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經營學博士 學位論文

A Study on China-Korea FTA

中國과 韓國간 FTA 에 관한 研究

指導教授 俞日善



2012年8月

韓國海洋大學校 大學院

貿易學科

宣善文

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Abstracts

A Study on China-Korea FTA

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Under the background of slowing progress in global multilateral trade negotiation, regional economic cooperation, mostly in the form of FTA, is blooming throughout the world. In recent years, the governments of China and Korea showed strong interests on bilateral FTA. Korea's recent economic growth has been partly due to increased exports to China, leading us to believe that China's economic growth is an important exogenous factor for Korea's development. Currently, China is Korea's biggest trade partner and Korea is China's fourth biggest trade partner. Consequently, Korea and China are in active negotiations to establish FTA to enforce greater and freer trade and investment.

However, trade liberalization is a double-edged sword all the way. FTA brings not only the welfare effects, but also the impact to the relative inferior industries in the member countries. China is the world's largest developing country, it has a comparative advantage in resources and labor-intensive industries, and the capital and technology-intensive products has comparative disadvantage, while Korea has a comparative disadvantage in agriculture and labor-intensive industries, but it's a comparative advantage in capital-intensive industries. If China-Korea FTA succeeds, the inferior industries in both countries will be impacted. As worrying about this kind of impact, the domestic related interest groups would object to China-Korea FTA desperately.

Therefore, in order to increase the bilateral benefits and reduce the costs as far as

possible, it is very necessary to analyze China-Korea FTA. Problems in this paper needed to be solved include: 1. Whether there is complementary in the trade between China and Korea, and whether both sides can offer supports to the reciprocal market; 2. The impact of the establishment of China-Korea FTA on two countries' economy; 3. The obstacles of the establishment of China-Korea FTA, and how to take measures to response it; 4. What strategy the two countries should take to establish China-Korea FTA.



國文抄錄

中國과 韓國간 FTA 에 관한 研究

宣善文

大學院 貿易學科

韓國海洋大學校

WTO설립이후 글로벌 다자간 무역 협상이 전개되었다. 그러나 1990년 후반부터 다자간 무역협상은 협상타결까지 시간이 너무 많이 소요되면서 무력화되었다. 이에 따라 쌍무무역협상형태인 양국간 또는 몇 개 국가그룹으로 자유무역협정(FTA)을 체결하여 지역 경제협력체를 만드는 것이 대세를 이루고 있다.

이런 배경하에서 최근 한국과 중국 정부는 자유 무역협정 체결을 위한 협상을 시작하였다. 중국은 한국의 수출과 수입이 모두 1 위인 중요한 무역상대국이고 중국의 넓은 시장은 한국경제성장에 크게 기여하고 있다. 한편 현재 한국은 중국에서 4 번째로 큰 무역 파트너이다. 1992년 정식외교 수립이후 한국과 중국 간 무역은 비약적으로 발전하고 양국간 경제는 상호 밀접한 관계를 갖게 되었다. 이에 따라 한국과 중국은 적극적으로 무역과 투자 자유화를 촉진하기 위해 자유 무역협정체결을 추진하고 있습니다.

그러나 무역 자유화는 항상 양날 검을 될 수 있다. 한 중 자유무역협정이 양국의 거대한 개발 기회를 주는 동시에 심각한 과제를

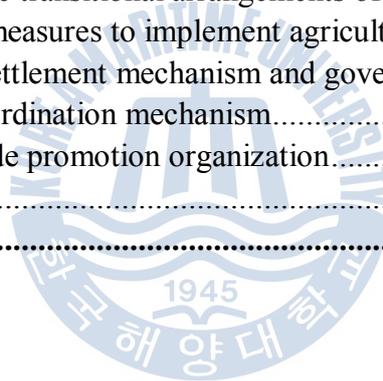
제기한다. 세계 최대의 개발 도상국으로서 중국은 자원 및 노동 집약 산업에서 비교 우위를 가지고, 자본 및 기술 집약적인 제품의 비교 열위를 가지고있다. 반면 한국은 농업 및 노동 집약적이고 낮은 기술 산업에서 비교 열위를 가지고, 자본 및 기술 집약적인 산업에서 비교 우위를 가지고 있다. 중국-한국 자유 무역협정 통해 양국의 비교우위가 있는 산업에 특화하여 무역을 하면 양국에서 무역이익을 얻을 수 있다. 그러나 양국의 비교열위산업은 구조조정을 당하게 될 것이다. 이런 구조조정은 양국의 내부의 격렬한 반발에 부딪치게 될 것이다. 이것은 중국-한국 자유 무역협정체결에서 고려할 점이다.

따라서 자유 무역협정 체결 때 조정 비용을 최소화하고 장애물을 제거하기 위해 한중간 예상 경제효과에 대한 심층 연구는 매우 필요하다. 이 논문에서 필요한 해결 주요 문제는: 1. 중한 양국의 무역은 보완성을 어떤가? 쌍방은 서로 시장의 지지를 받을 수 있는가? 2. 중한자유무역협정 체결 후에 양국의 경제 대한 영향을 어떤가? 3. 중한자유무역협정을 체결하기 위하여 장애적인 요소 해결 방법은 무엇인가 4. 중한자유무역구역 촉진시키기 위하여 어떤 전략을 선택하는가? 등이 논의되었다.

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Chapter 1. Introduction

1.1 The current problems

At present, worldwide regional or bilateral free trade area (FTA) gets developed rapidly, while the development of WTO which represents the multilateral trade liberalization is being immobilized. Many countries and regions is getting more and more apt to set up or join the free trade zone to accelerate tariff concessions and to expand the market access and also to implement trade liberalization to promote investment and economic growth, depending on the group's strength to overcome the negative effect of economic globalization, utmost to share the benefits of economic globalization. Facts proved that the establishment of FTA is the most effective and most convenient way to promote regional economic integration and regional economic cooperation. The most members of WTO have attended one or more agreement of FTA. About 70% of the global trade is being conducted in FTA and the proportion is still in an upward trend. Any countries and regions, if not build or join the FTA, would lose a lot of trade and investment opportunities in the process of economic globalization and would be at risk of being marginalized.

Based on this kind of trend, three main areas in the world are highlighted: Europe, America and Asia. The European Union (EU) has reached the highest level of economic integration toward political integratio, while the North American Free Trade Area (NAFTA) and the South American Common Market (MERCOSUR) is trying to set up the Free Trade Area of Americas (FTAA). Compared with the development level of economic integration and the degree of extensive economic and trade cooperation in Europe and America, East Asia is the most populous region and has experienced the world's highest economic growth rate. But the degree of regional economic integration is relatively low. China and Korea, the two major trade partners in this region has not formed a formal economic cooperation mechanism yet. The overall advancement of regional cooperation in East Asia is only in its early stages.

In early 2003, China had surpassed the U.S. to become Korea's first biggest trade partner. With the trade rising continuously, Korean investment in China is growing so rapidly; China has become the first choice of Korea's enterprises for investment. Since the open and reform policy in 1978, China-Korea's bilateral trade and investment scale have been

unceasingly expanded. These phenomena have made the economic ties between two countries closer and closer. Now two countries have strong complementary characteristics in industry, trade and investment structure. All of these factors contribute to promotion of the institutional cooperation between the two countries. Therefore, the establishment of China-Korea FTA will help to facilitate the industrial structure adjustment between two countries and to reveal the enterprises' potential benefit and international competitiveness. In this sense, the significance of China-Korea FTA is obvious.

At the same time, the cooperation between China and Korea plays a very important role to East Asia economic integration, and the bilateral FTA will promote "10+1", "10+3" cooperation process and inject new vitality for East Asian economic integration. If China-Korea would establish FTA, it could make Japan put in disadvantages competitive position. That could drive Japan into seeking to establish FTA with China or South Korea, or joint China and Korea to form the China-Korea-Japan FTA, i.e., the establishment of China-Korea FTA is expected to bring profound and far-reaching effects to Chinese and Korean economies and even the entire East Asia regional economic cooperation and development. In view of this, it is significant to study the FTA between China and Korea.

1.2 Research methods

This paper uses the method of the combination of theoretical analysis with empirical one and of the combination of quantitative analysis with qualitative one. Partly the historical analysis is combined with comparative analysis and other methods. With customs union theory, a variety of theories such as free trade area theory and other relevant international trade theory are used as a foundation, to analyze the feasibility, effects, barriers and prospects for establishing China-Korea FTA.

1.3 The structure and main points of the paper

First, the theory of FTA and regional economic integration will be reviewed to understand what theory guides the establishment of China-Korea FTA. Second, through the analysis on the background and the current status of China-Korea's economic and trade development, I will figure out what factors impede the establishment of China-Korea FTA. Third, by

seeking how to modify the unfavorable factors, this paper puts forward some measures to speed up the establishment of China-Korea FTA.

This paper was divided into six chapters:

The first chapter is the introduction, mainly to briefly explain the background of research, the object of study, the research idea etc. The second chapter constructs the theoretical framework of this paper, including customs union theory, economic integration theory and free trade area theory. It also analyzes the present situation of global free trade area development and at the same time emphatically does the respective FTA progress of China and Korea. Based on the current participant of two countries in regional or bilateral FTA practice, the views from the two countries' politics, economy and industrial structure will be mentioned briefly. The third chapter analyzes the feasibility to establish the FTA between China-Korea. The fourth chapter assesses the effects of China-Korea FTA and analyzes the influences of China-Korea FTA on East Asia economic integration development. From the aspects of the levels of economic development and trade frictions, the fifth chapter analyzes the barriers of the China-Korea FTA. The sixth chapter is about the prospects of China-Korea FTA and put forward some relevant policy suggestions.

Through the full text analysis and verification we can see, the establishment of China-Korea FTA has solid foundation in terms of theory and also has feasibility in terms of practise. Although there are many difficulties and obstacles in it, the two countries have paid a lot of efforts so far, and have made outstanding achievements and progress. The establishment of China-Korea FTA is accorded with economic globalization and regional economic integration. It is both China and Korea's common desire and pursue and is also a historical necessity. I hope that through this paper we can reveal the feasibility to establish China-Korea FTA and provide the theoretic basis and guidance for the establishment of two countries' FTA.

Chapter 2. The theory and practice of FTA

2.1 The theoretical framework of FTA research

The regional economic integration means that two or more countries or regions through economic treaties or agreements implement the unified economic policies and measures to eliminate artificial segmentation and restrictions in terms of commodity, element, and financial markets, to improve economic efficiency and to gain greater economic benefits. It is the process of integrating national or regional economy into a unified economy.¹ International economic integration can be classified into five forms, namely the free trade area, the customs union, the common market, the economic alliance and the complete economic integration. In the process of economic globalization, regional economic integration is also being developed quickly. The cooperation between different economic entities has been appearing and developing constantly. Many countries and regions, due to the pressure of competition and market access, has established many regional economic cooperation organizations, various forms of free trade area and customs union increasingly more and more. They play an important role in international trade and world economy and become one of the main tendencies of the economic development in the world.

¹ David Vines(1998), *East Asia and Europe*, Cambridge University Press, p.143

2.1.1 Customs Union theory

The first and the most common forms of regional economic integration are free trade area and customs union. It is generally thought that customs union theory is the cornerstone of free trade area theory. The customs union conception is, on the basis of free trade area, that all members impose the unified import tariffs and other trade measures on non-members. Customs union is the typical form of economic integration, in addition to free trade area; other forms of economic integration are gradually expanding its fields or connotation. So, in theory, about effects analysis of economic integration, the customs union is mostly chosen as the research object. In 1950, American economists Jacob Viner, in his book titled the problem of customs union, put forward the free trade area theory and customs union theory firstly, and proposed the two new ground-breaking concepts: “trade creation” and “trade diversion”, to explain the welfare effects customs union might produce. To take the quantitative analysis applied to study the economic effects of customs union, it created a new stage of customs union theory in post-war. After that, the economists who specialized in the economic integration in the field of international trade theory consider the two basics created by Viner as the starting point when the research on that is going on.

According to Viner's view, a fully formed customs union should have three conditions: First, delete the tariffs completely between the participating countries; second, set uniform tariffs to import goods from non-member countries or regions; third, allocate the tariff revenues among member countries through negotiation. Therefore, the customs union can liberalize the internal members; meanwhile, it can impose trade protection on non-members. These two contradictory functions of customs union cause static effect and dynamic effect. He thought the trade creation effect increases the whole social welfare of customs union members because the establishment of customs union makes higher domestic production cost replaced by other members who lower cost, thereby improve the resources allocation efficiency and enlarge production profit, while the trade diversion effect makes the import from non-member's lower cost products convert to import from member's higher cost products, which is disadvantageous to allocate resources, and then, reduce the social welfare. According to Viner's theoretical analysis framework, the net welfare effect of customs union depends on the comparison of these two kinds of effect. If trade creation effect is higher than trade diversion effect, the results of customs union turn out to be economic efficiency and welfare

increase and conversely, to be welfare reduction. It made the theory of such qualitative analysis develop into the theory of quantitative analysis later. Customs union theory is the traditional one about regional integration; it is also the basic theory of regional integration.

The effect of customs union could be divided into static effect and dynamic effect.

1. Static effect:

(1) Trade creation effect

Trade creation effect refers to the trade scale enlargement due to delete tariffs and non-tariff barriers each other between members. After establishment of the customs union, some domestic products of one country would be replaced by other inside members who lower cost, thereby improve the resources allocation efficiency and enlarge production profit. Meanwhile, through the specialization, one country will decrease its consumption expenditures, but capital is used to promote other products consumption, thus expand the social requirements and increase trade volume.

Assume there are three countries A、B、E in the world. These countries produce X、Y、Z products. The production possibility curve between the goods is linear. A、B are customs union members, while E is non-member. The tariff of A and B to product Y is t_y , to product Z is t_z . So, when the customs union is established, the prices of A's products are as follows:

$$P_x^A = P_x^w \quad (1)$$

$$P_y^A = (1+t_y)P_y^w \quad (2)$$

$$P_z^A = (1+t_z)P_z^w \quad (3)$$

In which, P_x^w , P_y^w , P_z^w is X、Y、Z's world market price, they don't inference by customs union, the budget constraints of A is:

$$P_x^w X + P_y^w Y + P_z^w Z = P_x^w S \quad (4)$$

S represents the export yield of A. Assume production possibility curve is linear, So, S is constant. X、Y、Z are the quantities of A's consumption. The utility function of A is U(X、Y、Z), that is ,A chooses P_Y^A or ty, to make it utility-maximized.

$F(P_x^A, P_Y^A, P_Z^A, U)$ means the minimum expenditure when A gets to U in domestic price. F relative price is continuous and concave to the original point. Assume F is second derivative, F_x is $\partial F / \partial P_x^A$, F_{xy} is $\partial^2 F / (\partial P_x^A \partial P_Y^A)$, F_{xw} is $\partial^2 F / (\partial P_x^A \partial U)$, the partial differential of F to P_x^A, P_Y^A, P_Z^A . So (4) can change to

$$P_x^W F_x + P_y^W F_y + P_z^W F_z = P_x^W S \quad (5)$$

Differential to (5):

$$P_x^W F_{xy} + P_x^W F_{xw} (\partial U / \partial P_Y^A) + P_y^W F_{yy} + P_y^W F_{yw} (\partial U / \partial P_Y^A) + P_z^W F_{zy} + P_z^W F_{zw} (\partial U / \partial P_Y^A) = 0 \quad (6)$$

According to Euler's theorem, $P_x^A F_{xy} + P_Y^A F_{yy} + P_Z^A F_{zy} = 0$ (7)

Put (1), (2), (3) into (7)

$$P_z^W F_{zy} = -(P_x^W F_{xy} + (1+ty) P_y^W F_{yy}) / (1+tz) \quad (8)$$

This equation represents the welfare of A when customs union established. The A's tariff of product Z is tz. If tariff to Y of B is abolished, $\partial U / \partial P_Y^A = 0$, that is, $tz - ty = -tz P_x^W F_{xy} / P_y^W F_{yy}$

When $F_{xy} \geq 0$, $tz \geq 0$ and when X and Y are alternatives, the tariff to Z is higher than Y, it means that the only products of A are imported from B. A can get benefits from member states in customs union, not vice versa.

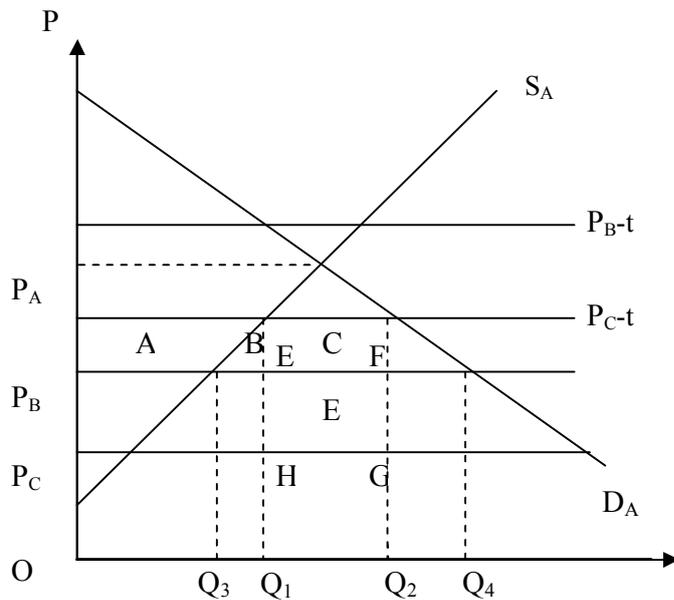
(2) Trade diversion effect

Trade diversion effect means that before establishment of customs union, one country don't produce a kind of commodity but imports from other countries which have highest production efficiency and the lowest cost; but after establishment of customs union, if this country is excluded from outside, then customs union internal free trade and common external tariffs make this commodity's price higher than specific member country's one. Member countries would import from one specific country where produces commodity with lower cost in the customs union, but not the lowest outside.

I will explain it by using Figure 1. Assume the world has A,B and C three countries that produce the same product, but the cost of these three countries is different. Now we take A for example in figure 1. SA means A's supply curve and DA means A's demand curve. Assume that the production cost of B and C is fixed and PB、PC two straight lines indicate the production cost of B and C. In addition, the production cost of C is less than B.

Before establishment of customs union, A imposes the same tariff t on goods imported from B and C. Assume A is a small country, after imposing goods tariff, if the same product of B and C is sold in A, the price is $P_B + t$ 、 $P_C + t$ ($< P_A$) . Obviously the price of B is higher than C. A will import from C, not from B. At this time, the domestic price of A is $P_C + t$ and domestic production is OQ1. Domestic consumption is OQ2, and import from C is Q1Q2. Assume A and B establish customs union and their common external tariff rate is still t . After establishment of customs union, A can no longer impose import tariffs on B, but can still impose import tariffs on C. So as shown, the sale price of B, P_B is lower than $P_C + t$. Therefore, C will be replaced by B as A's supplier. At the same time, as prices fall, the production in A narrows down to OQ3. Q3Q1 is the production of A but replaced by B. This is production effect. On the other hand, the price decrease causes A's consumption to increase. Then the consumption increases from OQ2 to OQ4, Q2Q4. It is consumption effect of customs union. A's imported quantity increases from Q1Q2 to Q3Q4 after establishment of customs union. The new growing trade is derived from namely trade creation effect, just as shown. Trade creation effect consists of production effect and consumption effect, which mean Q3Q1+Q2Q4 in the Figure 1. Remove the part of trade creation and the rest of the Q1Q2, is originally imported from alliance outside(C), but after establishment of customs union, it is imported from other alliance members (B). Trade has shifted from C to B. Trade diversion effect is equal to Q1Q2.

<Figure 1> Trade diversion effect



(3) Trade expansion effect

The establishment of customs union means exclusion from non-members products. In order to offset this effect, they are likely to transfer some production plants to countries in customs union and produce and sell directly in member countries' markets, bypassing the common tariffs and non-tariff barriers. Objectively, they generate a capital inflow that has led to a lot of foreign direct investment.

In addition to the above effects, the establishment of customs union will also bring some other aspects of static effect. It includes: ①Reduce the management cost. Due to deletion of tariff in customs union members each other, they needn't employ more government officials to supervise the products and service across the border, which thus, reduces the management cost and cuts government spending. ②Improve the foreign trade conditions of alliance members. For a single country, the market scale is limited; it's very difficult to be a big trade country which affects the international market prices. But after establishment of customs union, because the market scale within members is expanding, it becomes a big common trade body which can have effect on international market prices, to improve the alliance members' trade conditions. ③Strengthen the negotiation abilities. After establishment of customs union, it can enhance each member's economic strength in international negotiations,

especially in tariff concession negotiations. It can make them keep stronger bargaining power than they rely on their own strength upon negotiations.

2. Dynamic effect:

The dynamic effect of customs union refers to how customs union affects member states' employment, output, national income, international payments and the price level. From the dynamic perspective, customs union promotes the development of the effect of scale economy, competition effect and investment effect.

(1) The effect of scale economy. The effect of scale economy means that when enterprise scale expanding to certain degree, the unit production cost is declining.² After establishment of customs union, original scattered members' domestic markets form a unified large market and expand the market capacity rapidly. Each country can obtain benefit from economy of scale through improving the specialization, expanding the scale of production and reducing cost. Although it also can achieve the effect of scale economy through exporting to the rest of the world, the world market competition is fierce. Because there are many uncertainties and risks, the establishment of regional economic organization can provide stable market for enterprises.

(2) Competition effect. Before establishment of customs union, there are many monopoly departments in each member's home market, a few enterprises occupying the domestic market. It goes against the resource allocation and technology progress in countries. After the establishment of customs union, because each member in the market opens mutually, national enterprises face competition from other members of similar enterprises. In the competition, the enterprises, in order to obtain advantageous position, must improve management circumstances and reduce the production cost to promote economic efficiency and technological progress and create a strong competitive atmosphere in union. The enterprises which win finally in the competition will become an internal monopoly enterprises in customs union, which is beneficial to resist competition from alliance outside. It will also be helpful for customs union enterprises to compete with other countries.

² FengZongXian(2004), *International Trade Theory*, Xi 'an Jiao tong University Press, p.45

(3) Investment effect. The establishment of customs union expands market scale, improves the investment environment and strengthens the attraction to the investors from both member and non-member countries. On the one hand, after the establishment of customs union, it formed a unified big market. For survival and development, the enterprises in union have incentives to increase investment. On the other hand, after the establishment of customs union, it imposes high tariffs on the commodity of non-member countries. The non-member countries also have incentives to invest in customs union one by one in order to bypass the trade barriers. This attracts a lot of capital inflows.

From the above analysis, we can see that customs union as a kind of economic integration organization, in fact, seems to create a large internal market similar to a domestic market. In this market, commodity, labor and capital flows can move freely, which can allocate resources effectively and improve labor productivity in union. On the basis of the free trade area, all of members in customs union unify the import tariffs to non-member countries and take other trade measures. Therefore, the difference between customs union and free trade area is that the members cancel the mutual import tariffs, meanwhile, establish common external tariffs and that the products flow needn't additional certificate of origin among members' economies. Customs union sets common external tariffs among member countries. Actually it means that tariffs policy-making rights transfer from individual countries to economic integration organization. It isn't just like the free trade area which only cancels the tariffs between members, without transferring rights. Therefore, the customs union binds members' economies tighter than free trade area.

2.1.2 Free Trade Area theory

The evolution and development of free trade theory can be roughly divided into three stages. The first stage ranges from 1780s to 1860s. This is referred to as the period of free capitalistic competition. The first industrial revolution helped free trade theory appear. Free trade theory in this period is often called classical free trade theory. The second stage ranges from the middle of the 19th century to the world war II. Capitalism had gone into monopoly period. The second industrial revolution made free trade theory face a major turning point. Free trade theory in this period can be called a modern free trade theory. The third stage of free trade theory refers to the free trade theory after the world war II. Technology revolution has brought an innovation and all-round development of free trade theory.

1. Classical free trade theory

Classical free trade theory was developed from Adam Smith's absolute cost theory, followed by David Ricardo's comparative cost theory and John Muller's mutual demand principle. Adam Smith stressed the difference of labor productivity in its classical masterpiece the wealth of nations. Because of natural and social factors, in the same commodity production, the different countries have different labor productivity. So it formed the difference of their respective absolute production cost, that is, the absolute superiority. The reason why one country participates in the international division and international trade is that the country which has an absolute advantage in producing a certain commodity can reveal it.³ In his view, the basis of international trade is the absolute difference of the production cost; every country should focus on producing the commodities with cost advantage to make international exchange. International trade could make social labor division extend from domestic market to overseas market, and domestic division changes into international division. Eventually it results in specialization and enhancement of labor productivity. It will end up promoting the growth of countries' welfare. Based on the theory of absolute cost, David Ricardo supplemented and developed this doctrine with relatively cost theory, answering the question which absolute cost theory did not solve. David Ricardo pointed out what determines the international trade is the relative labor cost in different countries rather than the absolute labor cost. When the production costs of two goods in two countries are different from each other, in other words, if one country produces one commodity at the lower cost in terms of opportunity cost than the same goods produced in another country, the country has comparative advantage in producing that commodity. When each country produce and trade each goods with comparative advantage, they can enjoy gains from trade in both sides.⁴ In David Ricardo's view, the favorable international division only can be achieved in free trade system through mechanism of comparative advantage. The core idea of comparative cost theory is that every country has each own comparative advantage at least in one goods, or rather relative advantage, and it can reveal comparative advantage through trade. Here the comparative advantage is the greater absolute advantage and the smaller absolute inferiority, namely, "Of two interests choose the more, and while of two evils choose the less". About the allocation of the trade interests, British economist Muller used mutual demand theory to explain. Firstly, he used the principle of comparative

³ Adam Smith(2007). *The Wealth of Nations*, Xiezu Jun translation, Guangzhou: New Century Press, p.76

⁴ David Ricardo(1976), *Political economics and tax principle*, Commercial Press, p.89

advantage to explain practical terms of trade must be submitted to exchange ratio. If it is beyond the upper or lower limit, not in the middle of them, the international trade would not happen. Secondly, he concluded that practical terms of trade depend on the relative demand strength of trader.⁵ If foreign demand for domestic goods is stronger than their demand for foreign goods, the actual demand strength is close to the foreign commodity exchange ratio. So the actual terms of trade is favorable for domestic goods. On the contrary, if domestic demand for foreign goods is stronger than foreign demand for domestic goods, the actual demand strength is close to the domestic commodity exchange ratio. So the actual terms of trade is favorable for foreign goods.

2. Modern free trade theory

If labor was the only factor of production, as the Ricardian model assumes, comparative advantage could arise only because of international differences in labor productivity. In the real world, however, while trade is partly explained by differences in labor productivity, it also reflects differences in countries's resources. A realistic view of trade must allow for the importance not only of labor but of other factors of production such as land, capital, and mineral resources. That international trade is largely driven by difference in countries' resources is one of the most influential theories in modern free trade theory. Developed by two Swedish economists, Heckscher and Ohlin, the theory is often referred to as the Heckscher-Ohlin theory.

This theory started from the relative disparity of factor endowments, to explain the cause of international trade and trade pattern. Its main content is that comparative advantage is influenced by the interaction between country's factor emndowment. The country which has an abundant labor has comparative advantage in producing labor-intensive goods. Thus, this country tends to export labor-intensive goods. On the other hand, the country which has an abundant capital has comparative advantage in producing capital-intensive goods. Thus, this country tends to export capital-intensive goods. Accordingly, a country should export its relatively abundant production factors to exchange for those relatively scarce production factors. All sorts of factors of the price will tend to be equal.⁶ In the early days, Leontief believed in Heckscher-Ohlin theory. Based on the above cognition, he used input and output

⁵ John Stuart Mill(1997), *Exchanges Rate Coordination in East Asia*, Commercial Press, p.137

⁶ Bertil Ohlin(1967), *Interregional and International Trade*, Harvard University Press, p.234

analysis method to grasp the commodity structure in U.S. foreign trade. It's sort of purpose to verify Heckscher-Ohlin theory. But he got paradoxical results unlike that Heckscher-Ohlin Model expects. Though USA was the most abundant capital country in the world in 1950, American exported its labor-intensive products, and imported its capital-intensive products. This empirical studies conducted by Leontief shocked to international trade academia in the world. It has been called Leontief Paradox.⁷ Leontief Paradox sparked large-scale debates and verifications in western international economics, which brought the innovation and development of free trade theory since the world war II .

3. The free trade theory since the world war II

According to its origin, the free trade theory since the world war II can be divided into two parts: The first part is to explain the Leontief Paradox. We call it the new factors trade theory. The second part is to explain the new international trade pattern and structure, and we call it new international trade theory. New factors trade theory viewed that in considering goods of comparative advantage in international trade, the human resources, technology progress in international trade also plays an important role. It developed and complemented the production factor endowments theory. The difference is that it combined the production factor endowments theory with new connotation, and broke the original limitations. This theory mainly includes human capital theory, human resources theory and technology gap theory. The representative figure is Paul Kerugma and his new trade theory.⁸ The new international trade theory mainly includes: demand similarity theory, scale economy theory, the product life cycle theory, and intra-industry trade theory. There are three significant trade facts which cannot be ignored in contemporary international trade practice: the proportion of the knowledge intensive products in international trade volume is rising; assimilation of economic structure in industrialized countries; internal trade in the same department. All of these couldn't be explained by traditional trade theory, aiming at these major changes. The international trade new theory made some convincing explanations.

These free trade theories which discuss the cause of international trade and the benefits from free trade from different aspects thus provide the theoretical basic for the establishment of FTA between China and Korea.

⁷ Dominique(1998), *International Economics*, Tsinghai University Press, p.153

⁸ Paul Krugman, *Is Bilateralism bad?* MIT Press, 1991.

