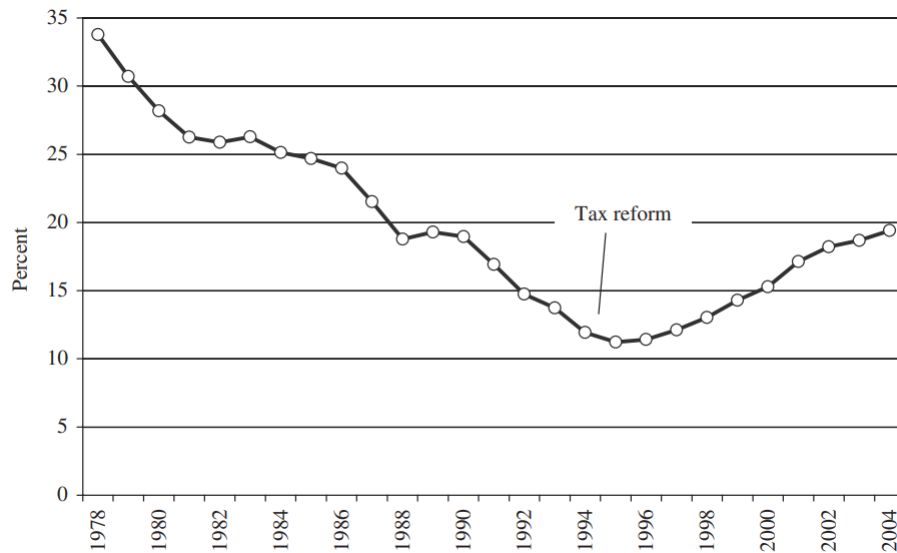


Figure 9: Budget Revenue of Chinese GDP.

Source: (Naughton, 2007), Page 102.

During the 1990s, China has grown up and expanded its stock market that it has reached 50% of GDP by 2001. Furthermore, the expansion involved insurances, domestic monetary, banks and housing finances. At the same time, China has focused on technology industry. It becomes a massive center for technology production and innovation, as well as contributing in sustainability and economic reform. The reform placed China from limited-income economy to a lower-middle-income economy by 1997 according to the world bank. A decade later, China become upper-middle-income economy and its Gross National Income (GNI) rose up to 38.7% in 2017. China still chasing for a place among high-income economy countries.

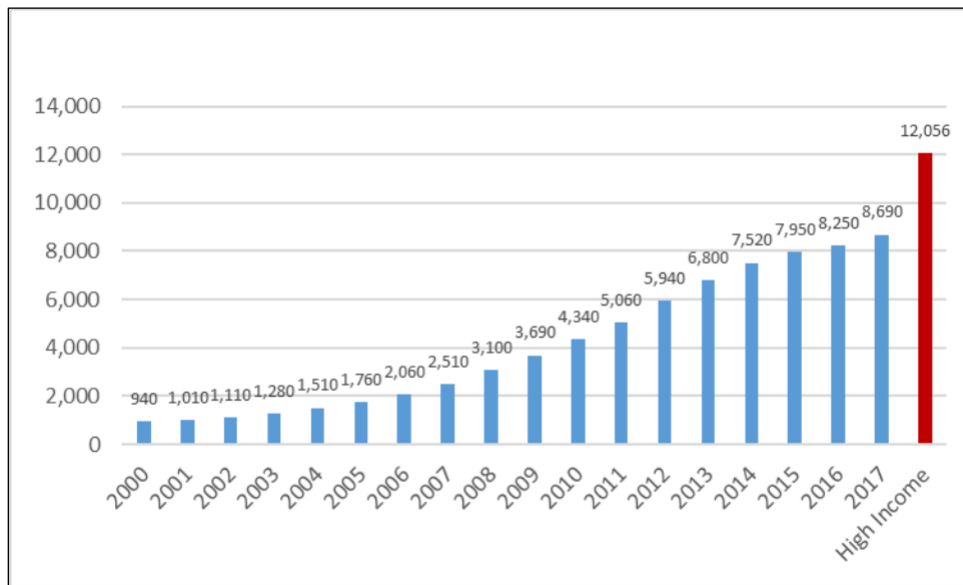


Figure 10: China's GNI per capita 2000-2017

Source: (Morrison, 2019), page 8.

China has maintained its growth during a very serious times where the world suffered from two economic crisis. In 1998, China's performance during the east Asian crisis stayed high and maintained its economic growth, the same pattern was in 2008 financial crisis.

As part of the reform, opening up to the world's economy was a milestone step that China took. After initiating and allowing foreigners to settle down businesses in 1978, globalization was the key for China to enter global economy and compete with the most powerful countries in the world such as USA, UK, France and Germany.

China's membership into the WTO marked the dawn of a new era in the country's economic growth. Been a member of WTO had a positive impact on China's agricultural sector. The major products that it was imported are bulk products except for rice. Other types of food like processed and canned food, vegetables, flowers and fruits were exported vastly. This new step made China in a position of self-sufficiency in demand and supply after having a worry being under the line of sufficiency production.

The early years of the 21st century did not only give China a membership in WTO but also a partnership in trading with the USA and being the largest associate to the states after two decades of diplomatic relationship between both countries. In

addition, opening doors for China to global economic growth and expansion for Chinese agriculture, manufacturing and services. The conditions for China to get access to WTO are:

- Lowering import tariffs.
- Entrance of foreign businesses to domestic Chinese market.
- Opening up to competition for financial and telecommunication industries.

By 2005, China's GDP has reached 11.4% and it was estimated to get higher with 1% for the following years after WTO membership.

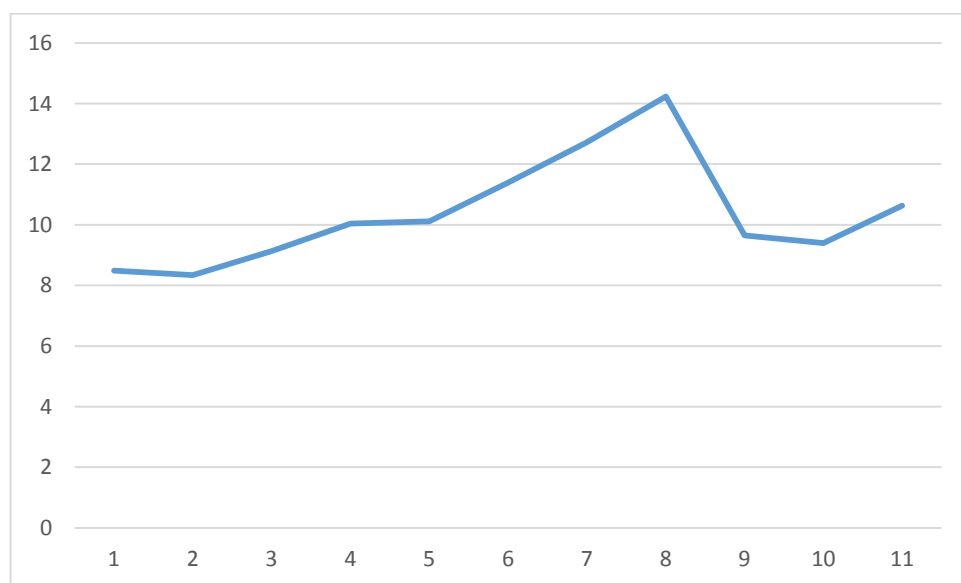


Figure 11: China's annual (%) GDP between 2000-2010

Source: World Bank Data -

<https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?end=2010&locations=CN&start=2000>

Other benefits of being a WTO member is that the Chinese stock market has expanded worldwide and made up to 50% of China's GDP, foreign trade has expanded up to 35% and exports expanded largely through the world providing China immense revenues. These factors made China the largest trading country and the second powerful economy within 2010.

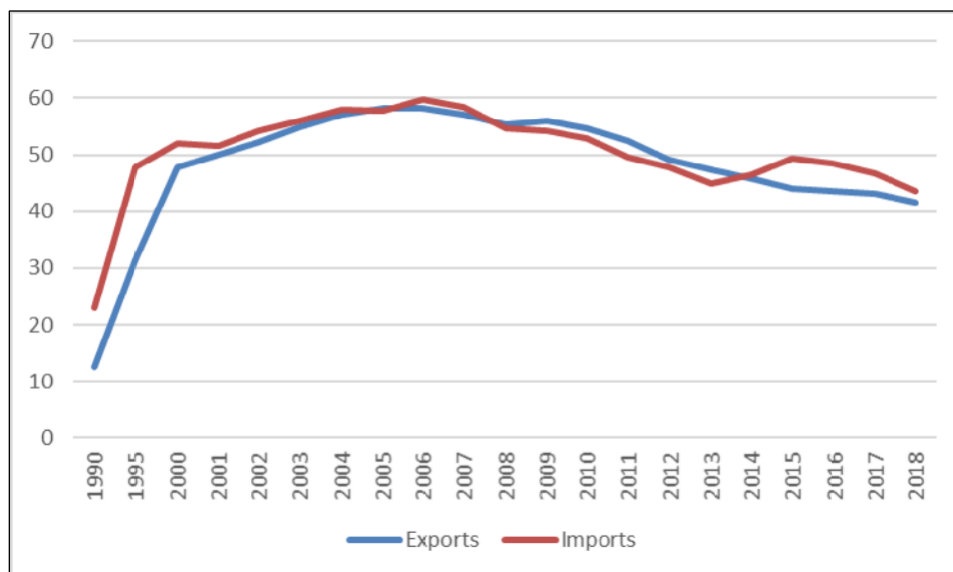


Figure 12: Foreign investment imports and exports in China 1990-2018.

Source: (Morrison, 2019), page 15.

The 2008 financial crisis did not have a huge impact on China's economy. China has a powerful characteristic that made her economy still standing throughout the crisis, such as the solid banking system that it provides, trade dependent system, large foreign substitutes and high rate of exports that is up to 30-40% with the same decade. The impact of financial crisis has touched many indicators including GDP growth that has decreased from 9.3% to 6.1% by the first quarter of 2009. As per trading, China has lost many billions of US dollars in manufacturing specifically and it has dropped by 25.7% in February 2009. In addition, not only exports but also imports have dropped sharply causing China big losses that year. Interest rate has fallen to 5.31% in the following year and unemployment rate has an increase with 4%. In response to the crisis, China has taken certain measurements to overcome the hard-time and sustain the economic growth. Among these measurements, cutting interest rate, increase consumer disburse, restructure of certain industrial sectors uplifting income for farmers.

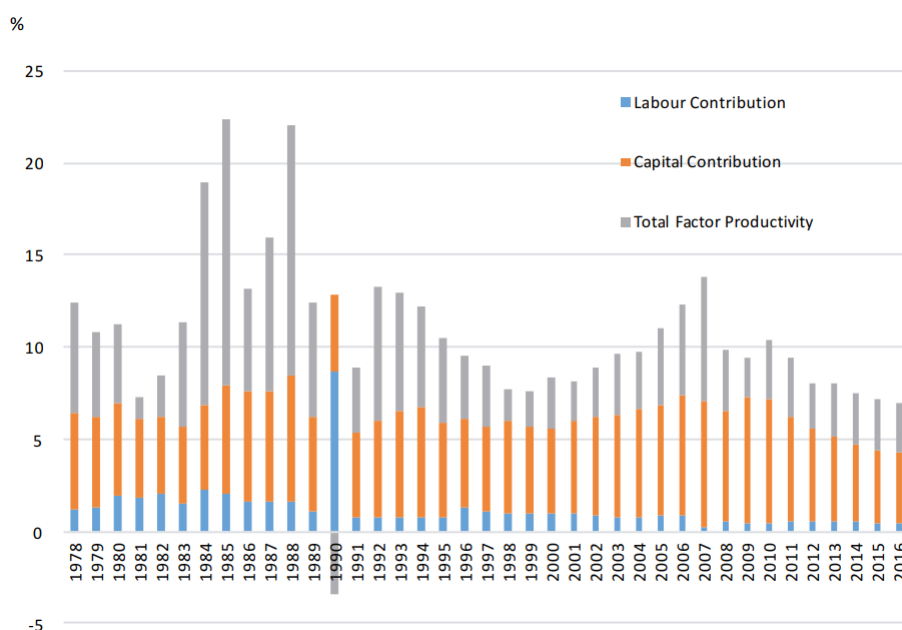


Figure 13: Decomposition of China’s GDP growth 1978-2016

Source: (Ross Garnaut, 2018), page 16.

China has overtaken the United States as the second largest receiver and provider of foreign direct investment (FDI), as shown in the United Nations Conference on Trade and Development (UNCTAD). Its inflows of FDI has reached \$139 billion, while its outflows have largely exceeded the inflows by reaching \$196.1 billion of FDI.

By 2018, Chinese trading has expanded dramatically to become second largest trading power and the USA largest lender. The table below represents China’s major trading partners that are represented in 28 country in the European Union (EU), US, 10 countries that represents the Association of Southeast Asian Nations (ASEAN), South Korea, Taiwan, Japan and Hong Kong.

Table 3: China’s major trading partners for 2018, (\$ billion)

Country	Total Trade	Chinese Exports	Chinese Imports	China’s Trade Balance
European Union	681	408	273	135
United States	631	477	154	323
ASEAN	575	318	257	61
Japan	327	147	180	-33
South Korea	313	109	204	-95
Hong Kong	310	302	8	294
Taiwan	225	48	177	-129

Source: (Morrison, 2019), page 23.

After the major economic outbreak that most of countries suffered of due to coronavirus pandemic, China, in June 2020 has announced its return to economic growth by an increase of 3.2% of GDP growth.

The coronavirus pandemic affected Chinese economy on a large scale due to isolation, the Chinese government had to take quick actions regarding economic sustainability related to financial, industrial and employment sectors. China has become one of the largest makers and provider for vaccines to fight the epidemic. The making of vaccines has been included in China's trading as an exporter to many countries in need to reduce the number and the high rate of covid-19 cases.

As China has took measurements to fight the epidemic, some certain policies that were among the economic growth after the collapse contains reducing Value-Added Tax (VAT) related to some goods and services, increasing the government's deficit budget, bank discounts related to interest rate made by the Chinese central bank and increasing VAT for exports related to steel, raw materials, agricultural products and chemical goods.

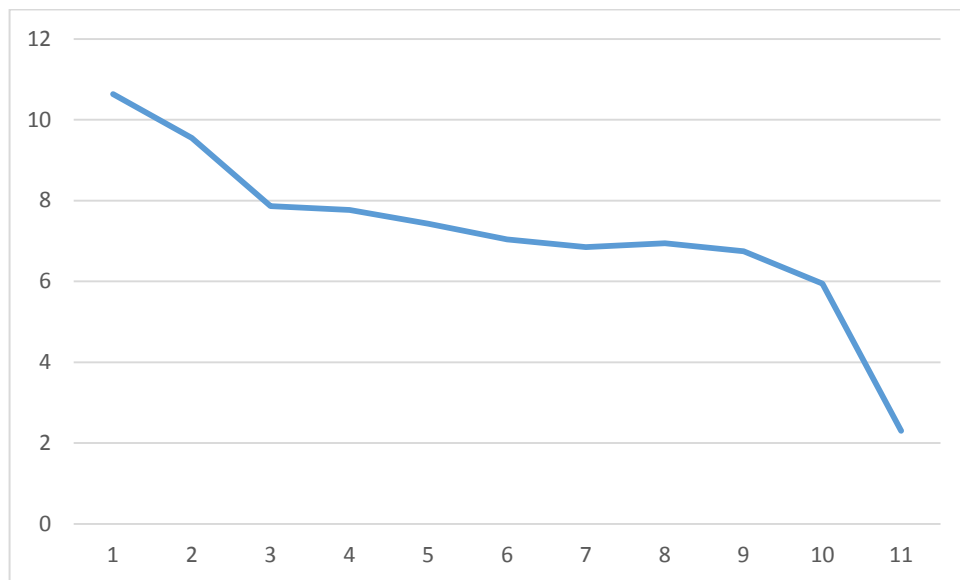


Figure 14: China's annual GDP (%) throughout 2010-2020

Source: World Bank Data -

<https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=CN>

C. Literature review

According to researchers, the trade war between USA and China will attract a wide focus to the subject and many calculations and modeling will be used to predict the potential impact on both sides as well as other countries.

