# **Czech University of Life Sciences Prague**

# **Faculty of Economics and Management**

**Department of Economics** 



**Bachelor Thesis** 

Foreign Trade, Case from China

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## **CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE**

Faculty of Economics and Management

# **BACHELOR THESIS ASSIGNMENT**

#### Yang Hongyan

Economics and Management Economics and Management

Thesis title

Foreign Trade - case study of China

#### **Objectives of thesis**

Through the analysis of the companies dealing with foreign trade between China and Czech Republic, we can find out how the traditional foreign trade industry transitioned and transformed into cross-border e-commerce mode under the impact of the Internet, big data and e-commerce.

#### Methodology

Through the investigation and analysis of the foreign trade companies in China and the Czech Republic as case subjects, we can get their operation mode, import and export flow. Quantitative analysis: Analyze and compare of two sets of data: a. Flow, profit space and performance of e-commerce models in recent years; b. Traditional models show the performance of foreign trade sector in recent years through data.

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### Declaration

I declare that I have worked on my bachelor thesis titled "Foreign Trade, Case from China" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the bachelor thesis, I declare that the thesis does not break copyrights of any their person.

In Prague on

03/21/2020

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# Foreign Trade, Case from China

#### Abstract

From the perspective of time to discuss the changes of China's import and export content: content contains what is the majority fraction of China's import and export. From the perspective of the world's countries (developed countries, developing countries, underdeveloped countries), the import and export are divided into four stages: the first stage is dominated by the export of raw materials; the second stage is dominated by the export of technology-intensive products, while the fourth stage is dominated by the export of technologies and services and the import of raw materials.

The first stage corresponds to underdeveloped countries, the second and third stages correspond to developing countries, and the fourth stage corresponds to developed countries.

In the face of China in different periods, the state of China at that time and its influence on future development can be seen from the export data of policies and export contents.

Keywords: Foreign trade, China trade, China export and import

# Zahraniční obchod, případ z Číny

#### Abstrakt

Z pohledu času diskutovat o změnách čínského importního a exportního obsahu: obsah obsahuje to, co je hlavním tělem čínského importu a exportu. Z pohledu zemí světa (rozvinuté země, rozvojové země, nerozvinuté země) se dovoz a vývoz dělí do čtyř fází: první fázi dominuje vývoz surovin; druhé fázi dominuje vývoz výrobků náročných na pracovní sílu; Třetí fázi dominuje vývoz technologicky náročných výrobků, zatímco čtvrté fázi dominuje vývoz technologií a služeb a dovoz surovin.

První etapa odpovídá nerozvinutým zemím, druhá a třetí etapa odpovídá rozvojovým zemím a čtvrtá etapa odpovídá rozvinutým zemím.

Tváří v tvář Číně v různých obdobích je stav Číny v té době a její vliv na budoucí vývoj patrný z údajů o vývozu politik a obsahu vývozu.

Klíčová slova: Zahraniční obchod, obchod s Čínou, vývoz a dovoz Číny

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## **1** Introduction

### 1.1 Background of Thesis

Trade is the initial format of commerce, it happened since the first human civilization, which is clan. At the very beginning, trade is taken place between individuals. Those individuals exchange their production with others to meet their need of survival. As civilization develops, currency stands out, it helps and accelerates the growing process of trade, and became commerce. When currency is created, trading is no longer in the format of goods for goods, they use currency instead. But trades between clans or countries in ancient times, are still by the format of goods for goods. Until people can mining stable amount of gold, then people use gold as trading values standards. Till modern times, people use international currencies as trading intermediary for more efficient commerce activities. The developing progress of trading can be evaluated as civilization developing progress.

Foreign trade happened in China in ancient times already. And in recent modern times, China is dealing with another nation or country for foreign trade. As the data showed, China starts exports and imports systematically since 1981, and the total annual foreign trade amount was 735 (counting unit as 100 million RMB), and till 2018, the total annual foreign amount was 305010 (100 million RMB). During the same time line, the component of top 10 major exports and imports commodity has shifted accordingly.

## 2 Objectives and Methodology

### 2.1 Objectives

Through the investigation of foreign trade of China, we can learn that how does foreign trade industry transforms and grows in China, and how it is related to Chinese national policy.

Through the analysis of the companies dealing with foreign trade between China and Czech Republic, we can find out how the traditional foreign trade industry transitioned and transformed into cross-border e-commerce mode under the impact of the Internet, big data and e-commerce.

#### 2.2 Methodology

#### 2.2.1 Case Study Method

By investigate the total annual amount of foreign trade amount in time line, and what are the industry segmentations contribute in those amounts for both exports and imports of foreign trade.

#### 2.2.2 Quantitative Analysis

To analyze the numerical changes in currency amount, and the segmentations of varies of industry change of the top tier changed in foreign trade.

### 2.2.3 Interdisciplinary Research Method

The research will be based on foreign trade transformation and national policy announcements.

### **3** Literature Review

#### 3.1 China Foreign Trade History

In 1981, the exports commodity of China is mostly in manpower-intensive industry products, and the imports commodity of China is mostly in technology-intensive industry products. And until recent years, the exports and imports commodity have been switched. As China develops very fast during the last 20-30 years, the industry segmentation has changed. In 1996, the top tier exports commodities are: Toys, Shoes, Knitted clothes, Non-Knitted clothes, Rubber products, Plastic products. And all the top tier exports commodities are belonging to the same signatures, which are low technology-intensive, low-value, high manpower-intensive. At the same year, China's top tier imports

commodities are: integrated circus, medical supplies, automobiles, vehicles, and machineries. All the imported commodities fall into the high technology-intensive, high unit value , profit labels. At that time, China needs to exports 200 million of shirts, in order to import a Boeing 747 airplane.