2.1.3 The conception of FTA

Free trade area (FTA) refers to two or more countries which waive tariffs mutually to form economic integration organization. An important feature of FTA is for the trade barriers among the members of economic integration organization to be abolished. Then the goods could be imported and exported freely. This contributes to realization of free trade. They, however, strictly restrict this trade treatment only within member countries. Another important feature of FTA is that they haven't the common external tariffs among member countries. It means that the free trade between member countries doesn't interfere with trade policies member countries take to non-member countries. Then some problems followed, it is so hard to distinguish whether a product came from member countries or non-member countries when implementing the free trade policy. The goods imported from the member which external tariff is lower get into the free trade area market, and then get into the member's market where external tariff is higher. Because there are possibilities that non-member countries avoid the high tariff by using such a detour, the higher tariff of member's foreign trade policy may be paralyzed. In order to solve this problem, usually "country of origin" principle is being taken. Its basic content is that only the goods produced in member countries is entitled to have the right to free trade, or free import tariffs. Generally speaking, the so-called country of origin demands that more than 50 percent value of goods should be produced in member countries. In some economic integration organization, in terms of some sensitive products, stricter criteria is requested, that is, the product value of 60%, even more than 75% produced in member countries.⁹

Free trade agreement is a kind of way in which countries comply with the world economy integration trend. It has played a great role in promoting regional trade liberalization, eliminating the artificial barriers of economic development. So free trade agreement is a significant link to the process of integration. It is also a measure which each country complies with the economic development and adjusts itself to foreign trade relations. Through the free trade agreement, the transactions cost among countries will be reduced substantially and various trade barriers among countries decreased. The agreement will accelerate the process of regional economic integration and promote the development of world economy.

⁹ Jiang Xianjiu(2008), The feasibility of China-Korea FTA, *Northern Economy Trade*, February, p.23

2.2 The present situation of global FTA

2.2.1 The vigorous development of global FTA

After the world war, regional economic cooperation in the world have experienced three stages of developments:

The first wave of regional economic cooperation occurred in the 1950s and 1960s. It was the establishment of the European Economic Community (EEC) in 1956. In response to EEC, European Free Trade Association (EFTA) was proposed by England and established in 1960. In addition to England, six members-Denmark, Swiss, Iceland, Portugal, Liechtenstein, Norway-are added. This featured a pure trade group; it hasn't the supranational characteristics like EEC. Today EFTA still exists with only four countries- Swiss, Iceland, Liechtenstein, Norway. In addition, a few developing countries which had taken part in the free trade agreement in Latin America appeared but most of them were failed, because of the opposition of USA. As the world biggest trade partner, America firmly opposed to any form of regional economic cooperation initially, emphasizing that free trade might be realized through the multilateral trade negotiations.

The second wave of regional economic cooperation occurred in the early 1990s. In addition to existing EEC, North American Free Trade Area (NAFTA) and Asia-Pacific Economic Cooperation (APEC) was established. It was worth mentioning that the United States-Canada free trade agreement came into effect in 1989. It indicated that America in terms of regional economic cooperation has undergone significant turning point. It changed attitude toward the regional economic cooperation, and decided to participate in and lead regional free trade agreement in order to get more economic and political interests. During this period, the EEC was being expanded rapidly, and transformed into European Union (EU); in a while it was proclaimed that North American Free Trade Area was established. All of these push forward the regional economic cooperation of Latin America and Africa, such as Southern Cone Common Market, Andean Communities, West Africa's Economic and Monetary Union, etc. Compared to other areas, the Asia-Pacific region is later than others; APEC didn't appear until 1989(at that time only 12 members) and then the Association of Southeast Asian Nations (ASEAN) was established in 1992.

The third wave of regional economic cooperation which occurred in the late 1990s continues up to now. This kind of tendency has encouraged countries to sign the regional trade agreements. Therefore, worldwide bilateral FTA emerged quickly. According to WTO statistics 2009, the regional trade agreements which notified the WTO/GATT have exceeded 271. In these protocols, more than 190 have come into effect, most of which are bilateral FTA. This tide includes the implementation of bilateral FTA between EU and Africa, Latin America, Central Asia, and the negotiating bilateral FTA of Asia-Pacific region. 10

<Table 1> Bilateral FTA of main countries and regions

Countries/Regions	The situation of bilateral FTA
U.S.	Lead and establish the North American Free Trade Area; it has already established free trade area with Singapore, South Korea, Israel, Jordan, Bahrain, Oman, Morocco, Chile, Australia, New Zealand, Peru; it is promoting the establishment of American Free Trade Zone; and negotiating with Thailand, Philippines, South Africa, Egypt to establish FTA.
EU	It has achieved high integration among 27 members; it has already established free trade area with South Korea, South the Common Market (Brazil, Argentina, Uruguay and Paraguay), Chile, Mexico and South Africa and Egypt, and planned to establish the FTA with all of countries in Latin American and ASEAN.
Japan	It has already established free trade area with Chile, Singapore, Mexico, Thailand, Philippines, Malaysia; and negotiating with South Korea, ASEAN.
ASEAN	It has established FTA among internal 10 countries; and continues to develop in depth and breadth; It has already established free trade area with China, Korea, Australia, New Zealand, India; and negotiating with the United States, and European Union.
India	It has already established free trade area with ASEAN; and negotiating with some South Asian countries and South Africa.

¹⁰ Chen Liuqin(2010), The development trend of world bilateral FTA, *Social Sciences*, Nov, p.21

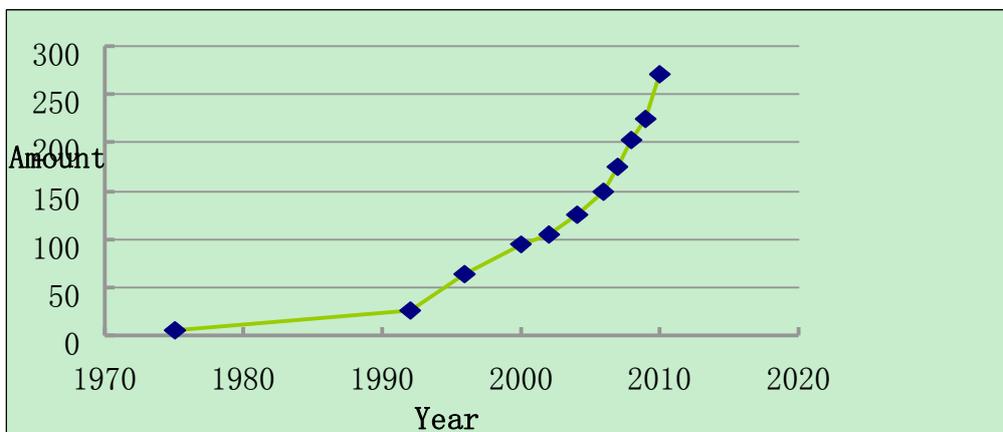
Russia	It has already established free trade area within the Commonwealth of Independent States and Eurasian economic community; and negotiating with New Zealand.
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Source: *Regional Trade Agreements Notified to the GATT/WTO and in Force (2011)*
http://www.wto.org/english/tratop_e/region_e/region_e.htm#work

The multilateral trade regime now faces certain limitation since the 21st century. WTO couldn't solve effectively the multilateral trade frictions. And it also takes time to reach agreement on ongoing issues. Thus making global economic integration has become further difficult. In order to seek their development respectively, they are taking more convenient, more reasonable and more effective cooperation way. Establishment of the multilateral or bilateral free trade area is one of ways to solve the current dilemmas. In the world economy, new pattern is working on. Almost all of members in WTO is taking part in one or more FTA.

The FTA, as the main form of regional economic cooperation has experienced rapid development. Since the early 1990s, regional trade agreements began to increase. All of countries seek a better economic and trade cooperation through regional trade agreements. According to WTO statistics, since the 1990s, FTA has made a dramatic growth. 5 Regional trade agreements was only signed before 1970s , 12 in 1970s and 10 in 1980s respectively. But its increase amounts to 64 in the 1990s and 95 after 2000. <Figure 2> reflects the rapid development of regional economic integration. By 2009, the amount of the FTA reached 271. All kinds of trade volume among FTA members have reached 50% in global trade.¹¹

<Figure 2> The amount of FTA in the world



¹¹ ShuSha(2010), *Study on China-Korean FTA*, the business school of Qingdao University, Graduation Thesis, pp.32

The trans-regional FTA of bilateral or multilateral emerges endlessly. In recent years, with the development of FTA, it has broken the regional limits gradually. Some countries and trade groups began to seek to establish bilateral or multilateral free trade area with other countries or trade groups which have close trade or political relations. For example, the European Union has established various forms of FTA with the Mediterranean countries. North American Free Trade Area signed FTA with some countries in Africa. USA has established the FTA with Israel, Australia, South Korea, and Singapore and so on. In East Asia, ASEAN are also negotiating with three countries- China, Japan and South Korea- to establish FTA.

The development of global FTA gradually turns to sign bilateral free trade agreement. Currently, besides the minority areas, most FTA was signed up between two countries or one country signed bilateral free trade agreement with an economic association. According to the statistics, the proportion of bilateral agreements amounts to 75 percent in all of established FTA, and still 90 percent is under negotiation of bilateral agreements.¹² The FTA between countries which were very different in economic levels is also gradually increasing; the economic level is not the necessary foundation when two countries sign the FTA agreement. If both sides of economy are complementary, it will be helpful for two countries. And upon the establishment of FTA, countries not only pay attention to the top-market, but also keep a watchful eye on some countries which have abundant natural resources and human resources. They not just pay attention to their own development but also to promote mutual economic growth. They move the economic entity in this area gradually towards the balanced development. The development of global FTA will inevitably narrow down the gap between countries. It balances all parties and results in the formation of new economic and trade pattern.

2.2.2 The development of Europe, America and East Asia FTA

The world is gradually forming three trade groups: Europe, America and East Asia. Among them, the European Union and the North American Free Trade Area have become the most powerful regional group in the world.

2.2.2.1 European Union (EU)

¹² <http://www.wto.org/> (2011)

The headquarters of EU is located at Brussels, Belgium. It was evolved from European Community. For more than half a century, in all kinds of regional integration, European integration is the earliest development, highest degree and most fruitful. The process of European integration was going on from easy one to hard one, from economy to politics, It experienced the development stages of Customs Union, Common Market, Economic Alliance and Monetary Unification; basically eliminate the barriers to form unified big market. The facts proved that the European Union complied with the trend of world economic development through various elements of the free flows and that it optimized the allocation of resources and promotes economic prosperity. It was regarded as one of the model of regional economic cooperation, the so-called "European" mode. With the new members added, the European Union has developed into 27 members, 480 million population and economic size more than 20.8 trillion dollars. It forms a huge regional market which has 35 percent GDP of the world. It becomes the biggest free trade area in the world. As the highest level of integration, it not only exceeds over the free trade area and established Customs Union and Common Market, but also the economic monetary union came true. It is the highest degree of global economic integration and the most influential regional economic organization.

2.2.2.2 North American Free Trade Area (NAFTA)

The North American Free Trade Area is a successful regional economic integration after the European Union established. The NAFTA put into effect on January 1st, 1994, 420 million population and economic size more than 15.6 trillion dollars. Because of the participation of Mexico, it becomes a successful paradigm of North-South regional economic cooperation. Generally speaking, customs union, free trade area and other forms of regional economic organization appeared in postwar and its members' economic level was similar. From the perspective of international industrial division, in order to achieve the high level of competition and complementary relationship, the horizontal division between member countries is good choice. For example, the EU which consists of developed countries before enlargement in terms of the social system, the level of economic development, and the historical and cultural traditions, is relatively close; it was jointly promoted by most countries, no single country can play the absolute leading role. Hence its organizational degree and standard is far higher than other regional organizations and it is also the basic reason of its

success. By contrast, the NAFTA which is composed of two developed countries and a typical developing country, member countries are different among them in political, economic and cultural aspects. Therefore, NAFTA embodied the economic complementarities through the vertical division among these three countries. From the historical experience, there is no precedence between countries which have so large gap. The NAFTA is the first trial between developed countries and developing countries. Its success or failure will be of great significance for worldwide regional economic cooperation. It is the typical representative of North-South economic cooperation, and also has a profound and revelatory meaning for China-Korean FTA.

The establishment and development of EU and NAFTA has exerted an important influence on that region and the world economy. Firstly, the exclusive and regional economic organization promotes the economy and trade growth in this region. As the internal trade barriers in free trade area are gradually eliminated, it promotes the free flow of production factors, and resource allocation is more efficient. So, the scale economy benefit was further improved. It is estimated that after realizing the free flow of goods, services, capital and talents, the EU could get 300 billion dollars-worth benefit, GDP growth which account for 5%, public cost decreased by 20%, industrial cost down 7% and an additional 200-300 million jobs. The operation of NAFTA also provides three countries considerable benefits: the annual growth rate of Mexico's export trade reached 20%, Canada was 10%, and the United States was 5%.¹³ Secondly, it changed flow direction of the world's goods, funds, technology and talents. When FTA was established in developed countries, mainly due to the invention of science and technology, main users was concentrated in developed countries, their absorptive capacity for science and technology is huge, it would cause the funds and technology flow to developed country firstly, then spread to developing countries in this region, accordingly, it would restrict flow to outside developing countries. In recent years, for sharing the interests of FTA, the outside of FTA are seeking its cooperation actively, thus, the mutual investment between FTA is appearing, especially in order to bypass FTA trade barriers, the outside direct investment will become the most common way.

2.2.2.3 East Asia

¹³ PiaoGuangji(2008), The process of China-Korea FTA, *Asia-Pacific Economic*, p.35

Since 1970s, the annual average growth rate of developing countries in East Asia is 8%, far higher than average 4.3% in other regional developing countries and average 3% in developed countries. Annual growth rate of foreign import and export trade also greatly exceeded the world's trade growth rate.¹⁴ As one of the world's fastest growing economy, the process of Asian economic integration is fairly slow, especially among the most important part of East Asia economy: China, Korea and Japan. The existing cooperation still stays in the stage of functional integration and has not set up any kind of institutional regional cooperation framework. Along with the developing of economic globalization and regional economic integration, there are many regional economic integration organizations appearing. The competition among countries is gradually developing into the competition in regional cooperation organization. And East Asia is still not forming a unified organization of regional economic integration. It makes the force of East Asia countries declining in the fierce international competition. In 1997, in the top rank 30 countries and regions in global GDP, only China, Korea, Japan, Taiwan and Hong Kong Special Administrative Region did not join any bilateral FTA. They're all in East Asia. However, since 1997, all kinds of bilateral FTA in East Asia emerge in large numbers; it became the leading actor on the stage in the third wave of regional economic cooperation in the Asia-Pacific. According to statistics, the different stage of bilateral FTA in Asia-Pacific region has more than 50. East Asia is changing the backward situation of free trade agreement.¹⁵

1. China's FTA strategy

China has undergone growing economic globalization at present and opening its economy which requires reliance on both domestic and international resources and markets. On the other hand, with its vast market and economic size, the China's economy faces issues like foreign trade friction and resource and energy bottlenecks. By signing an FTA, China will demonstrate its political and diplomatic interest and at the same time, gain economic benefits including trade and investments. Against such a backdrop, China is also picking up the pace of research and signing FTA with various countries around the world. Participating in regional economic integration has become an indispensable part of China's external economic and trade strategy in the new century.

¹⁴ Qiu Jianguo(2008), *The path selection of East Asian economic integration: based on the analysis of NAFTA, the EU experience*, Shandong University, Master Theses, p.46

¹⁵ Chen Liuqin(2005), *The development trend of world bilateral FTA and our solutions*, *Social Sciences* Nov, p.42

<Table 2> The process of China's FTA

Source: <http://fta.mofcom.gov.cn/index.shtml> service (2011)

Signed	Negotiating	Discussing
Hong Kong (June 2003)	GCC, Australia, Iceland, Norway,	India, South Korea
Macau (October 2003)	Southern Africa Customs Union	(official research),
Chile (November 2005)		Switzerland,
New Zealand (April 2008)		Japan, MERCOSUR,
Singapore (October 2008)		Mexico, Iceland,
Pakistan (February 2009)		Thailand,
ASEAN (January 2010)		China-Korea-Japan (folk
Peru (March 2010)		jointly study)
Costa Rica (April 2010)		

Note: ASEAN refers to 10 ASEAN countries; GCC refers to the Gulf Cooperation Council, MERCOSUR refers to South American community: Brazil, Argentina, Uruguay and Paraguay.

Not so long after joining the WTO, China took part in and promoted the regional economic cooperation. So far, China has signed 7 free trade agreements and two close economic partnership agreements (CEPA), they are China-ASEAN FTA, China-Pakistani FTA, China-Chile FTA, China-New Zealand FTA, China-Singapore FTA, China-Peru FTA, China-Costa Rica FTA and Mainland China-Hong Kong CEPA, Mainland China-Macau CEPA. At the same time, China also launched negotiations with Iceland, Norway, the Gulf Cooperation Council (GCC), Australia and Southern African Customs Union (SACU). In addition, China also has started the official feasibility study phase of FTA with India and Korea. In regional agreements, China has joined in Asia-Pacific trade agreements and greater Mekong sub-regional facilitation agreements; it has participated and completed the folk second stage feasibility study of China-Korea-Japan FTA, what is called “10+3” FTA and the frame of East Asia comprehensive economic partnership (CEPEA).¹⁶

China is the largest developing country in the world but the negotiation conditions with other developed countries is not mature. In the long run, China will choose the countries and regions which have similar economic level as the main negotiations, such as ASEAN, Pakistan. It formed a larger regional cooperation between developing countries. On January 1, 2010, China-ASEAN FTA was established; China's exports to ASEAN increased by 55.1%,

¹⁶ Zhang Yunling(2010), The influence of FTA to the commercial activities, *Contemporary Asia-Pacific*, p.23

whiel ASEAN exports to China increased by 48%. Now, China is ASEAN's third largest trading partner, while ASEAN is China's fourth largest trading partner. China-ASEAN FTA has become the biggest free trade area made up of the developing countries in the world, with 1.8 billion consumers, nearly 7 trillion dollars worth of GDP, and bilateral trade volume account for 4.5 trillion dollars.¹⁷ By January 1, 2010, China-ASEAN free trade area was fully established, 90% of products enjoy zero-tariff. Such changes offered opportunities to enterprises at difficult times from both sides. It is highly necessary for Chinese enterprises to take advantages of FTA, and to seize commercial opportunities from it. It will help them to gain more market shares and more tangible benefits will be derived. Currently, ASEAN has become an important source of foreign investment, and the first choice of Chinese enterprises got to be "to go abroad" policy. As to China's investment in ASEAN, although the absolute amount of investment is not large, it has faster growth rate. In 2009, China's direct investment in ASEAN countries increased 125% over the previous year. China-ASEAN Expo, China-ASEAN Business and Investment Summit play an active role to promote economic and trade cooperation between China and ASEAN.¹⁸ Meanwhile, China is also actively seeking FTA negotiations with developed countries. On April 7, 2008, "China-New Zealand Free Trade Agreement" officially signed. It was the first free trade agreement China signed with developed countries and also the first free trade agreement China signed with other countries which covered goods trade, services trade, investment trade and other fields of free trade agreements. Premier Wen Jiabao said that the agreement achieved four "first". Namely, New Zealand was the first country to complete bilateral negotiations with China; the first country to recognize China's full market economy status; the first country in developed countries negotiated with China; the first country in developed countries established FTA with China. From the structure of the trade goods, China and New Zealand economies is highly complementary. As a developed market economy country, New Zealand has a unique natural environment. Its economic extroverted degree is higher. The agriculture, forestry, husbandry has a comparative and competitive advantage. It is one of the world's major exporter of agricultural products. Besides tourism, education, transportation, telecommunications and other service industries showed a trend of rapid growth. However, New Zealand's industrial base is relatively weak. So it imports large quantities of industrial goods and daily necessities. The two countries' economies have strong complementarities. New Zealand will remove all

¹⁷ YuanBo(2010), The new progress of ASEAN FTA strategy,*International Trade*, p.21

¹⁸ China-ASEAN Free Trade Area Network, <http://www.cafta.org.cn/> (2011).

As a large developing country, in terms of benefit evaluation in the regional economic cooperation, it's not only considering the static economic benefits, but also the dynamic economic benefits and non-economic benefits.

(1) The strategy combining economic interests with energy and resources.

On the one hand, by establishing FTA, it can expand export trade, reduce trade friction, and decrease trade interdependence with some developed countries, develop new market and obtain economic benefits. On the other hand, in order to solve energy and raw material shortage due to the rapid economic growth, China established FTA with GCC, Australia, and Chile which have abundant resources. Currently, the countries which signed with China have its dominant resources, such as the forestry resources of ASEAN, the technology, capital, farming and timber resources of New Zealand, the technology, capital, iron and agricultural resources of Australia, the copper of Chile, etc. Take the Gulf Cooperation Council (GCC) countries as an example. Nowadays, China's 1/3 oil consumption depends on imports and the 6 members of GCC with global 45% of the crude oil reserves accounts for 20% of global crude oil exports. So, facing the energy problem in recent years, China established FTA with these Arab oil producers is so important.²¹

(2) The strategy combining economic interests with political interests.

In recent years, mainland China signed the Closer Economic Partnership Arrangement (CEPA) with Hong Kong and Macao, signed the FTA with ASEAN, Pakistan and other neighboring countries. It not only considers the foreign trade interests, but also political

²¹ Zhang Xiaona(2009), China-Korea FTA strategy choice, *Contemporary Korea*, p.45

interests. Strictly speaking, the ASEAN market is still very narrow, seen from the perspective of exports. Actually China-ASEAN FTA doesn't bring China much of the benefits but its political significance far outweighs the economic benefits. It will enhance mutual trust, eliminate misunderstanding between China and ASEAN. It is not only good for both economic development, but it brings benefit to develop the long-term and stable political relations between them and promote East Asian peace, security and stability.

(3) The strategy combining economic interests with foreign policy.

In the establishment of China's FTA, in addition to the economic interests, foreign policy becomes very important factors. To establish FTA with political friendly countries firstly, it can strengthen political mutual trust, keep the peace and stability of the economic and trade relationship. Take the trade relationship between China and Japan for example. China has become Japan's biggest trade partner. Although the relationship in trade and investment cooperation seems to be quite smooth, the friction takes place continuously in politics. The FTA between China and Japan is far away and not within the foreseeable future.

2. Korea's FTA strategy

In the early 1990s, with the trend of accelerated liberalization in international trade, Korea had to face international challenges that required further deregulation and liberalization of the market as well as institutional and policy changes. To meet the challenges, Korea entered a deeper liberalization process, making trade-related economic reforms which had aimed at abolishing unnecessary regulations and restrictions in trade and investment policy and reducing tariff barriers in line with the Uruguay round agreement. As a trade-oriented country and a member of the WTO, Korea has become a strong supporter of multilateral trade liberalization. Also, active promotion of foreign direct investment, deregulation and competition policy took place in this period as part of the globalization process. The financial crisis of 1997, however, clearly showed the structural weakness of Korean economy, which has been historically characterized by illicit ties between the government and protected industries. Therefore, the Korean government struggled to overcome the crisis and to modernize the economic structure by making overall reforms in every sector. Korea has chosen FTA partners selectively and has set up strategic route of "easy first, difficult later". Meanwhile, it has established specialized agencies to make FTA towards institutionalization.

(1) The steps of Korea's FTA strategy

As a newly industrialized country, the Korean government formulated the "three-step" strategy. The first step is to sign with the United States to expand the share of Korean goods in U.S market and to strengthen the Korea-U.S. alliance and bilateral diplomatic relations. In 2006, the Korea-U.S. FTA started negotiation, 16 months later, in April 1, 2007, they came to an agreement. According to this agreement, both sides will abolish 85% tariffs on industrial products and the remaining 15% of industrial tariffs will be phased out in 3-15 years. In the facet of automobile, the United States abolishes car tariffs and phases out minivans tariffs in 5-10 years. Other tariffs will phase out in the near future. Korea will phase out pork, chicken and oranges tariffs within 50 years. By establishing FTA with U.S., Korea can promote further the reforms of national economic structure and procure U.S. market steadily. Meanwhile, it exerts a demonstration effect and plays oppressive role to China and Japan, making these two countries apply more positive attitude to negotiate bilateral trade agreement with Korea. This agreement connected the world's 12th largest economy-Korea and the world's largest economic power-the United States to an economic circle. It is the largest open experiment and the first independent trade agreement in Korean history. The economy alliance means that the Korea will enter a new type of opening mechanism in the 21st century. The alliance will no longer be satisfied with a "military alliance" but based on mutual trust and interest toward the "trust alliance" relations. Korea-U.S. FTA will be consistent with this trend. Korea-U.S. Korea and U.S. will abolish all tariffs in industrial products in the next 10 year. About 94% of the tariffs will also be removed in the next 3 years. The outcome of negotiations is that the Korea can enter the U.S. market in the automotive, fiber and other manufacturing areas, while the U.S. can enter the South Korea market in the agriculture and services, cutting-edge technology and other fields. In the face of many economic and non-economic interests, despite that there is oppositions situation domestically but the signed and approved Korea-U.S. FTA finally shows the Korean attitude and determination in this respect.²² The second step is to sign with the EU to expand the cooperation field and to increase its influence. The volume of trade between Korea and EU reached 100 billion dollars in 2010. EU is the largest foreign investment source of Korea and the foreign direct investment of EU to Korea accounted for over 1/3 or more. From Korea's view, signed with EU, it can create 300,000 jobs in short term and increase the gross domestic product (GDP)

²² Tu Ruifen(2008), The Analysis of the process of China and Korea Free Trade Area, *Journal of Xinjing Normal Umversity (Social Sciences)*, p.23

by 2.02%. It can create 500,000 jobs in long term. The third step is to sign with China to achieve rapid economic development and to occupy a favorable ground.

<Table 3> The process of Korea's FTA

Source: Korea online. <http://chinese.korea.net/index.do> (2011)

Signed	Negotiating	Discussing
Chile (April, 2004)	Mexico, Canada, India,	Japan, China, Russia,
Singapore (March, 2006)	Australia, New Zealand,	Israel, MERCOSUR,
EFTA (September, 2006)	Canada, Colombia, Turkey	China-Korea-Japan
Korea-ASEAN (June, 2007)		(Folk jointly study)
EU (Oct, 2010)		
U.S. (Nov, 2010)		
Peru (Aug, 2011)		

Note: ASEAN refers to 10 ASEAN countries; MERCOSUR refers to South American Community: Brazil, Argentina, Uruguay and Paraguay; EFTA refers to the European Free Trade Association: Switzerland, Norway, Iceland, and Liechtenstein.

In particular, when negotiations with Japan got into impasse, Korea began to pay more attention to study FTA with China. Compared to Japan, China's abundant labor resources and vast market work as an advantage to meet the Korea's demands. Korea thought that signed the FTA with developed economies is beneficial to learn advanced technology and trade system from them and improve the efficiency of Korean companies to achieve the advanced trade methods. And it would help to increase its international competitiveness. Korea-U.S. FTA is not only conducive to competing with Japan in technology, but also competing with China in markets. Signed FTA with EU, the world's largest single market, also has given Korea a huge impact on the market and trade structure. It will occupy a good position in negotiations with China, Japan and India in the future.²³ <Table 3> shows the process of Korea's FTA.

Since the establishment of the FTA roadmap in 2003, Korea has actively engaged in FTA negotiations with over 50 countries. So far, the FTA with Chile, Singapore, EFTA, ASEA, EU and U.S. has entered into force. Korea is currently negotiating FTA with GCC, Peru, Australia, New Zealand, Columbia, India, Canada, Turkey and Mexico. Prior to launching official negotiations, Korea is conducting preparation talks or joint research projects with prospective

²³ Li Mingquan(2010), The rules of agricultural trade in Korea FTA, *Northeast Asia Forum*,p.54

FTA partners including China, Japan, MERCOSUR, Russia and Israel. In particular, China and Japan agreed to start a joint research on the trilateral FTA among government officials.

(2) The motivation of Korea for the implementation of FTA strategy

Though Korea has achieved economic growth through an export-oriented policy, its reaction to a widening spread of regional trade blocs has been lukewarm due to domestic opposition to a market opening under regional trade agreements. However, since the financial crisis began, the Korean government has been reevaluating the potential gains to be made by removing trade barriers on a preferential basis, and has decided to pursue the establishment of preferential trade blocs. It is judged that a free trade agreement should eliminate tariffs and alleviate non-tariff barriers and stimulate trade for member countries, while setting up limitation of imports from non-member countries at the same time. In an effort to avoid the negative effects of exclusion from such agreements, to maintain economic reform and an open policy, and to actively cope with proliferating regionalism, the Korean government has decided to pursue FTA with other countries. Forming FTA will enable Korea to create political alliance, to attract foreign investment and to establish overseas footholds. In addition, it will help Korean companies to secure foreign export markets and overcome discriminatory practices under other FTA.

Firstly, it is necessary to comply with the development of the world. One major reason for Korea's new thinking on regionalism is the trade diversion caused by the growth of FTA. A WTO (1995) report discussed the causes of the rapid increase in the number of FTA in the early 1990s. The report concluded that there was a growing trend of using regionalism as an insurance policy in the event of the failure of the Uruguay Round negotiations. An implication of that conclusion is that regional integration initiatives would be weakened as the multilateral trade system became firmly established. Yet following the inauguration of the WTO, regional trade blocs have continued to expand both in number and in scope. In line with this increasing trend towards regional integration, to minimize the losses from it, Korea has altered its past position of Korea's FTA policy. Korea's decision to pursue FTA was motivated not only by a fear of exclusion from the recent trend of growing regionalism, but also by the Asian financial crisis in 1998.

Secondly, it is necessary to realize economic development goals. One of important motivation came from Korean ambitious economic development plans. On August 30, 2006, Korea announced a national economic potential growth and long-term goal of social welfare program. According to this program, by 2030 Korea will become a world-class advanced country in economic growth and social security system. The per capita GDP of Korea in 2007 exceeded 21,651 dollars. In 2008, the per capita GDP declined to 19,195 dollars. Because heavy shock was blown by the international financial crisis, Korean economy suffered a setback in 2010. The per capita GDP decreased to 17,071 dollars with considerable decline. GDP dropped to 1300 billion dollars and fell to top 14 in the world. Korea expects to reach 45,000 dollars of the per capita GDP in 2020 and to become the world's tenth largest economy.²⁴ No matter what the long-term economic goals are or no matter how the recent economic developments of Korea are, it is considered to be an important period. So, as export-oriented economic, Korea is trying to sign bilateral free trade agreements with many countries to expand the scale of foreign trade and ensure economic growth.