For some studies, like the one made by (Edward J. Balistreria, 2018) the research was made to quantify the forecast about the implications caused by the conflict. In conclusion, the study showed how the disruption will damage both countries USA and China but at the same time it might be beneficial to other nations.

Other studies, for example (ITAKURA, 2019) that was based on the Computable General Equilibrium (CGE) model concluded that USA and China will see a reduction in their domestic productivity by 1.4% for USA and 1.35% for China which will reduce from their GDP.

In other research, the main goal was to count who will win in this dispute while calculating the welfare for both countries. Most of studies used the CGE model to predict the probable consequences of the trade dispute. As a conclusion, most studies found that the disagreement would cost both countries heavily, while China will be the most impacted in this dispute. Throughout the analyze of several possibilities, a common conclusion was made that raise of tariffs among USA and China is detrimental to their trade and the welfare with the USA losses will be greater than China's.

Furthermore, other simulations predicted the assumption of the traded balance between USA and China is either maintained and will be better or it will stay the same. The estimation for losses will reach \$165 billion for USA if the raising of tariffs will continue.

As per other studies regarding the impact of the trade conflict if it will be grater or not, shows that the actual effects of US trade policy activities on other nations are less severe than what other economists anticipated. The expected substantial tariff impact on the US draws attention to the effects on the Chinese economy.

In order to evaluate the direct effects of the trade war on Chinese enterprises, some studies concentrated on how the Chinese stock market responded to the

conflict. The findings of the studies demonstrated that there was a large significance variation in the stock market and that firms who had previously exported to the USA performed way less than the average particularly the non-state companies.

III. METHODOLOGY

A. Research Methodology

This section explains the methodology adopted to conduct the research and how the results were analyzed. To provide a comprehensive description of the trade tensions between the United States and China, this research adapt a qualitative research method based on a descriptive study. This qualitative descriptive method aims to provide a full explanation on how international trade is maintained among countries, as for secondary data used is to call attention of the importance of benefits of international commerce among China and USA and what benefits may bring to the table for other nations. Furthermore, the focus was more on what advantages and disadvantages might bring to the world with this on-going war between both parties.

A qualitative research is a wide array of dimensions of the social world, including the texture and weave of everyday life, the understandings, experiences and imaginings of our research participants, the ways that social processes, institutions, discourses or relationships work, and the significance of the meanings that they generate according to (Mason, 2002, p. 11). The major goal of this study is to investigate the impacts of the trade war between the United States and China by undertaking a rigorous literature review of existing data. As a result, the report also considers the impact of US tariffs on Chinese imports, as well as China's retaliatory actions, on both countries' economic prospects.

For (Goundar, 2012), Descriptive research aims to explain a scenario, problem, phenomena, service, or initiative in a structured way, or to provide knowledge on a community's living standards, or to define views toward an issue.

A qualitative research study using a secondary resource is the suitable method to this study because it works through academic material in order to gain a solid understanding of the contributing factors, perspectives, intentions and justifications for such a phenomenon, like the trade war that is still under constant research.

The secondary resources and the descriptive study allow a deep interaction

with the relevant research in order to make part of the qualitative research, ensuring the development of correct legitimate and referenced statements that reinforce or refute the study's main arguments. Furthermore, the study incorporates specific recent studies in the domain of trade conflicts, particularly the relation to the US-China trade war. In order to determine the causes of the worldwide economic implications of the US-China trade war.

B. Research Questions

The study's key research questions are:

1. What is the effect of the trade war on the global economy?
2. What are the industries or sectors that will be damaged the most?
3. Is the escalations of tension based on a political conflict?
4. What are the short term and long terms consequences of the trade war?
5. Will the escalation of the trade tension lead into a World War III?

C. Research Hypothesis

This research will be based on three mainly hypothesizes:

H1: China will be more impacted by the trade war.

H2: The USA will be more impacted by the trade war.

H3: The global economy might suffer from this trade war more than its expected.

D. Data Analysis

The data collected in this research is based on other books, research papers, World Organizations documents, governmental reports, thesis, annual studies reports, relevant websites, etc.... In addition, the data was gathered from the website of the World Bank (www.worldbank.org) and the OECD (<https://www.oecd.org/>) to have a solid base for this research. The purpose of using secondary data in this study is to showcase and explain the side effects of international trade among powerful countries as well as how it can be beneficial in a positive way, while it can cause

massive damages if wrong decisions are taken.

According to the data collected it shows that the trade war has affected the global GDP with 0.5% by 2019. The global GDP might decrease with 8 decimal points and drop from 3.4% to 2.8% within the next year 2022 by taking in consideration uncertainty effects. Following (Eddy Bekkers, 19 March 2020) and in his analysis for the trade war he sees that the direct effect of the tariff increases on global GDP is projected to be around -0.2%. Taking into account additional productivity effects the impact is expected to go up to -0.3% to -0.5%. As such the projected effects with the quantitative trade models are close to the long-run effects reported by the IMF (-0.2% direct effect and -0.3% with uncertainty and productivity effects). Not only that, the trade war might turn into a cold war that can be escalated to hot one and causing a World War III. The consequences of the trade war are concluded in the next chapter that shows different scenarios that might happen within the next years if the tension keeps on escalating.

In this section as well, we will measure two main scenarios by using the Computable General Equilibrium Model based on Global Trade Analysis Project (GTAP). The main scenarios that are taken into consideration for these measurements are:

- The US protectionist measures
- The Chinese retaliation should be taken into account

The measurements will provide an estimation or approximation of the outcomes from the trade war, the benefits that some sectors and countries might benefit from and the impact on the global trade.

The GTAP is a model that measures the impact of trade occurs that is based on the diversification of certain components that consists on microeconomic concepts based on different equations represented in the behavior of individuals and businesses that are parts of the represented zones in addition to the interregional exchanges. The model uses a three-level structure in the specification of the production function: at the first level, the production function assumes zero substitutability between primary production factors and intermediate inputs (Leontief technology). At the second level, it involves a constant elasticity of substitution between inputs and between factors of production. Imported intermediates are

assumed to be separable from domestically produced intermediate inputs, that is to say that firms first determine the optimal mix of domestic and imported goods and only then decide the sourcing of their imports (Armington assumption); and at the third level, a constant substitution elasticity is assumed between inputs imported from different origins. (Monique Carvalho, May 2019)

As per the macroeconomic completion, it is determined in the incorporated continuous law of returns to scale and in short-terms.

The GTAP model that is part of the general equilibrium model has a major benefit assimilated in the ability to simulate the influence on welfare. The GTAP model allows as well the separation of the welfare impacts such as:

- **Allocative effectiveness:** Represented in the removal or inclusion of inefficiencies that is related to the trade tariffs contributes in the share of the regional revenue from gains or losses' efficiency.
- **Trade terms:** Defined in the change of the export prices based as a result of the increase or decrease of tariffs.
- **The investment-saving component:** A function of prices related to investment and savings based on the situation of a given regions.

Compared with a simple equation econometric model or the partial equilibrium analysis method, the model has the advantage of capturing the input–output relationship between industry and other sectors in the open global economy scenario and thus improves the robustness of the results of the estimates for the market. (Monique Carvalho, May 2019)

For calculations related to the GTAP, the equations that are used are in the same time related to sectors and regions. Studying the trade war's impact will be conducted by the equations below:

$$pms_{(i,r,s)} = tms_{(i,r,s)} + pCif_{(i,r,s)}$$

where:

$pms_{(i,r,s)}$: Market price by source of tradable commodity i imported from source r to destination s.

$tms_{(i,r,s)}$: Power of the tax on imports of tradable commodity i from source s

to destination s.

$pCif_{(i,r,s)}$: World (C.i.f) price of the tradable commodity i imported from source r to destination s.

- pms are for the increase that depends on the tms in variation of percentage.

For the second equation used is:

$$pim_{(i,s)} = \sum MSHRS_{(i,r,s)} \times pms_{(i,p,s)} pim_{(i,r,s)}$$

where:

$pim_{(i,s)}$: Market price of aggregate imports of tradable commodity i in a specific region s.

$\sum MSHRS_{(i,r,s)}$: Market share of source r in the aggregate imports of tradable commodity i in a region s evaluated at market prices.

Now, as per reducing the side effects of the increased tariffs in a region according to the GTAP model, the equation used is:

$$qxs_{(i,r,s)} = qim_{(i,s)} - esubm_{(i)} \times (pms_{(i,p,s)} - pim_{(i,r,s)})$$

Where:

$qxs_{(i,r,s)}$: Quantity of exports of tradable commodity I from source r to destination s.

$qim_{(i,s)}$: Quantity of aggregate imports of tradable commodity I demanded by a region r using market prices as weights.

$esubm_{(i)}$: Substitution parameter among imported commodities from different sources in the Armington utility/production structure of agent of agent/sector i in all regions.

Lastly, demand will shift to national items and for the expand of the regional production is assimilated in the equation below:

$$q_{o(s)} = SHRDM_{(i,s)} \times qds_{(i,s)} + SHRST_{(i,s)} \times qst_{(i,s)} + \sum SHRXMD_{(i,r,s)} \times qxs_{(i,r,s)}$$

Where:

$q_{o(s)}$: Quantity of non-saving commodity i output or supplied in a region s .

$SHRDM_{(i,s)}$: Share of domestic sales of i in a region r .

$qds_{(i,s)}$: Quantity of domestic sales of tradable commodity i in a region r .

$SHRST_{(i,s)}$: Share of sales of i to global transport services in a region s .

$qst_{(i,s)}$: Quantity of sales of marginal commodity i to the international transport sector in region s .

$SHRXMD_{(i,r,s)}$: Share of export sales of i in specific destination s in a region r .

The variables that are mostly counted in these equations are: pms , q_0 , qxs , qds and pim and they are related directly to the products that has high tariffs in this trade conflict.

in the table below, the products represented are mainly the regional aggregations of the study that the GTAP based on.

Table 4: Regional and Sectoral aggregation.

Regional Aggregation	Sectoral Aggregation
China	Iron & Steel
US	Aluminum
Brazil	Soybeans
Argentina	Primary products
India	Other not industrialized
Canada	Other industrialized
Russia	Diary products
Mexico	Processed Rice
EU	Other Food
Other Countries	Beverages & Tobacco
	Petroleum & Coke
	Chemicals
	Motor vehicles & parts
	Other Transport Equipment
	Electronic Equipment
	Other Machinery
	Other Manufacturing
	Services

Source: (Monique Carvalho, May 2019)

E. Results and Conclusion:

In this part, we will analyze the results that are an outcome of the GTAP equations and related to the high tariffs imposed in the USA-China trade conflict. The results will be shared in the tables and related to the scenarios that are taken into consideration while making this study.

For the **production** related to direct sectors affected by the increased tariffs and other sector, and according to the two scenarios taken into consideration while making the study related to the GTAP, the table below shows the increase and decrease in the production related to the USA, China and other related countries that are part of the study. For the USA, there will be an increase in production especially in the products that are connected to the trade conflict like Aluminum production, electronic appliances as well as the iron & steel manufacturing. Some sectors will witness a decrease in production but luckily not a major one but it might also influence the general production for the whole country.

As per China, there will be a good drop in the production of the electronic equipment and other manufacturing product that can cause a huge effect on the general sectors. In a general conclusion, we can say that the US productivity for the main products related to the high tariffs in the conflict will witness a rise, unlike the electronic production in China will be the most impacted in this conflict. The only benefit from the increase of tariffs will be directed to the emerging nations that will have a rise in the output of iron & steel and also soybeans.

Table 5: Variation of domestic production in different countries in %.

Sectors	China	US	Brazil	Argentina	India	Canada	Russia	Mexico	EU	Other
Scenario 1										
Iron & Steel	0.73	5.71	2.49	2.91	-1.27	11.20	-1.78	1.50	-1.68	-2.02
Aluminum	1.11	2.88	1.00	3.58	-1.24	9.26	-2.36	4.22	-1.32	-2.10
Soybeans	1.91	0.04	-0.47	-0.36	-0.01	-1.74	0.08	-2.48	0.05	-0.03
Primary products	0.62	0.04	-0.35	-0.46	-0.04	-1.49	0.09	-1.51	0.00	-0.06
Other not industrialized	1.64	0.01	-0.53	-0.26	-0.18	-0.56	0.01	-2.03	-0.15	-0.12
Other industrialized	2.49	-0.54	-0.68	-0.57	-0.65	-2.39	-0.49	-4.94	-0.72	-0.91
Dairy products	0.03	0.01	0.09	-0.13	0.07	-0.03	0.09	-0.52	0.05	-0.02
Processed Rice	0.36	-0.07	-0.06	-0.26	0.04	-0.09	0.15	-0.68	0.02	0.03
Other Food	0.55	0.00	-0.15	-0.25	0.01	-0.97	-0.04	-0.84	-0.04	-0.10
Beverages & Tobacco	-0.13	0.00	0.03	0.02	0.06	-0.13	0.07	-0.42	0.03	0.05
Petroleum & Coke	0.15	0.10	0.02	-0.06	-0.03	-0.05	0.11	-1.12	0.05	-0.08
Chemicals	0.38	0.84	-0.41	-0.71	-0.11	-0.24	0.18	-3.92	0.17	-0.35
Motor vehicles and parts	-0.11	-0.47	0.24	-0.13	0.16	-0.09	0.30	-4.98	0.20	0.27
Other Transport Equipment	1.98	-1.29	-0.83	-0.37	-0.26	-3.29	0.55	-4.94	0.07	-0.34
Electronic Equipment	-8.09	5.78	-0.19	-1.30	-0.26	7.66	-1.05	17.78	-0.38	2.63
Other Machinery	-0.61	0.93	-0.40	-1.32	-0.16	1.79	0.06	-0.88	0.22	-0.07
Other Manufacturing Services	-4.07	4.11	0.23	0.05	2.54	1.08	0.17	0.46	0.59	1.86
	-0.21	-0.12	0.11	0.10	0.04	0.02	0.07	0.16	0.06	0.07
Scenario 2										
Iron & Steel	0.73	6.00	1.90	2.14	-1.29	11.12	-1.83	1.49	-1.68	-2.06
Aluminum	1.12	3.40	-0.28	2.17	-1.28	9.26	-2.48	4.31	-1.36	-2.17
Soybeans	6.43	-13.92	9.30	4.47	0.01	-0.06	0.16	-4.15	0.09	0.24
Primary products	0.81	-0.21	-0.95	-2.13	0.03	-1.58	0.11	-1.63	0.09	0.02
Other not industrialized	1.61	0.18	-1.15	-0.72	-0.21	-0.57	0.01	-1.99	-0.15	-0.12
Other industrialized	2.39	-0.40	-0.98	-0.80	-0.66	-2.45	-0.49	-4.95	-0.71	-0.91
Dairy products	0.36	-0.27	0.13	-0.24	0.06	-0.03	0.09	-0.52	0.06	0.04
Processed Rice	0.28	0.19	-0.14	-1.16	0.04	0.04	0.18	-0.68	0.03	0.04
Other Food	0.52	-0.15	-0.30	-0.54	0.01	-0.96	0.13	-0.80	-0.01	-0.02
Beverages & Tobacco	-0.13	-0.12	-0.01	-0.02	0.06	-0.13	0.07	-0.41	0.05	0.06
Petroleum & Coke	0.12	0.11	-0.06	-0.05	-0.04	-0.05	0.09	-1.12	0.04	-0.10
Chemicals	0.32	1.09	-0.61	-1.02	-0.14	-0.33	0.13	-3.94	0.12	-0.40
Motor vehicles and parts	0.38	-1.13	0.15	-0.51	0.18	-0.26	0.29	-5.04	0.37	0.40
Other Transport Equipment	1.92	-0.89	-1.57	-0.64	-0.31	-3.38	0.42	-4.96	-0.06	-0.46
Electronic Equipment	-8.06	6.14	-0.26	-1.69	-0.32	7.56	-1.13	17.71	-0.45	2.50
Other Machinery	-0.62	1.26	-1.03	-2.06	-0.20	1.60	0.02	-1.01	0.15	-0.19
Other Manufacturing Services	-4.11	4.41	0.24	0.07	2.47	1.06	0.14	0.46	0.55	1.81
	-0.26	-0.12	0.12	0.12	0.03	0.04	0.08	0.17	0.06	0.07

According the **trade deficit** or the **trade balance** between the two major economic countries, USA will have an economic growth with \$48.401 billion, while China's trade balance will grow by \$7.62 billion.