At the 1970s to 1980s, most of the exports and imports are officially operated by the stateowned enterprises, only a very little portion of exports and imports activities are operated by private enterprises. And that is due to China's national policy, which is more like a close border policy. At the later 1980s, the China's national policy transformed into a more open policy. As a result of that, there are more private enterprises established, then China's economy and industry are all stepped into a high-speed developing period. Thus, the formation of foreign trade turns to a new page.

In year 1990, China's foreign trade had a positive trade balance in the first time. Along the past 10 years of 1990, the trade balance is between -17 to -449 (units in 100 million RMB). After the year of 1990, the trade balances are all positive except for 1993, at 1993 the trade balance is -701 (units in 100 million RMB). But at that time, the major export commodities are all belongs to low technology-intensive industry products. And the imports commodities are still high technology-intensive industry products. Even the foreign trade commodities segmentation remains the same, which is imports high tech products, and exports low tech product, but the definition of low technology-intensive products has been changed. At the 1980s, the low technology-intensive products refers to the product requires only elementary industry technology infrastructure, most are in high manpower-intensive industries. Such as toys, knitted clothes, shoes, in general, living supplies for individuals. There is not much exports commodities can contribute in industrial sector or any other areas requires a very high technology infrastructure. And at the 1990s, even the exports commodities are still considered to be low technology-intensive product, but those products no longer labeled as zero tech goods. Those exports commodities already changed into minimum industry technology infrastructure products. At 1990s, the top tier export commodities are electrical parts, auto mobile spares parts, preliminary processed industrial materials. Among these exports commodities, only roughly 20% are exported by private enterprises, and the rest of the portions are exported by stated-owned enterprises.

At the late 1990s, and early 2000s, the private enterprises had taken a more important roles in foreign trade. More private enterprises had established cooperation with foreign enterprises, therefore, the portion of foreign trade taken by private sectors had became larger as there were more cooperation between Chinese private enterprise and foreign enterprises. The cooperation between Chinese private enterprise and foreign enterprises has ensured the growth of China industrial production capacity, as well as the exports ability and the imports requirements. The foreign enterprises will export the technology into China private enterprises in exchange of cash flow. And in return, when China private enterprises taken in those exported technologies, and will improve those technologies. As a result, the private sectors will improve their product as more technology-intensive, also, the production capacity will be improved as well. As the most of the industries are improving the production capacity, and product qualities, the supply of domestic market is overcoming the demand of domestic market, exporting will eventually become part of the solution.

After the year of 2000, the import commodity and export commodity segmentation had been totally switched. The portion of production materials from import commodity had grown faster and faster. And the trend is that, the imported materials are less processed, as raw as it can be, or just have an elementary process of the material. On the other hand, the exports commodity segmentation has a large piece of end user product, which can be delivered to clients or into industrial usages directly.

As of 2010s, the exports commodity no longer has any bulk commodity of elementary processed products, or civil technology privilege products. It is more like to be import more brands of a certain class of product, instead of importing something China does not have. At the 2010s, the imports are more focused on food supply, like beans, pork, fruit and excreta. And for export commodities, the largest segmentation is electrical product, followed by machinery equipment and machinery spare parts, mobile phones, audio equipment, auto vehicles, textile, plastic products.

### **3.2** Transformation of Trade

Along the China foreign trade formation changes, the supply and demand, the imports and exports, and the foreign trade balance has been converted. And the most important changing point is year 2001, which is China joins WTO, and after China joins WTO, the policy against foreign trade has been more distributed by Chinese government.

Another key factor that China's foreign trade is growing fast is that, China itself has established a product quality and safety standard, based on that standard, any enterprise imports or exports across Chinese border, had to meet the base line. And that standard had become more and more strict to any enterprise which obligate to it.

In the current global market, the situation is not optimistic. The deeper influence of financial crisis is still in place, waiting for the next show time. And from the macro view of the global market, the economic system recovery from a crisis takes longer and longer, and the recovery process is more complex and more difficult. Therefore, the global foreign trade structure needs to be adjusted accordingly. In this case, China foreign trade will be adapted willingly. It will cut off the scale production, and change into high quality and efficiency production. High quality and high efficiency both have stronger coping ability to any domestic or global destructive events. And enterprises find out that, they must improve themselves, in order to survive in the modern market, otherwise, they will be left behind or cut off from the whole food chain. Those enterprises who plays roles in China foreign trade business have recognized that, as they are growing and become more profiting, they must take more responsibilities to the society, not only to China, but to the whole world. It will not only help the society gets better, it also helps the enterprises to become more competitive, and to gain the power of sustained development ability.

Since the concept of globalization, foreign trade is the connection of it. Each civilized country must be part of it. For foreign trade itself, it has its own ideology, which can be explained as the supply and demand of all foreign trade countries. And as for the next supporting stronghold of foreign trade, it will be the very high-technology-intensive products. High end technology is the carrier of foreign trade since globalization, and it plays a significantly important role in global trading industry.

In China, manufacturing industry is the major player in foreign trade, and it is becoming less manpower-intensive and more technology-intensive on a global perspective, not only on China's perspective. And another key player in global economy system is trading in services, and China is focused on this part as well. As an assumption, the trading in services will has a portion of more than 50% in all foreign trade. Service trade will contribute majorly in resource allocation and scaled economics, also helps improves domestic enterprises' competitive power. Since 2005, the growth rate of trading in service is greater than the growth rate of commodity trade. In China, the service trade growth rate to commodity trade growth rate is much greater than the global average.

As the demand in must have for survival is decreasing rapidly, and the demand in spiritual pleasure is increasing rapidly in the globe, the need for service trade is much more desired than before. Also, since the Internet and communication technology have developed significantly fast, the cost of service trade is decreasing. Therefore, the service trade is facing a now turning point, and it will be developed very fast in the future. And the service trade itself is mutating as well. From 2005 to 2018, in China, the traditional service trade (including tourism and transportations) and commodity trade had a drop on portions, from 73.96% to 39.86%. And the new format of service trades has raised from 26.04% to 60.14%, and the leading industry in the new service trade format are business services, communications, computers and information services. From another point of view, the service trade can also be considered as the benefit of technology and science expansion.