Thirdly, the implementation of FTA is an important way to improve national welfare and upgrade industrial structure. Korea recognized that the supplier-oriented trade policy of the past must be changed into a consumer-oriented policy, which maximizes the convenience and benefits to the general public. In terms of cost-efficiency, the public's well-being is better served when the majority of consumers can be supplied with low-cost, high-quality goods rather than defending the interests of a minority of domestic producers. Therefore, the government must perform the role of opening up the domestic market, so that consumers can enjoy an abundance of low-cost, high-quality goods and services. Though Korea has applied a relatively passive trade policy in the past, in the coming era of fierce competition, Korea must be equipped with a more active and assertive trade policy in order to lay the foundation on national prosperity in the 21st century. Also, it is important to maintain friendly relations with trade partners, and to secure a stable export performance based on competitive domestic industries. In addition, Korea must attract additional foreign investment, not only for financial purposes but also for acquiring the advanced technology of foreign companies.

Summary:

This chapter describes the theoretical framework of free trade area, including the

²⁴ Piao Guangji(2010), *China-Korea relations and Northeast Asian Economic Community*, China Social Sciences Press, p.43

customs union theory, free trade area theory, and the conception of FTA. At the same time, it illustrates the development of FTA in the world, and generalizes the development process of NAFTA, EU and East Asian trade bloc. On basis of this, it focuses on analyzing the development strategies of China and Korea FTA and lay a theoretical foundation and realistic basis for the following paper.



Chapter 3. The feasibility of China-Korea FTA

Today's world is an open world in the process of globalization. The trend of regional economic integration is growing and the degree of interdependence continues to deepen in trade, investment, technology, labor mobility among countries. Therefore, all of countries are willing to seek economic and trade cooperation with neighboring countries. They has formed a number of regional economic integration organizations in order to achieve their own interests better. Regional economic integration organizations to optimize the allocation of international resources, improve the efficiency of resource allocation in the region and produce a significant scale effect, investment effect and the trade creation effect. It also brings the a variety of value to member countries which can not be created by individual country and it has been an effective means for each country to participate in the international competition. In addition, most regional organizations try to abolish internal barriers to trade-most trade barriers against outside countries, which still maintain, to form the discriminatory treatment. Therefore, most of countries in the world feels the competitive pressures brought from the regional economic integration organizations. By only cooperating with the countries which can have the common interest with each other, they can have a right place in an increasingly competitive world.

Geopolitical and historical ties provide a strong foundation for the development of bilateral economic and trade relations between China and Korea, while their complementary economies present big opportunities for mutually beneficial requirements to realize pragmatic interests. To look for bigger and more stable markets to promote bilateral economic growth, both of them need to develop institutionalized regional economic cooperation to maintain their ever-closer ties in trade and investment.

3.1 The trade relationship between China and Korea

3.1.1 The trade status of China and Korea

As a result of its open-door policy, China has been integrating itself into world trade networks. It is now the world's largest trade country. During China's reform and opening for

about 30 years, the average annual GDP growth rate reaches 9%, in the 21st century and the annual rate reached 10.1% in 2010. GDP reached 5852.7 billion dollars in the same year, when calculated at comparable prices. It means an average increase of 10.3%. The amount of imports and exports grew rapidly. The total value of annual imports and exports was 2972.8 billion dollars. It means an increase of 34.7%, compared to previous year, among them. The value of exports was 1577.9 billion dollars, increased 31.3%. The value of imports was 1399.9 billion dollars, increased 38.7%. If the value of exports is offset by that of imports, the trade surplus was 183.1 billion dollars. It dropped down 6.4% compared to previous year. Nowadays, China has become the second largest economic entity in the world economy. From Table 4 we can see, although Korea is not China's largest trade partner, Korea is the largest trade deficit source of China. It indicates that China and Korea have a close trade relations.

Since 1965, the economic development of Korea was rapid; the average annual economic growth rate was 8.7% in 1970s, 9.9% in 1980s, the average annual growth was 8.7% in 1990-1997, to create a "Han River Miracle"²⁵. In 1997 Asian financial crisis, Korea harshly suffered from it. However, under the leadership of the government, Korean people take effective measures to heal the wounds of the financial crisis and recovered the economy speedily. In recent years, the Korean economy still records an average annual growth rate of 5% and becomes one of the fastest growing regions in Asia. The fast economic growth of China and Korea laid a solid material and technical foundation on the establishment of FTA between China and Korea. It can create new economic growth point for China and Korea, to promote the better and faster economic development of the two countries. It ends up creating a new miracle.

From Table 4 we can see that no matter how much the trade amount or trade surplus is, China is Korea's biggest trade partner. The trade amount of China-Korea exceeds the sum of U.S. and Japan. Meanwhile, it indicates that Korea is more interdependent on China's development.

<Table 4> The imports and exports of China with main trade partners (2010)

Unit: billion dollars

²⁵ Lu Xinde(1998).The economic internationalization experience of Kim Young-sam government, *Asia-Pacific Development Research*, p.53

Countries (Regions)	Total volume	Imports	Exports	Trade Balance
EU	479.71	168.48	311.23	142.75
U.S.	385.34	102.04	283.3	181.26
Japan	297.77	176.71	121.06	-55.65
ASEAN	292.78	154.57	138.21	-16.36
Hong Kong	230.58	12.26	218.32	206.06
Korea	207.17	138.4	68.77	-69.63

Source: China Customs (2010)

<Table 5> The imports and exports of Korea with main trade partners (2010)

Unit: billion dollars

Countries (Regions)	Total volume	Imports	Exports	Trade Balance
China	207.17	68.77	138.4	69.63
U.S.	87.52	39.49	48.03	8.54
Japan	89.56	62.22	27.34	-34.88
EU	88.73	37.32	51.41	14.09
ASEAN	94.26	42.91	51.35	8.44

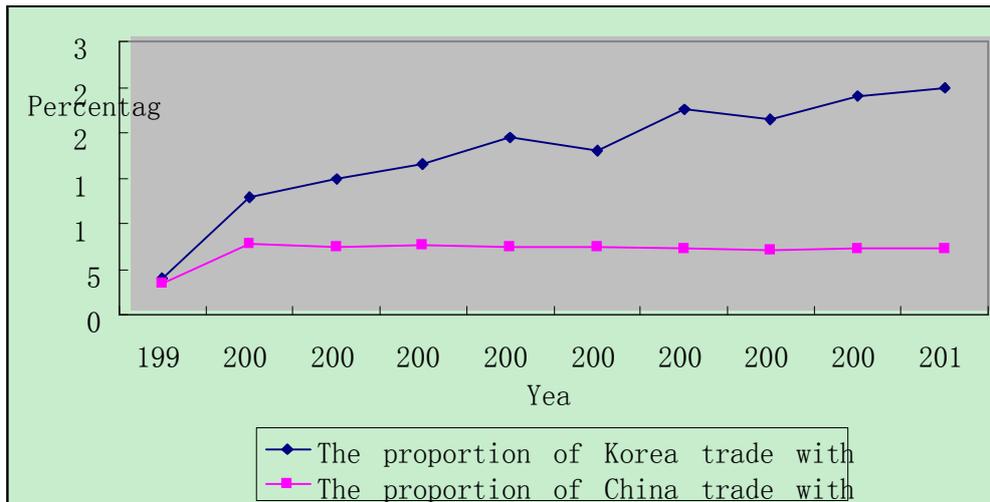
Source: China Customs (2010)

3.1.2 The trade dependency of China and Korea

The trade dependency means the proportion of trade in a country's gross domestic product. It can be a rough description of the economic ties with outside. The trade dependency of China-Korea can explain their influence on the economy and the close economic ties between the two countries.

<Figure 4> The trade dependency of China and Korea

Unit: %



Source: China Customs, Country Report(2011)

Data shows that in 2005, trade dependence of Korea on China was 18.4% and is increasing year by year. Korea's trade dependence with China soared to 25.2 percent in 2010. China has become the biggest trade partner to Korea on foreign trade.²⁶ The trade dependency between the two countries shows a rising trend year by year. It indicated that the economic and trade ties between the two countries is increasingly getting closer. From Figure 4 we can see, Korean interdependence on China is far higher than China's interdependence on Korea and rather, China's economic influence on Korea is higher than Korea's influence on China. Though the bilateral trade started from the late 1980s between China and Korea, it entered a rapid growth phase after the establishment of diplomatic relations in 1992. From 1992 to 2009, the bilateral trade increased from 5.03 billion dollars in 1992 to 140.95 billion dollars in 2009, increased to nearly 30 times. This growth rate is significantly higher than the corresponding growth rate of foreign trade of Korea in the same period.

<Table 6> China's imports and exports to Korea

Unit: billion dollars

Year	Exports		Imports		Total volume		Trade Balance
	Amount	Growth (%)	Amount	Growth (%)	Amount	Growth (%)	
1992	2.405	10.39	2.623	146.02	5.028	54.95	-0.218
1993	2.861	18.96	5.36	104.35	8.221	63.5	-2.499
1994	4.402	53.86	7.319	36.55	11.721	42.57	-2.917

²⁶ <http://news.163.com/10/1005/02/616R214I00014AED.html> 2010-10-05

1995	6.688	51.93	10.293	40.63	16.981	44.88	-3.605
1996	7.5	12.14	12.482	21.27	19.982	17.67	-4.982
1997	9.127	21.69	14.93	19.61	24.057	20.39	-5.803
1998	6.252	-31.5	15.014	0.56	21.266	-11.6	-8.762
1999	7.808	24.89	17.226	14.73	25.034	17.72	-9.418
2000	11.292	44.62	23.208	34.73	34.5	37.81	-11.916
2001	12.519	10.87	23.377	0.73	35.896	4.05	-10.858
2002	15.535	24.09	28.568	22.21	44.103	22.86	-13.033
2003	20.095	29.36	43.128	50.97	63.223	43.35	-23.033
2004	27.812	38.4	62.234	44.3	90.046	42.43	-34.423
2005	35.108	26.23	76.82	23.44	111.928	24.3	-41.713
2006	44.522	26.82	89.724	16.8	134.246	19.94	-45.202
2007	56.099	26.00	103.752	15.63	159.851	19.07	-47.653
2008	73.951	31.82	112.162	8.11	186.113	16.43	-38.211
2009	53.68	-27.41	102.552	-8.57	156.232	-16.06	-48.872
2010	68.77	28.11	138.4	34.96	207.17	32.60	-69.63

Source: China Customs (2010)

In 2005, the bilateral trade between China and Korea amounted to 111.93 billion dollars and increased to 24.3%. Compared to previous year, it reached the goal of 100 billion dollars with three years ahead of schedule. From zero to 100 billion dollars, China and Korea only spent 13 years, while China-U.S. spent 23 years and China-Japan spent 30 years. This is rare in the history of world trade. Nowadays, the total sum of trade between China and Korea exceeds the sum of Korea-U.S. and Korea-Japan. The bilateral trade between China and Korea in 2010 reached 207.17 billion dollars. In 2010, China became the largest trade partner of Korea, the largest exports destination, the largest investment destination, the third largest source of imports and the largest trade surplus source of Korea. Without including the EU and ASEAN, Korea became China's fourth largest trade partner, the third largest source of foreign capital and the fourth largest exports market.²⁷ The rapid growth of trade between China and Korea has greatly increased trade interdependence between the two countries, which has laid a solid foundation on the establishment of China-Korea FTA.²⁸

Since the new century, the main reasons for substantial growth in trade between China

²⁷ Ministry of Commerce of the People's Republic of China (2010)

²⁸ Tu Ruifen(2008), The analysis of China and Korea Free Trade Area process, *Journal of Xinjing Normal University (Social Sciences)*, p.34

and Korea are the following aspects: First, It is concerned with the two countries' sustained and rapid economic growth. China's average annual economic growth is 10.1%, while Korea average annual economic growth is 4.7%. The rapid growth of the countries' economy not only provides solid material foundation on the exports, but also expands a broad market space for imports. Second, with frequent exchanging of visits between the leaders and personnel, bilateral relations got comprehensively and deeply developed. Korea has recognized that China's market is of great significance in Korean economy status and two countries are studying the establishment of FTA. It provides a good environment for cooperation. Third, Korean products have an international competitiveness, compared with other countries and regions. Korean products are good for the Chinese market in price and their service also makes consumer satisfied. Fourth, after China had accessed to WTO, the domestic markets is getting open more and more. It is conducive to the development of foreign trade. Fifth, in recent years, Korean companies in China have been at a high level of actual investment. It promotes Korean products and the related accessories export to China increased dramatically. Meanwhile, the products is being manufactured in China and then sold back to Korea and other markets. It increases exports to Korea and other regions.²⁹

During the challenging period of the global financial crisis, the quality of trade cooperation continued between China and Korea. The big business in Korea set off a new round of investment to China. In 2009, the "China-Korea economic and trade cooperation and long-term development plan report" was formally signed. It raised a new goal that bilateral trade reached 300 billion dollars in 2015, only to improve steadily the cooperation in financial, energy, high technology, logistics, communications, shipbuilding, steel, green low-carbon industry and other fields. In November 16, 2005, Korea announced to recognize China's market economy status, which is the first country to recognize China's market economy status among the bilateral trade volume with China over 100 billion dollars. It has great significance to the trade development between China and Korea: First, economic and trade relations between China and Korea will be more closely. Second, it benefits to the Chinese companies which export to Korea. Before that, although the trade volume between China and Korea is large, there are also many disputes in the future. China and Korea can settle these disputes under the framework of the WTO or regional trade mechanism, which is beneficial to Chinese enterprises to open up the Korean market. Third, it can play an indirect promotion

²⁹ Xu Changwen(2008), Economic and trade development between China and Korea FTA, *International Trade*, p.54

effect to establish the FTA between China and Korea. Overall, After Korea recognizing China's market economy status, China and Korea will seek more cooperation. Then bilateral relations will further develop.

3.2 Strong complementarities between China and Korea

Whether the regional economies have complementarities or not is based on the degree of similarity of natural resources, labor, technology and other production factors in this area. If the production factors and the range of its products are quite different, it is considered that there exists a complementary in regional economy. China and Korea established diplomatic relations in 1992. At that time, through reform and opening policy, China sought to do a deeper stage of development. It's also the period of Korean manufacture industry restructured and the Korean labor-intensive industries shifted outwards. Korea transferred its labor-intensive industries to the emerging Chinese market. China have taken advantage of the manufacture sector to develop labor-intensive industries and low value-added industries. It formed trade patterns which China imported from Korea and exported to Europe and America. This particular pattern of trade flows is also reflected that China is called a "world factory" in the international division. Obviously, this makes China's export sector focus on light industrial goods, while Korea exports a large number of heavy and chemical industrial products which reflects the situation at that time. In the international trade patterns, China and Korea conducted a vertical division system, while the trade vertical formation of complementary relationship between China and Korea push the trade quickly into the rapid development stage after the establishment of diplomatic relations between two countries. Therefore, China and Korean economic complementarities is the basis for bilateral cooperation.

First, the complementary market between China and Korea is concerned. Korea has less than 100 thousand square kilometers of territory and more than 45 million people, per capita GDP is 17, 071dollars in 2010, the contradiction between developed productivity and limited market capacity is bound to be resolved by expanding foreign trade. China is an enormous market with 9.60 million square kilometers of territory and 1.3 billion people, per capita GDP is 4200 dollars in 2010, and it can digest and absorb the surplus of Korean products. Meanwhile, it eases the imbalance between development and demand of the Korean economy.

China's huge domestic market provides a rare opportunity for the small market and is heavily dependent on external market of Korea.

Second, the complementary labor resources between China and Korea are concerned. Korea is a relatively developed country with a large number of high technology and high management personnel. Therefore, its products are manufactured at a relatively high labor costs and domestic workers get paid the \$ 7.75 per hour. While China is a developing country, it has abundant labor resources, low average wages which only amounts to 11.87% of Korean workers wages. In agricultural products, clothing, electrical assembly and other labor-intensive products have a comparative advantage.³⁰

Third, the complementary scientific and technological level between China and Korea is concerned. In the development of the world economy, the scientific and technological progress play an important role to improve technology-intensive economy and transfer and diffuse technology to the world. They strengthen the links of national economies to improve the development of international economy. Since 1970s, to make the “technology founding” a principle of state, Korea has expanded investment in technology and introduced foreign advanced technology and capital. These policies have helped strengthen their own technology research, which has made it possible to improve technology rapidly. Currently, the technology level of Korea is in a leading position in "moderately developed country" and some of them even reached the world advanced level. In the process of industrialization, China has formed the basis of complete technical departments and some high-tech industries such as information industry, aerospace, microelectronics, biotechnology and other fields have been developing rapidly. But now, only lack of capability transfer technical into real productivity. Overall, China and Korea have their own strengths in the technical aspects and the complementarities are so high. The technology trade between the two countries will help them play their own advantages to stimulate the development of trade.

Fourth, the complementarity in economic and trade structure between China and Korea are concerned. The complementarity in economic and trade structure between the two countries is based on the comparative advantages of both sides. China's abundant natural resources and labor resources determines its advantages in resources processing and labor-intensive

³⁰ Feng Weiwei(2010), China and Korea bilateral economic and trade relations and the prospects for Sino-ROK Free Trade Area Analysis, *Business China*, p.43

industries, while because Korea has advanced technology, it determines the capital-and technology-intensive industry are the comparative advantage industry. The complementarity in economic and trade structure between the two countries determines a large trade space which is beneficial to the establishment of free trade area. Overall, since China and Korean economy is in two different development stages, they have highly mutual complementarity. The two countries should actively participate in economic cooperation to maximize the sharing of the benefits of international division.

3.2.1 The economic structure between China and Korea

Since 21st century, the important reason why the rapid economic growth happens through bilateral economic and trade cooperation is the complementarities. As a newly industrialized country, Korean domestic and economic development and industrial progress have the abundant funds and advanced technology advantages. But it faces narrow market, higher labor cost and resources scarcity. Such a negative situation is around Korea. On the contrary, China has a huge market, abundant natural resources, and low labor cost advantages. On the path of industrial upgrade it faces the difficulties of fund shortage and lack of technical content. It is because the two countries are in different positions. Industrial division system in East Asia and complementary industrial structure between two countries, if economic cooperation would be strengthened, contribute to revealing a huge development potential. Both of sides can achieve comparative advantage by signing the bilateral FTA and enhancing production efficiency of a domestic industry.³¹

For a long time, because there is a big gap between China and Korea at the level of industrial development in the regional division, the status of China and Korea bilateral trade showed significant and complementary characteristics. Overall, China's exports to Korea are mainly agricultural products (including fishery), textile and other light industrial. The content of most agricultural and textile products is low value-added products and the level of technology is not high. Korea's exports to China are mainly electronic components, optical and medical devices, automotive parts and sophisticated mechanical and electrical products, steel products, which are mostly capital-intensive and technology-intensive type of industry. It can take advantage of cheap labor in China, but also give full play to the technological

³¹ WuQiong(2007), China and Korea FTA: the deep economic cooperation in Northeast Asia, *International Business Daily*, p.43

advantages of Korean companies, for example, the electrical and mechanical, steel and shipbuilding which are the traditional advantages. It has always been a major component of exports to China. It can be said that the mainly trade structure between China and Korea shows a vertical complementary relationship, that is, the inter-industry trade is dominant.

<Table7> Main changes of China's exports to Korea

Unit: billion dollars

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Electromechanical	4.05	5.71	9.23	11.69	14.63	23.8	27.59	23.90	34.01
Base metals	1.40	2.24	4.56	6.57	9.72	13.39	20.49	8.41	11.97
Textile products	3.42	3.81	4.11	4.07	5.18	5.37	5.11	3.92	4.21
Chemical	0.96	1.58	1.51	2.05	2.62	3.48	4.22	3.25	4.18
Minerals	1.27	1.55	2.06	2.87	2.81	2.88	3.64	3.78	4.06

Source: China Customs (2010)

In 2010, China's main goods export to Korea was the electromechanical, base metals, textile raw materials and products, chemical and mineral products. In the commodities, the electromechanical remained the largest category of goods exported to Korea. The amount of it reached 34.01 billion dollars and grew by 26.2% over 2009. Followed by electromechanical, the largest increase happened in base metals and products and significantly increased for several years. In 2010, it grew by 42.3%. The amount of it reached 11.97 billion dollars. It has become the second largest export commodity to Korea. The reason why structural change happened with the Korean economic development is because some big companies enlarged its investment in China, and the commodities made in China was sold back to Korean market to promote the growth of Korean exports.

<Table 8> The main changes of Korea's exports to China

Unit: billion dollars

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Electromechanical	7.5	12.1	18.2	25.5	30.4	31.1	35.51	33.95	43.54
Optical medical equipment	2.73	2.88	4.67	6.43	7.49	10.71	12.36	14.92	20.63
Chemical	2.13	3.58	5.23	6.34	8.45	9.59	11.23	9.7	10.58
Minerals	1.34	1.94	3.26	3.57	5.89	6.64	6.98	5.08	7.54
Plastic	0.87	1.44	2.98	3.35	4.32	4.99	5.78	6.64	7.13

Source: China Customs (2010)

China mainly imported from Korea was electromechanical, optical medical equipment, chemical, mineral products and plastic products. Especially in recent years, electromechanical and optical medical equipment exported to China increased significantly. It reflected the Korean advanced technology capabilities. In 2008, China held the Olympic Games. Korea's exports to China increased significantly. In 2009, Korea's exports to China declined, and then rebounded in 2010. In addition to base metals, leather bags and footwear exports increased slightly. The Korean exports to China in the other commodities are a double-digit growth. This change shows that the trade structure between two countries tend to be reasonable. From raw materials oriented economy in the past to manufactured goods oriented economy, from low value-added economy to high value-added economy, the bilateral economic and trade relationship has become closer.

We can use GSM to prove it. This section is based on the model of Francois and Hall's GSM (Global Simulation Model). The flexible price of demand and cross elasticity of imports plays a very important role in this model. To obtain these values firstly, we supposed :

$$M_{(i,v),r} = f(P_{(i,v),r}, P_{(i,v),s}, r, y_{(i,v)}) \quad (1)$$

$M_{(i,v),r}$ is the goods i that country v demands from country r , $P_{(i,v),r}$ is the goods i 's price in country v that country r 's exports. $P_{(i,v),s}$ is the domestic price in country v except country r , $y_{(i,v)}$ is the total yield that country v imports goods i .

According to this suppose, we can see:

$$\text{Cross elasticity:} \quad N_{(i,v),(r,s)} = \theta_{(i,v),s} (E_m + E_s) \quad (2)$$

$$\text{Demand elasticity:} \quad N_{(i,v),(r,r)} = \theta_{(i,v),r} E_m - \sum \theta_{(i,v),s} E_s = \theta_{(i,v),r} E_m - (1 - \theta_{(i,v),r}) E_s \quad (3)$$

$$\text{In it, } \theta_{(i,v),r} = M_{(i,v),r} T_{(i,v),r} / \sum M_{(i,v),s} T_{(i,v),s}$$

S is the proportion of goods i of country v imports from country r , E_m is the demand elasticity, E_s is the substitute elasticity. $P_{i,r}$ is the goods i 's export price of country r , $P_{(i,v),r}$ is the goods i 's domestic price in country v imports form country r , the relationship between them is:

$$P_{(i,v),r} = (1 + t_{(i,v),r}) P_{i,r} = T_{(i,v),r} P_{i,r} \quad (4)$$

In it, $T=1+t$ is additional factor, that is:

$$X_{i,r}=f(P_{i,r}) \quad (5)$$

According to (1) 、 (4) and (5) , we can get:

$$\hat{M}_{(i,v),r} = N_{(i,v),(r,r)} \hat{P}_{(i,v),r} + \sum N_{(i,v),(r,s)} \hat{P}_{(i,v),s} \quad (6)$$

$$\hat{P}_{(i,v),r} = \hat{P}_{i,r} + \hat{T}_{(i,v),r} \quad (7)$$

$$\hat{X}_{i,r} = E_{x(i,r)} \hat{P}_{i,r} \quad (8)$$

In it, $\hat{\quad}$ means the rate of change.

Take the equation (6) 、 (2) and (3) into (8) , we can get:

$$\hat{M}_{i,r} = \sum \hat{M}_{(i,v),r} = \sum N_{(i,v),(r,r)} \hat{P}_{(i,v),r} + \sum \sum N_{(i,v),(r,s)} \hat{P}_{(i,v),s} = \sum N_{(i,v),(r,r)} [P_r + \hat{T}_{(i,v),r}] + \sum \sum N_{(i,v),(r,s)} [P_s + \hat{T}_{(i,v),s}] \quad (9)$$

If the imports equal to exports, that is $\hat{M}_{i,r} = \hat{X}_{i,r}$. Put (9) and (8) into, we can get:

$$E_{x(i,r)} \hat{P}_{i,r} = \sum N_{(i,v),(r,r)} [P_r + \hat{T}_{(i,v),r}] + \sum \sum N_{(i,v),(r,s)} [P_s + \hat{T}_{(i,v),s}] \quad (10)$$

From Table 9 we can see, the most competitive manufactured goods that China exports to Korea are still concentrated in labor intensive industry, such as textiles and agriculture, (SITC0、SITC1、SITC2、SITC4) while the most competitive products of Korea are mainly concentrated in high value-added, high-tech products, (SITC0、SITC1、SITC2、SITC4) .

<Table 9> The results of GSM

SITC	0	1	2	3	4	5	6	7	8
China exports to Korea	66.6%	55.7%	5.7%	-25%	13.1%	-22.1%	-6%	-22.6%	-24%
Korea exports	38.1%	58.2%	22.6%	-11.8%	20.8%	-0.3%	19.1%	12.9%	15.1%

to China									
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Source:LiXiaofeng(2009),The impact of China-Korea FTA to Bilateral Trade, International Economics and Trade Research,p.43

In the long term, because this kind of inter-industry vertical division of labor model would be further strengthened, it indicates that based on the comparative advantage among industries between the two countries, their economic structures are highly complementary. So the trade will be able to reveal huge potential. On the other hand, due to foreign direct investment, the processing trade has a significant development in some medium-tech products, such as the processing industry and mechanical products. China's trade competitiveness was gradually enhanced, although there is far from being competitive products. But it indicates that traditional vertical trade structure is gradually being broken, because it begins to move to horizontal division. Trade competition between the two countries in these products was gradually enhanced. China-Korea FTA cannot increase the total trade of traditional exports that China exports to Korea. It can increase the goods that was produced in not large amount before. In contrast, Korea exports to China would be increased substantially.

3.2.2 The industrial structure between China and Korea

According to the general principles of theory in international division, to a certain extent, the commodity structure of trade between two countries can reflect the characteristics of industrial division between them. If the transaction of same commodity is essentially one direction, then, it has the characteristics of vertical division. On the contrary, if to both sides, the imports and exports is roughly the same. So, it can be said that this industry has the characteristics of horizontal division. Because economic development level between China and Korea stays in quite different stages, 1990s is the period of rapid economic growth in China. The average annual GDP growth rate reached 9.9% from 1999 to 2005, driven by economic growth. China needs capital and technology-intensive products to be increased. In the middle of 1960s, Korea established an "Export First" and "Trade Nation" as basic national policy and built up actively developed export-oriented economies. Since the 1990s, with the deepening of Korean industrial structure adjustment, the electrical products, automobiles, chemical products and steel exports increased sharply and this trend is consistent with the

structure of China's demand for imported goods. Therefore, China's imports from Korea were growing.

Appendix Definitions of Variables

Revealed Comparative Advantage (RCA), RCA is defined as:

$$RCA_{ij} = \frac{x_{ij} / \sum_i x_{ij}}{\sum_j x_{ij} / \sum_j \sum_i x_{ij}}$$

where i and j indicate industry and home country, respectively. x_{ij} represents exports of industry i in country j to world and evaluated at domestic market price. Therefore, $RCA_{ij} > 1$ means that industry i in country j has comparative advantage (compared with world average) while $RCA_{ij} < 1$ means i in country j has comparative disadvantage. We use three types of regionalization index. First index is called absolute measure and defined as:

$$A = \frac{x_{jk}}{\sum_k \sum_j x_{jk}}$$

where j and k indicate home and partner countries, respectively. x_{jk} represents exports from country j to country k , respectively. Therefore, absolute measure captures export the share of country j to country k relative to world total exports. Second index is called relative measure, which is defined as:

$$B = \frac{A}{\sum_k x_{jk} / \sum_k \sum_j x_{jk}} = \frac{x_{jk}}{\sum_k x_{jk}}$$

The relative measure indicates the export share of country j to country k relative to country j 's total exports.

Third index is called double relative measure. Double relative measure is the divided by home and partner export shares so that we could partly control both home and partner' scale.

$$C = \left(\frac{\sum_k x_{jk} / \sum_k \sum_j x_{jk}}{\sum_j x_{jk} / \sum_k \sum_j x_{jk}} \right) = \frac{x_{jk} \times \sum_k \sum_j x_{jk}}{\sum_j x_{jk} \times \sum_k x_{jk}}$$

The value of exports is evaluated at the domestic market price while value of imports is evaluated at the world price. We define Effective Rate of Protection (ERP) as follows.

$$ERP_{ij} = \frac{t_{ij} - \sum_z t_{mj} a_{izj}}{1 - \sum_z a_{izj}},$$

where i , z and j indicate final goods industry, intermediate goods industry and home country, respectively. a_{izj} indicate the input coefficient from i industry to m in country j obtained from input-output table in GTAP database. The rate of protection in this analysis, therefore, includes both tariff and non-tariff barriers.



<Table 10> Revealed Comparative Advantage (RCA)

	China	Korea
Agriculture	0.88	0.06
Forestry	0.33	0.03

Fishing	1.63	1.51
Mining	0.37	0.01
Food products and beverages	0.68	0.31
Textiles	3.53	2.13
Pulp, paper and paper product	0.64	0.38
Chemicals	0.67	1.07
Iron, steel and metal products	0.86	1.28
Transportation machinery	0.20	1.23
Electronic equipment	1.17	2.26
General machinery	0.86	0.74
Other manufacturing	4.00	0.73

Source: China Customs data and <http://onstats.un.org/unsd/comtrade>(2010)

From <Table 10> we can see, Korea imports from China are mainly low value-added resources, labor-intensive products, especially in the type of commodity based raw materials, such as textile raw materials and products, base metals and products, minerals and agricultural products. These products are vulnerable in the market, when the relative price of commodities rises. It is easy to be destroyed. China has the comparative advantages in agriculture, fishing, mining, food products and beverages, textiles, pulp, paper and paper product. These industries were low value-added. Meanwhile, Korea has the comparative advantages in chemicals, iron, steel and metal products, transportation machinery, electronic equipment, these industries were high value-added.