The table below show the percentage of the trade balance in both USA and China as well as the emerging countries related to trade conflict and take part of the GTAP study.

Table 6: Trade balance in \$ billions.

Scenario 1		Scenario 2	
China	7.624	China	10.678
US	48.402	US	52.155
Brazil	-4.528	Brazil	-6.457
Argentina	-0.913	Argentina	-1.120
India	-1.954	India	-2.092
Canada	-2.979	Canada	-3.268
Russia	-1.656	Russia	-1.864
Mexico	-3.099	Mexico	-3.231
EU	-19.280	EU	-21.302
Other	-21.612	Other	-23.497

For the first scenario that is based on the US protectionist measurements will have a significant impact on the trade deficit even though taking into consideration the Chinese retaliation. For scenario 2, there will be an increase for both China and USA with a high increase in trade balance. Whereas, the emerging countries will see a reduction in their trade balance in both scenarios. For example, the EU deficit will be presented in the loss of \$19.280 billion in scenario 1 and \$21.302 billion for scenario 2.

For the sectors that contribute in the trade balance for both scenarios and help in improving the trade deficit for USA and China are presented in the table below:

Table 7: Trade balance by sectors (\$ Billion)

Sectors	China	US	Brazil	Argentina	India	Canada	Russia	Mexico	EU	Other
Scenario 1										
Iron & Steel	2.388	7.820	1.729	0.146	-0.948	2.821	-1.084	0.771	-4.647	-8.473
Aluminum	6.022	1.546	0.236	0.205	-0.108	3.544	-0.942	1.125	-2.569	-8.989
Soybeans	0.015	0.047	-0.032	0.006	0.002	-0.080	0.000	0.043	-0.011	0.024
Primary products	2.945	0.262	-0.456	-0.164	-0.139	-0.639	0.043	-0.592	-0.175	-0.998
Other not industrialized	4.104	-1.446	-1.049	-0.074	-0.442	-1.615	0.419	-1.414	-0.323	2.368
Other industrialized	47.152	-5.526	-1.808	-0.229	-1.552	-3.928	-0.423	-3.916	-14.521	-16.894
Dairy products	0.159	0.080	-0.008	-0.013	-0.002	-0.022	0.007	-0.137	0.028	-0.096
Processed Rice	0.036	0.000	-0.008	0.000	0.005	0.001	0.000	-0.003	-0.001	-0.032
Other Food	2.020	0.149	-0.074	-0.043	-0.017	-0.369	-0.035	-0.535	-0.342	-0.841
Beverages & Tobacco	0.120	0.039	-0.014	0.000	0.000	-0.069	0.001	-0.100	0.085	-0.065
Petroleum & Coke	0.307	0.324	-0.077	-0.009	0.052	-0.156	0.280	-0.494	-0.039	-0.227
Chemicals	0.290	4.648	-0.563	-0.146	0.090	0.162	0.199	-2.122	3.206	-4.556
Motor vehicles and parts	0.475	2.702	-0.122	-0.131	0.000	-0.389	-0.078	-3.153	0.600	0.415
Other Transport Equipment	4.161	-1.290	-0.191	-0.018	-0.057	-0.558	-0.002	-0.428	-0.415	-1.181
Electronic Equipment	-48.810	17.819	-0.452	-0.045	-0.031	1.223	-0.069	10.430	-1.308	21.695
Other Machinery	-10.158	13.149	-0.848	-0.164	-0.257	0.601	-0.234	-0.399	1.993	-2.645
Other Manufacturing	-15.924	6.072	-0.014	-0.018	2.098	0.136	0.079	-0.007	2.163	6.105
Services	12.322	2.017	-0.778	-0.217	-0.650	-3.641	0.182	-2.167	-3.005	-7.226
Total	7.624	48.412	-4.528	-0.913	-1.955	-2.979	-1.656	-3.099	-19.281	-21.616
Scenario 2										
Iron & Steel	2.437	8.022	1.560	0.129	-0.952	2.830	-1.101	0.780	-4.661	-8.520
Aluminum	6.056	1.945	0.076	0.147	-0.117	3.562	-0.977	1.155	-2.652	-9.126
Soybeans	0.570	-5.388	3.241	1.225	0.001	0.100	0.000	0.096	-0.028	0.361
Primary products	4.575	-1.799	-1.194	-0.856	0.117	-0.637	0.038	-0.632	0.245	0.438
Other not industrialized	4.072	-0.672	-1.987	-0.110	-0.531	-1.601	0.528	-1.380	-0.486	2.739
Other industrialized	46.028	-3.480	-2.464	-0.310	-1.566	-4.000	-0.449	-3.929	-14.353	-17.035
Dairy products	0.273	-0.136	-0.015	-0.025	-0.002	-0.022	0.005	-0.140	0.057	0.012
Processed Rice	0.024	0.013	-0.016	-0.003	0.007	0.001	0.000	-0.003	-0.001	-0.027
Scenario 2										
Other Food	2.050	-0.452	-0.134	-0.070	-0.012	-0.366	0.042	-0.527	-0.187	-0.385
Beverages & Tobacco	0.221	-0.099	-0.030	-0.004	0.000	-0.071	0.000	-0.102	0.142	-0.052
Petroleum & Coke	0.314	0.534	-0.121	-0.023	0.053	-0.156	0.277	-0.494	-0.111	-0.324
Chemicals	-0.148	6.986	-1.110	-0.272	0.047	0.101	0.158	-2.109	2.603	-5.063
Motor vehicles and parts	1.798	-0.227	-0.320	-0.214	0.002	-0.512	-0.103	-3.208	2.013	1.122
Other Transport Equipment	4.202	-0.415	-0.327	-0.030	-0.070	-0.574	-0.021	-0.431	-0.790	-1.520
Electronic Equipment	-48.517	19.123	-0.651	-0.065	-0.050	1.202	-0.084	10.387	-1.603	20.714
Other Machinery	-9.726	16.800	-1.568	-0.243	-0.316	0.502	-0.329	-0.503	0.700	-4.276
Other Manufacturing	-15.945	6.496	-0.047	-0.024	2.053	0.127	0.070	-0.009	2.047	5.924
Services	12.395	4.912	-1.349	-0.371	-0.756	-3.750	0.081	-2.183	-4.241	-8.483
Total	10.678	52.162	-6.457	-1.120	-2.092	-3.268	-1.864	-3.233	-21.306	-23.501

Source: Author's Calculation.

The results shows that the trade deficit will be reduced as desired from the USA-China raise of tariffs conflict. The most beneficial country will be USA as it

will have a high production in Aluminum and Iron & Steel sectors. Although the Chinese retaliation is taken into consideration, both of the countries will suffer from losing later on as the benefits will be for the short-term.

To have a good result for **welfare** in a case study of CGE models with perfect competition is to lower the additional charges that are already existing with an increase in consumer surplus by taking into consideration the differences in taxes and supply adjustments. When it comes to gains in economy, it is strongly related to how much a nation lowers its tariffs. The imported goods that are cheaper cause an increase in consumption as well as in the way of use of domestic goods. Moreover, when states are engaged in a case of trade conflicts or a trade war that are caused by the high tariffs, the opposite of this case can happen.

The welfare of a country in this situation can be affected by the shifts in trading besides the relative cost of investing and saving. Given the significant decline in the consumer surplus particularly in the USA, both nations in case if we add up the loss of terms of trade for China, there will be a suffering in terms of welfare for the entire globe not only for both countries who started this conflict. The majority of costs associated with the trade war will be a burden to Chinese consumers and producers. It is very important to note that in the case scenario of the US implementing extra import tariffs will have more significant impact and it will be minimized if China choose to retaliate. Hence, the country that escalated the import tariffs in the beginning and that is the USA will be considerably more clout in the tariff war.



Figure 15: Welfare's results in the case of both scenarios

The figure shows that in the case of both scenarios for both countries involved in the trade dispute would decrease, while the case of second scenario will have more effect on the welfare causing a remarkable loss that is up to \$23.589 billion for USA and \$43.063 billion for China. Other countries that are closely involved in the dispute will gain in their welfare particularly in the second scenario the gains will be much more than in the first one.

Taking consideration of both scenarios, the changes in the general welfare are related to the trade components in both scenarios. The decrease in China's tariffs for exports is mainly related to the additional tariffs imposed by the USA and that lead to a decrease in demand in China's exports. Therefore, China's results are solely the

most affected. For developing countries, there will be a shift in demand for their supplies as the dispute is not solved completely which will show an improvement in the region's trade agreements. In overall, the general welfare for the other nations will witness a positive recovery.

The losses that the world is facing in case of scenario 1 is up to \$25.446 billion and \$28.633 billion in scenario 2. These results are aligned with economic researches that are displaying the trade disputes, depicting the overall welfare of engaged countries in the trade disagreement as well as engaged countries.

Table 8: Welfare results in both case scenarios.

Regions	Allocative Effects	Terms of Trade Effect	I-S Effect	Total
Scenario 1				
China	-7.778	-34.326	2.380	-39.725
US	-26.580	3.052	4.265	-19.263
Brazil	1.025	1.071	-0.158	1.938
Argentina	0.130	0.285	-0.103	0.311
India	0.439	1.082	-0.155	1.366
Canada	0.886	2.734	-0.272	3.348
Russia	0.178	0.369	-0.318	0.229
Mexico	0.276	5.727	-0.675	5.328
EU	2.282	6.400	-0.977	7.705
Other	4.070	13.202	-3.956	13.316
Total	-25.072	-0.404	0.030	-25.446
Scenario 2				
China	-11.812	-33.975	2.724	-43.063
US	-26.423	-0.504	3.332	-23.595
Brazil	1.209	2.089	-0.147	3.150
Argentina	0.226	0.673	-0.130	0.769
India	0.435	1.118	-0.103	1.450
Canada	0.928	3.029	-0.242	3.716
Russia	0.195	0.433	-0.308	0.319
Mexico	0.276	5.907	-0.645	5.538
EU	2.197	6.719	-0.837	8.078
Other	4.505	14.105	-3.607	15.003
Total	-28.263	-0.406	0.036	-28.634

The table above provides the effects of economic efficiency on welfare for the regions included in the study. The results demonstrate that despite the USA has increased the tariffs it was the country that has lost the most and being responsible for other countries losses as well as it the country who started the escalation of tariffs, while China's shortfalls will be a considerable from the economic terms of

trading.

Since trade war are new and not very common among countries, researches based on the CGE model or the GTAP model to discuss the behavior of changing tariffs are still rare for the use.

The models solely depicted the effects on US trade, general impact on macroeconomics and sectoral impacts without including the retaliation scenario. The primary findings include a raise in the prices of the products that has high tariffs in the states, furthermore it will lead to a decline in the exports of these products and their derivatives which will lead to a decrease in the real GDP by 0.6% and a drop in the welfare by \$6.3 million. Other countries like Mexico and Canada will face a big loss in their GDP. However, while a decline in the USA trade investments will result a benefit and increase for some other countries like China, Japan, South Korea and the EU while some countries that are a USA allies won't be affected.

Nevertheless, economists stress about the economic consequences of bilateral trade conflicts would be adverse for the nations concerned. In a situation of retaliation, for China, the results will change drastically by area and will have a worldwide repercussion. For the trade dispute between USA and China, the outcome is asymmetrical while China's GDP will decline with 1.2%, the USA will only be reduced to 0.3% and that because the USA has more market dominance in the trade deficit. Additionally, researches came to a conclusion that the number of countries involved might change if the escalation will cover more countries.

Even so, the results shows that even in the case of Chinese retaliation the goal to decrease trade deficit might be achievable. However, since the market will have an improved access for USA businesses, it will enhance a positive trade balance especially in high-tech industries. The protectionism scenario is not only related to the USA but also to other countries that can be impacted by these decisions like developing nations. Regardless of the welfare reduction for China and USA, some other countries that are not involved directly in the trade dispute can benefit from the argument by a drastic shift in demand and that the case of both scenarios in this research like Mexico and Brazil.

The trade conflict would give the desired result wanted to diminish the trade

deficit even in the case of China's retaliation. Even with the protectionism measures taken by the USA, the production of heavy metals like steel and aluminum would increase. In the case of reducing imports coming from China to the USA as a result of trade conflict, improving trade deficit and local product will also lead to the reduce of US imports for China's response.

Given the significant decline in the economic efficiency, both countries in addition to the entire globe would witness a remarkable reduce in the welfare by considering the loss of trade for China. It is important to note that in the first scenario where the USA has a protectionist measurement, there will be a significant impact on the tariffs. But in case of China's response, the impact will be minimalized and more percussions will be taken.

IV. TRADE WAR BETWEEN US AND CHINA: CAUSES AND CONSEQUENCES.

A. Introduction

Amidst China's entrance to WTO in 2001 and its deeper integration into the global economy, the US extended its commercial connections with China dramatically. In 2017, exports of US goods to China now account for 8.6% of export earnings, while the percentage of goods imports to China outreached 21.6%. Nevertheless, over the last 3-4 years, the trade war between the USA and China has reduced trade balance, threatens to limit the gains that this trade brings to the US economy. Growing economic cooperation with China has helped the United States. Following a slight decrease in global commerce, the US delivered \$106 billion in products and \$57 billion in services to China in 2019.

However, the tale is about more than just exports to China: Consumers in America have profited from lower-cost Chinese imports. Low-cost materials have raised competitiveness for firms, but globally networked supply chain partners have boosted efficiency and lowered production costs for US companies. As a result, US businesses are able to develop and create jobs. Trade and investment with China have served the USA in many ways.

Economic expansion, consumption requirements, and employment creation have all profited from a combination of bilateral trade, supply chain performance and expenditures. In 2019, 1.2 million job opportunities in the United States were sustained by exports to China, and Chinese multinational companies employed directly 197,000 individuals in the USA. The revenues from these expenditures, as well as the role that they play to the competitiveness of US enterprises, help support the US economy through Research & development activities, investment growth, and paying dividends, which totaled \$105 billion in 2019. Because China is predicted to drive around one-third of the international economy in the next decades, maintaining market access to China it is becoming increasingly essential for US enterprises'

worldwide success.

The trade dispute between the USA and China has caused a negative damage to the US economy and failed to meet the Trump administration’s key policy goals. Instead of bringing more benefits to the economy, it has slowed and lowered development and employment in the United States, leading to a massive decrease of nearly 250,000 job positions. Tariff rates have maintained at multi-decade peaks following the conclusion of a phase one trade agreement in the beginning of 2020. China has indeed made direct investments in the USA, resulting in the creation of new jobs and opportunities for American families. Furthermore, International firms with headquarters based in the States have created business opportunities in China, allowing investors to invest profits generated by their Chinese operations. Since China is expected to drive around a quarter of the global expansion over the next years, the success of US corporations in China will indeed be vital to their international competitiveness.

Table 9: Tariffs imposed by the United States in 2018 and retaliatory measures taken by trade partners.