Even the service became a rising format of foreign trade, but it still requires a strong industrial and technology supporting in the back. As a service is provided to clients, at first, the service provider must understand the business at top tier, and has a very persuasive reason for that, which means, it can provide advantages with an edging ceiling and with other business competitors cannot easily over run. In order to lead the advantage in a specific service covering area, it not only requires the method of providing service or goods, it also requires the up-stream and low-stream business to be advanced at the same time. That, in another way, can be delivered as an end to end solution, which covers the whole flow of a specific business area.

In fact, service providing is not only the transformation of China's foreign trade, also it indicates an epitome of the trading of the whole world. If considering the whole word's trading as a giant factory production line, every country has a role in that production line, and the role's position is determined by the nature of one country's advantages, or can be described as advantages at time point. One country's role can be switched as the country's natural advantage changes as one country is developing or exploring. To look back with China's foreign trade format transmission, it fits this mechanism, which is one country's role can be changed if putting this country's contribution into a larger picture, in this case, the whole world's economic system. And at the meantime, it is not necessary the one country can only have one role in the giant trading loop, it is possible to have more than one role at the same time. When a country's infrastructure and technology are very sophisticated, the more likely a country has more roles in the global trading loop. It can provide raw materials to other countries in various area, and at the same time acting as a primary processing provider. It can provide services to other countries in some areas of global trade, and requires services from the same or different countries in other areas.

## 4 Practical Part

### 4.1 Trade Policy

China, it has switched several roles in the global trade loop, from the lower rank as a raw material provider, to a middle rank like primary processing provider and to a higher rank as service provider. Unfortunately, yet, China has not reached the supreme rank of the global trade loop. After 1949, China was just experienced from warfare, and was rebuilding. At that time, China was mainly importing techniques, primary processed product, machineries and other products or services. And the exports are focused on raw materials in various kinds. At that time, China was only a lower rank player in the global trading loop, and can only participate in a very minimum way, in another hand, can only contributes a few to the whole economy system. And there are various reasons for China to act in that way, one is the national after war trauma, and the other one is the global political environment China is facing. The "West" is not so much can be described as friendly at that time. There is not much international help from outside the country.

And by that reason and situation, China's central policy has built its one straight announcement, which China has followed till modern times. That political announcement is that, China must improve itself from technology, at all cost. Then the whole nation agreed on that one. To invest in technology in various areas, to learn from any possible methods, and after that, China has moving into the second phase after war. Chia enters a high-speed developing period.

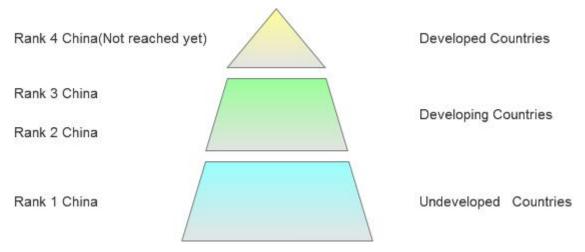


Figure 1 Rank of China in different countries

There are 3 phases mapping to the 4 class of ranks of the global trading circle. And in fact, the phases of a country are currently undertaken also mapped to those 4 phases, and there are overlaps in between, depends on the status of a country under a certain rank. An under developing country is mapped to lower rank of the global trading circle, which is Phase 1, and a developing country can be mapped to middle rank or high rank of the global trading loop, and at lase, a developed country can be mapped to a high rank or supreme rank of the global trading loop.

#### 4.1.1 Three Phases

At Phase 1, like all under developing countries, the major participation of the global trading is to exports raw materials and labor in exchange for extra income of a country. And those countries are not able to practice scaled primary process productions. At Phase 2, countries under this phase are mainly developing countries, they provide primary processed products using raw materials from phase 1 countries, and exports them to phase 3 countries. And some of the Phase 2 countries are developed countries, but due to the overall ability, they are classified as a Phase 2 countries. The last one, is phase 3, and it covers most of the developing countries. These countries are mainly in providing state of

art products, and services to the global trading circle. These countries import raw material from Phase 1 countries, but out sourcing most of the primary processing production to the Phase 2 countries. At the same time, Phase 3 countries exports end user products to Phase 1 and Phase 2 countries, along with services. These 3 phases are the component of current countries mapped to the 4 ranks of the global trading circle.

In a general speech, those Phase 1 countries are gaining more while participating in the global trading activities, they treat the raw materials and manpower as output to global trading circle, and they receive revenues. And further, those Phase 1 countries will use the revenue from the output activities, to purchase end user products, which they are not capable to produce, or not able to produce in scale in order to meet the domestic needs. Also, Phase 1 countries required frequently assistance or gain help form the world, for a purpose of accelerate the development speed.

A Phase 2 country can mainly develop on its own, without or at a minimum level of using the capacity of international assistances on a regular basis. Phase 2 countries are able to process raw materials on the primary level, and even can process the primary processed products on the next stage of technology tree. And the top tier of the Phase 2 countries are able to provide services to Phase 1 and other Phase 2 countries. But there are a few services or high-tech products can be outputted to Phase 3 countries.

And for a Phase 3 country, it is mainly acquiring the raw materials, and providing high tech products to the global trading circle, along with high end services. And it will provide more help or assistance to Phase 1 countries.

Those 3 phases of countries cannot survive alone without the other 2 phases countries. With all 3 phases together, the global trading circle is intact. Otherwise, the circle is missing a piece, and eventually, the global trading circle will fall apart. It is better described as a triangle as the formation of these 3 phases, but the global trading activities are in the formation of a loop.