<Table 11> Effective Rate of Protection (ERP) (%)

	China	Korea
Agriculture	51.6	154.2
Forestry	0.6	0.9
Fishing	9.5	21.5
Mining	-5.4	4.6
Food products and beverages	60.5	-57.6

Textiles	33.2	12.9
Pulp, paper and paper product	10.6	7.7
Chemicals	22.2	9.4
Iron, steel and metal products	17.5	7.2
Transportation machinery	36.0	4.8
Electronic equipment	14.7	16.3
General machinery	21.3	11.7
Other manufacturing	24.6	11.2

Source: Innwon Park(2009), Economic Effects of China-Korea FTA, Division of International Studies,p.93

As to ERP, Korea tends to protect agriculture, forestry, fishing and mining. These are Korea's comparative disadvantages industries. China tries to protect chemicals, transportation machinery and general machinery. These are China's comparative disadvantages industries. Each country levys high tariff on its disadvantage industries. Overall, the horizontal division between China and Korea is not obvious so much. Between China and Korean, traditional trade is in line with the principle of comparative advantage in international trade at the macro level. That is, China exports the labor-intensive primary products or low-tech, low value-added to Korea, while Korea exports the technology-intensive and capital-intensive manufactured goods to China.³²

3.2.3 The investment structure between China and Korea

Since the reform and opening up, China has become the most rapidly growing country in the world. The rapid economic development, the improved investment environment, laws and regulations continue to be improved. By taking advantage of huge domestic market and relatively cheap labor, China tried to attract foreign direct investment. In recent years, the further development and deepening of economic and trade cooperation of the bilateral trade between China and Korea is being advanced. The mutual investment between the two countries is being developed rapidly. China and Korea have accelerated the pace of investment each other. Korean investment in China continues to expand. China has become Korean largest investment destination. The investment of China's enterprises in Korea also

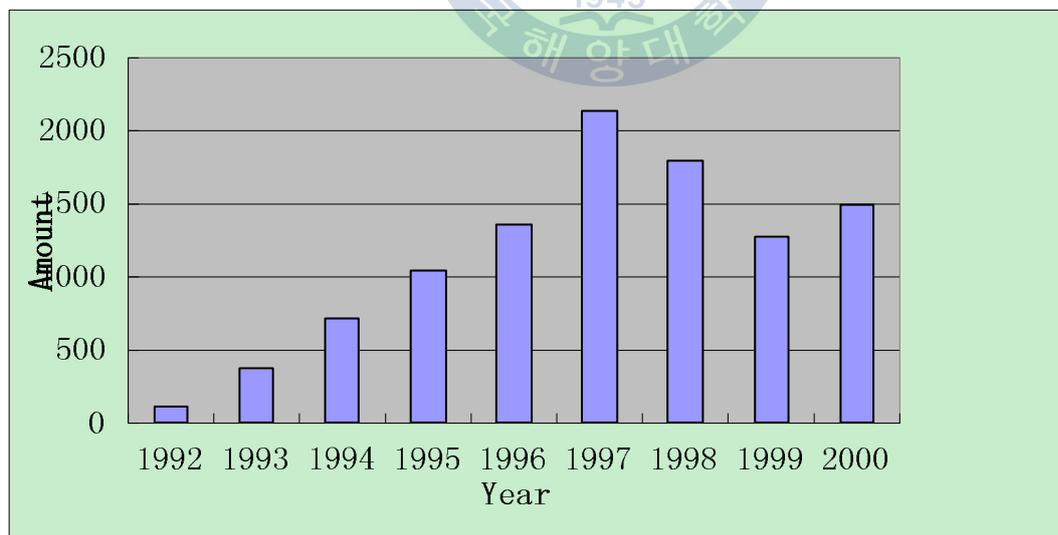
³² Li Yanhua(2007), The causes and countermeasures of China-Korea trade deficit, *HLJ Foreign Economic Relations & Trade*, p.33

maintains a rapid growth rate. The good development of mutual investment between China and Korea is bound to lay a solid foundation on China and Korea FTA.

China has already been the third largest foreign direct investment destination. Since 2002, China became Korea's largest foreign direct investment destination. From the development perspective of Korean investment in China, it can be divided into three stages, namely, the initial stage from 1985 to 1992, the rapid development stage from 1993 to 1997 and stable growth stage after that. Compared to other countries and regions with investment in China, Korean enterprises' starting point was relatively late. Since 1985, Korean companies have invested in China. The first few years are indirect investment through Hong Kong or Japan. After 1988, it has changed into a direct investment.

<Figure 5> Korea's investment in China (1992-2000)

Unit: million dollars



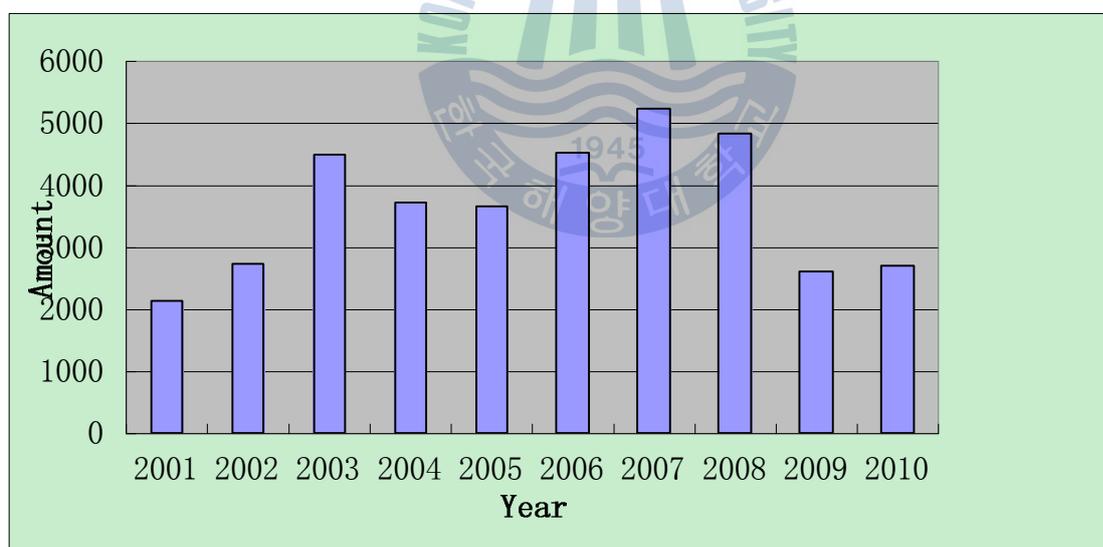
Source: China Customs (2010)

Since from 1985 to 1992, Korean enterprises in China only have 943 investment projects. The Contract value was 0.62 billion dollars, and the amount of the actual use was only 0.16 billion dollars. The investment in China mainly concentrated on Shandong, Liaoning and

other places and the products was mainly labor-intensive and small processing projects. The average amount was less than 100 million dollars. Most of them were produced in low skills and with small project. From the establishment of diplomatic relations in 1992 to Asian financial crisis in 1997, Korean investment in China continued to grow. The investment amount and level has gradually increased and the investment area has gradually extended from coastal areas to inland. Since 1997, because of the Asian financial crisis, there was the downward trend for two consecutive years in 1998 and 1999 regardless of contract amount and the actual amount has decreased greatly. However, from 2000, there was more rapid growth direct investment in China. Especially the investment projects have the fastest increase rate.

<Figure 6> Korea's investment in China (2001-2010)

Unit: million dollars



Source: China Customs (2010)

Since 2001, despite some fluctuations of Korean companies' direct investment in China, it always has been at a high level. From 2001 to 2005, the direct investment of Korea increased from 2.15 billion dollars to 3.65 billion dollars. It became the third largest investor only behind Japan and U.S. In 2007, the actual investment of Korean companies surpassed Japan

to become the most investment in China.³³ The main reasons of Korean companies invested in China are: first, Korean labor costs continue to rise; second, China's market potential and rapid growth have a strong appeal to Korean companies. China's rapid economic development and the growing demand in the market have attracted Korean companies invested in China, and the rate of investment return is higher than other countries and regions, especially in recent years, the Eastern and Southern China became a ideal place to Korean enterprises to invest in; third, as Samsung, Hyundai, LG, Daewoo and other large Korean enterprises enter into China, a large number of small and medium sized Korean companies which provide supporting services also have follow-up.

In recent years, the direct investment of Korea was concentrated in manufacturing and some service industries. The direct investment of Korea in China's manufacturing industry was 2.11 billion dollars in 2004, accounting for 91% of total FDI. It can be said that the direct investment of manufacturing industry is the most important part of Korea investment in China; it reflects the huge capitals advantage of Korea in manufacturing industry, the great determination of Korea to transfer its international industrial under the rising pressure of the adjustment of industrial structure and production costs. It also shows the comparative advantage in manufacturing industry of China continues to raise, its level of productivity and international competitiveness has been considerable development. Also, in addition to many traditional manufacturing sectors, the rapid growth fields of Korean direct investment in China including construction, wholesale and retail trade, transportation, scientific research, technical services and sports entertainment, it laid a solid foundation for further deepen the China-Korea comprehensive cooperation.

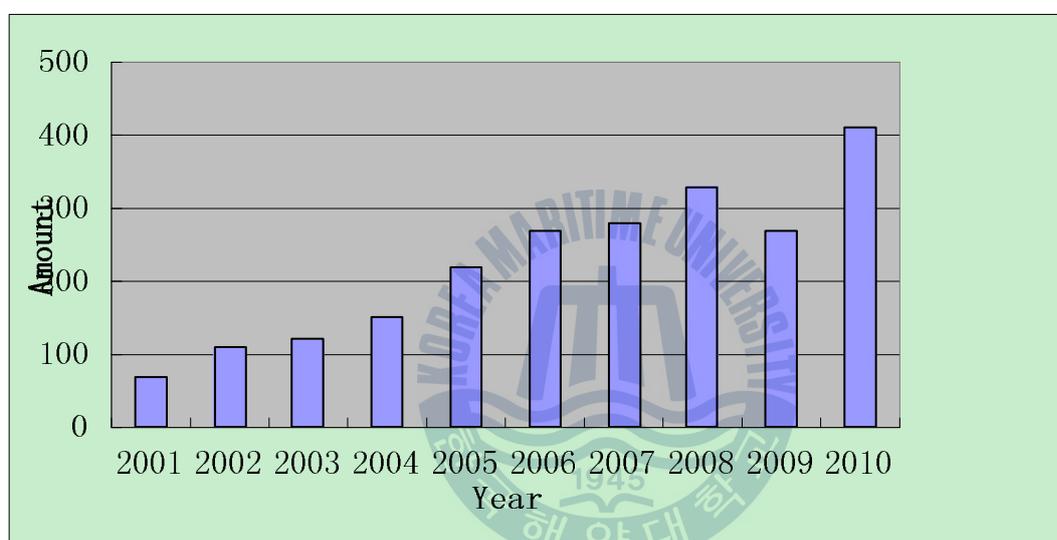
Meanwhile, Chinese enterprises in the implementation of the strategy of “opening to outside world” also accelerated the pace of investment in Korea. At present, the one-way flow of funds cooperation between China and Korea is not conducive to the development of cooperative persistent. With the process of multi-level, comprehensive, wide-ranging opening up pattern forming, expand investment in Korea will become an inevitable choice for Chinese enterprises. In addition, on the basis of WTO, China will enhance more enterprises to cooperate with Korea, open up new fields of cooperation, develop the various forms of cooperation, enhance the basis for cooperation, and promote comprehensive cooperation.

³³ He Fenlan(2008), A strategic partnership between China and South Korea, *International Business Daily*,p.43

From the Figure 7 we can see besides the 2009 which inflected by global financial crisis, the total trend is rising. At present, most of investment mainly in trade, catering, finance, shipping, etc., it's generally small scale, enter into the area of manufacturing industry is not so much, it has a certain potential development and space.³⁴ Some enterprises, especially high-tech enterprises, use the advanced technological, research and development capacity of Korea to accelerate development. Through mergers and acquisitions in high-tech enterprises in Korea, they formed the new investment form in Korea.

<Figure 7> China's investment in Korea

Unit: million dollars



Source: China Customs (2010)

Firstly, it is about the construction project of China-Korea International Industrial Park. China Guangsha Group Co., Ltd. and China's technology innovation research and development headquarters has done joint venture to construct China-Korea International Industrial Park in Jeollanam-do Muan, South Korea. The park will synthesize industrial, commercial, residential, cultural, tourism and education in a whole. The total area of 19,800,000 square meters was utilized, with a total investment of 1.5 billion dollars. China holds 51% of all equities, while Korea holds 49%. China Development Bank and Korea Development Bank jointly provided financial support for it. It finished construction in December 2010.³⁵

³⁴ AiHua(2007), The economic analysis of China-Korea, *International Trade*, p.23

³⁵ GuoLi(2004), The discussion of investment and cooperation between China and Korea, *Heilongjiang Social Sciences*,

Secondly, Shanghai Automotive Industry Corporation (SAIC) purchased Korea's Sangyong Motor. In January, 2005, SAIC invested 5600 million dollars (cash) to buy 48.92% stake of Sangyong Motor Co. which is the 4th largest carmaker in Korea, and purchased additional 1.99% shares in stock market on May. The total volume was 50.91%, which is sufficient to secure the management. In 2005, Sangyong Motor vehicle sales were 139,064 and increased by 7%, compared with before the acquisition. Among them, 65,521 was exported, which meant an increase by 101%. The sales revenue was 3.435 billion dollars.³⁶

Thirdly, it is about the acquisition of Hyundai TFT-LCD business. February 2003, the famous Chinese enterprises BOE Technology Group (BOE) spent 3800 million dollars to buy Hyundai Display Technology Co., Ltd. (HYDIS) (thin film transistor liquid crystal display). By far, it was the largest amount of high-tech industry overseas acquisitions. This event marks the first time Chinese companies to grasp the core technology of TFT-LCD; it was a profound impact on the competitive landscape of the global LCD industry. TFT-LCD display products is the mainstream in the future, it has a broad business outlook. The acquisition has greatly enhanced the BOE core competitiveness in the liquid crystal display. In addition to, this acquisition further consolidates and expands the HYDIS original market, BOE will also strive to expand Chinese domestic market, to achieve the "Made in China, global sales" goal.³⁷

In short, the development of China-Korea economic relations, particularly since the establishment of diplomatic relations, shows that the two countries have become important economic partner. China-Korea mutually beneficial cooperation will not only greatly benefit the economic development of the two countries, but also help to improve these two countries' stage in the world. Maintaining cooperative relations and developing mutually between the two countries corresponds to the fundamental interests of both sides. As long as the two countries give full play to their strengths, learn from each other and maintain close cooperation, the economic cooperation between the two countries will further develop.

p.21

³⁶ Chen Demin(2006), Korean direct investment in China, *Contemporary Korea*, p.45

³⁷ TangShu(2006), China-Korea economic and trade cooperation has broad prospects, *Today Technology*, p.31

3.3 Good political relations between China and Korea

The reason why economic and trade relations between China and Korea could be developed rapidly after establishing diplomatic relations, was inseparable with the close cooperation between the two governments. Since the establishment of diplomatic relations between China and Korea in 1992, the leaders of two countries met more than 10 times, the ministers met more than 60 times and the two governments signed various agreements more than 50(Table 12).³⁸

It shows that the cooperation between China and the Korea government is the effective support and protection to the bilateral economic and trade relations. It is the strong drive force to propel economic cooperation between the two countries to a higher level. Therefore, in order to promote China-Korea FTA establish early, Chinese government should further strengthen the cooperation with the Korean government to enhance the mutual trust, mutual respect and mutual understanding, which will not only help to eliminate some of the political instability elements, to create a good political atmosphere for economic development of the two countries, but also conducive to promoting bilateral trade and mutual investment.

3.3.1 The establishment of “strategic partnership” between China and Korea

In August, 1992, China and Korea established diplomatic ties. At that time, the bilateral relations were the lower level of "friendly and cooperative relations". In November, 1998, South Korean President Kim Dae-Jung visited China, to discuss the overall rapid development of China-Korea relations. The two countries further upgraded stage of economic cooperation to "Partnership for 21 century", which will promote "cooperation relationship" to "partnership" level. In October, 2000, China and the Korea unanimously decided to push the bilateral partnership to comprehensive cooperative relationship between the countries.

<Table 12> bilateral agreements Between China and Korea

³⁸ Li Shujuan(2008), The context of regional economic integration of China-Korea, *Contemporary Korea*, p.33

Files	Year
China and South Korea Joint Communiqué to establish diplomatic relations	1992
China-South Korea trade agreements	1992.9.30
The exchange of notes to set consulate general in Shanghai and Bashan	1992
The exchange of notes to set consulate general of South Korea in Qingdao	1993
China-South Korean government cultural cooperation agreements	1994.3.28
The exchange of notes to retain consulate general of South Korea in Hong Kong	1995
China-South Korea Joint Communiqué	1998.11.13
China-South Korea about visa facilitation formalities agreements	1998
The exchange of notes to set consulate general of South Korea in Guangzhou	2000
China-South Korea fishery agreements	2000.8.3
The extradition treaties of China and South Korea	2000.10
The exchange of notes to set consulate general of South Korea in Shenyang	2002
China-South Korea Joint Statement	2003.7.8
China-South Korea civil judicial assistance treaty	2003.7
The exchange of notes to set consulate general of South Korea in Chengdu	2004
The exchange of notes to set consulate of China in Guangzhou	2004
The exchange of notes to set consulate general of South Korea in Xi'an	2006
China-South Korea Joint Statement	2008.5.28
China-South Korea Joint Communiqué	2008.8.26

Source: <http://countryreport.mofcom.gov.cn/default.asp> (2010)

In July, 2003, President Roh Moo-hymn visited China. China and Korea officially announced the establishment of a "comprehensive cooperative partnership." It refers to not only cooperation between China and Korea in political, diplomatic, military, security, economic, social and cultural, but also beyond the level of bilateral ties, to coordinate and cooperate in nuclear issue on the Korean Peninsula and Northeast Asia peace mechanism, etc..³⁹

In November, 2005, during the period of president Hu Jintao attended the APEC summit

³⁹ Piao Jianyi(2004), *China-Korea relations*, Beijing University Press,p.39

held in Korea, issued a "China-Korea Joint Statement" with president Roh Moo-hyun to confirm the China-Korea cooperation beyond the scope of bilateral cooperation with regional significance, and that will further develop the military security cooperation between the two countries. Korea recognized the significance of China's market economy status, and further promoted the China-Korea comprehensive cooperative partnership to go forward in the political, economic, cultural and international affairs. It shows that a China-Korea relationship has been improved from the traditional practice of economy and trade to military cooperation. It marks the strategic transformation of China-Korea relations, so as to lay a political foundation on Lee Myung-bak visit to China and to build the strategic cooperative partnership between two countries.

May 27, 2008, South Korean president Lee Myung-bak started its first official visit to China. President Lee met with Chinese President Hu Jintao, Chairman Jia Qinglin of the CPPCC and Premier Wen Jiabao. China and Korea issued a "Joint Statement". It confirmed the two sides agreed to the agreement in summit meeting between the two countries, which includes improve the comprehensive and cooperative partnership relations of the two countries to a strategic cooperative partnership, establish the strategic dialogue mechanism of ministry of foreign affairs between the two countries and exchange visits between leaders. They also actively considered promoting China-Korea FTA negotiations, taking substantive measures to strengthen cooperation, expanding trade and investment and keeping the peace and stability in the Korean Peninsula and Northeast Asia.⁴⁰

Firstly, it is about the political and security fields. According to the Chinese proposal, the two leaders, to establish strategic cooperative partnership between the two countries, reached consensus on four points: First, to strengthen friendly exchanges and to deepen political mutual trust. Both of sides should make full use of dialogue and consultation mechanisms to discuss the major issues of common concern, to properly handle the problems of bilateral relations and to ensure the healthy and stable development of bilateral relations. Second, both of sides should promote pragmatic cooperation and realize mutual benefit and pursue win-win situation. Both sides should try to adjust themselves to and to enrich "China-Korea economic and trade cooperation and long-term development plan". They also try to strengthen trade, investment, environment protection, logistics, communications, energy and

⁴⁰ China and South Korea issued a joint statement, <http://www.china.com.cn> China Online, May 28, 2008.

other key fields of mutually beneficial cooperation. To prepare for the future, both sides actively study and promote the process of establishing China-Korea FTA. Third, it is about expanding humanities exchanges and consolidating the basis of friendship, especially to further strengthen the exchanges of bilateral young people and to foster more fresh force for China-Korea friendship. The two countries' relevant departments should create more convenient conditions for personnel exchanges. Fourth, it is about conducting closer multilateral cooperation and maintaining common interests. The two sides should further strengthen cooperation on major issues such as peace and stability in Northeast Asia, as well as United Nations reform, climate change, making it an important part of China-Korea strategic cooperative and the fulcrum. The two sides appraised highly the rapid development of China-Korea relations since the establishment of diplomatic relations in 1992. China and Korea agreed to improve "comprehensive and cooperative partnership" to the "strategic cooperative partnership". In the diplomatic, security, economic, social, cultural and personnel exchanges and other fields further to strengthen exchanges and cooperation.

Secondly, the economy-trade and energy fields. The two governments decided to make the joint efforts to expand the bilateral trade, send procurement envoys and investment mission to gradually solve the trade deficit between China and Korea. It is also necessary for the two sides to reach a consensus in mobile communications cooperation, and decided to cooperate from the electronic information and communication cooperation extended to the software, radio frequency identification (RFID) and other areas. The two governments also decided to promote the reform and opening up in financial markets, and to strengthen financial cooperation in international and regional. So, the two sides decided to revise the "The joint research report of China-Korea economic and trade cooperation" in 2005. In addition, in order to strengthen environmental protection, the two sides decided to expand the environmental industry and environmental protection of the Yellow Sea to enhance exchanges and cooperation in the field. It is remarkable that the two countries are also strengthened cooperation in non-traditional security field, especially in response to earthquakes, tsunamis and typhoons and other natural disaster.

Thirdly, it is about Negotiation of China-Korea FTA. So far, the two governments affirmed the joint research on industry, government, academia, and decided, based on the results of this study, to promote China-Korea FTA. As early as November 4, 2002, after Chinese premier Zhu Rongji formally proposed the establishment of FTA among China, Korea and Japan, so

far, the industry, government, academia joint research meetings of China and Korea FTA have been held four times, to lay a solid foundation on China-Korea FTA negotiations.

Fourthly, it is about folk cultural exchanges. In the China and Korea summit negotiations and the "Joint Statement", the two sides decided to promote exchanges between the two countries' people. It will make two governments take a series of measures including the facilitation of visa procedures to promote access to youth friendly exchanges, academic forums organized by civil society and to further strengthen bilateral exchanges in the humanities and communication, and strengthen cooperation in science and technology, justice and education. In particular, China and Korea signed a mutual recognition qualifications agreement which was expected to help young people further to expand bilateral communication. It built strong civil foundation between the two countries. It was worth mentioning that President Lee visited Sichuan earthquake-stricken areas to comfort the victims and to provide substantial assistance in the earthquake-stricken areas. It was called "condolence diplomacy" to help enhance the good impression of the Chinese people to Korea.⁴¹

No doubt, the most important result of president, Lee's visit to China is that the China-Korea relations improved from the "comprehensive and cooperative partnership" to "strategic partnership". It marks the development of bilateral relations to a new stage. What is a "strategic partnership"? According to Korean presidential Blue House official view is that from the two countries established diplomatic since 1992, from the "friendly and cooperative relations", the relationship between two countries has been gradually upgraded to the "partnership" in Kim Dae-jung administration, and to the "comprehensive cooperative partnership" in Roh Moo-hyun administration. It was also said that if coupled with the word "strategy", it will expand the economy and trade relations to foreign affairs and national security between China and South Korea. It is of a great significance. South Korean media have commented that the strategic partnership between the two countries is the highest level for cooperation. It can be said to be almost equal to alliance, which is not only the bilateral relations between the two countries, but also to strengthen cooperation and to take common measures in third countries and the international community.⁴² After Premier Wen Jiabao talked with President Lee Myung-bak, he said that "China will play a constructive role to

⁴¹ Hu Jintao and Korean President Lee Myung-bak talks, [http:// www.xinhuanet.com](http://www.xinhuanet.com).Xinhua Online, May 27, 2008

⁴² China and Korea to upgrade strategic partnership relations, *South Korea News*, May 28, 2008.

resolve the Korean Peninsula nuclear issue and to improve South-North relations. The establishment of strategic relationships between China and Korea wouldn't be changed in any time".⁴³ Clearly, from the perspective of bilateral relations, China put more emphasis on regional security cooperation and strategic cooperation between China and Korea. This relation is stable and will not change for some events or over time. And the establishment of "strategic partnership", in fact, based on Roh Moo-hyun administration's "comprehensive and cooperative partnership", to further clarify the relationship between the two countries beyond the scope of bilateral relations. It shows that the two countries will establish a more stable mechanism for dialogue in the diplomatic, security, economic, social, cultural and other fields and then cooperate in the issues of Korean Peninsula, Northeast Asia region and worldwide.

In December 11, 2007, President Hu Jintao who met with South Korean Prime Minister Han Duck-soo said that after establishing diplomatic ties, especially comprehensive partnership of cooperation between the two countries, rapid development of bilateral relations has been sustained and got positive results in various fields. President Hu Jintao said, "It is the important period of development for China and South Korea, to further develop the cooperative partnership between the two countries which corresponds to people's common ground and fundamental interests. It also make a positive contribution to the peace and stability of East Asia and the world. China is willing to make joint efforts with the Korea to maintain the good momentum of development of bilateral relations, to develop a better future".⁴⁴ We believe that China and Korea would develop bilateral relations better and create perfect prospects of cooperation.

3.3.2 Non-governmental exchange closely between China and Korea

The tourism cooperation and personnel exchanges between China and Korea have been experienced rapid development. In 1998, Chinese government designated Korea as the abroad travel destination for Chinese citizens. Korean government opened up Jesu Island to Chinese citizen's visa-free travel destination in 1999. In 2001, visitors who traveled to and from the two countries exceeded 2 million, and in 2010, this amount reached 6 million. 3.78

⁴³ China and Korea to upgrade strategic partnership relations, *South Korea News*, May 28, 2008.

⁴⁴ South Korean Prime Minister Han Duck-soo met with President Hu Jintao, *People's Daily*, December 12, 2007.

million of Korean people traveled around China in 2010. Now, China is the first choice for Korean tourists sightseeing places. Meanwhile, the number of people who traveled around Korea is also increasing. It reached 1.83 million people in 2010. China is Korea's second-largest inbound tourist country. In 2010, Korean students studying in China was about 56,000, while Chinese students studying in Korea was about 75,000.⁴⁵ As China-Korean folk communication envoy, overseas students laid a solid foundation on the friendly relations and cooperation between China and Korea. From the civil level, China and Korea folk cultural shows multi-channel, all-round and a variety of features. According to statistics, the two countries established a total of 122 pairs of friendly provinces and cities.

The friendly organizations have China-Korea Friendship Association, China-Korea Culture Association, 21st Century China-Korea Exchange Association, Association of China-Korea business, and so on. They play an important role to promote China-Korea cooperation and to strengthen communication. At the same time, China and Korea in the financial, energy, transportation, tourism, politics, security, culture, information and communication technology, science and technology, environmental protection and other fields are also extensive and in-depth cooperation and exchanges. For example, China and Korea have signed "The memorandum of understanding in the field of energy efficiency cooperation", "The memorandum of understanding in the field of high-tech cooperation", "The memorandum of understanding in the field of combat desertification cooperation". China set consulate general in Busan, Gwangju and in return Korea set consulate general in Shanghai, Qingdao, Guangzhou, Shenyang, Chengdu, Xi'an and Hong Kong. Between the major cities of two countries have dozens of scheduled passenger flights, nearly 850 flights per week, more than 10 scheduled cargo flights, nearly 50 flights per week. Tianjin, Qingdao, Dalian, Yantai, Weihai, Lianyungang and Korea's Incheon, Busan and other places have scheduled passenger airline. 15 years ago, Korean students studied at Peking University was only 10, but today more than 750 people; 15 years ago, Koreans living in Beijing mainly embassy officials, a total of it not more than 200 people, but today, living in Beijing more than 300,000 people, the long-term residence of Korea living in China has reached 100 million.⁴⁶ Since Korean War ended in 1953, the United States is the country accepted most Korean populous immigrants, by 2010; the total of Korean living in America is 1.3 million, but another five

⁴⁵ The People's Republic of China ministry of foreign affairs. <http://www.fmprc.gov.cn/chn/gxh/tyb/ywcf/t782862.htm>
2010/12/31 People's Republic of China ministry of foreign affairs.

⁴⁶ <http://bbs.news.163.com/bbs/mil/193657830.html>

years to 10 years, the long-term residence of Korea living in China would surpassed the United States. These numbers, while just only the indexes measure China-Korea relations, but profoundly reflected the reality of the two countries have extensive and deep social base.

Summary:

This chapter is mainly through the trade cooperation status and industry structure between China and Korea, to analyze the feasibility of establishing China-Korea FTA. The current political relationship between China and Korea is good. All levels of the two countries are actively promoting the establishment of a bilateral FTA. Bilateral economic and trade relations is getting closer and cultural exchanges is made frequent. There are common interests in regional economic integration cooperation. The geographical position between China and Korea helps two countries get closer. They have deep cultural origins. Meanwhile, natural resources, labor resources and industrial structure are obviously complementary. The establishment of China-Korea FTA is expected to generate the synergic effects. As two important economic trade powers in the world, since the establishment of diplomatic relations between the two countries, because China and Korea has experienced the rapid development of bilateral economic and trade ties, it will lay a solid foundation on the establishment of China-Korea FTA.

Chapter 4. The effects of China-Korea FTA

4.1 The enrichment of the overall welfare of China-Korea

4.1.1 The static and dynamic effect

Krugman believes that regional economic integration will improve the welfare of member countries but reduce the level of benefits non-members in this region, if the market size is different between countries. The firms easily transfer from small market size to large market size. The members of small countries are vulnerable to be marginalized in the process of trade liberalization while the large market can get more benefits from it. He also pointed out that if intra-regional trade liberalization and external multilateral trade liberalization

proceed simultaneously, the marginalization won't appear⁴⁷. The establishment of China-Korea FTA, on the one hand, can make the products which have a comparative advantage export to other markets more conveniently, which results in trade creation effect and increase the national welfare. On the other hand, both of China and Korea are the members of APEC and WTO. Because the tariffs level of them will reduce to a lower level in the next few years, the trade barriers will be significantly reduced. Therefore, it doesn't result in trade diversion after the establishment of free trade area. Thus, the establishment of China and Korea FTA will not lead to welfare decline. From the static and dynamic point of view, the establishment of China and Korea FTA will promote the overall welfare levels.