Panel A: Tariffs on U.S. Imports Enacted by US in 2018						
Tariff Wave	Date Enacted	Products (# HS10)	2017 Exports (mil USD)	2017 Exports (%)*	Tariff (%)	
					2017	2018
Solar Panels	Feb 7, 2018	8	5,782	0.2	0.0	30.0
Washing Machines	Feb 7, 2018	8	2,105	0.1	1.3	33.9
Aluminum	Mar-Jun, 2018	65	17,685	0.7	2.0	12.0
Iron & Steel	Mar-Jun, 2018	753	30,523	1.3	0.0	25.0
China 1	Jul 6, 2018	1,668	33,510	1.4	1.2	26.2
China 2	Aug 23, 2018	429	14,101	0.6	2.7	27.6
China 3	Sep 24, 2018	9,076	199,246	8.3	3.4	13.4
Total		12,007	302,970	12.6	2.6	17.0
Panel B: Retaliatory Tariffs on U.S. Exports Enacted by Trading Partners in 2018						
Retaliating Country	Date Enacted	Products (# HS10)	2017 Exports (mil USD)	2017 Exports (%)*	Tariff (%)	
					2017	2018
China	Apr-Sep, 2018	1,997	60,522	3.9	7.8	22.7
Mexico	Jun 5, 2018	232	6,746	0.4	9.5	27.4

Turkey	Jun 21, 2018	240	1,554	0.1	9.9	30.1
European Union	Jun 22, 2018	303	8,244	0.5	4.0	29.3
Canada	Jul 1, 2018	323	17,818	1.2	2.1	20.1
Russia	Aug 6, 2018	162	268	0.0	5.0	36.7
Total		3,135	96,045	6.2	6.5	23.3

B. Causes of Trade-War

When former President Trump issued the "Presidential Proclamation Addressing China's Economic Aggression" and placed fresh tariffs on steel and aluminum on March 23, 2018, the trade agreement is regarded to have formally begun. Back to 2017, the WTO designated China as a free market, which alarmed the US since it limited the opportunity for protection against Chinese businesses. The United States has hesitated to acknowledge China as a market economy which was the first step to rise tension between both parties. Trump's tough posture was mirrored in the National Security Strategy, which was released in December 2017. It put restrictions on Chinese acquisitions in US technology, tightened export restrictions, and expanded the list of dual-use goods that can't be shipped to China.

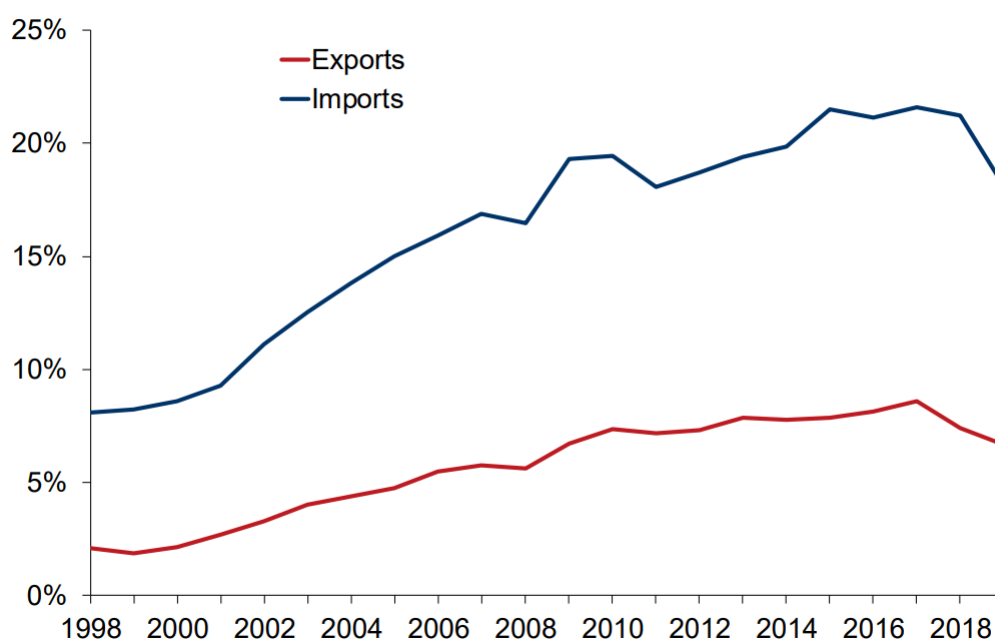


Figure 16: US trade goods to China between 1998-2018

Source: Oxford Economics – The US-China Business Council.

We can summarize the trade escalation between both bilateral trade countries in the table below:

Table 10: Steps throughout the escalation of trade war between USA and China.

Date	Context	USA's Action	China's Action
April-May: 2017	Negotiations to solve the trade imbalances	Investigation in imports related to steel and aluminum.	US businesses get to have more access to Chinese agriculture and financial sectors.
February-April: 2018	Inspection in China's actions related to technology, innovation and intellectual property policies.	Measures related to China: new import duties to take place in the aerospace, IT, telecommunications, and manufacturing sectors.	Fruit, wine, seamless steel pipes, and recycled aluminum are among the 128 products subject to duties ranging from 15 to 25%. Plus 178.6% import tariffs on wheat imports from the US.
July: 2018	Conversations taking place for new restriction list under open negotiations.	818 goods are subject to a 25% duty (worth \$34 billion in imports).	Marine products, Agriculture, and cars are among the 545 product categories with 25% tariffs (imports worth \$34 billion).
August: 2018	China complains against the US after exchanging preliminary lists.	Semiconductors, chemicals, plastic, motorbikes, and e - scooters are among the 279 products subjected to 25% tariffs.	New duties up to 25% on 333 items, including Gasoline, coal, copper scrap, vehicules, and medical equipment.
September: 2018	China cancel the negotiations of the trade tariffs and release another state for opposition.	10% tax on \$200 billion in Chinese imports (introduced with the possibility of a rise to 25% in 2019).	Imports totaling \$60 billion are subject to 5% and 10% penalties.
December: 2018	At the G20 conference in Buenos Aires, the United States and China agreed not to raise tariffs for 90 days.	Announcement of the US about delaying the new list of tariffs.	China increases agricultural and petroleum imports whereas decreasing vehicle and automobile part duties from 25% to 5%.
May – June: 2019	Trade talks are still continuing on ahead of the G20 summit.	Imports worth \$200 billion will be subject to a 25% duty (up from 10%). The Entity List has been updated to include Huawei and five more Chinese businesses.	Import taxes of 25% - 20% -10% (up from 10% -10% -5%) were imposed on \$60 billion worth of goods.
June: 2019	During the G20 summit that took place in Osaka, both countries had agreed to avoid increasing tariffs.	The restriction on Huawei partnerships is being revisited. A total of 110 products	China has stated that it aims to increase agricultural commodities imports.

are exempt from the
25% tariffs.

After the G20 summit organized in Osaka, Japan in 2019, both countries began exchanging threats regarding the increase of tariffs relates to imported-exported goods. Meanwhile, Chinese businesses have stopped buying agricultural products from the US. Meanwhile, the US has accused China of market manipulation especially in currency in order to achieve a competitive edge and somewhat mitigate the impacts. As per China, it has launched a new WTO case against the USA, disputing the taxes' reasoning. Despite the G20 conference's achievements, the US announced brand-new tariffs on \$125 billion in Chinese commodities.

China then slapped a 5% tax on \$75 billion worth of US oil products and other imports. Both sides eventually decided eliminate specific commodities as it became clear that companies in both nations were paying too much for the governments' activities. In the meantime, ZTE (SOE Chinese manufacturing company) and Huawei received involuntarily penalties that resulted in the lack of competitiveness in Chinese high-tech businesses.

One of the more controversial aspects of the agricultural trade talks is China's import of soybeans grown in the United States. In July 2018, China ceased importing soybeans from the USA but later by the end of the same year it resulted in buying them again. Thereafter, agricultural exports from USA were the main subject of discussions. As a result, China excluded soybeans as well as other agricultural goods from increased tariffs.

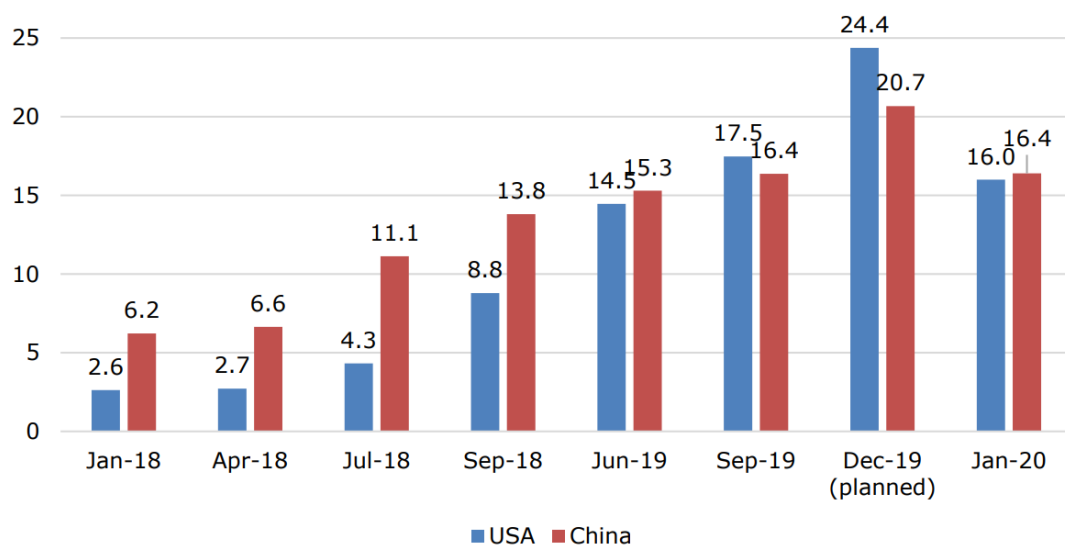


Figure 17: transformation of trade tariffs between USA and China between 2018 and 2019.

Source: (Eddy Bekkers, 19 March 2020), page 6.

The goal of the trade conflict had to have some benefits like to lower the bilateral trade deficit and return employment to the USA. Unfortunately, later in 2017, the conflict took a wrong way. China contributed for \$376 billion, or more than half of the \$796 billion US trade imbalance that has been increased more than it should be. Later on, The US acknowledges a number of concerns in its economic ties with the PRC and most importantly the trade deficit that is rising. Nevertheless, as a consequence of the trade imbalance, exports from the US to China have decreased by 21%, while exports from China to the US have increased by 19%. For decades, the conflict was under the rise but it got highlighted more during the past few years. As per The United States government trade with China is deemed to be not "fair."

As a result of the conflict, China's elevated capabilities are projected to dwindle. The United States is dissatisfied with China's limits on developing collaborative projects for transfer of technology in exchange for a share of permitted shareholding in local firms. Another contentious subject is Chinese state investment in foreign markets, which creates unfair competition. The United States is concerned about China's success in implementing a growth strategy that incorporates expansion in manufactured robotics, lithium batteries, networking devices, and other items. Therefore, the Import duties on electronic products from China, have been raised up to 25% while telecommunications devices are included.

Another aspect to the trade war is supposed to reduce China's military capacity. It is believed that allowing China to attain military supremacy, even in the long run, is extremely risky for the US. As a result, the US is taking steps to maintain its image regarding its economic edge in the national security market and preventing China from dual-use of technologies.

The trade war is designed to reduce the deficit in the federal budget. The federal government of the USA has set a budget imbalance of \$21 trillion, due to tax reductions adopted in December 2017. The Chinese Communist Party now has a considerably stronger financial condition and is set to recompense some sectors that have suffered due to the conflict. On the other side, the US government witnessed a major deficit of nearly 4% of GDP, which is expected to likely increase in the near future.

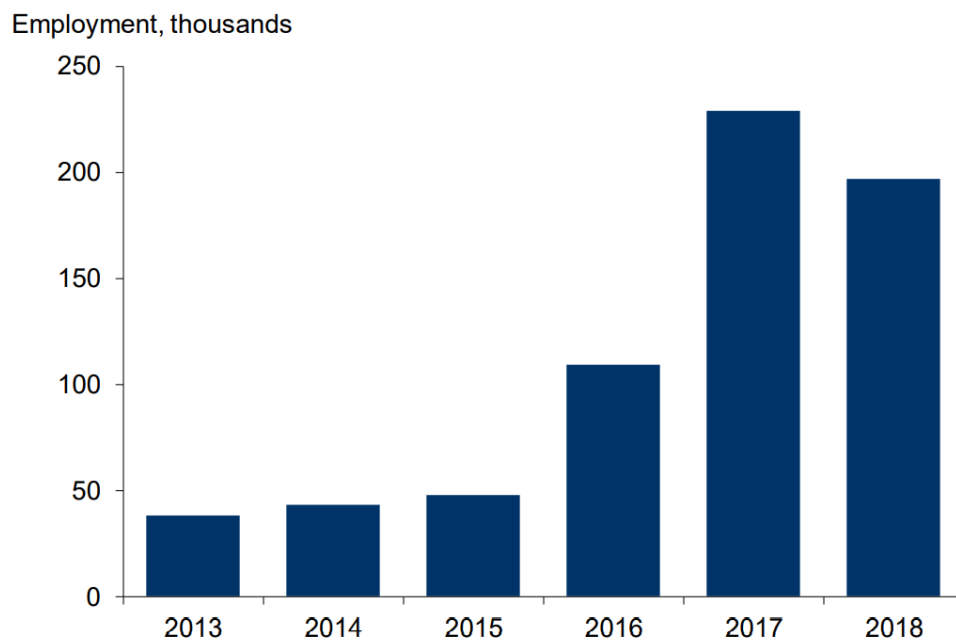


Figure 18: US employment in Chinese multinational businesses from 2013 to 2018.

Source: (Oxford Economics, January 2021), page 10.

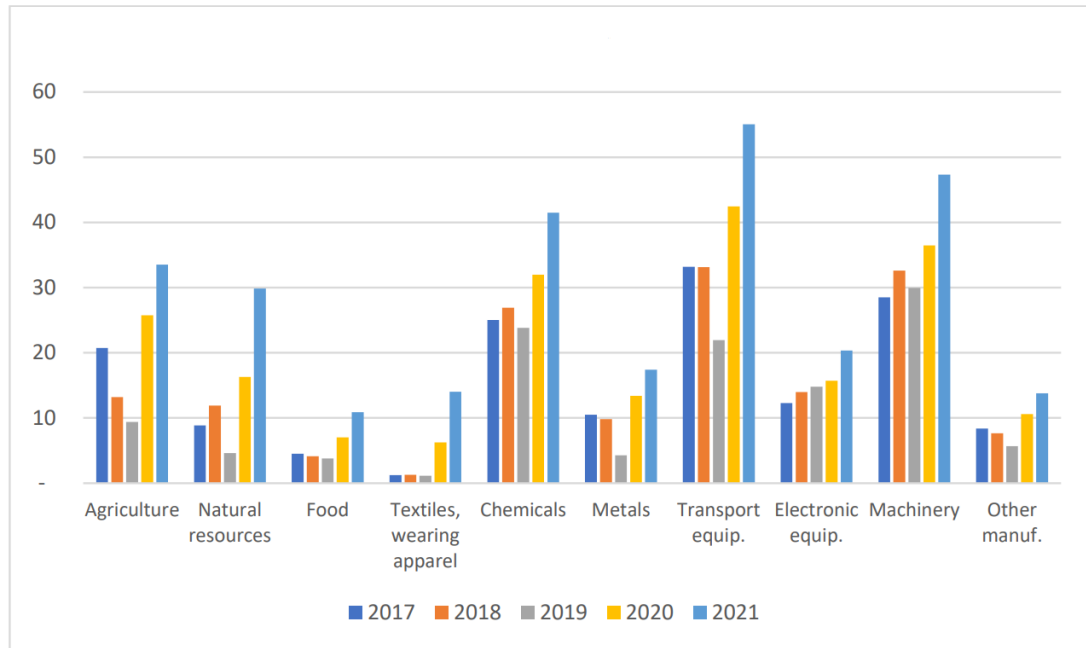


Figure 19: Chinese imports from the USA (\$ Billion) in 2017-2021.