Within this global trading loop, the higher the rank is, the more the profit is. But pursuit for a higher rank in the global trading loop does not mean chasing for more profit only. It is not wrong to chase for more profit, but it is wrong to chase for profit only. To gain a higher rank in the global trading loop also means that there are more responsibilities to the global trading loop, and contributes more to the whole economy system globally. The first 2 ranks belonged countries are more likely to receive assistance from the other 2 rank countries. The middle 2 ranks countries are more likely to cover most of the scaled production and services. The last 2 ranks countries are more be describing as contributors in the global trading life circle.

#### 4.2 China's Development In Three Phases

foreign trade in China has its own advantage, but it still follows the developing trend of global foreign trade infrastructure improvements. That is the science and technology expansion and developments. Look back a long time, foreign trade is always there, it is just in different format and different scales. Since the very beginning, the foreign trade is goods for goods between different clans, or even individuals from different clans, and at that time, the purpose is only to exchange for goods to meet their survival requirements. And in the civilized modern times, foreign trade is more in manufacturing industries, it means to make the global economy system more efficient, to have the resources reallocated to the most efficient and valued manufacture. And as in recent times, the service trade has a more significant role in the globe foreign trade. The demand is no longer to meet physical requirements, it switched into more spiritual requirements. Service trade brings a more efficient method of conducting a more enjoyable living environment. In the micro view as China, foreign trade was suppling materials, and into manpower-intensive industries, and into technology-intensive industries, and now, into service trades. Service trade and its related industries will then be becoming the most important roles in China economic system.

And yet, China can be described as a Phase 2 country, and along with a High Rank in the global trading circle. But China was not built as a Phase 2 along with a High Rank country. Or can put it this way, no country is built as a top phase along with a top rank, they all worked very hard, with a series of brilliant administrative decisions on the path to reach the top tier in both phases and ranks.

China is a country has a very long history; it can go back 5000 years of this country. But the China here is talking about, is the one re-established in 1949. At that time, China is a Phase 1 under developing country, with minimum participation in the global trading activities, which can be barely listed as a low rank country. At that time, China put more effort in developing itself. When there is profit from exporting raw materials, China invest those profits into developing in infrastructure of domestic layout, in technology developments and extra, in anyway that may help China developing. At that time, China is under a very special stage, it is so be called as Planned Economy, all the supplies are planned to produce, and to be distributed to people or organizations as planned. The amount of food of a family can purchase are planned as well. Also, at that time, works are also planned. It is seemed to have less freedom for Chinese at that time, but it is the most efficient method for China to get pass that period, and to reach a higher level of phase of countries or ranks of the global trading circle.

During that period, China has to acquire services and products from Europe and Russia for basic machineries. Once service or product is in place, China has to learn from it, and developing from it. At that time, foreign trade can only be practiced as government activities. It is almost impossible for an individual to participate in global trading activities. At the later stage of Phase 1, China was able to do scaled production on primary processed products. And that continues to happen even when China reaches Phase 2.

#### 4.2.1 First Phase

During Phase 1, around 1950, China's imports and exports amount is about 1.13 billion USD, that number jumps to 1.95 billion USD at 1960. At that time China is following the Standard International Trade Classification, SITC in short, which is edited by the UN. And until 1986, China's own Goods Name and Code of International Trade was replacing the SITC, and officially used by China. And this GNCIT was first being researched at the year of 1970.

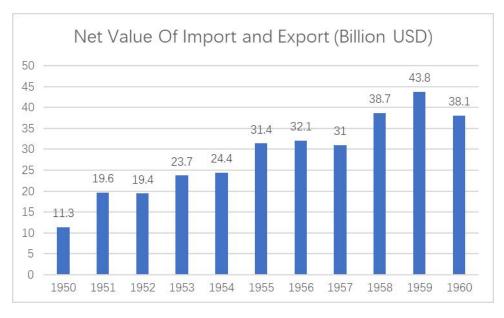


Figure 2 Net Value Of Import and Export(Billion USD)

During 1950 period, China mainly exported raw materials and agriculture by-products. The product exported can only be described as raw materials and agriculture by-products, there is no further classification with more details. At that time, the imports are limited by international political environment, it was very hard to get machineries production line or technology from the West. Most of the technology imports were coming from Russia back then, Russia was the largest foreign trade partner from that time. China imports firearms, machineries, daily products and extra. For the Europe, the importing contracts are mainly done by private company from British, and nothing was related to machineries. At 1956, there were 60 tractors authorized to exported to China by the British Officials. And right after that, Malaysia and Singapore are granted for exporting natural rubber to China. Before that, China was on a huge shortage for natural rubbers. At 1957, China imported from British had a total amount of 12 million GPB. But until 1957, China was experiencing a trading deficit.



Figure 3 Export categories(1952)

China over run the Phase 1 very quick, and enters Phase 2 at late 70s, and has reached Rank 2 about the same time. At that period, China reduced the portion of raw materials export, and increased primary processed products portion for exporting activities. At the same time, China imports raw materials, technology and services from the global trading activities. At that stage, China is a major player of scaled production due to the manpower advantage. Those scaled production required limited technology existence, and with the manpower advantage of China, it brings in a substantial revenue to China.

Also, during Phase 1, China has a very strict control for the usage of foreign currencies. At that time, China's foreign currencies were held by central government, and a spending plan was made by the central government as well. A majority portion of the limited foreign currencies were used on imports the raw materials China did not have, or were unable to collect under that situation and technology background. Only the must have products were imported to China at that time. And domestically, China managed to cover the production of essential products that can provide a minimum level steady to the whole country. And all those indicated that at that time China is a low rank player in Global trade circle, that time period covered almost 30 years.