In general, economic effects of FTA can be divided into two ones. First one is the static effect by reducing tariffs in the region, through the mutual removal of trade barriers in member countries to expand trade directly. Second one is the dynamic effect by improving labor productivity, technology transfer and capital accumulation, indirectly promote economic growth in member countries.

4.1.1.1 The static effect

Trade creation effect means that consumers in importing country within the region can get cheaper goods and services than before the establishment of the FTA, while the increase of exports will also stimulate economic growth in all member countries. In this sense, the effect to the regional economy is a positive effect.

The assumption of the model is: (1) Import from member states and non-member states is not completely substitutes relationship; (2) Produced by domestic market with import from member states and non-member states is not completely substitutes relationship; (3) Tariff concessions don't exert on incomes and exchange rate; (4) Export elasticity of supply is infinite. The effects of tariff changes are fully reflected in the prices of imports. (5) It is assumed that one country imports one kind of goods which corresponds with one partner country. So, the formula is:

$$U = \left(\sum_{j=1}^n X_j^a \right) \quad (1)$$

⁴⁷ Qu Jianguo(2008), *The choice of East Asia economic integration*, Master Thesis, Shandong University, p.65

In it, U means utility function, X_j is consumption of goods that import from j country, a is parameter, $0 < a < 1$, assume the marginal effect of import goods is declining, meanwhile, the elasticity of substitution of the import goods is constant, it is ε .

$$\varepsilon = 1/(1-a) \quad (2)$$

We use maximize the utility function to derivate the corresponding import demand:

$$\text{MAX} \left(\sum_{j=1}^n X_j^a \right) / a \quad (3)$$

$$\text{Subject to } \sum_{j=1}^n P_j X_j = E \quad (4)$$

P_j is goods j's domestic price, E is total expenditure of import goods. Take the logarithm to above formula, we can induce j's import demand, it is X_j ,

$$X_j = \frac{E P_j^{-\varepsilon}}{\sum_{j=1}^n P_j^{1-\varepsilon}} \quad (5)$$

If the change of tariff convert to price so the trade creation effect can be defined:

$$TC_a = [\varepsilon + (1-\varepsilon)S_a] M_a [\Delta t_a / (1+t_a)] \quad (6)$$

In it, a means import country, t_a is the initial tariff of import country, Δt_a is the preferential concessions, S_a is the share of import from a country, M_a is the import from region.

According to (5)

$$S_a = P_a^{1-\varepsilon} / \left(\sum P_j^{1-\varepsilon} \right) \quad (7)$$

Assume the elasticity of substitution of goods in domestic and abroad is 2.2, (ching-cheng Chang&Shih-HsunHsu, 1999).According to the data released by the China Customs website, China's general tariff level was 11%, among them, the average tariff for industrial goods is 10.3%, agricultural products is 16.8% , Korea's general tariff level was 7.9%. Take the data to formula (6) we can calculate the trade creation effect between China and Korea.

<Table 13> The static effect of China and Korea FTA

Unit: %, billion dollars

	Korea	China
The growth rate of real GDP	3.1	1.1
The growth rate of exports	0.695	4.125
The growth rate of imports	1.639	4.051
China's trade balance		6.4
Korea's trade balance	26.3	

Data:Li Jianpeng(2007), The Free Trade Area study of China-Japan-Korea, Master Thesis, Guangxi University,p.35

According to the study of " *The Free Trade Area study of China-Japan-Korea*" in 2007, after the two countries establishing FTA, the growth rate of real GDP in China will increase 1.1 percentage points, while Korea will increase 3.1 percentage points. The total welfare of China will increase 6.4 billion dollars, and Korea will increase 26.3 billion dollars. In the volume of trade, the tariffs of free trade area will decrease and it would further improve the potential growth of trade between two countries.

The establishment of FTA refers to the mutual withdrawal of all tariff barriers between member countries. The goods produced at the higher cost than the goods produced in non-member country may be transacted, owing to tariff protection. It means that the inefficient goods is produced. On the contrary, this shows that FTA can generate the inefficient allocation of resources. That is called trade diversion effect. It is clearly negative effects. Reduction of trade barriers between China and Korea will expand the regional market size, and improve efficiency through the competition within the region. Because FTA is a preferential arrangement, other outside regional countries could face the trade diversion effect. If there is trade diversion effect between the global trade group, China and Korea would pay the price. For example, if China cancels tariffs on auto imported from Korea and at the same time imposes 30% the tariff rate to Europe and the United States, it means that the price of imported auto from Korea is lower 30% than imported from Europe and the United States. In order to avoid damages of trade diversion effect, European and the United States auto makers might choose to "bypass tariff barriers" to increase investment and production in China. However, Europe and the United States might exert pressures on China to totally open the auto market. In the long term, in order to avoid possible trade diversion, the more sensible

choice is to cut tariffs between China and Korea, to actively involve in multilateral trade liberalization process.⁴⁸

The existing free trade agreements are far beyond the scope of trade in goods. It extended to investment, services, technology, intellectual property, environmental protection and many other areas. The goal is, through the cooperation of investment, technology and services, to promote trade and investment. Therefore, the analysis of welfare effects of free trade area can not be confined to the traditional static analysis, but be concerned with the dynamic effects.

4.1.1.2 The dynamic effects

The so-called dynamic effects of FTA are including labor productivity effects and capital accumulation effects. Between them, the labor productivity effects can be divided into four aspects: an expansion effect of the domestic market generated by increased intra-regional trade; a promotion effect of the domestic market generated by introduction of foreign investment; a technology diffusion effect in member countries generated by mutual communication; an innovation effect of domestic politics system. After establishing FTA between China and Korea, in the short run, due to loss of some tariffs protection, the product competitiveness of some China's industrial sectors might be in disadvantage stage in competing with Korea's products. However, from a dynamic point of view, China also has the advantages of market scale, production cost and high savings rate and it has a strong appeal to foreign investment. For the Korean companies have abundant capital and advanced technology, after the establishment of FTA between two countries, it is possible for the trade creation effect to speed up the resources transfer to China. Meanwhile, it will also attract more foreign investment. For example, Korea can transfer its labor-intensive industries such as electronic, shipbuilding, automobile and others to China to use China's abundant cheap labor, to reduce its costs and to enhance its international competitiveness of products. On the other hand, along with the removal of trade barriers, the cost of the companies which enter other's markets is decreasing. As the two sides can pursue the expansion of external markets in search of economies of scale, both of them will contribute to the improvement of welfare. Since it will undoubtedly improve China's industrial structure and technology level, Korea's advanced and market-oriented scientific management methods has an important significance to the construction of China's market economy. As to Korea, China's huge market and cheap

⁴⁸ Zhang Xi(2009), In the framework of WTO and APEC to establish China-KoreaFTA, *Business Research*, p.32

labor also provide a convenience for Korean companies to expand production capacity. Accompanied by investment liberalization, the two sides could take advantage of their factor endowment advantage, through transferring industries, to achieve their industrial structure adjustment and upgrading.

As for the capital accumulation effect, it could be proved by Mexican currency crisis. In 1982 and 1995, Mexico has suffered currency crisis twice. Compared to 1982, the currency crisis in 1995 overcame quickly. One of the important reasons is that it has joined the NAFTA. So, it received large investments from U.S. and Canada, enhanced the ability to deal with the crisis. Similarly, the establishment of China-Korea FTA would enhance the two countries to fight against financial crises and prevent the recurrence of the East Asian financial crisis.

4.1.2 The analysis method and simulation program

We use the Global Trade Analysis Project (GTAP) in the Computable General Equilibrium model (CGE) to imitate the expected economic effects of China-Korea FTA. The analysis database based on 2005 GTAP_6 database. In order to fully examine the short-term and long-term effects of trade liberalization, the paper uses a static computable general equilibrium model and dynamic computable general equilibrium model to respectively measure the economic effects of two kinds of tax reduction programs. Measured by the static CGE model of resources are mainly short-term effects, and the results of the dynamic CGE model are not only the short-term effects but also include the accumulation effect of long-term capital. Such capital accumulation effect was caused by the static effect of high savings and high investment. Project one means on the condition of completely eliminating tariff barriers in agriculture and manufacturing, the establishment of China-Korea FTA impacts macroeconomic variables. Project two means on the condition of completely eliminating tariff barriers in agriculture and manufacturing but services trade barriers eliminating 50%, the establishment of China-Korea FTA impacts macroeconomic variables.⁴⁹

The GTAP model is based on assumptions such as constant returns to scale, perfect competition and a global bank designed to mediate between world savings and investment. The Constant Difference of Elasticities (CDE) consumer demand system is designed to capture price differentials and income responsiveness across countries. We modify the

⁴⁹ Lee Hongshik, China-Korea FTA and policy implications, *Policy Analysis*, (3)2005.

standard GTAP model in order to capture the medium-run growth effects of trade liberalization. Consider a Cobb-Douglas production function showing aggregate production in a country.

$$Y = AK^\alpha L^{1-\alpha}, 0 < \alpha < 1 \quad (1)$$

where A is an overall productivity parameter, and α and $1-\alpha$ are elasticities of output with respect to capital and labor, respectively. For a given flow of investment, the capital stock evolves over time according to

$$dk/dt = sy - \delta \cdot k \quad (2)$$

$$k = K/L, y = Y/L \quad (3)$$

where δ is the fraction of the capital stock that depreciates each year. In order to distribute income between savings and consumption, it is assumed that consumers save a fixed share of their income.

$$S(t) = sY(t) = I(t) \quad (4)$$

where $S(t)$ indicates total saving in time t and s is the fixed saving rate. In the absence of technical progress, this process cannot be sustained because of diminishing returns with respect to capital per worker. In the long run, growth in per capita income will stop at the point where savings is just enough to replace depreciated capital. Using equations (1), (2) and (3), the capital stock and steady-state output in the are given by:

$$K = (s/\delta)^{1/(1-\alpha)} A^{1/(1-\alpha)} L \quad (5)$$

$$Y = (s/\delta)^{\alpha/(1-\alpha)} A^{1/(1-\alpha)} \quad (6)$$

Baldwin (1989, 1992) suggests that static efficiency gains induce higher savings and investment, which in turn yield more output. That is, an increase of the overall productivity A , resulting from enhanced efficiency of resource allocation, leads to an increase of capital stock in (4) and output in (5). Francois et al. (1999a) present a useful approach capturing the capital accumulation effects of trade liberalization in the context of the neoclassical growth model.

The effects and simulation analysis is as follows.⁵⁰

Firstly, the establishment of China-Korea FTA has impacts on two countries' GDP and economic welfare. China-Korea FTA can promote GDP growth significantly. However,

⁵⁰ Wei Wei (2010), "The feasibility and economic effects of China-ROK FTA", *Forecasting*, p.56

because the total amount of China's economy is so large, the effects of China-Korea FTA on China are less than Korea's. In the project one, China's GDP and welfare will be increased by 0.395% and 0.073%, while Korea's GDP and welfare will be increased by 2.443 % and 1.132 %. If China-Korea FTA implement in accordance with the project two, China's GDP and welfare will be increased by 0.401% and 0.084%, while Korea will be increased by 2.472% and 1.164%. The reason why the welfare of project one increase less than project two is that it is mainly, due to the short-term effects, caused by trade services which occupied a small proportion in the result of the dynamic CGE model.

<Table 14> The effects of China-Korea FTA (static model)

Unit: %

Project one	GDP	welfare	Exports	Imports	Trade balance
China	0.395	0.073	3.537	4.732	0.154
Korea	2.443	1.132	4.756	5.152	1.235
Project two	GDP	welfare	Exports	Imports	Trade balance
China	0.401	0.084	3.561	4.763	0.154
Korea	2.472	1.164	4.787	5.182	1.237

Data: Wei Wei(2010), The feasibility and economic effects of China-ROK FTA”, Forecasting,p.57

<Table 14> is the results of CGE model of capital accumulation. The CGE model of capital accumulation not only includes the short-term static results, but also contains the dynamic long-term results. These dynamic results mainly came from the change of bilateral trade conditions, the reallocation of resources and the benefits of capital accumulation. As can be seen from <Table 15>, in the project two, the acceleration effect of China-Korea FTA on China and Korea was respectively as high as 3.174% and 3.03%.

<Table 15> The effects of a China-Korea FTA (capital accumulation model)

Unit: %

Project one	GDP	Welfare	Exports	Imports	Trade balance
China	0.584	0.593	3.733	4.944	0.128
Korea	3.132	2.989	5.433	5.858	0.942
Project two	GDP	Welfare	Exports	Imports	Trade balance
China	0.594	0.603	3.862	4.980	0.127
Korea	3.174	3.030	5.477	5.903	0.939

Data: Wei Wei(2010), *The feasibility and economic effects of China-ROK FTA*, Forecasting,p.56

Secondly, from the terms of trade changes, China and Korea FTA has improved the external conditions of member countries. Especially Korea could be benefited from it more. According to <Table 14> and <Table 15>, after the establishment of China and Korea FTA, China's trade balance will increase from 0.127% to 0.154%, while Korea's trade balance will increase from 0.939% to 1.237%. Korea's growth rate is far higher than that of China. Since trade liberalization in Korea is already very open, its main trade tariffs have been reduced lowly. As a whole, the opening pressure of China and Korea FTA on Korea's is not great (though there is a lot of pressure on agricultural products, however, because the proportion of agricultural trade in bilateral trade is small, so the overall effect is not significant). So the improvement of trade is obvious. Finally, from the point of the effect of trade flows view, China and Korea FTA played a significant role in promoting imports and exports trade between the two countries. Among them, China's exports increased from 3.537% to 3.862%, imports increased from 4.732% to 4.98%; and Korea's exports increased from 4.756% to 5.477%, imports increased from 5.152% to 5.903%. To sum up the above analysis, it can be concluded that no matter how it is measured from the static model or dynamic model, the establishment of China and Korea FTA will have a positive impact on two countries' GDP, economic welfare and bilateral trade.

4.2 It is conducive to upgrading industrial structure

4.2.1 Intra-industry trade model of China and Korea

Intra-industry trade between China and Korea is another index to measure comparative advantage. If the intra-industry trade index is high, it indicates that no country has a clear

comparative advantage in the industry. On the other hand, when intra-industry trade index is low, it means one of the two countries must have a clear comparative advantage. Thus, we can use index method to verify and modify the comparative advantage between China and South Korea.

Grubel and Lloyd (1975) raised the intra-industry trade index to measure the trade of the same industry between countries, the formula is as follows:

$$IIT = [(X_i + M_i) - (X_i - M_i)] / (X_i + M_i)$$

IIT is domestic industry trade index, X_i is the exports value of industry i in a period of time, M_i is the imports value of industry i in a period of time, $X_i + M_i$ is the total trade volume of industry i , $X_i - M_i$ is the trade balance of industry i , the difference between imports and exports within the industry is the superposition, that is the overlapping part of the intra-industry trade in the two countries, it divided by total trade volume is intra-industry trade index IIT.

From this formula, we can see:

1. When $IIT=0$, the result is $M_i=0$, then products of industry i only exports to another country unilaterally, there is no mutual trade.
2. When $IIT=1$, the result is $X_i=M_i$, at this time, the same amount of products of the same industry between the two countries export mutually, the industry trade index is largest.

Therefore, when IIT is closer 1, it means the level of intra-industry trade is higher, the intra-industry trade is more active, and the two countries are evenly matched in the industry's competitive situation, at the same time, it also has very close collaborative relationship. On the contrary, IIT is closer 0, it indicates that the level of intra-industry trade is lower; the two countries have very close complementary relationship.

Industry is divided into agriculture, mining, chemical, textile, steel, machinery, electronics and other industries. Classification is based on a unified international customs HS code using 22 goods categories, it can be classified by agriculture (1-4 classes); mining (5 classes); chemical industry (6-7 classes); textile industry (11 categories); steel industry (15 classes); machinery industry (16-19 class); and other sectors (8-10, 12-14 class, 20 class-22 class).

Calculation for each sector is shown in <Table 16>⁵¹

<Table 16> Intra-industry trade model of China and Korea

	Agriculture	Mining	Chemical	Textile	Steel	Machinery	Others
1995	0.07	0.25	0.38	0.88	0.45	0.38	0.99
1996	0.06	0.79	0.37	0.85	0.26	0.33	0.59
1997	0.09	0.56	0.38	0.86	0.51	0.37	0.67
1998	0.22	0.65	0.44	0.79	0.94	0.46	0.74
1999	0.16	0.55	0.37	0.70	0.97	0.55	0.61
2000	0.13	0.88	0.32	0.73	0.95	0.60	0.58
2001	0.21	0.88	0.23	0.68	0.55	0.63	0.38
2002	0.16	0.71	0.27	0.81	0.57	0.61	0.49
2003	0.15	0.72	0.26	0.87	0.66	0.59	0.57
2004	0.14	0.82	0.29	0.98	0.55	0.63	0.70
2005	0.11	0.97	0.42	0.87	0.66	0.51	0.93
2006	0.11	0.88	0.31	0.85	0.65	0.44	0.94

Source: Chen Xiaoli(2007)

<Table 16> shows that from 1995 to 2006, the intra-industry trade between China and Korea has the following characteristics:

1. China and Korea has very low level of trade within the agricultural industry. The highest was only 0.22, because Korea has comparative disadvantage in the agricultural, it is difficult to export to China. Thus, the intra-industry trade index of agriculture is low.
2. China and Korea has a high level of trade within the mining industry, the highest was 0.97. It was due to huge demand for resources of the two countries. The competitiveness of mining weren't big different.
3. The intra-industry trade index of chemical industry is relatively low. The highest was only 0.44. Chemical products was one of the main products which imported from Korea, and also

⁵¹Chen Xiaoli(2007), *The study of China-ASEAN Free Trade Area impacts on China's economy*", Master thesis, Wuhan Technology University, p.76

it was the dominant industries in Korea, the reason why chemical industry trade index is low due to China's exports is limited, as China's competitiveness in this industry improves, the intra-industry trade will further enhance.

4. The intra-industry trade index of textile industry is highest, the average up to 0.8. China imports from Korea the high-end textile, while exports to Korea the large number of inexpensive products, the bilateral trade is mainly the intra-industry trade.

5. The intra-industry trade index of steel and machinery intra-industry in recent years was exceed 0.5, there was a rising trend, it indicates that with the improvement of the competitiveness of China's products, these two types of products transit to intra-industry trade. It is worth noting, for mining, the degree of intra-industry trade is high, it means this industry is a competitive industry between China and Korea; the two countries are evenly matched in the industry's competitive situation, and also has very close cooperation relationship. China is a mining import country, its imports larger than exports, especially in recent years, with the rapid development of China's industry, demand for mining is sharp rising, and domestic mineral resources can not meet demand. In the large number of China's imports of minerals, the proportion of imports from Korea is very small, because Korea is also a mining imports country; it shows that China and Korea hasn't a comparative advantage in mining industry.

From the above analysis, after China and Korea established diplomatic ties in 1992, the two countries' trade gradually developed from traditional inter-industry trade to intra-industry trade, and the scope of trade products is increasing, it has being formed complementary division. As China's active participation in international division and the adjustment of industrial structure, the proportion of manufactured products in export commodity structure is increasing, intra-industry trade between China and Korea is becoming an important form of trade, and this trend is growing.

4.2.2 It is conducive to enhancing industrial structure

To improve industrial structure adjustment and to achieve complementary advantages between two countries is a big motivation to establish a free trade area. In terms of resources, labor, industrial structure, product markets, capital, technology and management, China and

Korea have strong complementarities. It is a prerequisite for economic and trade cooperation in the past and also is the solid foundation for mutually beneficial cooperation in the long-term. Korea is the important capital and technology provider to China and is also an important demander for food, primary products and raw materials. China has rich natural resources and human resources. It provides Korea a huge potential market. China can learn from Korea's experience, to realize the transformation and development of capital and technology-intensive industries and to achieve complementarities of capital and technology. Therefore, the establishment of China-Korea FTA would be beneficial to two countries, thereby, by expanding the exports of the goods which has the comparative advantage and reducing import costs and enhancing the two countries' competitiveness in the world economy.

China's economic growth and industrial structure adjustment have a very close relationship and only push forward the optimization of industrial structure. China's economy could achieve sustained growth. But until now, the proportion of energy consumption and low value-added industries is higher; the proportion of high technology and knowledge-intensive industries is lower. The gap between developed countries is increasing and it's not conducive to China's economic development. The establishment of China-Korea FTA can make China maintain the advantages of the resources and labor-intensive industries, through the introduction of Korea's capital, advanced technology and its comparative advantage products, to ensure the adjustment and upgrading of industrial structure. Although the development of labor-intensive industries is not the ultimate goal of China, it's only a transitional mode as the world's production base. China can use the labor advantage to increase exports to global market, which is conducive to expanding economies of scale. By taking advantage of the policies what is called "work for multinational" and "walk with the giants", it is conducive to achieving the accumulation effect of technology, knowledge and human capital and to accelerating technological progress and industrial upgrading. Therefore, China should start from the comparative advantage, continue to obtain the industry's international competitive advantage. And it should transfer this competitive advantage into comparative advantage again. The key measures are to accelerate technological progress and technological innovation and to continue to introduce and absorb foreign advanced technology, to improve the technical capability of independent innovation, and constantly to promote the China's industrial upgrade.

4.3 It will promote economic integration in East Asia

4.3.1 The situation of economic integration in East Asia

East Asia, North America and Europe are the world's three major economic centers. East Asia also is the most dynamic and potential region in the world. "10+3" coordination mechanism, the East Asia Summit and other official consultation and cooperation mechanisms provide a new platform for regional cooperation. Its long-term goal is to construct "East Asia Community". However, compared with NAFTA and EU which reaches the high level of economic integration and a wide range of economic and trade development, the cooperation level of East Asia is only in the initial stage. The official cooperation mechanism is still relatively loose and also did not generate any substantial regional arrangements and economic and trade cooperation organizations. As the main channel to promote East Asian regional integration, "10+3" mechanism is not yet a formal regional economic integration organizations, only a platform where countries exchange views and promote cooperation. There is still a long way to institutionalize cooperation. In the short term, there is no indication that the East Asia economic integration will get breakthrough. The reasons are following:

1. The political and economic systems, economic capacity and growth rate, industrial structure and development level of East Asian is so quite different. Capitalist countries co-exist with the socialist countries, democratic tradition and legal system is quite different, market economy development level and openness of domestic markets is mixed, it make East Asia countries to seek multilateral cooperation at the regional level have many divergent interests. Economies of scale and capacity of East Asia countries is great different, the difference of comparative advantage and leading groups making the negotiations and consultations very difficult to reach consensus, it's difficult to realize the universal economic and trade cooperation arrangements in the short-term. The total amount of GDP in China, Korea and Japan accounted for 91.2% in East Asia. China and Japan accounted for 84.5% of the total quantity of the ASEAN countries. It accounted for less than 10% compared to ASEAN.⁵² No matter what the quality is and how much the quantity of East Asia economies are, there are fundamental differences between the industrial structure of Indonesia &

⁵² Zhou Xuechun(2008), Accelerate the establishment of China-Korea free trade area to promote economic integration in East Asia, *Southeast Asia Outlook*, p.34

Thailand, and Japan & Korea which have some similarities. Because other countries and regions' industrial structure are quite different in speed and direction, it also became an important reason to obstacle regional economic integration.⁵³

2. East Asia countries have a strong sense of sovereignty. Most of countries in East Asia won independence and full sovereignty after World War II. It's very sensitive to the sovereignty transfer even for regional economic and trade cooperation (including monetary and financial cooperation). In recent years, the historical problems, unresolved territorial sovereignty and the energy crisis among East Asia countries continue to produce conflicts. To some extent, all of these have hindered the deeper regional economic cooperation in East Asia.⁵⁴

3. Each country understands and interprets the leadership of East Asia cooperation in its own way. Unlike NAFTA and EU which is promoted and dominated by the biggest power, the current East Asian "10 +3" mechanism and the East Asia Summit Forum was initiated and led by ASEAN. The cooperation model of "Small group leads big countries" reflects the dominant position of ASEAN. In the first East Asia Summit in December 2005, the parties agreed that ASEAN would play a leading role in the process of East Asian cooperation. More prominent is that the "10+3" itself is not an entity, but three "10+1" (i.e., ASEAN and China, ASEAN and Korea, ASEAN and Japan cooperation).

4. As the region's two economic giants, China and Japan in the issue of leadership in East Asia is also utterly different. China's attitude which actively promotes cooperation and supports the East Asia Summit clearly declared that "do not compete for dominance of East Asian cooperation". China will continue to firmly support that ASEAN plays a leading role in regional cooperation. It is willing to rely on 'China-ASEAN' cooperation together with ASEAN to promote East Asian cooperation".⁵⁵ Japan hopes, by its strong economic strength, technological level and experience of advanced market economies, to play a leading role in economic integration in East Asia. From the historical experience of regional economic cooperation, it's very obvious that the biggest economic power led economic and trade cooperation in FTA. But the influence of ASEAN in East Asia is limited. It's difficult to undertake the responsibility for East Asian cooperation by itself. As for China and Japan, the

⁵³ Zhang Jianping(2007), The comparison of East Asian countries' industrial structure, *Journal of Jilin University*, p.21

⁵⁴ Chen Jianmin(2009), To promote economic integration in East Asia, *Contemporary Korea*, p.32

⁵⁵ Liu Changli(2007), *Study on East Asian free trade area*, Dongbei University of Finance and Economics Press, p.23

mistrusts of ASEAN and differences in industrial structure on many issues have hampered the regional economic integration.

5. The United States presence and its influence factors. Powers outside the region (particularly the United States) are against establishing an East Asian economic integration organization. The facts that "Pro-Americanism" of most countries in East Asia and market demands and capital rely on U.S., is also an important obstacles to accelerate multilateral cooperation in East Asia.

The China, Korea and Japan's political and economic status in East Asia will determine their leading role in building the framework of regional cooperation.⁵⁶ Without their participation and close cooperation, East Asia can not be real unity and cooperation organization. However, despite that the East Asian economic cooperation in recent years has made some progress, there are many problems which still hamper the process of economic integration in East Asia. In the Economic integration in East Asia appears a variety of paths and mechanisms, mainly due to the lack of credibility in the region. There is not any country which can provide the necessary broad market, and also meet their capital and advanced technology needs and enable them to get rich. In East Asia, China, Korea, Japan and ASEAN can't play the leading role to promote regional economic integration. Although Japan could provide fund and technology to this regional economy but due to its poor economic autonomy, they can't provide them to members of the broad market. In spite that it had ever invaded into most of the countries in the region in the past, currently its introspection is not sufficient. So, it is difficult to obtain the full confidence of member countries and thus insufficient to play a leading role in regional economic integration. China is the region's most dynamic source of economic growth and has huge potential market, but on the whole, it's an economically underdeveloped country. Thus it is difficult to provide all countries the capital and advanced technology that they needed. The absence of leading force in East Asia, creates the conditions for inferior forces to play the leading role in the region, such as the ASEAN. It fully seizes the chance to play a leading role in the "10+3" framework. The establishment of China-South Korea FTA will play "a ripple" effect in East Asia. A variety of economic cooperation will change and adjust.

⁵⁶ Lu Haitao(2007), Construction of China-Korea free trade area to promote economic integration in East Asia, *Economic Research Guide*,p.52

As the most dynamic economic entities in East Asia, As China and Korea have a strong desire and favorable conditions to promote the common prosperity of the region, it has become an important force to promote East Asian cooperation process. In recent years, with the deepening development of "10+3", APEC, Asia-Europe Meeting (ASEM) and East Asia economic cooperation has made considerable progress. Free trade agreements as a link, the East Asian countries and regions become closer exchanges and cooperation, regional economic integration has become possible. As an important part of East Asia cooperation, China and Korea which take the "10+3 " as a stage, has formed a multi-level dialogue and exchange mechanism. More importantly, China and Korea economic cooperation has developed into a higher level. It has begun from the strategic height to further enhance bilateral economic and trade cooperation, which is not only conducive to their common development but also inject more vitality into East Asian economy. China and Korea coexists in East Asia economic circle. Nowadays, East Asia accounts for 20% of the world's GDP, in the next 10-20 years. The economy of scale is expected to increase by 30% of world's GDP. It shows that the East Asia has enormous growth potential. It will gradually form a new growth center of the world economy.⁵⁷

4.3.2 It will promote economic integration in East Asia

China and Korea is expected to play an important role in the East Asia economy, through the establishment of FTA between the two countries. Moreover, it would promote bilateral economic integration, create enormous economic and political interests, and play a positive role to promote integration process in East Asia.

1. The establishment of China and Korea FTA will exert a strong pressure on and attractive power on Japan. Japan had to strengthen cooperation with China and Korea, which will lay a solid foundation to establish free trade area among China, Korea and Japan. In East Asia, in terms of economy, China, Korea and Japan are the cooperation partners which have cooperation basic and potential. Due to three countries' higher trade dependency, the establishment of China, Korea and Japan FTA would played a significant role in promoting three countries' economy. As early as November 4, 2002, Chinese Premier Zhu Rongji put forward the idea of the China, Korea and Japan FTA in the sixth "10+3" Summit. Korea also

⁵⁷ Li Shujuan(2007), China-Korea co-operation under the regional economic integration", *Contemporary Korea*, p34.

proposed to establish FTA among three countries, but Japan did not respond positively. However, if China-Korea FTA established firstly, for its own interests, Japan is bound to rethink the establishment of China, Korea and Japan FTA. At the same time, because the commodities structure of China which imported from Japan is similar to that China imported from Korea, if China and Korea established FTA, it would form a discriminatory treatment to Japan. China might reduce imports from Japan and increase imports from Korea. Japan's interests must be greatly damaged. Therefore, Japan would have to participate in China-Korea FTA, which would form China-Korea-Japan FTA. It would undoubtedly play a tremendous role in promoting the process of economic integration in East Asia.