Source: World Bank Data reports.

C. Consequences of Trade-War

The war trade between both countries will cause huge losses in global GDP that might decrease to 1% in the current year. Experts and analysts from the world bank offices used a model called The Computable General Equilibrium (CGE) based on existing data to calculate and create a new economic estimation by imposing a 25% tariff on all Chinese imports to the US and resulted to there might be a worldwide cut in exports by 3% and global product by 1.7%. According to the study, escalating tariffs could cut world exports by up to 3% (\$674 billion) and global income by up to 1.7% (\$1.4 trillion), with losses affecting all regions in the current decade. The most affected industries in the US related to the high taxes are agriculture, chemicals, and transportation equipment. For electronic equipment, machinery, and other manufacturing products are considered to be the most impacted industries in China.

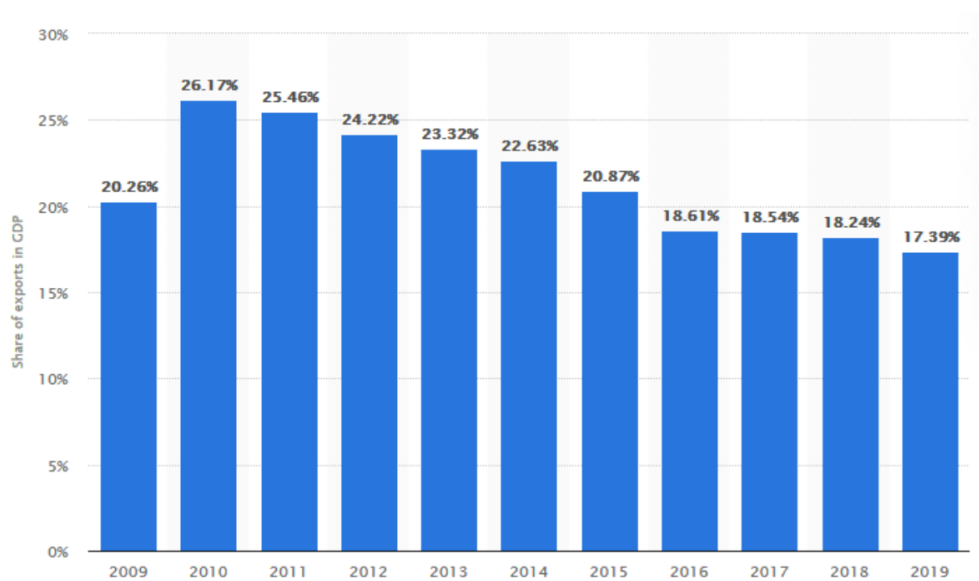


Figure 20: Growth of Exports and GDP in China during 2009-2019.

According to analysts, even the tariffs are added to the imports from USA to China, the Chinese GDP won't get affected. There will be a noticeable impact that it is represented with 0.7% yet the Chinese economic growth will be increasing and appearing with 6.1% of GDP growth. According to several analysts, the outcome in this trade war is showcased in an immense impact on the US economy more than on the Chinese one. Because of patriotic appeals to boycott American firms like Apple, McDonald's, and KFC, US businesses will suffer from a huge loss in Chinese market. Furthermore, there is more demand for US-restricted products (such as Huawei). Huawei is facing a tough situation due to the restrictions as well as most of the chips used in communications were imported from the US, while Chinese and Korean manufacturers were unable to increase the demand.

The influence on customers will be determined by consumption behavior of consumers. Because rising taxes make imported items more costly, customers who favor electronic gadgets, which are primarily manufactured in China, are more inclined to feel wrongfully treated than those who rely on locally (American) produced products. As shown in a new study, imposing tariffs on \$200 billion in imports will charge each American consumer \$127 per year. Furthermore, if tariffs are imposed on all foreign imports between China and the USA, global GDP may decrease by \$600 billion. Even if the trade war ends, already imposed limitations will cause GDP growth to drop by 0.2% in the US and 0.5% in China in the next two

years.

This trade war might cause a cold war between USA and China as both parties will not set up to compromise for solutions. The countries' economic and political systems will not be abandoned to do a favor for each other and that will escalate the tension between both administrations. As a result, a growing number of global issues will be addressed by international organizations that do not include the United States. The United States' influence in logistics services and international trade will diminish as the country's power degrades. The United States could be kicked out of a variety of local trade and economic organizations. When some enterprises in the US succeed, others fail. There is increasing dissatisfaction among American corporate leaders and their international partners (with recent instances include Ford and Boeing, equipment manufacturing, and the chemical industry, among others). As well as the inflation of domestic market will rise and prices will increase.

Simultaneously, China's financial market would suffer, and the "Made in China - 2025" strategy is at risk of failing, thereby slowing the country's technological advancement. China has recently expanded its Research and Development (R&D) spending, although it continues to fall behind the US. Given the significance of Made in China 2025 to China's economic future, economists predicts difficulties for the Chinese government meaningful sacrifices during the trade dispute.

The trade war can end with compromises if the USA accepts to respect other states' concerns and not cause any cold war or a new World War III. In the other hand, China as well have to contribute in the making of peace by accepting some of the USA's terms. For example, liberalization of Chinese automobile industry, tighten intellectual property rights, restrict the transfer of American innovations to Chinese businesses and increasing imports of USA's goods and services.

Another outcome that might result out of this trade war is import tariffs can be reduced by 12.5% within the end of 2022 and reach a target of \$200 billion. Also, given that China primarily exports items produced by TNCs with assembly process manufacturing units in the country, Chinese companies have started to relocate

production to Vietnam, Bangladesh, Ethiopia, and other countries with a lower labor cost. Within the trade war, six ASEAN Countries and more have arranged supplies of almost 1,600 additional brands of products either under goods or services conditions which they had never offered in the US previously since the trade war started, in addition to the US banning imports from China.

The war might turn to a hot one and cause a world war III especially that the US has restrictions of nuclear weapon use. The trade war among China and USA is profound, and it will not be simply settled. The battle is linked to a competition for global economic leadership. The US has a considerable technology edge in the digital sector and is seeking to "virtually rule" the global economy growth.

D. Conclusion

The trade war can lead to a dangerous slow-down in global economy and a drastically change in the architecture of international trade. The countries can be divided into two groups, each defending one of the two superpowers, but simultaneously forming gigantic economic alliances and regional monetary regimes. While Asian countries are in the process of strengthening their region in global supply chain, the USA is likely to maintain a dominance in the control of global economy, politics and in the national security.

The United States' current international trade strategy tries to impede the PRC's still strong economic expansion and growing prominence in the global economy. China is seeking to be a global leader in robotic systems, biotechnology research, and artificial intelligence in exchange. This will offer financial support to high-tech enterprises and will do all possible to discourage the US from suspending or delaying China's economic transition and modernization.

Furthermore, we should keep in mind that the US's restrictive campaign against its trade agreements, notably China, has a political as well as an economic proportion. According to US officials, China will be the United States' principal strategic adversary in the upcoming years. As a result, Trade barriers with the US and other means of slowing China's productivity expansion are also tools for restraining China's political dominance advancement.

V. SECTORS THAT HIGHLY AFFECTED BY THE TRADE WAR

A. Agriculture

The agriculture industry in the United States suffered the fastest and most devastating effects as a result of the penalties, with fewer export revenues to China. In 2017, the US sold \$19.5 billion in agricultural commodities to China prior to the tariff rise. Agricultural exports to China plunged 53% to \$9.1 billion in 2018 as a result of tariffs imposed and reduced operational purchases. Because it ignores other factors like climate and global commodity prices, this gross drop understates the full impact on the agriculture sector.

Furthermore, China's aggressive strategies were a major factor in the global drop of US soybean shipments. Because of the drop-in exports to China, American soybean exports fell from 66.06 billion Kg within 2016-2017 fiscal year to 51.04 billion Kg in the 2018-2019 fiscal year. During the same timeframe, this loss accounted for an 18% drop in soybean exports from the United States.

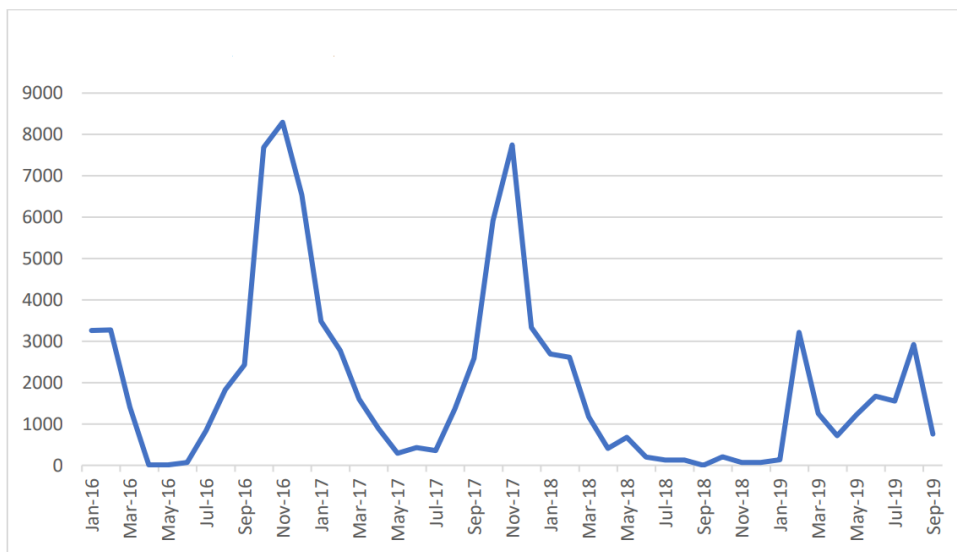


Figure 21: China's Soybean Consumption from January 2016 to September 2019

The agriculture industry has clearly been harmed as a result of China's protectionist measures, which were implemented in an attempt to minimize the effect of the original tariffs imposed on her imports by America's former president Donald Trump in 2018. In conclusion, China's punitive actions have resulted in a board decline in US product exports, wreaking havoc on the farm industry in various counties across the nation.

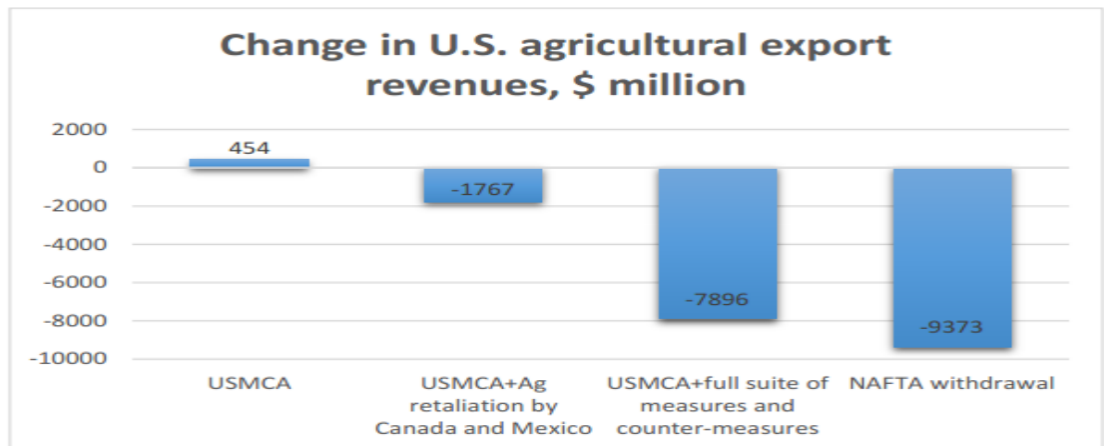


Figure 22: US Agricultural Changes in Revenue (in US \$).

B. Manufacturing

The trade dispute harmed the US industrial output because of its supply chain connections, both with China and within the US. The manufacturing sector forecasts immediately just after September 2019 higher tariffs display that the industry's most frequently subjected to supply chain interconnection with China, such as motor vehicles, machinery, and electronics, appear to be the most likely to be impacted, but tariffs have reduced all manufacturing sector production forecasts.

Tariffs appear to have harmed manufacturing jobs, according to statistical research. According to a Central Bank study, industries that are more exposed to retaliatory trade barriers and supply chain connections with China are now more likely to lose jobs as a result of the increase of tariffs, as any marginal gains from local manufacturing security are more than counter balanced by the impact of import duties and supply chain disturbance, which raise costs of production.

The tariffs increases on the exported steel from China has affected the industry in the USA. Clearly, the Trump governments policies to impose tariffs on Chinese goods are unlikely to have an influence on Chinese exports. Nevertheless,

tariffs imposed by the United States and counter-tariffs imposed by China on American exports will hurt critical industries in the United States, such as agricultural and manufactured goods.

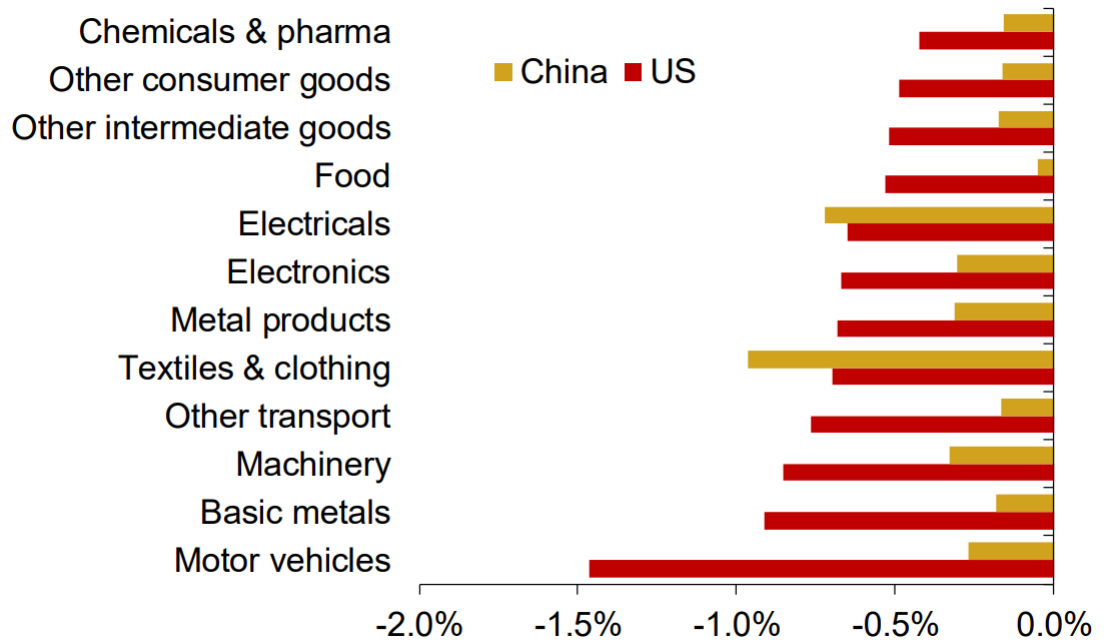


Figure 23: Tariffs on manufactured goods in the United States and China in 2020.

Source: (Oxford Economics, January 2021), page 15.

C. Energy

The US energy sector has been made more vulnerable to the trade dispute as a result of China's violent moves, with China slapping 5% tariffs on imported goods such as oil and a 25% tariff on liquefied natural gas (LNG) imports. In monetary terms, 23 shipments of petroleum products and natural gas to China decreased by 47% and 90%, respectively, in 2019.