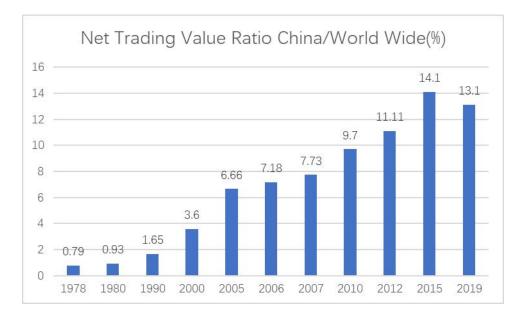
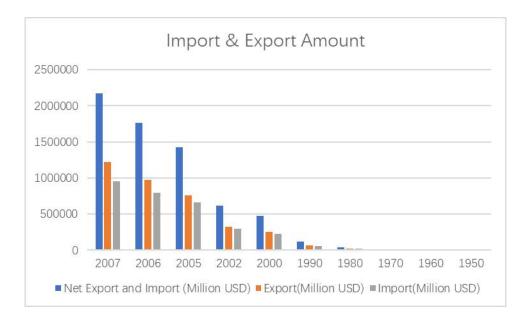


Figure 4 Net trading value ration China/World(%)

#### 4.2.2 Second Phase

For Phase 2, Chinas enters this period at early 1980s, and kept it that way until modern time. During Phase 2, China had experienced 2 ranks of the global trade circle, which is the middle rank and the high rank. Between those 2 ranks, China's purpose and methods of foreign trade were different. In between early 1980s to 2001, China's foreign trade were focused on exports, and treat imports as auxiliary. And since 2002 till current time, China's foreign trade policy is mainly focused on exports and imports at about the same level. This is the rank 3, which is the high rank of the global trading circle.



	2007	2006	2005	2002	2000	1990	1980	1970	1960	1950
Net Export and Import (Million USD)	2176175	1760438	1421906	620766	474297	115436	38136	4590	3810	1130
Export(Million USD)	1220060	968978	761953	325596	249203	62091	18119	2260	1860	550
Import(Million USD)	956115	791461	659953	295170	225094	53345	20017	2330	1950	580

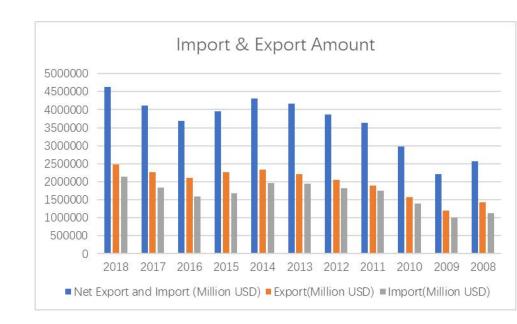


Figure 5 Import & Export Amount

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Net Export and Import (Million USD)	4622415	4107138	3685557	3953033	4301527	4158993	3867119	3641864	2974001	2207535	2563255
Export(Million USD)	2486682	2263345	2097631	2273468	2342293	2209004	2048714	1898381	1577754	1201612	1430693
Import(Million USD)	2135734	1843793	1587926	1679565	1959235	1949989	1818405	1743484	1396247	1005923	1132562

#### Figure 6 Import & Export Amount

At the middle rank, China had a foreign trade principle announced. That principle had indicated the strategy while facing labor intensive area and capital/technology intensive area. While facing labor intensive areas, China's set up a policy as encouraging exporting at labor intensive productions, and China had taken several measures to ensure that policy. And as for the capital and technology intensive industries, China's policy was to import the necessary products, instead of producing those on China own, when China did not have the full capability to produce them.

At 1980, China's total exports and imports amount was 800 million USD, with a 399.7 million USD on exports, and a 400.3 million USD on imports, which has a 0.6 million USD trading deficit. When it was 2001, China's total exports and imports amount was about 610 billion USD, with a 315 billion USD on exports, and a 295 billion USD on imports, with a trading profit of roughly 10 billion USD.

At rank 2, China kept focused on labor intensive and scaled production industries, and the exporting categories were mainly fall into those industries. By looking into the imported goods category and weights for Rank 1, 2 and 3, it showed a very clear path of the foreign trade changing.

At 1950s, the imported raw materials for production had a weight of 91.5% over all imported goods. In between those materials, 51% of them were the materials to produce a complete set of equipment and electromechanical equipment. Other than that, China was imported a significant amount of strategic materials and raw materials that can be used in industrial and agricultural production, transportation production and national defense industries. At 1960s, due to massive amount of natural disasters occurred in China, the components of importing goods has changed. Since the domestic requirement for daily supplies had raised, the imported consumer goods raised to a very high weight, and the complete set of equipment and electromechanical equipment for production purpose reached to a low-level weight accordingly. Till 1970s, the weight of raw materials for production raised again, and it reached to a historical high weight, which is 81%. Other than the increased amount of complete set of equipment and electromechanical equipment, which is 81%.

the raw materials for industrial production had increased as well, like nonferrous metals and steels. That is due to the unbalanced domestic economic requirements, it had to be at equivalent to leverage the domestic economy balance. Therefore, the shortage parts had to be replaced by importing methods.

When it was 1980 to 2001, China had reached Rank 2, which is the middle Rank of the global trading circle. China kept a relatively stabled imports category weight, the industrial end products and new technologies had a weight around 80%, and the primary processed products had a weight between 10%-20%. At the same period, China's exports were more focused on primary processed product, which still falls into the category of labor intensive industries.