2. The establishment of bilateral free trade area has a demonstration and competition effect to other countries, to prompt more countries to establish bilateral or multilateral trade agreements. At present, China-ASEAN FTA negotiations went in front of Japan. This situation has imposed a challenge on Japan. Japan worried about losing the leadership in East Asian economic cooperation and the China-Korea FTA would make it "marginalized" in East Asia. So, Japan will make efforts to co-operate with Korea, which will help to establish Korea and Japan bilateral FTA.⁵⁸ Along with China, Korea and Japan FTA put on the agenda in politics, as a weaker party in East Asia cooperation. In order to prevent the China-Japan joint leading regional affairs and reduce over-reliance on economic and trade relations with the two big countries, Korea will make every effort to seek to strengthen cooperation with ASEAN, to speed up the establishment of Korea-ASEAN FTA. In economy, Korea has worried that China and ASEAN FTA would affect Korea's exports to ASEAN. China would replace the direct investment toward Korea with that toward ASEAN. So, after the establishment of China-ASEAN FTA, the Korean government began to actively discuss the related issues with ASEAN to establish Korea-ASEAN FTA. According to relevant agreement, Korea-ASEAN FTA was established in 2011 and Japan-ASEAN FTA will be established in 2012.

3. With the establishment of cooperation mechanisms among China, Korea and Japan, the current "10+3" mechanism. ASEAN as the center-leading entity will be changed into the "3+10" mechanism in which China, Korea and Japan work as the center-leading. East Asian economic integration will gradually finish the absence of lead power and speed up the

⁵⁸ Chen Jianmin(2005), To promote economic integration in East Asia, *Contemporary Korea*, p.43

process of integration. With the establishment of China-Korea and Korea-Japan FTA, ASEAN would be forced to speed up establishing FTA with Korea, Japan and other East Asian countries. Otherwise, Japan and Korea's capital would further concentrate on China and then the commodities of Korea and Japan would have more competitive in China market. China's commodities are getting more competitive advantage in Korea and Japan's market. In order to prevent Japan and Korea from reducing investment in ASEAN and to maintain the share of exports to these three countries, ASEAN will seek collective bargaining in the "10+3" framework to establish East Asia trade and investment liberalization pact. As to ASEAN, the collective bargaining is better than it were negotiating with China, Korea and Japan respectively. In collective bargaining, it can take advantage of the conflicts among China, Korea and Japan as far as possible. But in bilateral negotiating with China, Korea and Japan, because of unequal strength, ASEAN will be at a disadvantage. From this perspective, the establishment of China and Korea FTA will promote the construction of the East Asia FTA.⁵⁹

As early as 2003, the Prime Minister of China, Korea and Japan issued a joint statement on cooperation and expressed good wishes for establishing FTA among these three countries. However, so many obstacles remained unsolved and there are some political and historical problems between China and Japan, Japan and Korea not resolved. Thus, it will take time to achieve this goal. From the progress of regional economic cooperation in recent years, Japan's attitude is comparative apathy. That is not conducive to the implementation of the joint statement. In view of this, it should start from the actual situation toward the future. The first step is establishing China-Korea FTA; the second step is establishing China- Korea-Japan FTA; the third step is establishing the entire Northeast Asia FTA includes DPRK, Mongolia and Russia; the fourth step is establishing East Asia FTA and the East Asian market, to create a tripartite economic entity with EU, NAFTA. Both China and Korea should strengthen cooperation to make a new contribution to it.

Summary:

To achieve regional economic integration and the global trend of trade liberalization, the China-Korea FTA in the framework of WTO and APEC is conducive to the improvement of national welfare and sustainable economic development between the two countries. China

⁵⁹ Chen Liuqin(2008), The possibility of China-Korea-Japan FTA, *Contemporary Korea*, p.43

and Korea is growing the rapid bilateral trade growth and their commodities structures are complementary. All of these indicate that China-Korea FTA has a solid economic foundation. Therefore, China and Korea FTA has a feasible basic. The establishment of China and Korea FTA will greatly promote the optimal resources allocation in the region and improve the overall welfare of the two countries. After the establishment of FTA, the two countries' bilateral trade will continue stable development. The investment between two countries will rapidly be expanded. In East Asia, the establishment of China-Korea FTA will promote the process of economic integration.

Chapter5. The barriers between China -Korea

FTA

Generally speaking, it is always thought that the differences of economic development of all countries in the region indicate that there are strong economic complementarities in it. The region's economic prospects for cooperation are very bright. But in fact, in the process of regional economic cooperation, the development gap is often an obstacle to the establishment of institutionalized mechanisms for cooperation. This is because the difference between countries' trade and investment liberalization policies will impact the relevant industry. Therefore, each country will hold a very cautious approach for regional economic integration. China and Korea have strong complementarities in terms of industrial structure and factor endowments.

In the long run, the two countries which establish bilateral FTA can achieve complementary advantages and ultimately reach win-win situation. But we should also see the difference of economic development which will make it difficult to establish bilateral FTA. The establishment of China-Korea FTA means that all trade barriers between China and Korea (only a few of the industries to take exceptional measures) disappear within a certain period of time. It necessarily has larger and deeper impacts on related industrial restructuring and reallocation of resources in the two countries. Korea's capital-intensive industries and technology-intensive industries are bound to cause greater impact on similar industries in

China, while China's labor-intensive industries will also have a huge impact on similar industries in Korea. With the reallocation of resources, it will result in the redistribution of social benefits. Every country's resources will transfer to industries which have comparative advantage. Therefore, the industries with comparative advantage will be getting greater economic benefits, but in a comparative disadvantage industry, investors and labors will suffer from the losses. So, the interests impaired will inevitably take measures against market-opening. Compared to China-U.S. and China-Japan economic and trade relations, China and Korea's economic and trade relations is being developed faster and larger. Both sides are speeding up with other countries (regions) to establish FTA. However, as early as 2002, China and Korea has begun the multi-level research, but has not yet started negotiations on China-Korea FTA. So, what's the main reason impeding the establishment of bilateral FTA? How to resolve these disputes and frictions? It has become the issues that need to be resolved immediately between the two governments.

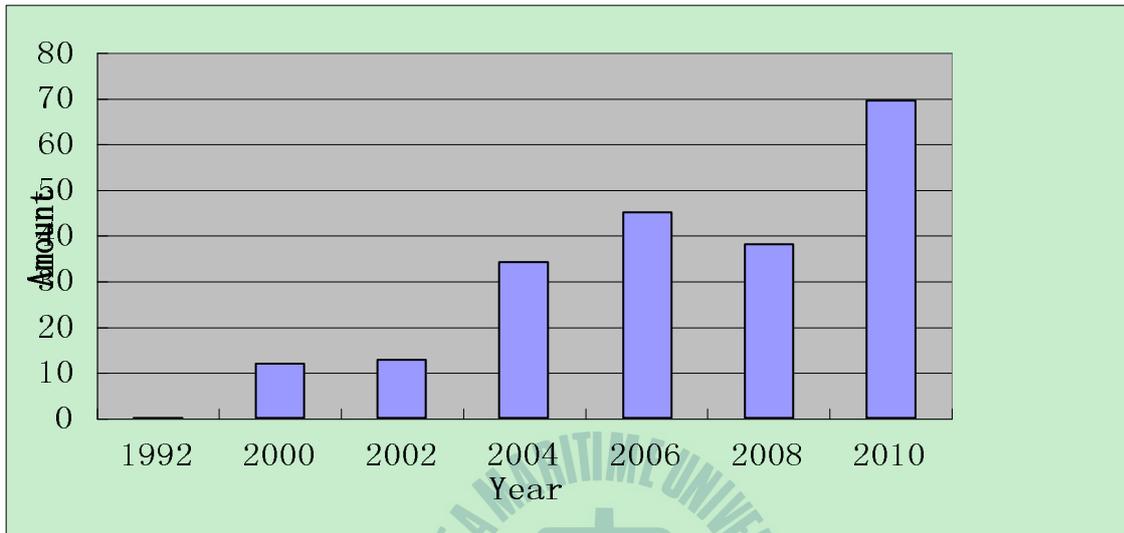
5.1 Trade deficit

5.1.1 The characteristics of trade deficit

After China and Korea formally established diplomatic ties in 1992, bilateral trade has developed rapidly. China continues to maintain largest trade partner, largest export market and second largest importer of Korea. Korea has become the sixth largest trade partner of China following the EU, United States, Japan, Hong Kong and ASEAN. But with the growing volume of trade, bilateral trade imbalance has become increasingly prominent. From 1992 to 2010, for a short period of 18 years, China's trade deficit with Korea actually increased by 205 times. As the average annual increased by 33%, it's higher than the average annual trade growth rate of 29%. Growing trade deficit leads us to do research on the issue of trade imbalance between China and Korea.

<Figure 8> Trade deficit between China and Korea (1992-2010)

Unit: billion dollars



Source: China Customs (2010)

The characteristics of China and Korea trade deficit is as follows.

1. The growth rate of trade deficit is higher than the growth rate of trade volume. The trade volume between China and Korea increased from 50.3 billion dollars in 1992 to 207.17 billion dollars in 2010. The average annual rate was increased by 29%. At the same time, the trade deficit increased from 0.22 billion dollars to 69.63 billion dollars, that is, the average annual rate increased by 33%. Obviously, the trade deficit growth rate is higher than the growth rate of trade volume.
2. The ratio of trade deficit over trade volume is getting higher. Since 1992, the trade deficit first appeared. The ratio of trade deficit over trade volume is always more than 21% and reached the maximum as high as 43% in the early 21st century. The ratio of trade deficit over trade volume was always more than 30% and the average was 34.3%.
3. Trade deficit has lasted for a long time. After the first deficit since 1992, the cumulative trade deficit amounts to nearly 200 billion dollars.

4. In 2003, China exported only 20.1 billion dollars to Korea, while the trade deficit has reached 23.03 billion dollars and exceeded 2.93 billion dollars. In 2004, China had a trade deficit of 34.43 billion dollars and exceeded 6.61 billion dollars which exported to Korea. In 2005, China had a deficit of 41.71 billion dollars and exceeded 6.6 billion dollars which exported to Korea.⁶⁰ Even though the situation is better in 2010, the trade deficit amounted to 69.63 billion dollars, still beyond the exports 0.86 billion dollars.

5.1.2 The reasons for trade deficit

There are so many reasons for trade deficit, such as the trade structure and policy factors.

1. China and the Korea economy are in different development stages and technical level. Korea is one of the newly industrialized countries. Compared to China, it has financial and technical advantages. As the world's largest developing country, China has the advantages of cheap labor and abundant resources, which determines the complementary structure of bilateral trade. China's major exports to Korea were low-tech, low-value added and labor-intensive industrial products, such as textile raw materials and products, base metals and products, minerals and agricultural products. Because these products are low skilled, it has more vulnerable to be shocked, compared to capital and technology-intensive products. When the relative price of commodities increasing, it was easy to be replaced. The numbers of export products of China are large, but the total amount is relatively small. The proportion of high value-added products is low. While the products of Korea which exports to China are mainly high value-added technology and capital-intensive industrial products. Such complementary imports and exports commodity structure and vertical division are adapted with the two countries' economic development level, and it is in line with comparative advantage in international trade. This bilateral trade done on the basis of comparative advantage is generating the big imbalance itself, which is gradually widening trade deficit between China and Korea.

2. Korea's enterprises investing in China have participated in a large number of machines, equipment, and raw materials imports. China has relatively low labor costs. The transportation between China and Korea is easy because they are far closer to each other in geography. Along with preferential policies on processing trade in China, it has attracted a

⁶⁰ Li Tong(2006), The status causes and countermeasures of China and Korea trade imbalance, *International trade*, p.21

large number of Korea's manufacturing firms to set up plants in China. In recent years, Korea's enterprises' direct investment in China has been increasing rapidly. Korea's enterprises are investing in China for two purposes: the first is to open up China's market directly; the second is to make China a processing base and exports final products to U.S. and EU. It will produce two results: the first is the diversion effect of trade surplus. The neighboring countries and regions transfer labor-intensive industries to China, export raw materials and components to China for processing and sell to international markets. It changes country's origin of the products which originated from the neighboring countries. And the region's trade surplus against the U.S. and Europe was transferred to China, making China's trade surplus against the U.S. and EU increases, while reduce the trade surplus against neighboring countries and regions. The trade deficit between China and Korea was affected by it. The second is the characteristics of Korea's enterprises. The most prominent feature of the processing trade is the "export-oriented", which must import large quantities of raw materials. According to a survey of the Korea Institute for International Economic Policy showed that Korea's enterprises investing in China need to import 58% of raw materials. The proportion of purchases from the parent company is 35%, but only 30% products are exported back to Korea. With the increase of Korea's investment in China, China will increase imports from Korea, China and Korea trade deficit also expanded. According to statistics of the Ministry of Finance and Economy of Republic of Korea, among Korea's manufacturing firms investing in foreign markets, 1/3 of the companies have chosen to invest in China. 64% trade surplus of Korea was created by these companies. China has surpassed the U.S. as Korea's largest overseas investment destination.⁶¹

3. Korea makes a discriminatory trade policy to China's products. Korea uses the tariffs, tariff quotas and special safeguard measures to restrict importing from China's comparative advantage products such as agricultural and forestry products, aquatic products, medicine and other resources and labor-intensive products. According to China's Ministry of Commerce announced in the past several years, in 2006, in the 17 kinds of products used adjusting tariffs in Korea, there are 8 kinds of products which is imported from China. All of them have a competitive advantage. In fact, the implementation of tariff regulation restricts China's products, most of china's competitive agricultural products within the scope of tariff quotas management of Korea, such as green bean, red bean, soybean, sesame, etc., which have more

⁶¹ GuoQin(2008), The motivation and perspective of China-Korea FTA", *Economic & Trade*, p.32

superiority from exporting to Korea. Many of tariff quotas of agricultural products are 300%; the highest is 800%. In fact, it is equivalent to prohibit imports. In addition to tariff barriers, Korea has set all kinds of non-tariff barriers for China products, for example, by increasing the sampling rate of imported agricultural products to increase customs clearance time, and set technology-based trade barriers. In recent years, for different reasons, Korea took measures to restrict importing agricultural products from China's, or even directly prohibit imports. The products include garlic, ginseng, pickles, sauces, fish, herbs and fresh fruit. These discriminatory provisions not only limited China's competitive products which export to Korea and increased trade deficit of China, but also affected the interests of the majority of Korean consumers.⁶²

5.2 Trade friction

The specific meaning of trade friction between China and Korea is, in the bilateral trade relations, the trade conflicts and disputes caused by the Korea's trade surplus and China's trade deficit. The emergence of the major trade disputes was relative with the implement of trade protectionism of Korea. In recent years, the Korean government, in order to protect their own markets, in addition to take tariffs protection measures, took some non-tariff barriers measures to restrict other countries' products from entering the Korean market. Particularly, all of these increase difficulty in China's products exporting to Korea.

5.2.1 The trade friction examples between China and Korea

1. In 2000, the trade friction happened to the garlic and cell phone. As the Korea imported garlic from China which is increasing year by year, the wholesale price of Korea domestic garlic market decreased year after year. 30% farmers make a living by raising garlic in Korea. They thought garlic imported from China has damaged their interests. Then they asked government to suspend the import and to protect the garlic. The Korean government suspended imports of China's garlic from November 18, 2000, to May 31, 2001. The Korean government announced to take protective measures on garlic imports from China and tariffs increase to 315%. The Chinese government quickly reacted, in June 7. The Chinese Ministry of Foreign Trade spokesman said: since Korean government's discriminatory imports policy damaged the interests of China, Chinese government decided to suspend imports Korea's

⁶² Zhang Jinghong(2008), Trade imbalances, *HLJ Foreign Economic Relations & Trade*, p.28

mobile phone and polyethylene and reserves the right to take further measures. Cangsha county in Shandong province is one of the biggest garlic production base in China. The farmer was so much affected by this trade friction. Before the trade friction, 90% of enterprises' products in Cangshan was exported to Korea. After Korean tariffs increased from 30% to 315%, the machine was shutdown, workers left, inventory increased. The whole provincial direct losses reached 30 million dollars. Korea also experienced the serious consequences of the trade friction. In June 8, the next day that the Chinese government suspended imports mobile phones and polyethylene of Korea, the stock price of Samsung mobile phone business, LG and other companies dropped significantly. Korea's mobile phone stopped sale in China market and resulted in sharp business volume atrophied, many Korea's companies have to petition the government to end to friction as early as possible.⁶³

2. In 2005, conflicts happened in kimchi industry. The Korean government released a series of health warnings about Chinese kimchi products, mentioning to find some carcinogen in Chinese kimchi products. But the fact is that the Chinese kimchi products has caused pressure on Korea-made kimchi, as the imports volume in 2005 has increased by 136% compared with in 2004. 99% of kimchi came from China. A survey by Korean Hotel Association indicated that one out of two restaurants in Seoul used Chinese kimchi. This situation encouraged Korea's industries protector to reverse the trend. In the subsequent two months, Korean kimchi market has undergone dramatic changes. After the prohibition of Chinese kimchi, the Korean cabbage, radish and other commodity prices were soaring. The price of Korean kimchi has also risen. As a result, some people in Korea stood out against the government's trade issues on kimchi.⁶⁴

5.2.2 Korea's anti-dumping to China's products

Before China entered into WTO, Korea regarded China as a "non-market economies", given China's products unfair anti-dumping judgment. Since 1999, Korea regarded China as a "market transition economies" but in the actual investigation, it didn't formulate specific standard and lack of transparency. Whether the litigation-responding enterprise can obtain market economy status or not, it mainly depends on the Korean officials subjective judgments. From 1997 to 2006, Korea had launched 81 anti-dumping investigations on 25 countries'

⁶³ Xu Wenji(2007), The review and prospect of China and the Korea bilateral relations, *Northeast Asia Forum*,p.42

⁶⁴ Li Xiaofeng(2006), "The effective way to solve trade disputes between China and Korea", *International Trade*, p.22

export products, and carried out 46 anti-dumping measures to 17 countries. Among them, the number of anti-dumping cases aimed at Chinese products exports is the first place. From the industry point of view, Korea's anti-dumping cases to China mainly in the petrochemical industry accounted to 43% in anti-dumping cases. In addition, the proportion of general consumer goods was 29%, minerals were 14%, and paper products were 7%.⁶⁵

Blind pursuit of exports can be striken back by export trade partner. Until June 2006, the total of Korea's dumping prosecution cases was 223 and ranked the second in the world following China (500 cases). So many dumping prosecution cases, which mean the Korean products in the overseas country were facing enormous pressure of protectionism.

5.2.3 China's anti-dumping to Korea's products

From 1995 to 2007, China had launched 149 anti-dumping investigations on 25 countries' export products. Among them, the number of anti-dumping cases aimed at Korea products exports was 29 and ranked the second place following Japan (30 cases), while in the number of the arbitration cases, Korea ranked the list top which was 22 cases. To some extent, it reflects the trade friction between China and Korea heating up, Korea is likely to be suffered by defensive anti-dumping measures.

Nowadays, China's anti-dumping on the Korean products focused on petrochemical products, iron and steel metal products, electrical and electronic products. In the Korea's export products, petrochemical products have a high proportion, because Korea's petrochemical industry level is higher than China. At the same time, along with the economic development, China's demands are growing so fast. So, a large number of petrochemical industrial products swarm into Chinese market. From 1995 to 2007, among China's anti-dumping cases to Korea, the chemical materials and chemical products industry accounted for 13 cases. The proportion of total anti-dumping cases was 65%. As China's domestic demands for steel continues to be heating, the number of steel imported from Korea was more and more. Chinese government immediately enrolled steel as import restriction item and levied tariff quotas and finally determined the steel were anti-dumping products. Since 1990s, with Korea's large electronic companies increased investment in China, many electronic products and components began to enter the Chinese market, and gradually became the main

⁶⁵ Shusha(2010), *Study on China-South Korea FTA*, Qingdao University Business School, Master Thesis,p.53

products in Chinese market. Following the structural changes of Korean exports, the anti-dumping restrictions items aimed at Korea have also changed. The anti-dumping investigations from the petrochemical products, steel, and paper to electronic products gradually expanded.⁶⁶It will affect the further development of China-Korea trade if the frequent trade friction could not be resolved.

<Table 17> The main cases of China’s anti-dumping to Korea’s products

Name	Filed time	Arbitration time	Results
Newsprint	2002.12	2003.6	55% anti-dumping duties
Chloride	2005.12	2007.4	75% anti-dumping duties
Polyester	2006.8	2008.2	48% anti-dumping duties
Cold-rolled	2006.8	2008.2	52% anti-dumping duties
Anhydride	2007.3	2008.7	33% anti-dumping duties

Source: <http://www.cacs.gov.cn/zhongmeimaoyi/zhonghan.aspx> (2010)

5.3 Trade protection

5.3.1 The cases of trade protection

There is the story behind the cabbage crisis. “Korea is facing a cabbage crisis, with the price of the vegetable reaching a historic high of more than 10,000 won (nearly \$9) a piece. To overcome the crisis, the Korea government removed its tariff on cabbage imports temporarily on Oct 14, 2010, and decided to import the vegetable from China. Soon Korea business people flooded the vegetable fields in Shandong and Liaoning provinces, and Tianjin municipality to buy cabbages. The apparent reason for the cabbage crisis in the Korea is natural disasters. Cabbage production fell dramatically in the Korea because it was severely damaged by typhoon and torrential rain. But the real reason could be due to the trade protectionism measures. Korea has imposed high tariff rate on agricultural products for a year. In today's globalized world, no country or region can solve all its economic and agricultural problems on its own. That's why economic globalization, regional integration and free trade area have been thriving in the 21st century. The agricultural acreage of the Korea is less than

⁶⁶ Geng Zhuqing(2007), *Study on the establishment of China-Korea FTA and the Bohai economic circle*”, Beijing University of Technology, Master Thesis, p.42

1.85 million hectares, and falling. The trend among people in the Korea is to take up jobs or go in for business, especially small-scale business. More country's aging population has caused the agriculture population to fall. So, the Korea has to rely on imports for a large amount of agricultural products. But to get the support (and votes) of farmers, the Korea imposed high import tariffs on agricultural products to limit their import. The import tariffs on cabbage and white turnip were 27 and 30 percent, which made it difficult for imported products, even from neighboring countries, to enter its market. And that is the root of the "cabbage crisis". If the Korea had agreed to set up an FTA with China, the two sides could have facilitated trade by reducing tariffs and eliminating non-tariff barriers, and ensured that the Korea didn't face a cabbage crisis.

In November 2004, the leaders of China and the Korea reached an agreement to start studies on the possibility of setting up an FTA. After five years of studies and discussions, experts on the two sides agreed that an FTA would spur GDP growth in both countries. China enjoys certain advantages in agriculture, fishing and clothing, while the Korea is strong in steel, auto and other manufacturing areas. It's a pity that the two countries still haven't been able to agree on an FTA. Two reasons could have influenced the Korea's decision not to set up an FTA with China. First, the Korea thinks Chinese products could influence its domestic market, a fear that is unwarranted. China is an agricultural country with a population of 1.3 billion and a massive market, and a majority of Chinese still live in rural areas. Since the country's per capita arable land share is low, its agricultural products are consumed mainly by its own consumers and hence are not so competitive in the international market. Last year, China's agricultural exports accounted for only 5 percent of the total to the Korea, among which many were from China-Korea joint ventures. Besides, China is wary of exporting its agricultural products. People have not forgotten the consequences of exporting garlic to the Korea a few years ago. And with China's economic development and the improvement in living standards, Chinese consumers are demanding more high-quality and green products, making it possible to import them from other countries, including the Korea. An example is that the rice is imported from Japan and Thailand".⁶⁷

⁶⁷ Cabbage crisis cries out for FTA, *China Daily* 10/28/2010)

5.3.2 The performance of trade protection

The Korean government, in order to protect their own markets, sets a series of trade barriers and obstacles to restrict China's products from entering Korean market. So, the trade deficit between China and Korea was further expanding.

Tariff barriers. In 2006, Korea set 63 categories of agricultural products subject to quota tariff and some of the products quota tariff was higher than 200%. Most of China's competitive agricultural products have been included into the scope of tariff quota. Such as in 2006, the average tariff rate was 36.2%. In the imports tariff on 18 kinds of products, there are more than 10 kinds of products related to China. All of them were competitive products in China, such as the quota tariff of sesame was 630%, garlic was 360%, mung bean was 607.5%, jujube was 611.5%, and green tea was 513.6%. According to statistics of Chinese Customs, affected by the tariffs, the exports volume of China's red beans and peanuts was decreased by 20% in 2006. Since the second half of 2006, the Korean Customs requires that all ceramic tile imported from China must be marked "Made in China". The Korean government has no such requirement for their own manufacturer of ceramic tile. China believes that this provision of Korean government has made discrimination to China's exports ceramic tile and it has violated the principle of national treatment.⁶⁸ Korea has set high tariff barriers to foreign agricultural products, not only implemented tariffs to protect the less competitive products such as agriculture, forestry, livestock and aquatic products, but also set the numerous flexible tariff systems, such as anti-dumping duties, emergency duties, countervailing duties, retaliatory duties and quota tariff. It seriously hindered the process of agricultural trade liberalization.⁶⁹

<Table 18> The import tariffs of China and Korea agricultural products (2008)

Unit: %

	Livestock	Dairy	Fruit	Tea	Grains	
China	14.8	12.2	15.0	14.9	23.7	
Korea	27.3	69.8	64.3	74.1	179.7	
	Oil	Sugar	Tobacco	Cotton	Others	Average

⁶⁸ Li Yanhua(2007), The causes and countermeasures of China-Korea trade deficit, *HLJ Foreign Economic Relations & Trade*, p.43

⁶⁹ Zhang Xiaoji(2006), China and Korea face to the 21st century, *China Development Press*, p.51

China	11.6	27.4	24.1	22.0	11.9	15.8
Korea	46.9	32.2	42.5	2.0	20.8	59.3

Source: WTO, statistics database (2010)

In <Table 18>, except for cotton, the Korea's import tariffs on all agricultural products were significantly higher than that of China. Once the bilateral negotiations on China-Korea FTA start, it must reduce agricultural products tariffs and raise a lot of disputes, therefore, how to reduce and remove the various types of imported agricultural products tariffs and eliminate non-tariff barriers, to promote the liberalization of agricultural trade. This part would be a very important element in China- Korea bilateral FTA negotiation.

<Table 19> Sensitive products in agriculture sector of Korea

Degree of Sensitivity	Examples of Application	Items
Super	Exempt from tariff abolition	Rice
High	Exemption from tariff abolition by offering TRQ conditions or minimal tariff abolition	Chinese Cabbages, Radishes, Onions, Beans, Sesame, Peppers, Garlic, Apples
Sensitive items	Period of 10 years or longer for tariff abolition or tariff reduction after a grace period	Ginseng, Mandarin, Oranges, Grapes, Pears, Tomatoes, Strawberries, Cucumbers, Peanuts

Source: Lee, Hongshi(2005), economic effects of a Korea-China FTA and policy implication, *Korea Institute for International Economic Policy*, p.56

<Table 19> summarizes 18 sensitive items based on the degree of sensitivity related to China-Korea FTA. Among these 18 items, rice was classified into a super-sensitive item, while the other items fulfilling the three criteria were classified into high-sensitivity items, considering their contribution share in the Korean agriculture households' income and total

agricultural production. Those items that fulfilled two of the three criteria were classified into sensitive items, while items that fit only one criterion were classified into low sensitivity items. Among these sensitive items, the adverse effects from the low-sensitivity items can be controlled with quarantine inspections. Thus, short-term attention should be given to the remaining 19 items. Particularly for high-sensitivity products, a careful negotiating strategy should be prepared for either exempting them from tariff abolition under the condition of providing a tariff-rate quota (TRQ) or minimal tariff reduction.

The technical barriers. Korea set customs procedures barriers, technical trade barriers and sanitary measures to import agricultural products, aquatic products and livestock products, for example, by increasing the sampling rate and inspection system to extend customs clearance time and increase costs of related Chinese agricultural products and to prevent the Chinese agricultural products, aquatic products, livestock, food and food additives, drugs and pharmaceutical raw materials and other products from entering into Korean market. According to "The HS code of imports and exports customs clearance in 2003," Korea almost have taken strict inspection and quarantine measures to all agricultural imports. Some measures are specifically for China's export products. For example, 6% casual inspection applies to China's agricultural products, while only 3% to United States and other countries' agricultural products. The discriminatory policy has seriously hindered the exports of Chinese products to Korea.⁷⁰

Korea strengthened anti-dumping investigations on Chinese products. In April 2005, some Korean ceramic tile companies petitioned that ceramic tile imported from China suffered them. They required government to take anti-dumping investigation. Tiles made in China involved in anti-dumping cases amounting to \$ 58,660,000. It was the largest anti-dumping investigations that Korea exerted to China in recent years. In November 21, 2006, Korea Trade Commission said that because China dumping polyvinyl alcohol (PVA) products in Korea resulted in the loss of Korea in the same industry. So, it recommended that Ministry of Finance and Economy of Republic of Korea should imposed the maximum rate, up to 35% anti-dumping duties to the polyvinyl alcohol products made in China within the next three years.⁷¹

⁷⁰ Ma Xiaohui(2008), Study on the trade imbalance of China and Korea, *Northern Trade*, p.42

⁷¹ <http://lccn.mofcom.gov.cn/spbg/show.php?id=4569&ids=2> • 2006.9.22

If the Korean government did not take effective action to reduce or eliminate trade barriers against China, such as cut high tariffs, abolish discrimination policies against Chinese products, then China's trade deficit with Korea would be further expanded. The trade imbalance would become increasingly severe, which would directly affect the bilateral trade cooperation.

5.4 Agricultural problems

The establishment of China-Korea FTA will be consistent with the common interests of China and Korea but among a lot of issues, the biggest bottleneck is the agricultural trade issue. Agriculture is not only related to one country's economic profits, because of the foundation role of agriculture in national status, it also relates to one country's political and social security. The trade disputes between China and Korea in recent years shows that the liberalization of agricultural trade between the two countries gradually is regressing. Therefore, agricultural trade between China and Korea is directly related to the establishment of China-Korea FTA.

5.4.1 The status quo of China-Korea agricultural trade

The volume of trade between the two countries has been rapid growth since China and the Korea established diplomatic relations in 1992, and Korea has always maintained trade surplus to China, the trade surplus steadily increased from 0.77 billion dollars in 1992 to 69.6 billion dollars in 2010. But from the perspective of agricultural products, due to lower production costs of agricultural in China, China holds certain advantages in agricultural products trade. In 2008, China's agricultural products exported to Korea reached 2.85 billion dollars, from 1999 to 2008. The average annual growth rate of Korea's agricultural imported from China was 16.1%.