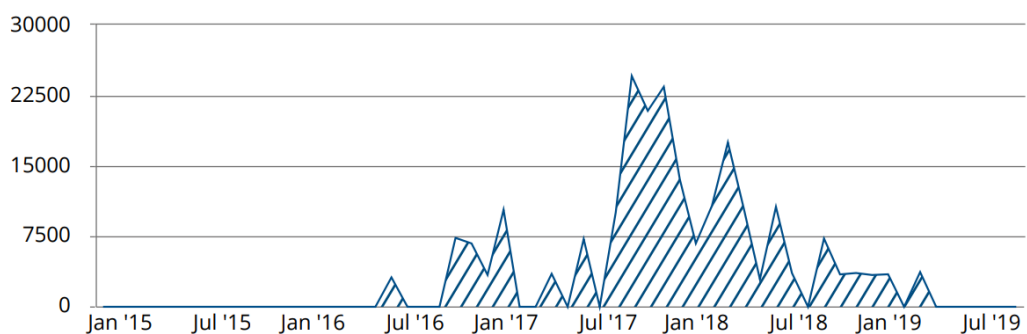


Figure 24: The drop of the US natural gas exports to China over a three-year period as a result of tariffs imposed by the trade war.

Considering China's increased energy needs, this helped bring the US LNG exports to a stop. China's consumption for oil grew by 4.5% in 2019, according to the US Department Of energy, and natural gas usage rose by 9.4%, according to research made by Oxford Analysts.

The sector's long-term strategic implications will be much more substantial. China presently accounts for 14% of global oil consumption and 7% of global natural gas use, with those figures expected to rise to 15% and 9%, accordingly, in the next few years.



Figure 25: Volatility in the Oil Market

China's consumption of US energy products has increased dramatically as a result of the stage of one trade agreement, but China failed to fulfill its 2020 commitments, and tariffs remain unchanged. This will continue to be a barrier to the US energy sector's accessibility to China, the largest power user, unless it is resolved.

In the meantime, the winners from the trade war in terms of energy and oil trade will be OPEC countries and Russia. OPEC and Russia will benefit from market share as they will strengthen their position by providing their goods and services to Chinese oil market. These benefits will be a short-term one as the trade war still going on, it will have an impact on the economic growth and oil industry for the long-term.

D. Labor Market

China's economic sanctions on US exports have a significant impact on income and manufacturing possibilities, as well as labor market consequences in different US areas. The additional tariffs put on US agricultural goods have had a negative impact on the US agriculture industry. Since 2009, China has been the biggest and most important trade partner outside of North America for the US agriculture industry, with yearly shipments anticipated to be approximately \$ 20 billion in 2017.

As a result, China's reciprocal tariffs on agricultural imports from the US are anticipated to have a considerable effect on agricultural workforce results. Notably, the most impacted part of the labor income sector is those employees who used to have a competitiveness due to the Chinese market but lost it due to the increase of tariffs. China's aggressive actions against US agricultural goods are believed to have impacted employment market in the agricultural industry.

Additional tariffs have resulted in lower agricultural exports from the United States to China, which is the country's most important market. Overall, the USA-China trade dispute has had a negative impact on consumer and labor market outcomes in the United States. Due to lower imports, consumers in the United States have had to pay much higher costs for goods.

E. Stock Market

Global stock markets are being influenced by the trade conflict between China and the United States, and no sector benefits from weakening mood as a result of the conflict's intensity. The markets with a developed framework to China's and the United States' supply networks suffer the most. As a result, Asian markets seem to be the most vulnerable and sensitive to be affected easily with the trade tension.

Table 11: The market's reaction to the critical era of trade tension.

Stage	Extent	The Return of CSI All Share Index
The 1 st Stage (23 March 2018 to 8 April 2018)	Negative events dominate the outbreak phase	-2.48
The 2 nd Stage (9 April 2018 to 29 May 2018)	After the outbreak of the trade conflict, the two sides gradually eased and began consultations until they reached a consensus to suspend the trade war.	-1.99
The 3 rd Stage (30 May 2018 to 11 July 2018)	The US once again provokes a trade war with negative events	-11.98
The 4 th Stage (12 July 2018 to 1 August 2018)	Trade war eased again	1.55
The 5 th Stage (2 August 2018 to 28 October 2018)	This period is full of negative events	-12.62
The 6 th Stage (29 October 2018 to 31 December 2018)	Trade war once again eases	-2.57

As the trade war progressed, social media reports of upcoming tariffs and governmental declarations dominated the news. The timing of these statements corresponded to sharp and often unfavorable moves in the stock market. Once the American government under Trump administration announced the upcoming application of 25% tariffs on the first shipment of Chinese imports, analysts discovered that the tariff notifications caused market depreciation of 4.3%. The stock market plummeted a total of 12.9% over a three-day period surrounding the happenings, with their analysis blaming the trade war for the entirety of the dip. These figures differ with dynamic trade systems' outcomes, which are based on price movements and conditions of trade. These figures vary with the dynamic trade models' outcomes, which are reliant on price movements and conditions of trade.

Stock markets suffered their lowest year in 2018, with the S&P 500 plunging over than 6% and the Hang Seng and Shanghai stocks index dropping 13% and 25%, correspondingly. Google search volume has increased ever since, indicating that

investors' interest to the trade conflict has increased.

Table 12: Asian stock markets' performance in 2017 and 2018.

Index	Return in 2017	Return in 2018 (Jan 1-Aug 20)
Bangkok SET	12.2%	-4.3%
FTSE Bursa Malaysia	7.9%	0.3%
Hang Seng	30.7%	-9.6%
Indonesia JSX	21.0%	-7.1%
Kospi 200	21.8%	-11.5%
Nikkei 500	26.8%	-8.2%
Philippines SET	18.3%	-14.0%
Shanghai Stock Exchange Composite	5.9%	-19.4%
Shenzhen Stock Exchange Composite	0.7%	-24.4%
Straits Time	13.1%	-6.6%

The trade war has had a significant impact on financial market efficiency in six ASEAN member nations, including Malaysia, Indonesia, Thailand, Singapore, Vietnam and the Philippines. Furthermore, throughout the era of the American and Chinese trade disagreement, the achievement of the ASEAN equity market depending on the Cumulative Abnormal Return (CAR) was beneath than the MSCI Global Index, despite the fact that the trade war had no meaningful influence on the ASEAN financial market. In the meantime, the Korean index has dropped with 70%.

VI. THE TRADE WAR AND ITS IMPACT ON THE WORLD

Since the inception of the trade conflict between the USA and China, both nations have increased taxes on one another exports, the increase of taxes on Chinese imports into the US went from 2.6 % to 17.5% and for the US imports it went from 6.2% to 16.4%. The Phase one Agreement in between China and USA cut tariffs on Chinese imports entering the US to 16 %. The trade war did not only have had an impact on the United States and China alone, but also other countries have been affected with the decisions made by rising trade tariffs.

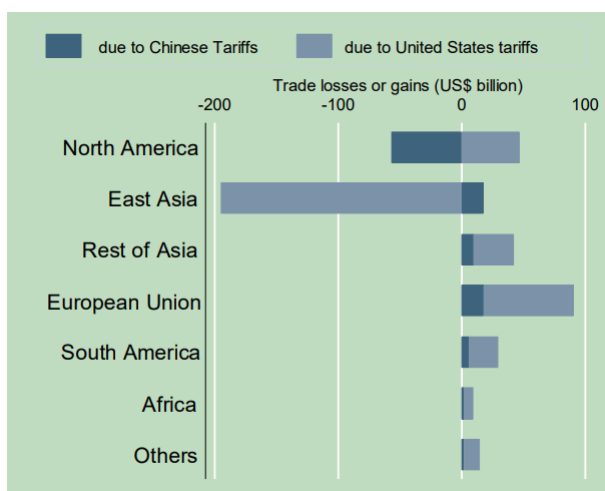


Figure 26: Implications on localized value chains as a result of 25% tariffs on the affected products.

The economic repercussions for both countries will be severe, and it will have a negative impact on global trade. The consequences of this conflict will also be a source of concern for global growth. If this current commercial war is restricted to the US and China, the major consequence on the world economy will be roughly -0.5 % GDP; but, if other countries follow suit and the trade war continues, global GDP will be reduced by at least 3%. The world economy could be sent into a major downturn as a result of this. (Khan, 2019)

Table 13: Expected impact of policy options for emerging countries.

	Join the trade war			Do nothing			Non-US RTAs			Turn other cheek		
	GDP	Exports	Exp to US	GDP	Exports	Exp to US	GDP	Exports	Exp to US	GDP	Exports	Exp to US
Involvement in dispute												
United States	-0.3	-11.7		-0.3	-10.8		-0.3	-11.1		-0.3	-10.9	
China	-0.1	-0.5	-10.9	-0.1	-0.4	-8.9	-0.1	0.9	-10.7	-0.1	0.9	-10.2
EU-28	0.0	-0.4	-8.0	0.0	-0.4	-6.0	0.0	-0.1	-6.8	0.0	-0.1	-6.3
Other Europe	0.0	-0.3	-4.8	0.0	-0.3	-2.6	0.2	0.3	-3.6	0.2	0.3	-3.0
Mexico	-0.4	-7.0	-12.3	-0.4	-6.7	-11.3	-0.4	-5.3	-9.9	-0.4	-5.2	-9.6
Canada	-0.4	-5.4	-12.4	-0.4	-5.1	-11.2	-0.4	-4.6	-11.4	-0.4	-4.5	-11.1
High Income Asia	0.0	-0.9	-12.1	0.0	-0.8	-10.1	0.1	0.1	-12.0	0.1	0.2	-11.5
Total	-0.1	-2.2	-10.6	-0.1	-2.1	-8.8	-0.1	-1.6	-9.7	-0.1	-1.5	-9.2
Developing countries*												
Brazil	0.0	-0.5	-8.6	0.0	0.2	-5.2	0.4	2.1	-4.8	0.4	2.5	-3.9
Rest of Latin America	-0.5	0.5	-17.6	-0.2	1.6	-15.2	0.0	2.4	-15.1	0.1	2.7	-14.5
Central Amer. and Carib.	-1.4	-4.6	-15.5	-0.6	-1.5	-9.9	0.4	1.1	-8.4	0.6	2.1	-6.7
MENA	-0.2	0.1	-1.2	-0.1	0.2	0.7	0.3	1.0	0.7	0.3	1.1	1.2
Nigeria	0.3	-0.2	5.2	0.5	-0.1	6.1	0.6	0.1	5.8	0.7	0.1	6.0
SACU	-0.2	-0.6	-10.5	-0.1	0.0	-7.9	0.4	1.2	-8.8	0.4	1.2	-8.2
Rest of Africa	0.0	-0.1	1.7	0.1	0.0	3.3	1.2	2.4	4.4	1.3	2.5	4.8
Former Soviet Union	-0.2	0.4	-3.8	-0.1	0.5	-2.0	0.1	1.2	-2.1	0.1	1.3	-1.6
India	0.1	-0.8	-7.9	0.1	-0.6	-5.5	0.8	2.4	-4.4	0.8	2.5	-3.7
Rest of South Asia	-0.1	-1.6	-12.7	0.0	-1.3	-10.6	0.7	4.1	-7.0	0.7	4.2	-6.4
Rest of Asia	-0.3	-0.8	-13.4	-0.1	-0.1	-10.7	0.7	2.2	-9.8	0.7	2.4	-9.0
Total	-0.2	-0.3	-7.5	-0.1	0.2	-5.1	0.4	1.7	-4.6	0.4	1.8	-4.0
Global	-0.1	-1.8	-9.8	-0.1	-1.5	-7.8	0.0	-0.8	-8.3	0.0	-0.7	-7.8

A. European Union

The European market represents one of the world's major economies, but it is unclear whether the EU would profit or not from the trade dispute. Following to some organizations and banks, it is questionable that the trade tension will provide new opportunities for the EU members. According to a research conducted by the United Nations Conference on Trade and Development (UNCTAD), the EU exports would capture up to US\$70 billion of the US–China bilateral trade. Among EU member states, Germany and France would be the most likely to benefit from this dispute, European companies may gain market share in China, thanks to trade substitution caused by tariffs (Goulard, 2020).

Exports from Europe to China might increase by 0.1% of GDP, with the European vehicle industry earning the largest benefits from the trade conflict.

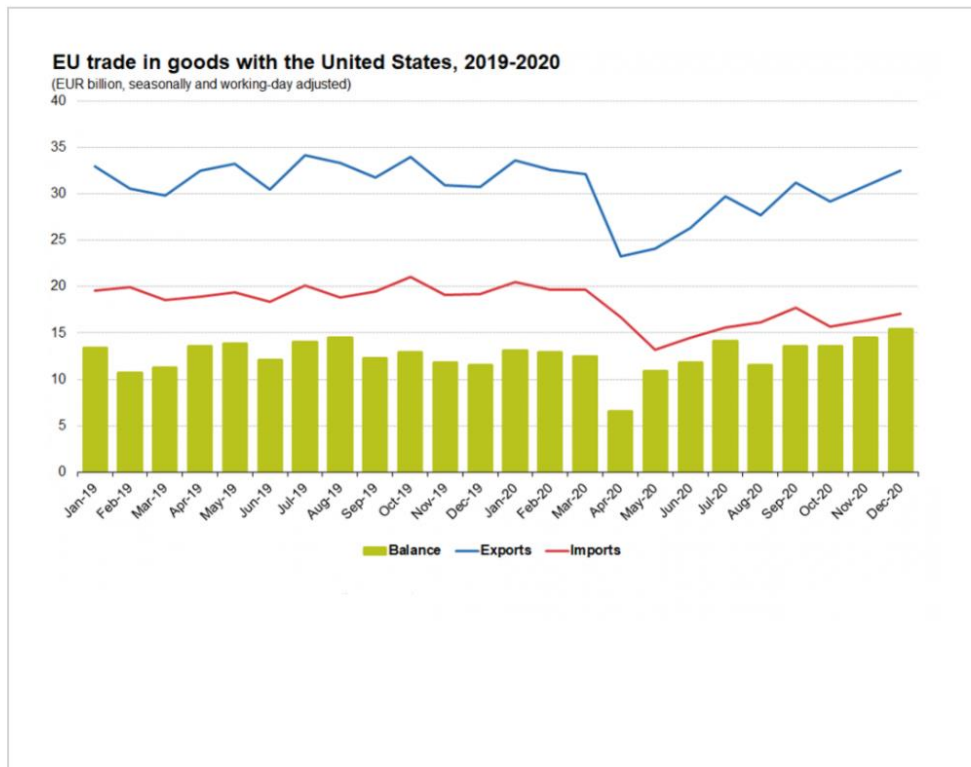


Figure 27: Goods trade between the EU and the US in 2019-2020

Trade tensions between the United States and China, on the other hand, are having a severe influence on the European economy, notably on European enterprises situated in China. In September 2018, the European Union Department of Commerce in China published a research based on surveys of European businesses in China. According to the research, about 54% of European companies in China stated that US charges on Chinese goods or services were disadvantageous, while 42.9% thought China's tariffs on American imports damaged their businesses.

In the fields of aerospace, military spending, and the political backlash of China's worldwide influence, the EU is caught in the middle of the US-China trade war. It is best to pick parties only when the EU-28 can chose their destiny together. Much further in patriotism will be fueled by a rising wave of anti-immigrant, anti-Islam, and anti-China sentiments within the EU.

EU has to democratize its own policy-making process in Brussels to make cogent and realistic socio-political and socioeconomic choices in this highly polarized world (Genç, 2020).

Regardless of anticipated or actual management changes, some essential aspects of the EU's perspective should stay stable over the next few years, assuming

substantial changes in internal or international circumstances. Faced with USA and China, the EU is likely to stick to a democratic, global agenda, for which it will continue to pursue backing from allies such as Republic of Korea, Canada and Japan.