At Rank 3, which is the High rank of the global trading circle, and still a Phase 2 country, China had a utilization process for the imported goods infrastructure. China was recognized as Rank 3 in global trading circle since 2001 till current time, but China has 2 stages in between. The first stage was between 2001 and 2009, China has a significant raise in the weight of capital-intensive industries and technology-intensive industries. And the weight of those 2 categories had increased annually rapidly. The second stage is between 2009 and current time, the imported weight of capital-intensive industries and technology-intensive industries and technology-intensive industries and technology-intensive industries is keeping as a relatively high level, but the weight increasing speed is dropping year by year. Under the foreign trade policy which China is bearing, China's foreign trade infrastructure and scale are both entering a new developing phase. After joining the WTO, China's scale of importing services is expanding at a very rapid rate. If only focus on importing service, the traditional service is having a relatively high weight, but the new services importing increasing rate has overwhelming the growth rate of traditional service importing.

Categories(Million USD)	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000
Net Value of Export	2486681.51	2263345	2097631.19	2273468.22	2342292.7	2209004	2048714	1898381	1577754	1201612	1430693	1220060	968978	761953	593326	438228	325596	266098	249203
Primary Processed Products	134992.83	117733.19	105186.79	103927.11	112692.13	107267.63	100558.21	100545	81685.76	63111.79	77956.93	61509.1	52919	49037	40549	34812	28540	26338	25460
Food and Meat	65471.19	62626.14	61097.65	58154.36	58913.62	55726.09	52074.91	50493	41148.26	32627.78	32761.99	30742.65	25723	22480	18864	17531	14621	12777	12282
Baverage and Cigrate	3713.24	3468.29	3539.15	3309.29	2883.01	2608.87	2590.41	2276	1905.91	1640.95	1529.43	1396.54	1193	1183	1214	1019	984	873	745
Inedible Raw Materials	18021.01	15439.77	13101.67	13917.14	15826.37	14562.73	14341.47	14977	11603.03	8153.08	11318.9	9116.3	7860	7484	5843.2	5032	4402	4172	4462
Mineral Related Products	46722.22	35389.1	26873.19	27901.51	34446.01	33786.1	31006.96	32274	26673.09	20373.73	31772.92	19950.87	17770	17622	14480	11114	8435	8405	7855
Animal/ Plant Oil	1065.18	809.89	575.14	644.82	623.12	583.83	544.47	526	355.47	316.25	573.69	302.76	373	268	148	115	98	111	116
Industrial Products	2351688.68	2145638.14	1992444.4	2169541.11	2229600.57	2101736.37	1948156.13	1797836	1496068.56	1138483.47	1352736.13	1156266.66	916017	712916	552777	403416	297056	239760	223743
Chemical Products	167465.65	141293.46	121928.76	129579.57	134543.23	119617.54	113565.36	114788	87571.93	62017.02	79346.42	60323.85	44530	35772	26360	19581	15325	13352	12098
Knitted Products and Rubber Products	404659.17	368564.14	351244.68	391017.71	400224.21	360606.39	333140.81	319560	249108.07	184815.98	262391.22	219877.2	174816	129121	100646	69018	52955	43813	42546
Machineary Products	1207787.54	1082329.15	984212.26	1059118.22	1070504.35	1038534.39	964361.3	901774	780268.76	590274.47	673329.15	577044.66	456343	352234	268260	187773	126976	94901	82600
Miscellaneous Products	565605.76	547691.71	529488.41	587444.66	622061.62	581249.01	535671.87	459370	377651.93	299746.87	335959.32	296844.46	238014	194183	156398	126088	101153	87110	86278
Uncategorized Products	6170.56	5759.69	5570.29	2380.94	2267.16	1729.05	1416.79	2343	1467.88	1629.13	1710.03	2176.49	2315	1606	1112	956	648	584	221

Figure 7 China scale after WTO

The origins of importing had changed after China join WTO. Before joining WTO, China's major importing partners of foreign trade are more focused on North America, Europe, and the countries near by as neighbors. And after China join WTO, the old importing partners of foreign trade activities does change, but has expand the scope of importing origins, which includes Africa, South America and central and western Asia regions.

Even it is still Rank 3, but China's foreign trade policy has changed around the year of 2010. Unlike at the earlier stage of Rank 3, China acquires massive imports and exports at the same frequency, at the later stage of Rank 3, China's foreign trade policy is more focused on importing, and keeping a steady increase rate on exporting, but a huge increase rate on importing. And for the importing, it is more interested in high-end technologies, state of art processing equipment in a complete set. By increasing the technology side of importing, it will help with the domestic industries in various areas. In further, it will help with exporting, will provide more competition capability. China is no longer chasing the quality and amount of imported goods and services, has switched into chasing the quality and efficiency of imported goods and services.

Also there is a theory as global value chain, it was raised originally at 1980s by international trading researchers. The theory is mainly about the global value chain exists all the way of a product life circle, from researching and developing, designing, manufacturing, marketing, sales, distribution and after sales services.

This is different than the traditional production method, this theory will allow different countries to participate in the production process by using one country's advanced abilities. Therefore, one country can maximize its advantage ability, and will also reduce the cost of production. One production process can benefit more countries other than just one country. An impressive example is that, most of the cell phones and laptops are designed in America or Japan, and the precision components are produced in South Korea and China Taiwan, and then assembled in China mainland. But the sales and distribution are taken place world widely. The after sales services are held world widely, and the call-centers for service are centralized in India. A cell phone or a laptop computer production has benefited a series of countries, and it helps each participants of that foreign trade circle.

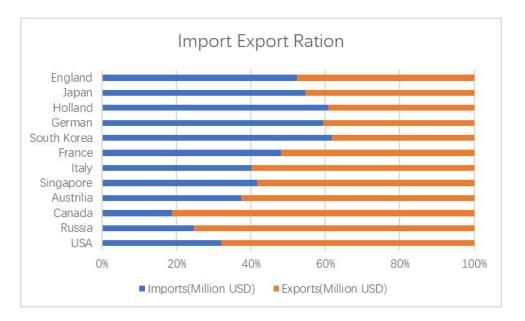
As for now, more than two-third of foreign trades are taken place in the format of intermediate products, instead of final products. And processing primary level of intermediates or raw materials are the major method for a Phase 2 country to participate in the global trade circle, or we can say the global value chain. During the foreign trade intermediate process, a massive amount of foreign trade activities has been happening. And each participant will benefit from both side of the foreign trade. The imports are for the upper stream of the value chain, and the exports are for the lower stream of the value chain. At each knot, a country for example, will benefit from imports and exports, and along with the domestic production process.