From the data in <Table 20>, we can see that China has a strong competitive advantage in meat, aquatic products, vegetables, grains, marine products and vegetables except oilseeds feed and animal by-products. In addition, according to WTO statistics, the agricultural products of Korea imported from China accounted for more than 30% which were grain,

aquatic products, vegetables, meat and marine products, grains, vegetables and fruit products, silk and animal hair and so on.⁷²

After accessing to WTO, although China's agricultural products entered into Korean market, the threshold was raised, not fallen; the constraints of non-tariff trade barriers were more obvious. In the past, many importing countries used sampling method to check Chinese export products but now it changed into batch inspection, and furthermore, the testing standards and methods have greatly improved. In 2005, Korea banned imported weever from China. The reason is just because there was no registration for the record and drug residue exceeded standard. It makes China suffered serious losses.

<Table 20> The structure of China's agricultural products exported to Korea

(2008) Unit: %

Products	Exports proportion of China	Exports proportion to Korea	Imports proportion of Korea
Meat	2.7	0.3	10.9
Aquatic products	16.0	27.7	15.3
Vegetables	11.2	7.6	2.0
Grains	5.2	27.8	14.8
Oilseeds feed	5.1	5.4	6.0
Marine products	16.1	8.3	2.6
Animal by-products	11.4	5.0	3.2
Others	32.3	17.8	45.2

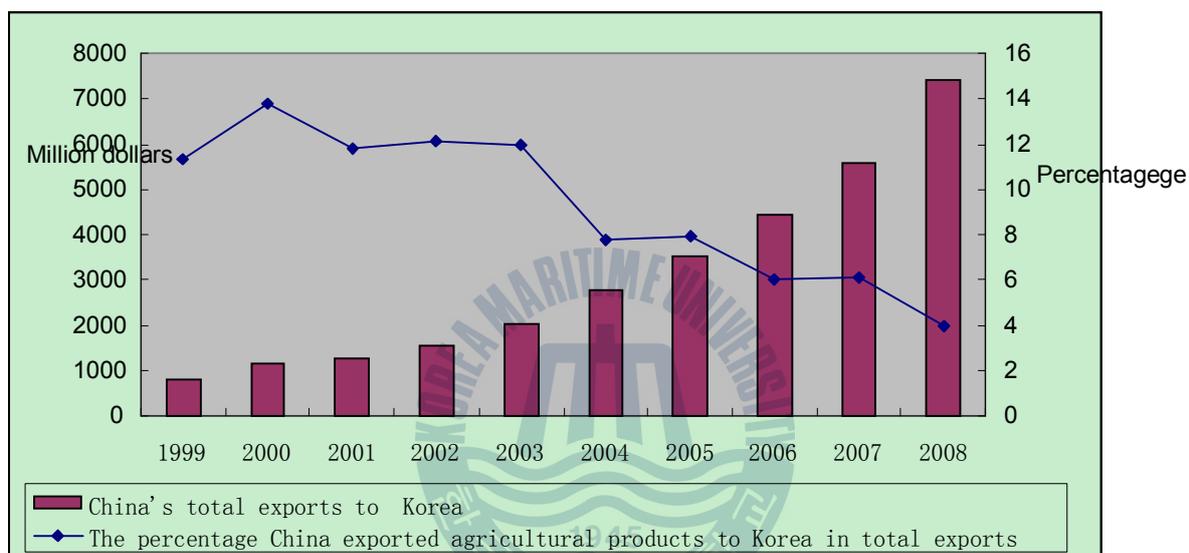
Source: WTO, statistics database (2010)

From 1999 to 2008, the total volume of China's agricultural products which exported to Korea was increased year by year, but the proportion of agricultural products exports in total amount of exports decreased year by year. In 1999, the proportion was 11.51%, in 2003, the proportion was 11.54%, in 2004, it dropped to 7.19% and in 2008, it dropped to 3.98%. Meanwhile, it is obvious that the annual growth rate of China's agricultural products exported to Korea was very unstable. In 2000, the annual growth rate was 67.69% , in 2001, the annual

⁷² Li Junjiang(2008), Study on agricultural trade liberalization and countermeasures between China and Korea”, *Asia-Pacific economy*, p.51

growth rate was -9.47%, in 2002, the annual growth rate was 33.66%, in 2003, the annual growth rate was 22.13%, in 2004, the annual growth rate was -15.03 %, in 2005, the annual growth rate was 32.74%, in 2006, the annual growth rate was -2.94%, in 2007, the annual growth rate was 32.33% and in 2008, the annual growth rate was -15.50%.The unstable growth rate shows, except for being affected by supply and demand factors, that the China's agricultural products exported to Korea is subject to other external factors.

<Figure 9> China's agricultural products export trade with Korea



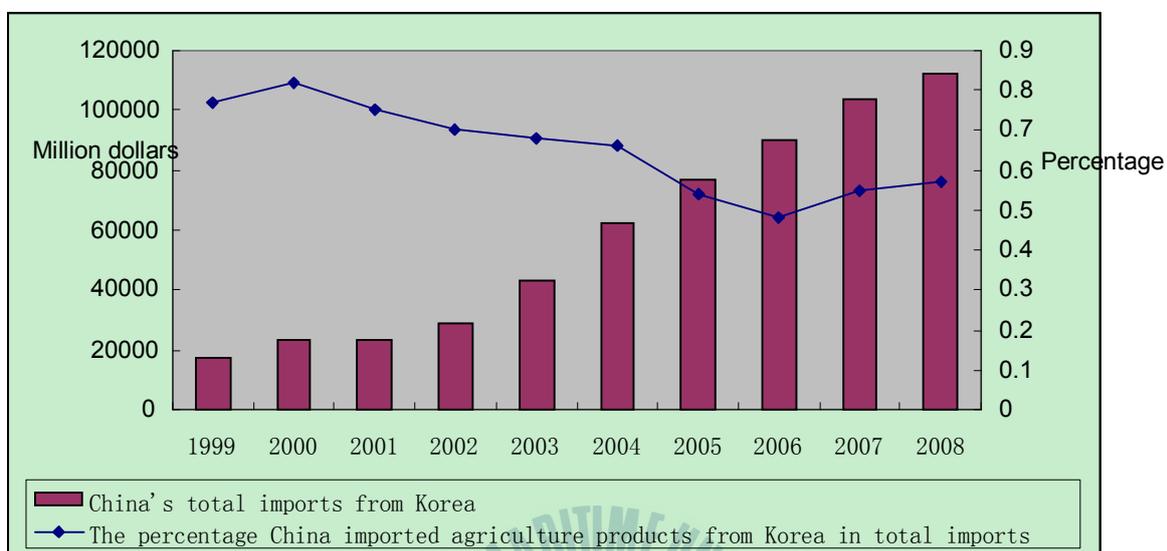
Source: Chinese Commerce Ministry (2010)

From 1999 to 2008, the total volume of China's agricultural products imported from Korea was increased year by year, but the proportion of agricultural products imported from Korea in total imports was very small. In 1999, the proportion was 0.75%, although rose to 0.82% in 2000. In 2001, the proportion was dropped to 0.74%, in 2002, dropped to 0.68%, in 2003, dropped to 0.63%, in 2004, dropped to 0.62%, in 2005, dropped to 0.53%, in 2006, dropped to 0.47%, in 2007, a slight rebound to 0.55%, in 2008, the proportion was 0.56%. We can see in the two countries' bilateral trade, the proportion of Korea's agricultural products exports was very small.

In general, the agricultural products trade between China and Korea has been expanding, which increased from 1.123 billion dollars in 1999 to 3.578 billion dollars in 2008. It was an increase of 3.18 times. However, it was relatively low, compared to the growth rate of bilateral trade between China and Korea. But because the demand elasticity of agricultural

products is relatively low, the growth rate of agricultural products trade between the two countries was still relatively high.⁷³

<Figure 10> China’s agricultural products import trade with Korea



Source: Chinese Commerce Ministry (2010)

5.4.2 The sensitivity of agricultural trade liberalization in Korea

Although agriculture keeps very low proportion in the national economy in Korea, and the size of agricultural employment is also declining, Korean government always take a cautious attitude to the liberalization of agricultural trade. In promoting the liberalization of agricultural trade issues, Korea has mainly worried that the basic ground of the agricultural industry might be shocked down and serious threat to food security may produce a greater political risk.

1. Korea worries that promoting agricultural trade liberalization may have a greater impact on its agricultural industry. Korean agricultural resources are scarce. The proportion of arable land with respect to the whole land area is only 18.4 percent. The per capita arable land is only 0.08 hectares, far below the world average level. With the urbanization and industrialization developing rapidly, Korean agricultural population is declining quickly. The proportion of agricultural population amounts to only 8.8 percent in total population. The phenomenon of aging society is getting more serious. Nearly 40% of the agricultural population consists of people over 60 ages. On the other hand, the GDP of agriculture has

⁷³ ShuSha(2010), *Study on the establishment of China-Korea FTA*”, Qingdao University Business School, Master Thesis, p.32

decreased from 20.7% in 1970 to 4.0 percent in 2004. In order to prevent foreign agricultural products from damaging its fragile agriculture and from losing agricultural producer's interests, meanwhile, considering the national and political social security, since the 1970s, Korean government began to continuously strengthen agriculture by providing high subsidies and low-interest loans as the main contents of the agricultural protection and support policies. In recent years, Korea has signed the free trade area agreement with ASEAN, Chile, Singapore and the United States. It made a great concession for agricultural products free trade and promised to impose zero tariff on different sensitivity agricultural products within agreed time, but for highly sensitive products, it always adheres to a highly protected policy, and implement non-tariff barriers in agricultural imports, including improvement of agricultural inspection and quarantine standards, strengthening the authentication of agricultural products. As to agricultural products trade between China and Korea, Korea is basically a full importer country which is a large demander for agricultural products in China. However, It has also worried that a large number of China's agricultural products which enter into the Korean market will result in an unbearable impact on its agriculture. Some Korean scholars even believe that if China and Korea impose zero tariffs on agricultural products trade, the Korean agricultural production will be reduced to 1.60%-12.04%.⁷⁴

2. Korea worries that the liberalization of agricultural trade could threaten its food security. The so-called food security, mainly means to achieve higher levels of "self-sufficiency in staple food". It is generally believed that domestic food production to ensure self-sufficiency rate reach 95% or more. To maintain food security, Korea has taken to nurture and protect the rice production for food security strategy. Rice is the most important food crops for Korean, about 74% farmers grow rice by using nearly 67% of the arable land for rice cultivation. To prevent over-reliance on imported rice, the Korean government takes various measures to intervene in the rice market, while limited rice imports, and given heavily subsidies to domestic rice producers, meanwhile, make people purchase a high-price. That is why, for decades, although Korea's food self-sufficiency rate is low, the rice is almost completely self-sufficient. In 2003, for example, the food self-sufficiency rate was only 26.9%, but the rice self-sufficiency rate was 97.5%. Therefore, the issue of rice import is the most concerned event of Korea. It's the most sensitive items in the agricultural market opening.

⁷⁴ Xu Yonghui(2006), Study on the agricultural structure of China and Korea, *Northeast Asia Forum*,p.21

In 1993, the Uruguay Round negotiations on agriculture, although Korea accepted the minimum market access, in the performance of the Uruguay agreement, the rice trade was actually placed under the protection of the government. We can expect that in the next few years, Korea will not easily give up the rice self-sufficiency policy.⁷⁵ In the WTO's Doha negotiations, on reducing agricultural trade liberalization and agricultural subsidies, Korea also demonstrated a very clear negative attitude, which always adhered to the gradual opening up agricultural markets and refused to cancel the agricultural protection policy. This attitude of Korea has been strongly opposed by many countries, but there is still no sign to give up rice self-sufficiency policy. In the insistence of Korea, the Korea-U.S. FTA will eventually exclude the rice out of agricultural products in free trade frameworks. Although China and Korea FTA negotiations have not begun yet, Korea has said that the issue of rice market opening should be absolutely not touched. And it will propose exclusive items which is more than 200 species of agricultural and fishery products out of the market opening up as one of the preconditions for negotiations.⁷⁶ Thus, for food security reasons, the Korean government is difficult to make concessions on agricultural trade liberalization.

3. Korea worries that promoting agricultural trade liberalization might bring greater political risk. Since 1980s, on the pressure of international community, Korea has gradually expanded the scope of agricultural trade liberalization. In this process, the Korean farmer groups have been taking very violent protest, demonstrating against the country and striking against the government. They even take petitions to the international community in foreign countries and other more extreme methods of protest. For example, in mid November, 2005, at the 13th APEC summit held in Busan, Korea, Korean farmers called for the anti-globalization and elimination of polarization between the rich and the poor, by burning police cars. At last two peasants attempted to commit suicide. They claimed that if the rice market is opening, they have no future.⁷⁷ On November 23 in the same year, Korean National Assembly made an attempt to pass a vote for "Approved rice consultation". Then, the various farmer organizations paraded to protest the consultation, and proposed an "Overthrow Roh Moo-hyun government" slogan. In the subsequent meeting of the WTO summit in Hong Kong, nearly 2000 Korean farmers gathered in Hong Kong engaged in a fierce opposition to free trade and WTO and seriously conflicted with Hong Kong police. Korean farmer's fierce

⁷⁵ Zhao Hua(2007), The adjustments of Korea's agricultural policy, *Economic Theory and Management*, p.34

⁷⁶ Zhu Li(2007), The FTA between China and Korea in global trade war", *China Business*, June, p.12

⁷⁷ Zhan Xiaohong(2005), Korean farmers died for what, *Financial Times*, p.21

resistance has given government an enormous political pressure and greater political risk. In the face of external demands to open its agricultural market and the claim of internal farmers strongly opposed to opening up. Korean government was under the double pressures. Under such a circumstance, any economic decision-making which might damage the interests of farmers would lead to political risks. As for the Korean government, the strong opposition of farmers groups is undoubtedly a severe political challenge and finally to put them into a dilemma.

From the above mentioned, in the process of promoting the opening of agricultural products, Korean government is careful and positive. It seeks some strategies to open its agriculture conditionally by reducing the resistance of farmers. It is of great significance to find how to compensate for farmers' income which will be expected to lose and how to communicate with farmers. For Korea has signed or been negotiating with FTA countries, we can see the positive side of Korea to promote agriculture opening up. ASEAN, the United States, EU, Australia and other countries (regions) in the proportion of agricultural imports from Korea respectively was more than 8%, but Korea does not thereby reject the FTA negotiations with these countries. In the FTA negotiation with the superpower-the United States, Korean government has been strongly resisted by the framers community, but Korean government proceeded to the Korea-U.S. FTA without hesitation because Korean government was aware clearly that the loss would outweigh the gain if Korea-U.S. FTA was given up due to agricultural issues.

Many Korean scholars worried that China-Korea FTA negotiation might lead to failure, protested by farmers and agricultural organizations. The political voice of the Korean farmer groups left a deep impression to the world. It cannot be denied that 233 kinds of agricultural products between China and Korea to compete each other, China and Korea FTA negotiation are likely to face more pressure from farmer groups. In China, many people also worried that Korea's iron and steel, petrochemical, automobile, auto parts and other heavy chemical products would stroke Chinese market. Obviously, these people are afraid that because of Korean products, they would ultimately have no benefit and no profit. It is thought that they have to do something for fear that their products are less competitive.

In fact, this is a unilateral benefit thought. Fair and mutually beneficial trade is the basic principles of open trade markets. No matter what China or Korea thinks about FTA, if they do

not eliminate the unilateral benefit thought, it is so hard to establish a mutually beneficial idea. Then the prospect of China-Korea FTA negotiation is distant and indistinct.

5.5 The geopolitical influence

When discussing the FTA between China and Korea, we must fully take into account the influential power of the United States. As the world's superpower, its core strategy is to maintain U.S. global leadership, and to prevent the emergence of organization or regional groups rival with it. As a strategic focus of the United States, it's very sensitive to the East Asia cooperation, so it always beware of and constantly curbed the East Asia cooperation. Due to historical reasons, Korea and the United States maintain close ties in political, economic, security and other areas."Mutual Defense Treaty" (established in 1953), the bilateral consultation mechanisms and joint military forces built the three pillars of the Korea-US security partnership, which makes Korea and the U.S. have common strategic interests. So Korea's East Asia strategy relies heavily on the United States, which greatly affected the independence of Korea. In terms of high-tech transfer, mutual investment and construction of market integration, the United States will make all sorts of obstruction and interference, especially after signing Korea-US FTA. The Korean economy dependence on the U.S. market will be increasing, and its regional integration strategy will be more intervened in by the United States. It has increased the difficulty to establish FTA between China and Korea.⁷⁸

5.5.1 The strategic implications of Korea-U.S. FTA

1. In recent years, because WTO multilateral trading system does not play a better role. On the contrary, many large countries hve also joined the bilateral free trade system, to adapt to the global trend of economic regionalization and to look for broader economic growth. Based on this trend, regionalism has been expanding so fast. Korea-U.S. FTA not only means that Korea will continue to meet the trend of economic regionalization and strengthen the bilateral free trade system, but also it should continue to expand opening up and to promote its service industries and some weak industries to face the wave of world economic liberalization. In addition, when Korea(the world's fourteenth largest economy) and USA(the largest economy) established FTA, they will provide broader platform of free trade and economic growth

⁷⁸ Zhang Yushan(2008), The strategic implications of Korea- U.S. FTA, *World Economy*, p.12

opportunities for Korea and the United States. Studies have shown that the Korea-U.S. FTA could increase Korean exports to the U.S. account for 12-17%, increase total trade volume up to 200 billion dollars, and create 1 million jobs. In addition, because of the cancellation of non-tariff barriers, the formation of fair competition is made and degree of transparency increases. It is also expected to increase investment and technology transfer. The most important thing is that the development of the Korea-U.S. FTA will promote the services industry and establish a transparent accounting system. It will also form a flexible labor market and set an economic and social standard, thereby to increase the productivity of Korean economy.⁷⁹

2. Another one is to disperse the dependence on external sectors, especially to get rid of the serious reliance on China. Since the late of 1980s, the export structure of Korea has changed dramatically. The proportion of exports to the U.S. from 40.1% in 1986 down to 13.3% in 2006, while the proportion of exports to China (including Hong Kong) from 5.2% increase to 27.2%. Driven by China's rapid economic development, exports to China became the backbone of the Korean economy. More than 50% foreign investment of Korean manufacturing industries was concentrated in China. Then, it was no exaggeration to say that the rapid growth of China's market saved the Korean economy. Because of excessive dependence on China, if Chinese economy changes, it must have a huge impact on Korean economy. As a result, Korea tries to take advantage of Korea-U.S. FTA as an opportunity to regain the lost market share in the United States and plans to diversify the world exports market. Industrial Research Institute of Korea said that the Korea-U.S. FTA came into effect in the next 10 years. Korea's trade surplus with the United States would be projected to increase 745 million per year.⁸⁰

3. The third one is to get rid of the embarrassing situation, looking into the balance in East Asia. Korea-U.S. FTA could quickly reach the deadline. Besides the U.S. government TPA authority was about to expire.⁸¹ More important thing is that the Korean government is considering "political judgments" seriously. In recent years, Korea always worried that it has become the "sandwich" in East Asia. It fears being buried by Japan which has high

⁷⁹ WuQiong,(2006) The Korea-U.S. FTA as an opportunity to leap to the advanced countries, *Asia-Pacific Economy*, p.36

⁸⁰ Bo Guoqin(2008), The motivation and perspective of China-Korea FTA, *Economic & Trade*, p.22

⁸¹ Trade Promotion Authority (TPA) means the parliament gives the government full negotiations rights. It, without intervening in the content of the negotiations, only votes for or against the agreement.

technology and China which has lower costs.⁸² Because Japan's technology power is higher than Korea and China is becoming the factory of the world, Korean government is eager to reverse the decline in terms of competition and hopes to get rid of the embarrassing situation by the establishment of the largest FTA in Asia. Korean Foreign Ministry official said, "We have no choice but to strengthen competitiveness through the Korea-U.S. FTA".⁸³ In addition, the Korea-U.S. FTA is expected to boost Korea's imports from the U.S., to reduce Korea's dependence on Japan's capitals and products. Korea thought that the FTA would help to re-adjust the trade relationship with foreign countries and to ensure long-term economic growth.

4. The fourth one is to compete with China for the U.S. market and to improve the competitiveness in the global market. Why the target of Korea is U.S.? Korean media in responding to this question has clearly pointed out that if Korea can not win in the U.S. market, the market will be occupied by China and India. The United States is "fully competitive market" and the total annual volume of imports amounts to 1.7 trillion dollars. In the market are there many suppliers who can not affect the market price. Thus, if the goods can have access to the United States market, it can do access to all of countries. Conversely, if it can not occupy a place of U.S. market, it is difficult in the world market to come up with its business card. Unfortunately, the market share of Korean products in the United States was declining each year. According to statistics of the Korea Institute for International Economic Policy, the market share has been decreased from 3.3% in 1995 to 2.6% in 2005, although the main competitive country-Japan's market share also decreased from 16.7% to 8.3%, still much higher than Korea. China and India make a steady rise as the formidable competitors of Korea. China in U.S. market share was only 6.1% in 1995, but has reached 14.6% in 2005. In 10 years it increased more than 2 times. Korea believes that the rapid growth of China compressed the market space of Japan and Korea and this trend might continue in the future. China has not signed FTA with the United States, but its products price has obvious advantages. Accordingly, in a perfectly competitive U.S. market, its market share still is rising. Losing competitiveness in the past, Korea must find a new breakthrough. The establishment of FTA between Korea and U.S. can be one of ways to recover the lost share of market. After the abolition of United States trade barriers to Korea, Korean enterprises need no longer fear the "China price", greatly improving the competitiveness in U.S. market.

⁸² January in 2007, Lee Kun-hee, the chairman of Korea's Samsung Group, had used a "sandwich theory" warned: Korea's situation is like a sandwich, caught in between Japan and China. If we can not overcome the crisis, the Korean Peninsula will be facing a very difficult situation. *Global Times*, March 30, 2007.

⁸³ FTA, Why America? *Korean Daily*, July 7, 2008.

5. The fifth one is, from comprehensive alliance between Korean and U.S., to restrict the further integration between China and Korea. In fact, in addition to economic considerations, Korea-U.S. FTA also contains complex political factors. The first is that Korea wanted to be a “strategic balancer” between China and the United States. It can play an important role in East Asia for such a special geo-political environment. The second is that the United States wants to keep China at bay in the long-term strategy and thus need to use Korea's "strategic balancer" to achieve "a deeper involvement in East Asia". As for Korea, as the only East Asian country signed FTA with the United States, it will make the two countries on the basis of existing military alliances to further develop economic alliance, to form the so-called "comprehensive alliance" and to improve its "East Asia balancer "status. As for the United States, the economic implications of the Korea-U.S. FTA and the political implications are equally important. And keeping China at bay is another important factor. As China's role in East Asia economic cooperation is growing, U.S. economic position in East Asia was affected. Therefore, U.S. hopes to strengthen the links with East Asia markets through Korea-U.S. FTA and to weaken the impact of China on East Asia politics and economy.

5.5.2 The impact of Korea-U.S. FTA on China

In the process of FTA negotiations in East Asia, China stays at a disadvantageous position. Korea-U.S. FTA strategic intent is clear. It tried to weaken the impact of China on the process of East Asia economic integration. In some extents, Korea-U.S. FTA has succeeded in that point. Korea got rid of the embarrassing situation and achieved the economic "balance diplomacy" and won speaking rights as ‘balancer’ between two countries. If the negotiation with the EU is successful, then Korea almost grasps all initiative. This means that China has to consider the broader strategy out of “10+3” framework and to expand the scope of China's choice to win the initiative in the East Asia FTA. In April, 2008, China signed FTA with New Zealand. It was thought that China coped with USA strategies correctly and properly. Korea-U.S. FTA has a negative impact on China's foreign economic strategy by promoting the formation of China's FTA strategy.

The potential loss will be generated due to trade diversion effect. When Korea and the U.S. levys zero tariffs on most products, the trade diversion effect may result in three main aspects: first, in the U.S. market, the competition of China and Korea will become fiercer. Second, agricultural products of China and U.S. have more competitive on the Korean market. Third,

the transfer of investment in China will be made to USA. Some products of China and Those of Korea were overlapped in the U.S. market, due to tariffs reduction or abolition. A corresponding increase in the competitiveness of Korea's products helps Korean enterprises expand their market share. However, in many areas, China and Korea's export products are quite different. Korea has its advantages in mainly the electronics industry, steel industry, shipbuilding industry, the garment industry and other high-tech industries. Korea believes that if textiles are given zero tariffs, its competitiveness in the U.S. market will exceed Chinese products. But the fact is not like that. That is why China mainly exports textiles to the United States, while Korea exports the high-grade chemical fiber products. Therefore, such differences between the two sides aren't more likely to have competition. Of course, the Korea-U.S. FTA can not be treated lightly, according to the investigation of Korea Trade Investment Promotion Agency, 69% of U.S. purchasers said that they would expand imports from Korea.⁸⁴ Meanwhile, the cheap and competitive U.S. agricultural product could threaten China's agricultural exports to Korea. As to China export to Korea, agricultural products play an important role, at present. Korea imported from China's agricultural products nearly 3 billion dollars each year. It's the second largest importer of China's agricultural products only following Japan. But China has the geographical advantages with Korea, coupled with the technical content and competitiveness of agricultural products on the rise, the impact of this should not be too great.⁸⁵

The FTA negotiation between China and Korea will be more difficult in the future. Korea believed that it has already crossed the greatest difficulty of Korea-U.S. FTA, in the future. The negotiation with other countries will be smooth, including Canada, India, and China negotiations. The reason why Korea doesn't hurry to sign FTA with China, is due to its policy and strategy considerations. Korea does not want too much reliance on the Chinese market. It hopes to maintain a relative trade balance in Asia.⁸⁶ From views of Korea, the Korea-U.S. FTA increases the stakes for negotiations with China and Japan. For example, Korea utilized, for the references, the model of Korea-U.S. FTA, in the negotiation with the EU. It also excluded the rice out of the negotiation, and continues to maintain protective tariffs on grains, vegetables and fruits. Korea is expected to hold this hard-line stance with China FTA negotiation. Korea Ministry of Agriculture and Forestry has said Korea's agricultural

⁸⁴ Meng Xiaoyan(2007), The feasibility and obstacles between China and Korea FTA, *the journal of Harbin Commercial University*, p.21

⁸⁵ Song Zhiyong(2007), The impact of Korea-U.S. Free Trade Agreement on China?, *World Knowledge*, p.33

⁸⁶ Tu Rui fen(2008), The analysis of China and Korea FTA, *Journal of Xinjing Normal University (Social Sciences)* p.14

negotiation with China would implement the consistent attitude.⁸⁷ Therefore, agricultural problem must be the core to be resolved and is not easy job, when it comes to China-Korea FTA negotiation. Garlic and kimchi events have proved it. If the EU made concessions to Korea in agricultural sector, China will be even more unfavorable. China must be fully prepared for it.⁸⁸ Under the cases of successful negotiation with the United States and EU, Korea is bound to charge a higher price for China. So, the negotiation will be more difficult. Of course, the Korea-U.S. FTA which has the impacts on China are not always negative. Trade diversion effect plays some catalytic role to adjust the trade structure and to ease trade friction between China and U.S. In short, the Korea and U.S. signed the FTA both have the pros and cons for China. It is important to fully seize the favorable opportunity to promote the development of East Asia FTA, through regional economic cooperation and to realize common prosperity and development.

5.5.3 External influence factors on China-Korea FTA

Any regional economic integration organizations have some exclusive; it will have some adverse effects to non-member countries and regions, which mainly reflects the trade diversion effect. Sometimes, extra-territorial forces will be one of the most important factors affected by a national strategy for regional economic integration. The establishment of China-Korea FTA also faces the obstacles. At present, the dependence of China and Korea on the U.S. market is deepened. So the attitude of the United States would have an extremely important impact on establishing China-Korea FTA. From the political point of view, the United States, as a superpower, has a significant impact on East Asia, and from the economic point of view, the United States is also the major markets of East Asia. The United States is an important trader partner with China and Korea; it is the major export markets for the two countries, and played an important role for the economic development of China and the Korea. Therefore, we should realize that cooperation in East Asia can not do anything without the United States participation; the establishment of China and Korea FTA is inseparable from the United States. Pull it in is better than exclude it, the so-called “pull it in” doesn’t mean invite the United States join China-Korea FTA, but opening up to the United States in trade and investment. In the process of the establishment of China and Korea FTA, the United States should be regarded as an international resource that can be used. As the Chinese

⁸⁷ The focus is agriculture between China and South Korea FTA negotiations, *Global Times*, April 8, 2007.

⁸⁸ Lei Xinglong(2008), The characteristics of China and Korea trade”, *Social Sciences Review*, p.41

Foreign Ministry official said: "The United States has important interests and impacts in East Asia, we need to strengthen the cooperation among countries, and pursue open regionalism; it does not exclude the United States and other countries outside the region, mutual respect for each other's interests, continue to seek and expand new common interests".⁸⁹

There are three relationships that should be resolved for setting up a China-Korea FTA. The first is the mutual benefit such an agreement will bring. The second is that a China-Korea FTA does not aim at undermining U.S. interests. And the third is that it will strengthen the relationship between small-and medium-sized enterprises (SMEs), farmers and the disadvantaged groups today. We can create a mutually beneficial situation only if we take care of the needs and interests of the SMEs and farmers. China has been trying to build a stable, harmonious, prosperous and sustainable East Asia. Countries that blame others for trying to usurp the leadership role may be the ones that want to be the leaders themselves. It's natural that East Asia and even the whole of Asia should try to determine its own developing path, instead of being led or managed by other countries.