B. Asia

Growing trade tensions between the world's two largest economies could have a substantial influence on economic growth of Asia-Pacific nations. For the International and regional policy programs adopted in the area, restrictions related to the pattern taken can be tight increased and seen all over, but it can also face some limitations. With a significant increase and growth in import duties related to goods and services, a persistently high level of rigidity for trade in services, and rising concerns about investment. Furthermore, trade conflicts have an impact on the dynamics of regional cooperation.

From one side, the tensions are prompting Asia-Pacific countries to consolidate, as China and other countries appear to be hastening the implementation of Regional Trade Agreements. (RTA). On the other side, in order to diversify their commercial links and counterbalance the region's trade structure, which is controlled by the United States and China, Asian-Pacific governments are expanding ties with businesses from the outside zone.

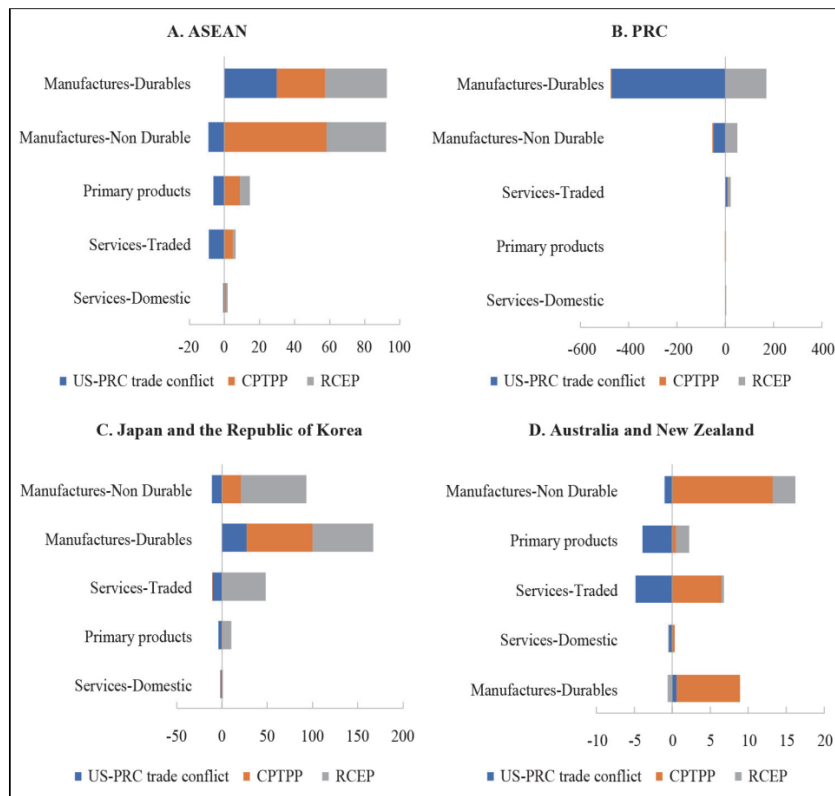


Figure 28: Policy Impact on Sectoral and Regional Exports in Asia and the Pacific (Export Changes in 2030, \$ billion)

Although the United States-China trade war has an adverse impact on the world economy, the direct exposure of the Asia-Pacific region, except China, to the current tariff wars are generally limited. The indirect impacts from the tariff wars could, however, be much more significant (ALEXEY KRAVCHENKO, 2019).

Through back and forward links in Global Value Chains (GVC), the dispute has had another devastating impact. Global trade movements are expected to slow in the short term as tensions between the US and China affect supply chains and reduce market stability.

For the medium to long term, trade negotiations among the world's two largest economies might have a substantial impact on the structure and extension of GVCs, that have been a key cause of regional economic progress over the past two or three decades.

The tariff increases that have already taken effect have only reduced local GDP by 0.12%, or around \$40 billion. Meanwhile, when trade disputes escalates and market confidence drops, as certain studies predict, the negative consequences may total about \$400 billion globally and more than \$115 billion in Asia and the Pacific.

In all situations, bad effects on China are to blame for the majority of the regional GDP loss, but net exports in practically all other Asia-Pacific economies are also falling.

The tariffs have an obvious impact on the commodities and nations that are exposed to it. Buyers of certain products in the nation whose imposed the levy nowadays are facing higher product cost per units, which has reduced their consumption for goods and services from international marketplace. For the Indirect implications, it can be encountered in both national and international distribution networks. Manufacturers who are now offering less quantity of items or products as a result of tariffs incur losses and purchase new intermediate goods from both domestic and international suppliers, resulting in unintended repercussions all the way up and down supply chains.

Furthermore, as a result, trade realignment may reward nations who aren't explicitly participating in the trade dispute. This is particularly true for countries that already produce the targeted goods but are exempted from the tariffs now levied on their competitors, and which have the capacity to expand production sufficiently in response to increased demand. It may also benefit the countries to which production may shift in a prolonged trade conflict (Abdul Abiad, 2018)

Decent trade benefits from regional cooperation could more than help to reduce the negative consequences of possibly growing externally driven trade disputes in the Asia-Pacific area as a whole. As a result, Asia-Pacific countries may seek to expedite the implementation of existing regional trade agreements. They may also suggest getting a significant role in many other trade-related continental collaboration and assimilation initiatives, such as the Partnership agreement on Facilitating Cross-Border Paper-Free Commerce in Asia and the Pacific, to mention a few. Finally, they may collaborate on the upcoming WTO changes, which aims to create a universal, regulation, accessible, nondiscriminatory, and fair global trade system for Sustainable Development.

C. Africa

Africa has traditionally been seen to have a varied economy, fueled by significant trading networks that formed between cities and kingdoms. The majority

of these roads were rural, passing rivers, while others grew up around port cities, forming enormous empires that prospered because to their trading routes. Africa's economic expansion has been criticized as being slow, owing to chronic violence and turmoil, dictatorial regimes, and extensive corruption, among other factors. Despite the fact that it has been on a recent upward trend.

African trading is controlled by a variety of natural commodities that the region has in plenty, despite the fact that trade differs between regional countries. According to the Bank of African Trade, 70% of Africa's exported goods are largely unrefined, and "Africa seems to be the only continent that transacts the least into itself, with intra-African financial inclusion of Africa's total trade in goods at 15%, especially in comparison to 33% for the Americas, 55% for Asia, and 65% for Europe!" Africa's trade is considered as being more reliant on international trade than other parts of the global markets, such as the EU and/or North America, which do business with their neighbors to the extent of 63 % and 40%, accordingly.

Table 14: List of African countries and their % of exports to China.

Africa's Top Exports to China	
Country	Percentage of 2017 Exports Destined for China
South Sudan	95%
Angola	61%
Eritrea	58%
Gambia	52%
Democratic Republic of the Congo	45%
Guinea	44%
Zimbabwe	44%
Gabon	42%
Central African Republic	41%
Republic of Congo	40%
Sierra Leone	36%
Equatorial Guinea	28%
Chad	24%
Mauritania	23%

However, Africa countries and sections of the population are likely to suffer significantly from the new protective tariffs planned by the US government. As China increases its trading activities with Africa even as in 2018, the United States

dealings with Africa has not improved since 2015 – 2017 when it dropped drastically (Annang, 2020)

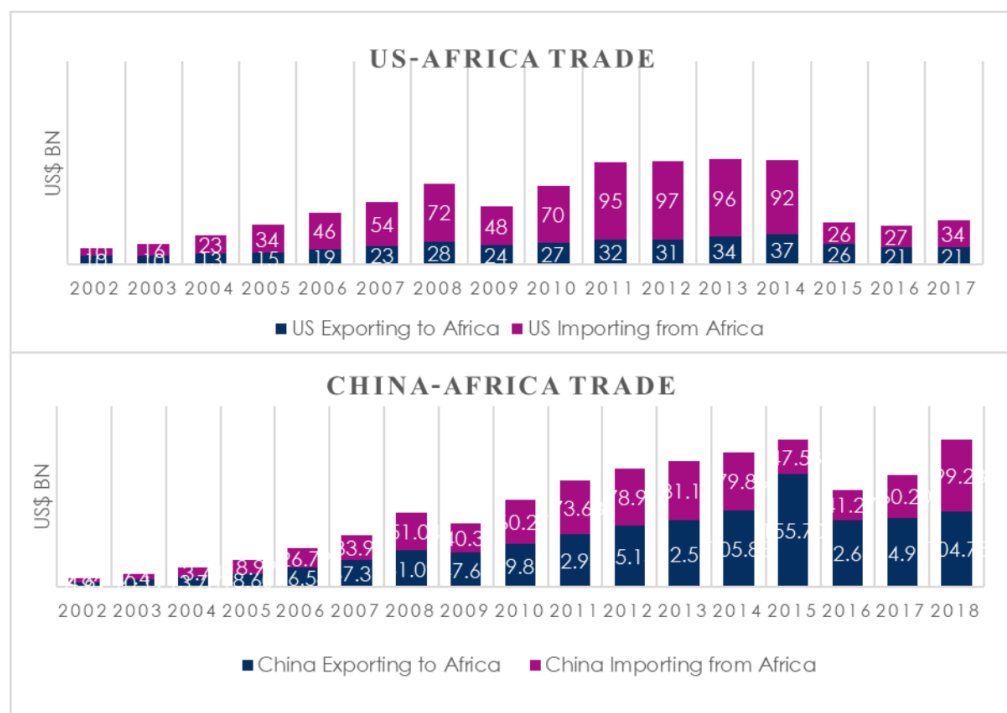


Figure 29: Africa’s trade with the USA and China.

Source: (Annang, 2020), page 19.

The ramifications of the disagreement between China and the USA would affect others who have no voice in the matter, such as little nations like Ghana. “These events provide proof, if some were needed, that ours is an inter- dependent world.” That was the statement of the president Nana Akufo-Addo, President of Ghana in the general assembly of United Nations in September 2018. The African continent has also suffered from an impact by the tension between USA and China. The IMF lowered Africa's 2019 GDP prediction from 3.3% to 3.1%, blaming rising trade tensions, Brexit, and poorer Chinese economic development as major contributors. According to the report, the trade war alone could lead in a 1.5% drop in Africa's GDP by 2021. Market confidence has already been affected by the projected effects of tariffs on African economies, resulting in decreases in commodities, national currencies, and significant stock exchanges.

The Majority of African countries depend on the sale of several goods to generate cash, and they mostly trade with non-African countries like China and Europe. For years, a mix of protectionist measures, poor manufacturing industries,

infrastructure shortages, and domestic instability has hampered many African economies' development, as well as the creation of regional and national supply networks. These weaknesses are especially prevalent in wealth countries. As a consequence, petroleum countries like Nigeria and copper-exporting like Zambia, as well as countries that rely heavily on Chinese commerce, are particularly susceptible, but countries like Senegal, which generates income from a combination of agricultural goods, tourism, and services, is less affected by the trade war.

The trade conflict's political and economic consequences are in China's advantage. If the remarks of African leaders are to be believed, the Trump government's global campaign to fight Chinese influence is having a negative effect in Sub-Saharan Africa; U.S. tariffs inadvertently give ammunition to Beijing's narrative and undermine U.S. efforts to stem Beijing's political reach on the continent (Judd Devermont, 2019)

It is not certain that the trade war between the United States and China will affect continents like Africa and USA might show an interest for the region. The power of external and national markets to offset the negative consequences of the trade war may determine how far negative economic forecasts occur. America has a number of immediate and long-term options for strengthening its US-Africa approach and overcoming the inconsistencies that have emerged between its international and regional policies.

Moreover, despite recent initiatives such as the Continental Free Trade Area (CFTA), the trade war's consequences have revealed a whole slew of unfinished business for Africa's economic progress. These pending tasks are not only preventing the economies of the continent from reaping further benefits from the Trade War, but also hindering their long-term prospects for economic growth and development (Cazares, 2019).

The trade war can be more beneficial to some African countries in regards of strengthening their relationship with China, both sides signed a common declaration and a three-year plan of action, pledging to enhance collaboration in a variety of areas, including trade, African industrialization, and security. China raised its oil imports from Angola as well as other nations to adjust for the drop-in oil and gas imported from the US. In 2017, the Middle East accounted for 40% of China's imports for oil and gas, while Africa accounted for 20%.

Furthermore, in terms of winning crude oil agreements in Africa, China will keep investing in the region via FDI, which now exceeds \$40 billion, as well as increasing lending and grant opportunities, like the \$60 billion funding announced in September 2018. This corresponds to recent developments in infrastructure spending on the area, with China accounting for 16% of total infrastructure spending pledges to the landmass.

D. America: North and South

As it is shown in an article for the Washington Post, the writer cited the statement below:

“As Trump hiked tariffs on China, U.S. economic growth slowed, business investment froze, and companies didn’t hire as many people. Across the nation, a lot of farmers went bankrupt, and the manufacturing and freight transportation sectors have hit lows not seen since the last recession. Trump’s actions amounted to one of the largest tax increases in years” (Long, 2020).

The increase in tariffs will cost more loses if it stays this way without finding a compromising agreement for both parties. In addition, it is already costed a decline in the US GDP by 0.3% in total. The trade tension is also affecting the NAFTA trade agreements as the Mexican manufacturing goods stated a decline in the last two years as prices went high due to the tension. Furthermore, the Mexican government has also applied new tariffs onto some American products that might cause another tension in the Americas.

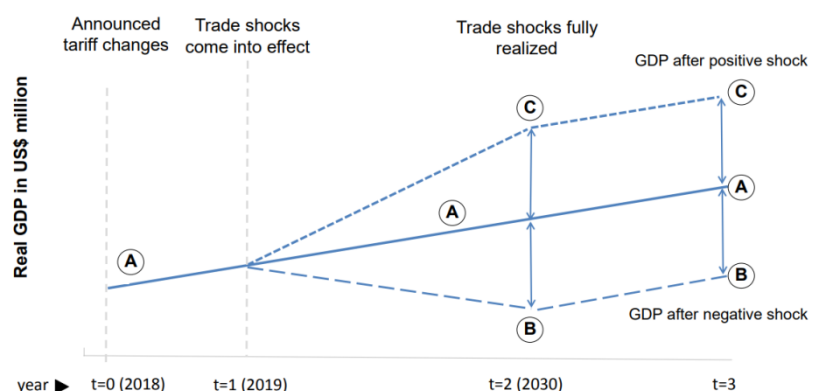


Figure 30: Changes in GDP as a result of various trade policy events.

For south America, china represents an important bilateral trade to the region.

Also, it represents an important source of FDI in the area with 10% inflows lately. In the short to mid-term, the commercialization of COVID-19 vaccine availability could serve as the next point for Sino-American hostility. China might overtake the United States as the area's top commercial partnership in the medium to the long term, starting as soon as 2035. Brazil, Peru, and Chile generally consider the country to be its most important trading partner, receiving 30-40% of their goods.