#### 4.2.3 Third Phase

As for now, China had experienced 3 ranks of the global trade circle. And also practice as various roles in the global value chain in different industries. But China is till facing a huge problem, which is that, China has a shortage on resources utilization. In fact, there are a lot of resources being wasted during production process, due to resource utilization efficiency and massive amount of production industries. For this issue, the solution is to import new technologies to avoid further lack of resource utilization efficiency. And another method is to invest more on domestic technology tree. But both methods have their own disadvantages. As for importing from Phase 3 countries, there is a ceiling for that. In most of the practical experience, the Phase 3 countries are not will to exports the latest generation technology to others, in the purpose to keep their own advantage point in the global trading circle, in further to gain more benefit from the value chain. Or the Phase 3 countries are willing to export the technologies, but in fact, the willing to be exported technologies are only previous generation technologies compare to the technologies the Phase 3 countries are currently use. And to import those technologies, the help on technologies improving is limited, and cost more financially and timely considering. And in further, once imported the previous generation technology, then China has to import the next previous generation technology when the Phase 3 countries has a new latest generation of technologies. And for the domestic investing in technology tree, it might take longer then expected, and cost more. And the worst scenario is that, the investment in technology tree research is in a wrong direction. So, the best solution is to combine those 2

potential solutions together. To import and to invest at the same time, therefore it can reduce the timeline of developing a new technology, and save cost at financial and timing concerns.

Exports helps increase the foreign currency reserves, and those foreign currency reserve can be used on import activities. China currently is not practicing all angels of technology development; it only develops the need to have technology. Because China can hold other technologies as reserves, but will not practice them in real production. The ability of capable producing is one thing, and put that ability into real production is another thing. First of all, the resources and raw material of producing certain products are limited by amount, hence, the production output has to be carefully chosen by purpose. Therefore, China is still willing to import certain categories of products which China already has the capability to produce them. The only reason for that is cost profit ratio.



**Figure 8 Import Export Ration** 

Destination Countries	USA	Russia	Canada	Austrilia	Singapore	Italy		France	South Kore	German	Holland	Japan	England
Imports(Million USD)	4726	335	162	600	822		501	634	4004	2548	2519	4129	1278
Exports(Million USD)	9991	1028	700	1005	1151		747	687	2482	1742	1620	3444	1162

Figure 9 Exact amount for different destination countries in 2018

In the export activities, the best way to practice it is to export the product which requires minimum resources, but comes along a relatively high profit. The smaller the cost profit ratio it is, the better an export activity it is. For example, there are 100 unit of common raw

materials, there are 2 technologies applies these raw materials. Tech 1, has a lower technological difficulty level, can produce 1000 unit of products, which can bring in 3000 unit of export income, and Tech 1's technological cost is 1000 unit of currency. Then the export activity practicing Tech 1 is 2000 unit of currency. And for Tech 2, it has a much higher level of technological difficulty, which has a technological cost of 5000 unit of currency, and by using those 100 unit of raw materials, Tech 2 can only produce 20 unit of products, and each of that unit will have a price of 5000, then the total income of exports will be 10000 unit of currency. And then, the over all income will be 5000 unit of currency. Or can put it this way, 1 cargo container of clothes, and 1 cargo container of electrical chips, it is very easy to determine the value differences between these 2 cargos. Cargo container 2 has a more efficiency value than cargo container 1, in both technology and financial perspective. Cargo container 1 is a symbol of labor-intensive industries, and the cargo container 2 is a symbol of technology intensive industries.

For the exports and imports activities, one other benefit is that, a country can expand the consumable goods' variety domestically by import activity, and also diverse the consumable goods classification of importing countries abroad.

As for now, the core ability of challenge to China's foreign trade practice has been explained, new technology innovation. And there is another factor cannot be missed, which is the impact of information technology applied in foreign trade globally. Based on the development of information technology, there are more category of service can be dealt with in foreign trade, and also the ability of trade. Another sign of service is the majority in foreign trade for China is that, in the past 3 years, importing and exporting services' growth rate is significantly larger than any other category of foreign trade products or activities. And China has attached importance to service as foreign trade products as well. Since 2018, the growth rate of exports in the format of service is higher than the growth rate of imports in the format of services in foreign trade.

## 5 The influence of Internet on traditional foreign trade

### 5.1 The collision between the Internet and the real economy

In the early stage of the development of disruptive and innovative things, it is a power to break the old pattern and old monopoly, which plays a great role in promoting the development of society/economy. The innovation of the Internet, which is an information attribute, has a huge impact on the monopoly formed by the opacity and local protection of information in the field with the property of "tradable".

The destructive development of the Internet in China has benefited from the following: low labor costs, and a huge addition to the basic traffic construction in logistics industry. huge foreign trade/domestic trade goods quality/price difference, with huge domestic demand rise.

In the field of communications, national continuously invested construction of infrastructure, and speed up JiangFei. PC, Internet, mobile communication network, intelligent terminal, a few bonus all caught up in the wave industry.