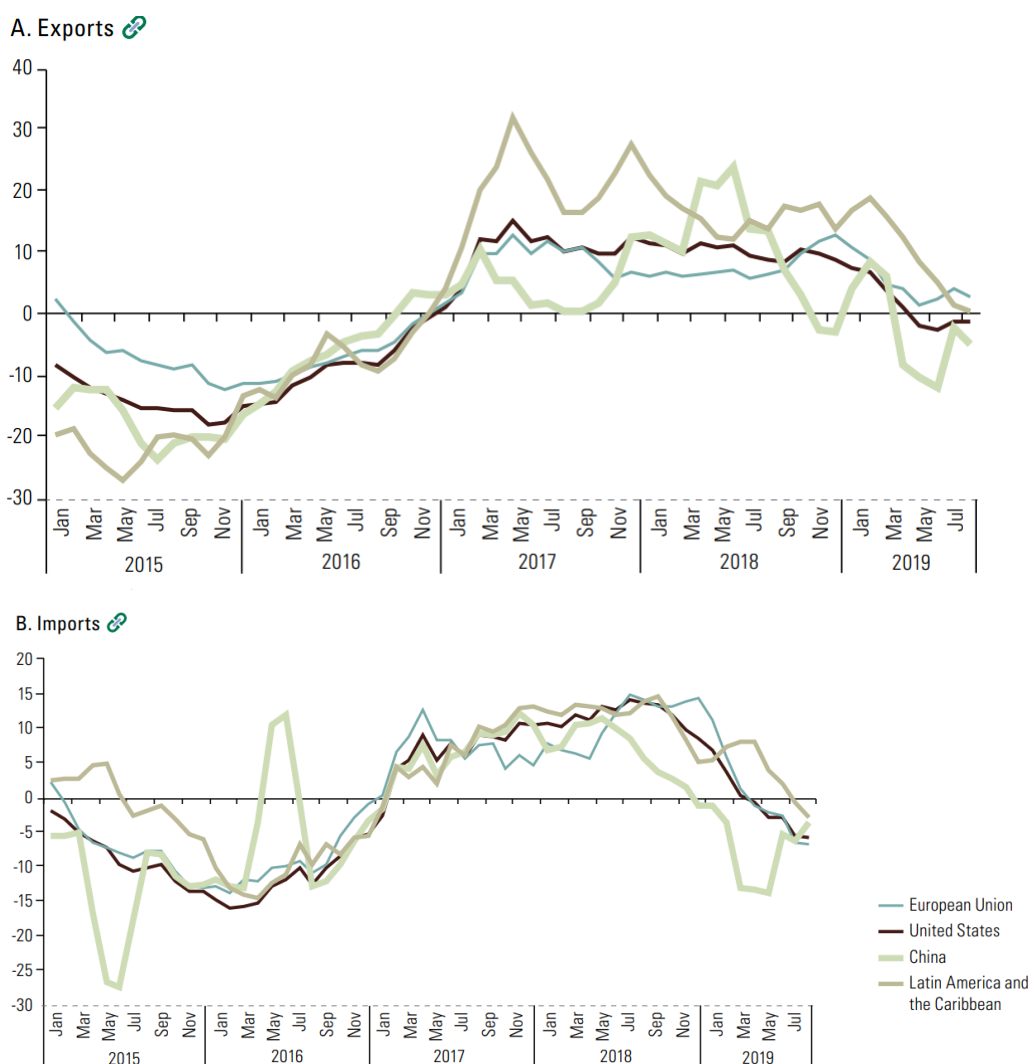


Figure 31: Year-on-year variance in the value of merchandise trade with selected partners in Latin America and the Caribbean, January 2015–July 2019.

The economies of South America are also vulnerable to the indirect effects of trade conflicts. On a macro level, the area has been hit particularly hard by the epidemic in terms of human and economic suffering. Although Latin America has only 8% of the earth's population, it routinely contributes for 30% of COVID-19 fatalities, and it saw the steepest economic downturn of any developing region in 2020. On a micro scale, the trade war's additional tariffs and rising protectionism

have inflicted indirect harm to Latin American businesses.

To survive the tension between USA and China, Latin America have to follow some steps like: To begin, South American countries must stay attentive and cautious as tensions between the US and China escalate on topics stemming from trade and investment to 5G technology and COVID-19 vaccines. Because the area is so diverse, particularly between its north and south, the only criterion for selecting between the United States and China must be complied with national infrastructure goals and plans.

Second, Latin America's exports must expand, beginning at the regional level. Larger international and intra-regional trade liberalization reduces reliance on particular markets, whether they be in the USA or China. Despite significant nationalism, Latin America has the potential to contribute positively to international trade collaboration.

Finally, the area should look into measures to improve its export performance in the long run. Reducing tariffs and non-tariff obstacles, as well as taking use of the 4th industrial Revolution's potential, will be critical in decreasing export prices. Efficient trade promotion and facilitation policies would indeed help to offset the effects of trade war spillovers, but they would also aid to diversify and increase exports.

VII. CONCLUSION

the trade war is the worst thing that can happen, unlike what the former president of USA D. Trump has mentioned: "Trade wars are good and easy to win". As a matter of fact, trade wars has no winners, and it can easily and quickly turn into a world war if both parties do not find a solution that can satisfy both administrations. In this case, the issue is not only from an economic point of view but it is political as well. Both countries wants to show their strength and power in military and wo's the dominant country.

Also, the war only works in the favor of one party. As per china, the government has signed major free trade agreements in the last three years and opening several FDI's in other countries to improve its economy, at the same time China's trade surplus has increased. Unlike the USA, more than 300.000 employees has lost their jobs within the past 3 years, farmers lost their businesses due to the raise of tariffs and the trade deficit has expanded.

Furthermore, the global supply chain has changed due to this additional tariff. For some countries, the trade war is working in their favor, for example Vietnam who had more job opportunities in manufacturing regarding trade with China. Some other Asian countries had their benefits as well. In a scenario escalation of trade war, it might increase to the cause of a world war III where most countries has to take one side between China and USA.

The United states' recent strategy when it comes to foreign trade is to stifle economic development and rising global economic importance when it is related to new prosper countries such as China, the goal here is to keep their dominance and control worldwide under the moto of protection. China's administration, in response, intends to be a world power leading in new technologies such as robotics, nanotechnology, and machine learning. It will secure financial stability to elevate industries and would do everything to prevent the United States from halting or decreasing China's economic transformation or taking steps towards digitalization.

The current status of economic ties between the United States and China is referred to as the Cold Trade War. The two sides' identical economic goals are more essential than their differences. Their consensual reliance triggered discussions that will result in a new equitable trade agreement that can work for both sides. The new US-China trade deal should also include a "new trade structure" that governs not only the use of available methods in mutual trade like tariffs, quotas, and sanitary and phytosanitary certificates, but also other legislations like intellectual property rights, technological upgrading, and Chinese federal subsidies to producers and distributors. Aside from trade, the new agreement will cover concerns like cybercrimes and the security of it as well as the expansion of US companies' accessibility to the Chinese market.

Finally, the agreement of the restricted trade campaign that the USA had issued has an economic component and a hidden political one that is addressed notably to China. According to US officials, China will be the United States' major players opponent in the long term. As a result, the limitations of international trade issued by the USA against China has a main goal and it's slowing economic expansion and restraining political power development of China as well as other countries that wants to be in their way in the future.

VIII. REFERENCES

BOOKS

- GARY M. WALTON, H. R. (January 1, 2010). **History of the American economy**. Ohio: Cengage Learning.
- GROUP, W. B. (2018). Kingdom of Morocco: Governing Towards Efficiency, Equity, Education And Endurance. Washington : **World bank**.
- HAO, X. (2019). The US-China trade war: The effects on the soybean industry. Kansas: **Kansas State University**.
- LIN, J. (2011). **China and the global economy**. Washington, DC: Routledge.
- MASON, J. (2002). **Qualitative Researching**. London: SAGE Publications.
- OECD**. (2018). **OECD Economic Surveys: United States**. Paris: OECD.

JOURNALS

- A. ERİNÇ YELDAN, B. Ü. (2015). **An Assessment of the Turkish Economy in the AKP Era**. Ankara: Routledge, Taylor & Francis Group.
- ABDUL ABIAD, K. B.-R.-B. (2018, December). The Impact Of Trade Conflict On Developing Asia . **Adb Economics Working Paper Series**, P. 5.
- ABDULLAH TAKIM, E. Y. (2010). **Economic policy during Ataturk's era in Turkey** (1923-1938). Bartın: Bartın University, Faculty of Economics and Administrative Sciences.
- ALEXEY KRAVCHENKO, B. N. (2019). The impact of Trade Tensions on Asia and the Pacific. Bangkok: **ESCAP** Trade Insights.
- ALICIA BÁRCENA, M. C.-B. (2019). International Trade Outlook for Latin America and the Caribbean: . Santiago: **ECLAC**: The Economic Commission for Latin America and the Caribbean.

- ALSHAHRANI, A. M. (2020). The Impact of the US China Trade War on the American Economy. **Kentucky: Eastern Kentucky University.**
- ANNANG, E. (2020). Impact Of The Us-China Trade War On Africa's Economy (A Case Study On Sub-Saharan Africa). Berlin: **Hochschule für Wirtschaft und Recht Berlin.**
- ARGÜDEN, Y. (2007). An Overview of the Turkish Economy: Outlook and Current Perspectives. Washington, DC: **The Middle East Institut.**
- ASLAN, M. (2005). Political Economic Analysis Of Turkish Economy: Structural Problems And The Role Of The State. Eskişehir: **Eskişehir Osmangazi Üniversitesi.**
- BANK, T. W. (2020). Turkey Economic Monitor: Adjusting the sails. Washington DC: International Bank for Reconstruction and Development / **The World Bank.**
- BARRY BOSWORTH, A. F. (2009, July). America's Financial Crisis: The end of an era. **ADBI Working Paper Series** , p. 12.
- BARTMANN, R. (2017). Causes and effects of 2008 financial crisis. Villingen-Schwenningen: **HFU Business School, Internationale Betriebswirtschaft .**
- CAROLINE FREUND, M. M. (2020). When Elephants Make Peace: The Impact of the China-U.S. Trade Agreement on Developing Countries . Washington D.C.: **World Bank Group: East Asia and Pacific and the Trade and Regional Integration Global .**
- CHAD P. BOWN, M. K. (2021). Trump's Trade War Timeline: An Up-to-Date Guide. Washington, DC: **Peterson Institute for International Economics.**
- CHENG, C.-Y. (1971). The Economy of Communist China, 1949–1969. **Michigan: University of Michigan Press, 2020.**
- CONGRESSIONAL RESEARCH SERVICE. (2020). China's Economy in 2020: Navigating Headwinds. Washington, DC: **CRS: Congressional Research Service.**

- ECCHIA, S. (2010). The economic policy of the Ottoman Empire (1876-1922).
Salerno: **University of Salerno**.
- EDDY BEKKERS, S. S. (19 March 2020). An Economic Analysis Of The Us-China Trade Conflict. Geneve, Switzerland: **World Trade Organization**.
- EDDY BEKKERS, S. S. (2020). AN ECONOMIC ANALYSIS OF THE US-CHINA TRADE CONFLICT. Geneve: **World Trade Organization** (WTO).
- GOULARD, S. (2020). The Impact of the US–China Trade War on the European Union. **Global Journal of Emerging Market Economies**, 59.
- JAEHYUNG AN, A. M. (2020). Trade war effects: evidence from sectors of energy and resources in Africa. Cambridge, MA: **Heliyon**.
- KHAN, N. I. (2019). Global Trade War and its impact on Trade and Growth: War between USA, China and EU. *International Journal of Innovative Technology and Exploring Engineering (IJITEE)*, 934.
- KRUEGER, A. O. (1995). Partial Adjustment and Growth in the 1980s in Turkey. In S. E. Rudiger Dornbusch, *Reform, Recovery, and Growth: Latin America and the Middle* (pp. 343 - 368). Chicago: **University of Chicago Press**.
- KUTLAY, M. (2015). The Turkish Economy at a Crossroads: Unpacking Turkey's Current Account Challenge. Ankara: **TOBB** University of Economics and Technology.
- LARISA KAPUSTINA, L. L. (2020). US-China Trade War: Causes and Outcomes. Paris: **SHS Web of Conferences**.
- LAUREN BAUER, K. B. (2020). Ten Facts about COVID-19 and the U.S. Economy . Washington, DC : **The Hamilton Project**.
- MAKSYM CHEPELIEV, W. E. (2019). How Differing Trade Policies May Impact U.S. Agriculture: How Differing Trade Policies May Impact U.S. Agriculture:. Indiana : **GTAP: Global Trade Analysis Project**.
- MARK P. KEIGHTLEY, M. L. (2016). Slow Growth in the Current U.S. Economic . Paris: **CRS: Congressional Research Service**.
- MARLENE AMSTAD, L. G. (2021). Trade sentiment and the stock market: new

evidence based on big data textual analysis of Chinese media . **Basel: BIS Working Papers.**

MERCER-BLACKMAN, V. A. (2018). The Impact of Trade Conflict on Developing Asia. Manila: **Adb Economics Working Paper Series.**

MORRISON, W. M. (2019). China's Economic Rise: History, Trends, Challenges, and Implications for the United States. Washington, D.C.: **Congressional Research Service.**

NAUGHTON, B. (2007). The Chinese Economy: Transitions and Growth. Massachusetts: **MIT Press.**

OECD. (2002). China in the World Economy: The Domestic Policy Challenges. Paris: OECD: Organisation for Economic **Co-operation and Development.**

OFSET, G. (2018). Economic report 2018 for The Union of Chambers and Commodity Exchanges of Turke. Ankara: **TOBB** Publication.

OXFORD ECONOMICS. (January 2021). The US-China Economic Relationship: A crucial partnership at a critical juncture. Oxford: **The US-China Business Council.**

PABLO D. FAJGELBAUM, A. K. (2021). The Economic Impacts of the US-China Trade War. Massachusetts: **NBER: National Bureau of Economic Research.**

PAMUK, S. (2005). The Evolution of Factor Markets in the Ottoman Empire, 1500-1800. Utrecht: **Global Economic History Network Workshop.**

PAMUK, S. (2007). Economic Change in Twentieth Century Turkey: Is the Glass More than Half Full? Paris: **American University of Paris.**

QURESHI, A. (n.d.). The US-China Trade Conflict: Impacts and challenges to the global energy sector. **IEF: International Energy Forum.**

ROSS GARNAUT, L. S. (2018). China's 40 Years of Reform and Development: 1978–2018. Canberra: **ANU Press.**

SETIAWAN, B. (2020). Does US-China Trade War Matter on ASEAN Stock Market: Event-study Approach. Sumatera Selatan: Sriwijaya

International **Journal Of Dynamic Economics And Business.**

SEVKET PAMUK, S. A. (2008). Sources of long-term economic growth for Turkey, 1880–2005. London: **European Historical Economics Society.**

TERENCE TAI-LEUNG CHONG, X. L. (2019). Understanding China-US Trade War: Causes, Economic Impact, and the Worst-Case Scenario. Hong Kong: **The Chinese University of Hong Kong.**

TOAN LUU DUC HUYNH, T. B. (2019). If worst comes to worst: Co-movement of global stock markets in the US-China trade war. Asturias: **Oviedo University Press .**

INTERNET SOURCE

CAZARES, J. (2019, October 17). Africa amidst the Trade War. Retrieved from Infomineo: <https://infomineo.com/africa-amidst-the-trade-war/>

GENÇ, S. Y. (2020). United States-China Trade War 2019: Its Impacts on European Economies. Istanbul: Yildiz Technical University. Retrieved from https://www.researchgate.net/publication/339223269_United_States-China_Trade_War_2019_Its_Impacts_on_European_Economies

GOUNDAR, S. (2012). Chapter 3 - Research Methodology and Research Method. Wellington: Victoria University of Wellington. Retrieved from https://www.researchgate.net/publication/333015026_Chapter_3_-_Research_Methodology_and_Research_Method

HOLZ, C. A. (2008). China's Economic Growth 1978-2025: What We Know Today About China's Economic Growth Tomorrow. World Development. Retrieved from https://www.researchgate.net/publication/23691146_China%27s_Economic_Growth_1978-2025_What_We_Know_Today_About_China%27s_Economic_Growth_Tomorrow

JUDD DEVERMONT, C. C. (2019, April 9). Innocent Bystanders: Why the U.S.-China Trade War Hurts African Economies. Retrieved from CSIS: CENTER FOR STRATEGIC & INTERNATIONAL STUDIES:

<https://www.csis.org/analysis/innocent-bystanders-why-us-china-trade-war-hurts-african-economies>

LONG, H. (2020, January 15). Was Trump's China trade war worth it? Retrieved from The Washington Post: <https://www.washingtonpost.com/business/2020/01/15/was-trumps-china-trade-war-worth-it/>

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