Before the market environment is bad, the Internet lax supervision and regulation is difficult. 6) the popularization of higher education, the employment direction, narrow engineer bonus. But the Internet is now gradually form a pattern of oligarchs, can bully "soft persimmon"All bullies have about the same, "crack" is not on technology and market demand can chew, attitude towards "authority" is more and more ambiguous, oneself also is "authority". This means that the industry is from the broken into the reaper. We've seen the Internet started in the field of it has a monopoly of monopoly. Who can give more money services such as baidu, drops can wait longer than a taxi, cost is higher. Even affected the election of facebook's information security problem. The oligarchs can take advantage of money to purchase or stifle latecomers, and himself as an information monopoly Media, traditional media/mediation cake eaten before. Now we only see the impact of economic globalization on between countries. The Internet influence on domestic regional, and the impact of globalization of each country, is also an economic pattern of remodeling, "tradable commodity production, channel, promotion, can be different, also means that may is a national, can concentration is higher and higher. And

local business will become more" trade "properties, such as the cinema is more and more fire, shopping is becoming more and more like a playground, tourist area people mountain people sea.But accordingly, no national competitiveness of local enterprises "trade" goods, will be more and more difficult. The basic regional competition is in the zone bit and traffic advantages, infrastructure projects associated with the traffic on the mass, then go to the above for some policy, again some of the local policy, hope to support some more national or international competitiveness of enterprises, can't develop, pull some power enterprises to open the factory also can be in local. Now the real economy is nothing more than these patterns which have so many chances to become a unicorn to each city. Perhaps the decline of the northeast is the result of the regional trade deficit ".

Now Internet began to online with offline, make money, make new retail, smart, intelligent 4 s shop, the last link in the consumer products in the field of circulation profit also want to. You can think of, pay to bank CARDS, to balance the treasure, to the side of the road ma smart supermarket shopping, all the links are Internet companies to master, in addition to the goods shelves need local artificial, all links in the virtual world and long-distance finished. Artificial intelligence, face recognition, location tracking, ha ha, true to that day, right to privacy in reality will have no security. In addition, the artificial intelligence is nothing but algorithm, algorithm can cheat, once the monopoly to form, the good hope in other people's conscience, wishful thinking. A bright future of the Internet industry, by controlled by supervision is inevitable, entity in combination with the Internet, combined with the new technology of industrial upgrading is also inevitable, backward entities to be eliminated, concentration is higher and higher also is inevitable. With the competition of enterprises, goods and services or become bigger and stronger, or death. A local service based companies or temporarily safe. But the future predictably, regional differences, the differences between classes, will be more and more big. As for the United States, I don't know about Japan. I think American voters misunderstandings about China is larger. Capital/logistics/Internet/trade/the development of artificial intelligence, inevitably cause industrial concentration, regional concentration is higher and higher. The residents of the backward area and the underlying will from the production of circulation is more and more far, only the consumption desire, more and more difficult to enjoy the benefits of economic development. Of course, globalization and the rise of China has greatly accelerated the trend.

### 5.2 The Internet is an improvement of trade efficiency

"Internet + foreign trade" changes not every process in traditional international trade activities, but the realization of efficiency improvement in all links of trade, as well as the comprehensive application of information, Internet and big data technology.

Led by the current trend of globalization, countries around the world have ushered in a new opportunity for transformation. The evidence of globalization will certainly promote the multiple integration of economic globalization, information globalization and trade globalization. Therefore, the traditional mode of trade will also see a huge change, and there will be what we call "Internet + foreign trade".

In this context, cross-border e-commerce, as a new trade mode, is a successful application of the development concept of "Internet + foreign trade" and shows an unprecedented momentum of development.In this sense, cross-border e-commerce is a representative innovative business model of "Internet + foreign trade", which will exert an ununderestimated influence on the development of international trade.By 2020, China's cross-border e-commerce transactions are expected to reach 12 trillion yuan, accounting for 37.6 percent of China's total imports and exports.Cross-border e-commerce retail exports will reach about 2.16 trillion yuan, with an average annual growth rate of 34 percent.From the perspective of the "Internet plus" strategy advocated by the state, the Internet is just a technology, not an end in itself.+ ", therefore, in the field of trade, "the Internet is not only a simple + technology, + + platform network means, but should be successful operation experience, with the help of a cross-border electricity to the deficiency of the traditional foreign trade enterprises to realize the information-based transformation, can achieve the strategic business model innovation and upgrading of strong power, for the decisive basis for development of network economy era.Can say, cross-border electricity let "Internet + foreign trade" is externalized, application and industrialization, which will help foreign trade enterprises to open up a new path of "digital trade", effective grasp the "area" the best opportunity to cross-border cooperation, cooperation, and even the whole world, in turn, achieve the innovation of the trade data growth, new kinetic energy for China's economic transformation and upgrading.

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### 6 Conclusion

In thus, China has been positively participating in foreign trade activities globally, no matter what phase of a country China is at, or what Rank China is assigned to in the foreign trade loop. And China is always will to participate more and willing to take more responsibilities in the whole value chain globally. China had experienced difficulties during the past both domestically and globally in foreign trade, but China managed to conquer the difficulties and achieves a better result. One day, every country will participate in the global value chain, and contribute to the foreign trade circle. For an ultimate objective is to utilize all the resources on earth efficiently, no matter which phase or which rank a country is under. The total amount of resources are limited globally, and the regeneration amount of resources is determined by the nature. The only way to maximize the outcome of resources, is to utilize the resource in a much more efficient way. And to accomplish that goal, foreign trade is the very tool, helps countries to exchange the needed goods and technologies on a mutual basis.

Among the difficulties China has faced during the time participated in foreign trade in decades, those difficulties may be faced by other countries as well. And the difficulties the Phase 3 countries faced before; China may face them tomorrow. The best way of make a more efficient foreign trade environment, is to learn from other countries, not only learn from the advantage edges of other countries, and more importantly, to learn from the disadvantage edges a country might face, and how they deal with it. The ultimate phase of foreign trade of human civilization is trading without borders, it seemed very unlikely to happen, but it never can be sure.

# 7 References

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