Summary:

The analysis shows that in the process of the establishment of China and Korea FTA, some inferior industries of China and Korea have to face a tough adjustment. It will make some people worry about the future of bilateral FTA. Meanwhile, the trade friction, trade deficit and intervention of outside forces will make China and Korea FTA face a complicated situation. From the microeconomic viewpoint, we can see that it is impossible for all firms and industries to enjoy the benefits of an FTA. Since China has relative price competitiveness in some industries, such as the agricultural, chemical, and other transport equipment industries, those industries in Korea will face a severe competitive environment after the establishment of FTA. However, in the macroeconomic sense, both countries will benefit from China-Korea FTA. As this paper showed, the total economic effects measured by GDP and welfare will offset the negative effects. Domestic competition under government protection against foreign sellers does not ensure everlasting productivity sufficient to survive in hard competitive international markets when domestic markets open to foreign suppliers. Sometimes it damages its productivity and competitiveness. China and the Korea has become

⁸⁹ Liu Xiangfeng(2005), The necessity and prospect of China and Korea FTA, *Contemporary Asia-Pacific*, p.22

the most important trade partners each other. As the trade relations between the two countries are getting closer, a big industrial division is forming in the complementary way, which will promote the healthy development of China-Korea. It is found that these trade relations are in line with the interests of the two countries. Through the joint efforts of China and Korea, it might weaken or even eliminate these constraints. Therefore, the establishment of China-Korea FTA has a realistic feasibility.

Chapter 6. The prospect of China-Korea FTA

6.1 Reduce trade deficit and trade friction

From the above analysis, we can see that despite there are many problems and obstacles in the establishment of China-Korea FTA, China and Korea should seize the favorable opportunity, according to the actual situation to speed up the FTA construction.

6.1.1 Take measures to reduce trade deficit

Although in international trade, a country should not blindly pursue trade balance, the continuing expansion of China-Korea trade deficit has been a negative impact on the healthy development of economic and trade relations between the two countries. China should take active measures to reduce trade deficit. For the case of China's huge trade deficit, Korea should actively seek cooperation to reduce tariffs and non-tariff barriers. And Korea should also gradually open its market, to give fair treatment to Chinese products as soon as possible. China also should actively expand marketable products exports to Korea.

1. Maintain the comparative advantage of China's products and improve quality. China has

comparative advantages in resource-intensive and labor-intensive products, but in international market, the competition of these two types of products is fierce. Therefore, in the short term, China can not change the situation of comparative advantage. It should implement the second initiative to improve the comparative advantage to a new level. If China wants to retain market share and increase exports under the strong impact of the competitors, it must not only increase traditional products' technology which contributes to exporting to Korea, but also improve the added value of these traditional products and products quality. It must gradually develop the diversification characteristics of the products. For some products with competitive potential, it should intensify efforts to fully develop the potential and expand its exports. The increase of China's products exports to Korea will help to balance trade between the two countries.

2. Adjust the commodities structure for exports to Korea. Improve the quality and grade of export products. First, China must broaden the scope of trade and improve the diversification of the export commodities. With China's economic development, because some of China's high technology and high added value products are increasingly favored by the international market, it can increase these products such as the mechanical and electrical products (TV, telephone, etc.) which export to Korea. The second is to improve the quality of export products, to divert from the "cheap win" to "quality win" as soon as possible. Only in this way, it can adapt to the changing international situation, to keep and even expand its market share in the fierce competition. So, the exports truly become the products with a high-earning foreign exchange. The third is to find the integration point of a comparative advantage and competitive advantage, to conduct its second development to the existing export products of China and to improve the comparative advantage to a new level. As for exports to Korea, even though China has a comparative advantage in traditional export products, it should still be prepared for the challenges from other countries and actively adjust to China's export products structure. So, the total volume of exports to Korea will be more substantial increase, which will help reduce China's trade deficit with the Korea.

3. Implement the "to go abroad" strategy to speed up China's enterprises to invest in Korea. The "to go abroad" strategy is to make full use of domestic and foreign markets and resources and to maintain the sustainable development of China's economic modernization. Mainly through foreign direct investment, foreign contracted projects and foreign labor cooperation that should be carried out, this implementation of the strategy will help promote China's

foreign trade. In this world, the relationship between trade and investment is getting increasingly close. The number of international investment, scale and growth rate, to a certain extent, also determines the number, size and growth rate of international trade. World trade has become more acute and more complex. Therefore, investment is very important and effective means to enter world market. In the period of China and Korea which established diplomatic ties, the rapid growth of Korean investment in China and China's investment in Korea have just started. This is the important reason for formation of China-Korea trade deficit. Therefore, China's enterprises should actively implement the "to go abroad" strategy to accelerate the pace of investment in Korea. In recent years, both the capital and the technical strength of China's enterprises have considerable development, while Korea and China also has strong economic complementarities. Korea is the important target country for many China's enterprises to invest abroad, and Chinese government should strengthen targeted guidance to help enterprises to expand investment in Korea. China's enterprises should change the practices that only established trade offices in Korea, increase productive investment in Korea. It can not only expand bilateral cooperation, but also reduce China's trade deficit.

4. China's enterprises should focus on the implementation of brand strategy to expand the popularity of China's products in Korea. As China and Korea increasingly close economic and trade relations, more and more Chinese brands enter into Korean market, and engaged in a fierce competition with other brands around the world in Korea market. But it is undeniable that China's products both in quality and diversity have a huge gap compared with some developed countries. It is difficult to occupy an appropriate place in Korean market. Therefore, China's companies should vigorously implement the brand strategy, only in this way to compete with the other countries, especially developed countries. It is worth mentioning that China and Korea are close neighbors and it has a geographical advantage. So, in the implementation of brand strategy China should take full use of this advantage. The Chinese government should consult with the Korean government to give special policy to establish a joint venture, and to expand marketing channels. And it should also hold various economic and trade exhibitions in Korea to expand the popularity of China's products in Korean market.

6.1.2 Take measures to reduce trade friction

Currently, there are many trade frictions between China and Korea. The two countries should take appropriate measures to resolve it. The trade war, vicious competition and trade protection can only create lose-lose game, it is not a desirable road.

1. Establish and improve the corresponding mechanisms for trade friction. Create early warning mechanism for trade friction, grasp the market information, and take measures to resolve the conflict in time, while strengthen communication with the international peer and related industries to help companies adjust export. Establish export coordination mechanism. Develop a reasonable, open and transparent tariffs and export policies. Strengthen policy guidance to enterprises. Externally strengthen exchanges and cooperation with trader partners.⁹⁰ Establishing and improving the trade remedy mechanisms, in accordance with the "clear responsibilities, information sharing and rapid response" requirements, initially set up the Ministry of Commerce (including overseas business institutions), local commerce departments, business associations and other intermediary organizations and enterprises. Make market oriented economy as the goal, give full play to the enthusiasm of enterprises, the coordination role of intermediary organizations, the motivation role of local government, the overall guidance role of the Ministry of Commerce.

2. Strengthen bilateral consultations and reduce trade friction. From the trade dispute settlement mechanism point of view, the bilateral trade consultation mechanism is a common and effective ways to resolve trade friction. The former Chinese Commerce Minister Bo Xilai had said in March 12, 2007 that China has always been expected to solve trade disputes and trade friction through consultation.⁹¹ Therefore, when trade friction occurs, China and the Korea should keep a peace of mind, through the establishment of high-level visits to strengthen bilateral consultations. As for trade frictions between the two countries, it should be positive attitude to solve these problems, and further to seek relevant solutions, as far as possible to minimize the problems.

3. Abide by and make use of World Trade Organization rules. WTO has implemented most-favored-nation-treatment to its members. It provides a negotiating forum for its members, in accordance with agreements to resolve trade disputes among members. To

⁹⁰ Fang Xiangsheng(2008), China-Korea cooperation, a model of international cooperation, *Guangming Daily*, p.42

⁹¹ YangJin(2007). Balance of power in Korean Peninsula, *Asia Research*, p.12

resolve trade disputes through the WTO, it's not only beneficial to avoid conflicts of bilateral economic and political relations, but also through the efforts of the arbitration organizations, it reflects equality, fairness and transparency. Since China is one of WTO member, the relationship between China and its trade partners should built on the basis of WTO rules. Therefore, in the trade friction between China and Korea, as long as China has strictly complied with the WTO rules, it should actively seek WTO adjudication and the protection and solve trade disputes under the unified rules. Especially it should be aware of and familiar with WTO rules, and learn to use the WTO principle of non-discrimination (i.e., the principle of most-favored nation-treatment and national treatment principle). And it should be aware of the principle of transparency and effective rules to determine whether Korea implemented discriminatory technical barriers to bilateral trade.

6.2 Promote trade and investment liberalization

From the practice and development of existing economic cooperation to see, most of them started from trade liberalization as a breakthrough, carried out special tariff privilege in some or all of the goods to promote intra-regional trade expansion and regional investment and economic growth, and then stride forward to customs union, common market and economic alliances until the economic integration is achieved. From the sense of cooperation between China and Korea, the liberalization and facilitation of trade and investment is the basis, and free trade area is the direction and goal. The establishment of free trade area, trade liberalization and integration is the important measure to further enhance bilateral economic and trade relations between China and Korea in the future. It corresponds to the common interests of both sides.

6.2.1 Trade liberalization and facilitation

Mutually beneficial trade is the basic of trade cooperation between two countries. In the long run, China-Korea institutional economic cooperation is beneficial. First of all, it contributes to promoting the stable development of China-Korea trade relations. Second, it is to achieve an efficient integration of the resources. Trade plays an increasingly important role between the two countries. Korea is China's largest labor-intensive products exports market, while China is also the Korea's largest capital and technology intensive products sales market. Through the institutional economic cooperation to resolve trade barriers, it will provide more

space for trade development between China and Korea. Finally, it will help to increase Korean investment in China and to enhance industries international competitiveness of the two countries.

<Table 21>

Bilateral economic and trade cooperation facilitation arrangements

Year	Contents
1997.9	The agreements on encouragement and mutual protection investment
1999.3	The agreements on the avoidance of double taxation on income and prevent stealing evade taxation
1999.9	The agreements on maritime cooperation
2005.11	The agreements on simplified visa formalities
2006.4	The agreements on the health management to import and export seafood
2008.7	The agreements on standardization assess cooperation
2008.10	The agreements on quality supervision, inspection and quarantine mechanism

20 08.10	The agreements on food security cooperation
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Source: China's Commerce Ministry (2010)

Trade facilitation is a good point to enhance economic cooperation between the two countries. Since 1990s, in global scope, the tide of regional economic integration was increasingly accelerating. World economy and international division has also undergone tremendous changes between China and Korea, based on comparative advantage within the intra-industry trade which has great potential for development. Trade liberalization and facilitation are an indispensable condition for this potential. Meanwhile, They should simplify the business visa procedures, coordinate the products' sanitary and quarantine standards, and establish customs management system in accord with e-commerce and paperless trade.⁹² From the overall interests of economy and trade relations, the two governments should take effective measures to eliminate tariffs and non-tariff restrictions, to create convenient conditions to attract mutual investment between the two countries. It is also conducive to the balance trade deficit and promotes smooth and healthy development of bilateral trade.

6.2.2 Investment liberalization and facilitation

Investment and trade liberalization are the most substantive content of economic globalization. Compared with the liberalization of trade, investment liberalization is the higher stage of economic globalization. Investment liberalization allows capital to flow more freely between countries and to require governments to reduce the supervision and control of international capital. China and Korea should be based on equality and mutual benefit, to seek common ground. Positive and pragmatic is the principle of win-win cooperation. They should take investment liberalization in according with economic development level and sustainable development objectives of China and the Korea. Real and positive is the basic attitude of them for investment liberalization. China is the world's largest foreign investment destination. Because of it, the international investment liberalization will have far-reaching impact on China. From the perspective of China's economic and social development, foreign investment plays an irreplaceable role in some respect. Therefore, from the grand strategy of

⁹² Zou Yu(2004), China and Korea trade research”, Harbin Institute of Technology, *Master Thesis*, p.56

China's reform and opening up view, in order to actively use international resources to promote domestic reform and development, it is necessary to take a more realistic and positive attitude on the issue of investment liberalization. As for Korea, China is its largest investment destination. China's investment policy has directly interest to attract them.

The investment liberalization includes providing mutual most-favored nation treatment and national treatment, establishing and improving the investment rules to ensure the transparency of policies and procedures. Investment facilitation mainly includes simplifying investment procedures and improving efficiency.

1. Gradually to promote industrial liberalization. If a country implements national treatment, the most important thing is to resolve the protection of domestic industries. For China is in a period of economic transition, the state-owned enterprises are implementing restructuring and reform. Many state-owned enterprises are in a state of institutional instability in the transition, and private enterprises are in process of development. Many enterprises are small, and face lack of international competitiveness. Thus, compared with Korea, the number of enterprises which has international competitiveness is small, if national treatment is implemented. It might be a considerable number of domestic enterprises that will be affected. Therefore, China must be based on the level of industrial development to formulate appropriate industrial policy and to take different measures. For enterprises regulated by the market, market access restrictions should be a transitional measure. It shouldn't be unlimitedly abused. Over-protection will make it lose the momentum of development, fall behind, and thus lose its competitiveness.

2. Loose foreign investment approval system. Industry liberalization is closely linked to the gradually loosening of foreign investment approval system. For enterprises which have international competitiveness, the law should also take appropriate measures to loose foreign investment approval system. China has adopted a strict approval system for investment. Each investment project must be individually examined and approved. In the future, in the process of industrial liberalization, we can consider a combination of approval system with registration system, for some not sensitive industries, only registered without approval.

3. Unify foreign trade policy and eliminate discrimination treatment. To implement national treatment, it should unify foreign trade policy and eliminate discrimination treatment between foreign enterprises and domestic enterprises. On the one hand, it can prevent and

eliminate the discrimination of various laws on foreign investment. On the other hand, it also should treat foreign enterprises equally. Domestic enterprises and foreign enterprises can compete on the basis of equality. It is the requirement of national treatment itself.

6.3 Cooperate step by step in agriculture

The agricultural trade liberalization is significant to China, in the short term. For Korea to open up its agricultural market is completely unrealistic. So, in the process of the establishment of China-Korea FTA, we must give full consideration to the strategic interests of both parties, setting up reasonable agricultural trade arrangements to avoid agricultural trade liberalization as an obstacle to the establishment of China and Korea FTA.

6.3.1 Determine the transitional arrangements of agriculture

1. Determine the scope of agricultural trade liberalization. First of all, determine a reasonable coverage of agricultural trade liberalization, which should follow the principle that complies with WTO provisions, in addition to retain some sensitive species. Most of the agricultural products should be items for trade liberalization, even as the exception of trade liberalization, It should also gradually reduce tariffs and non-tariff barriers level, furthermore, to determine the species of agricultural products, the lowest proportion of trade liberalization, exceptional products of trade liberalization and safeguard measures between China and the Korea. Taking into account the agricultural products status between China and Korea, the two sides should first determine the minimum target of their respective agricultural trade liberalization, and seek the balance point to meet their requirement, if necessary. China can make some temporary concessions, in the condition of fulfilling the minimum proportion of agricultural trade liberalization. China can distinguish different types of agricultural products, and gradually reduce the tariff rates and eliminate non-tariff barriers.⁹³

2. Set a reasonable transition period of agricultural trade liberalization. In the process of promoting the establishment of China-Korea FTA and agricultural trade liberalization, they set a reasonable transition period to minimize the huge impact on Korean agriculture in the short period. Meanwhile, it can maximize protecting the interests of the China. Currently, Korea is still adhering to the high tariff and customs procedures, technical and quarantine

⁹³ Park Young-ae(2006), The process of China-Korea FTA, *Modern Japan*,p.32

inspection barriers, to protect its agricultural markets. In 2006, the average tariff of agricultural products is 46%.⁹⁴ Furthermore, it carried out tariff quota management for 63 categories of agricultural products, such as sesame quota tariff(630%), garlic(360%), green tea(513.6%). And most of China's competitive agricultural products have been into the scope of tariff quota administration. In 2005, Korea imposed 1,067% of the agricultural special tariffs on 44 agricultural and forestry products. Among them, 21 kinds of products is related to Chinese agricultural and forestry products.⁹⁵ In such circumstances, China and Korea which try to promote agricultural trade liberalization will inevitably require a gradual process, giving Korean agricultural market a relatively long period of protection, allowing it to cancel tariff and non-tariff barriers in a certain period, and providing it relatively sufficient time to market adjustments.

3. Set the protection mechanism for agricultural trade liberalization. According to the relevant provisions of WTO, the so-called trade protection mechanism means that in the context of liberalization of international trade, when the member's domestic industry is damaged by foreign undue or unreasonable import restrictions and the domestic industry can not eliminate such damage, the member may suspend tariff reduction and elimination of quantitative restrictions and other obligations, and implement tariffs and non-tariff restrictions on imported products. In the process of promoting agricultural trade liberalization between China and Korea, it not only Korea's agriculture might be damaged due to a certain market opening, but also china's agricultural might be injured by unfair or unreasonable import restrictions of Korea. Therefore, China and Korea need to set reasonable protection mechanism for agricultural trade liberalization, to avoid the abuse of trade protection measures for members. The key is to set clear rules and detailed provisions for the protection mechanism for agricultural trade liberalization. The specific content should include the following four aspects. One is clearly defined as implementation conditions for trade security measures, that is, from two angles of qualitative and quantitative to determine the specifically identified criteria of "suffered industry". The second is to explicitly stipulate the procedures of trade protection measures. China advocates that the implementation of trade protection measures must be communicated and consulted by both sides. The third is to to explicitly stipulate the specific form of trade protection measures. The beneficiary should put forward

⁹⁴ Zhen Ni(2006), The fourth round of FTA talks between Korea and U.S., *Economic Herald*, p.26

⁹⁵ Wang Tao(2007), The feasibility and obstacle of China and Korea FTA, *Harbin University of Commerce (Social Sciences)*, p.32

some evidence that trade protection measures should be taken rationally. The fourth is to define the period of the implementation of protection mechanism. Although the longest provisions period of the WTO is 8 years, we think that it should be covered for the 2 to 3 year, lest the protection period should delay market opening so long.

4. Set reasonable settlement mechanism for agricultural trade disputes. In the existing regional free trade agreements, there are usually two ways to resolve trade disputes among members. One is to explicitly stipulate the settlement mechanisms and procedures for disputes and to set the specialized dispute settlement organization. Another one is not to explicitly stipulate disputes resolution. It mainly relies on temporary consultation, or on WTO arbitration mechanism to resolve it. In the case of Korean agriculture, its competitiveness is obviously getting weaker, with the continuous development of China-Korea bilateral trade relations. It's hard to completely avoid the agricultural trade disputes. To this end, in the process of establishing China-Korea FTA, they need to negotiate the disputes settlement mechanism for agricultural trade, and to establish the specialized agencies in accordance with mutually agreed procedures and rules to resolve trade disputes. Specifically, first of all, the exchanges and cooperation between the two governments and enterprises should be strengthened and the information exchange for agricultural production, price, quality and supervision inspection and quarantine rules, accurate grasp problems of the existing bilateral trade relations should be increased. Measures should be explored to reduce trade friction and early warning mechanism of trade disputes should be established, from the two links of production and trade to reduce the possibility of producers which suffered heavy losses and the adverse effects of unexpected events on the bilateral trade relations.⁹⁶ Secondly, the arbitration and coordination organization for trade dispute should be set up and then their responsibility range, procedures, consultation and arbitration ways, etc should be clearly defined. The agency should make an effort to promptly resolve dispute and mutual trade friction. If the agency can not resolve or have difficulty in reaching consensus, it should help the two governments reach a temporary agreement and if it still can not solve the problem, it can use the WTO dispute settlement mechanism to arbitrate, thus forming a multi-level and efficient channels and mechanisms to resolve trade disputes.

⁹⁶ Zhang Huizhi(2006), The problems of agricultural products trade among China, Korea and Japan, *Modern Japan*, p.42

5. Set "Most Favored Nation" (MFN) mechanism of agricultural trade between China and Korea. The "MFN" in this article, is not referring to the principles of WTO, but specifically refers to the China and Korean free trade agreement on agricultural trade issues. It should be defined as follows: in the aspect of agricultural trade, the commitments and concessions of the two countries opening to third parties market must be unconditionally applied to each other. In order to avoid the liberalization of agricultural trade barriers in the process of the establishment between China and Korea FTA, China can allow Korea to retain a small number of trade exception products, and make the appropriate concessions in the liberalization of agricultural trade. However, in order to protect the long-term interests of both sides and to realize the balance of interests, China has the right to ask Korea to apply "MFN" to China in agricultural trade. Korea must apply agricultural trade agreements other countries also have signed and negotiated with to China unconditionally. Its purpose is to avoid that China's agricultural products have a competitive disadvantage in Korean market.

6.3.2 The countermeasures to implement agricultural trade liberalization

For the implementation of agricultural trade liberalization between China and Korea, joint efforts between two countries are needed. The two countries should start from the reality of agricultural trade and actively explore an effective way of agricultural trade liberalization. To address this issue, this paper proposes the following policy recommendations:

1. China should allow Korea to suspend its rice market opening and in return, the Korean government should take active measures to improve the international competitiveness of rice. For the rice market opening up is the most sensitive issues to Korea, China should fully understand and allow it to suspend opening, and give it full time to adjust itself to. Meanwhile, Korean government should take active measures to enhance the international competitiveness of rice. The following two suggestions are considered: first, China should allow the Korean government to phase out tariffs and import quotas for rice in 10-15 years and to give Korean government a buffer and adjust time. In the specific implementation process, tariffs and import quotas should be gradually removed. So, the protections of Korean rice all depend on the tariff rate, and on the basis of this, protection measures should be gradually reduced until the total elimination of import tariffs. Secondly, Korea should change its agricultural production policies of "quantity first". It should encourage farmers to focus on

the strong brand of agricultural products to support “quality first”. Meanwhile, it should gradually stabilize the proportion of the rice production and improve the "quality" to withstand the impact of imported agricultural products and occupy home and abroad high-end consumer markets with high-quality rice.

2. Korea should take effective measures to deal with the reduction of farmers’ income after the opening of agricultural markets. Free trade of agricultural products between China and Korea will inevitably lead Korean agriculture to be attacked and cause agricultural structure adjustment. but because of the special nature of agriculture itself, production factors of agricultural, in the short term, is difficult to achieve effective transfer to other departments. The most notably conflict is that farmer’s income will decline and so these issues were difficult to resolve in the short term. Therefore, Korean government should take active measures to raise farmers’ income. In this issue, Korea can take the following measures: the first is that Korean government should expand scale of operation, adjust product structure and improve agricultural technology content. The second is that it should encourage farmers to enter into food processing industry, to provide policy privilege to farmers, reduce the threshold of entering the food processing industry, offer a preferential tax treatment and provide farmers the capital convenience. The third is that it should take policies to increase nonagricultural income of farmers, establish rural industrial base and provide farmers with employment opportunities, opening up channels for employment to increase their income.

3. To strengthen agricultural cooperation and to achieve win-win development. The Korea-Chile FTA paved a new path for resolving the agricultural issue. It set down a long period of transition, allowing for step-by-step liberalization of those sensitive markets of rice, apples, pears, etc. China can also follow Korea-Chile case to compromise on some sensitive agricultural products in Korea. Another way out is to increase Korea’s agricultural investments in China. As Korean enterprises are allowed to cultivate the neighboring area nearest to the northeastern and eastern or to develop that area areas in China, Korea is able to mitigate agricultural trade disputes with China by encouraging enterprises to invest in and set up agricultural production and processing bases. In addition, Chinese agricultural authorities also need additional access to funds and technology to improve product quality. Under this initiative, Korean farmers will play a role in arranging investments in China to establish plantations and breeding bases, undertake deep processing business, and then sell products to

their home country. This approach of investment and cooperation may be instrumental in easing trade disputes in agricultural products and bring benefits to farmers of both parties.

6.4 Establish dispute settlement mechanism and government dialogue

The establishment of bilateral free trade area not only involves two countries' different economy, but also involves many fields, such as political, cultural, religious, and many other aspects. It not only involves many government departments, but involves kinds of subjects such as research, enterprises and intermediary organizations. Thus, in the process of promoting cooperation and coordination, we should strengthen organization's operation and make fully use of all factors to achieve the maximal effects. China should work along with Korea to establish a unified coordinating organization, through the coordination of organization to solve and avoid friction.

6.4.1 Establish coordination mechanism

At present, the economic cooperation between the two countries based on spontaneous trade, only rely on negotiation rather than mandatory rules which can resolve problems and conflicts. These problems and conflicts only in the institutional arrangements mechanism might be resolved. Therefore, the two governments should establish a cooperative organization to formulate specific implementation details and common laws and decrees and create conditions for the establishment China and Korea FTA.

The establishment of FTA between China and Korea needs institutionalization. It should continue to further strengthen bilateral economic and trade cooperation to promote multi-level economic and technological cooperation and to establish mutual trust of political and security to promote China-Korea FTA negotiations. It includes cooperation in key projects, bilateral or multilateral economic cooperation in East Asia and cooperation among cities. Firstly, it should establish and strengthen trade coordination mechanism between the two governments and set up early trade disputes warning system in their home country to reduce adverse effects of bilateral trade relations. Secondly, it should establish negotiations mechanism for trade facilitation. It should comprise government officials, experts and business representatives through regular dialogue to understand the problems in trade make

policy recommendations to government to reduce trade friction. At the same time, it should clearly specify their responsibility, exchange of information regularly. Thirdly, it should strengthen customs cooperation, and gradually push forward cooperation in trade facilitation. For example, it should promote the tariff policy coordination, improve transparent and non-discriminatory function and simplify customs clearance system.

6.4.2 Establish trade promotion organization

China-Korea trade has entered a stage of rapid development. In order to avoid trade disputes, the two countries should increase coordination in relevant government departments. Meanwhile, it also develops "China-Korea Trade Association", the semi-official institutions, to expand the scope of coordination and to promote the balanced development of bilateral trade. In addition, the Korea should further open the domestic market to China's to minimize trade barriers, improve the trade balance, prevent the abuse of trade measures and establish a joint inspection institution to monitor the conduct of trade.

At present, China and the Korea communication channels are limited, although it is increasing more than before. The information and data are still insufficient, while Korea's information on China's is relatively more. But its accuracy and comprehensiveness should be strengthened to avoid some misunderstanding. To this end, the two sides should further expand the amount of information exchange, establish multi-channel and multi-style information exchange mechanism and provide more comprehensive advisory services, in order to deepen mutual understanding and awareness. In addition, relevant departments can organize entrepreneurs to visit other companies, to know each other business methods, management, personnel relations and corporate culture to enhance the localization of enterprise. Strengthening exchanges programs on research institutions and scholars are conducive to healthy development of economic and trade. In-depth discussion on the development of bilateral economic and trade situation is beneficial to the establishment of China-Korea FTA.

Summary:

As required by the high speed of economic and trade growth between both sides and pressing calls from both business communities, both sides should consider establishing China

and Korea FTA as soon as possible. Expansion of economic cooperation between China and Korea is a long-term, rather than expediency. So, both sides should deal with bilateral economic cooperation from a strategic dimension. Only in this way, it can promote the development of economic relations between China and Korea, it is also conducive to the development of East Asia and the world economy. Therefore, China and Korea should develop a long-term strategic policy and plan for expanding economic cooperation between the two countries. Specifically, the first step is to take effective measures to reduce the trade deficit between the two countries, and properly solve the trade frictions, promote trade and investment liberalization; the second step is to take measures on sensitive industries. Meanwhile, both sides should. For the future, strengthen regional cooperation to improve the overall economic level between the two countries, to fully understand the economic cooperation in their respective strategic position, to expand the potential of bilateral economic cooperation and to establish dispute settlement mechanism and government dialogue mechanism to achieve a win-win strategy for economic development.

Conclusions

This paper uses qualitative analysis, quantitative analysis, historical analysis, comparative analysis and other research methods, to analyze the bilateral trade, investment conditions and the complementarities between China and Korea. The main conclusion is as follows.

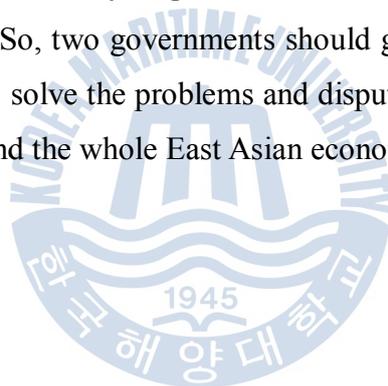
1. The complementary economic relations between China and Korea laid a solid foundation on establishing China and Korea FTA. In terms of economic resources, the natural resources, labor, science and technology, they are very complementary. The two countries should start from the actual situation of their resource endowments and play their respective comparative advantages to create maximum benefits. In terms of trade, from comparative advantage index we can see that China and Korea have their own comparative advantages in products and that the bilateral trade is complementary. In terms of market, Korea can take advantage of China's vast market for further development. In addition, in the context of globalization, the trade between China and Korea is still intra-industry trade. There is no obvious competitive situation.

2. The China-Korea FTA has both positive and negative effects. After the establishment of free trade area, the regional tariffs will be reduced. It will improve both countries' trading activities quantitatively and qualitatively. The effects will not simply be lower tariffs but also the acceleration of East Asia's economic integration. This economic integration is expected to result in generating economies of scale by enlarged market size and spillover effects by transferring knowledge and technologies. However, there would be negative effects of China-Korea FTA. When The two countries further open market, it will cause some industry to produce the comparative disadvantage industry. For this consideration, the two countries will slow the pace of integration. In China and Korea's bilateral trade, China is always at a position of trade deficit. The huge trade deficit has a serious impact on the development of China and Korea bilateral trade. In addition, a large number of tariffs and non-tariff barriers hindered the free flow of goods. It is not conducive to the development of bilateral trade. In some extent, it restricted the establishment of China and Korea FTA.

3. The establishment of China and Korea FTA will bring economic effects. This paper analyzes the economic effects of the two countries from static and dynamic aspects. Static effects include trade creation effect and trade diversion effect. Dynamic effect includes investment effect and competition effect. The establishment of China and Korea FTA will promote business competition, technological innovation, and achieve economies of scale to bring greater benefits to both countries' people. But we should also see the establishment of China and Korea FTA still face some challenges. The two countries should take measures to achieve institutional arrangements mechanism. In addition, with the development of world economy, economic cooperation between China and Korea is not only beneficial to the common prosperity of both countries, but will also have a positive impact on regional economic cooperation in East Asia.

4. The prospect of China and Korea FTA is bright. We can expect China and Korea FTA to have a very bright future. It will optimize both trade and investment environment and widen the field of trade and investment. Institutional cooperation will also reduce or eliminate barriers in mutual investment, and enhance the scale of investment in the region. It will further enhance the economic interdependence between the two countries. All of these will continue to enhance the power of trade liberalization, to promote regional economic growth in East Asia and to make a positive contribution to world economic stability and development.

Back in 1992, or even in 2000, none could have envisioned today's close relations in economic and trade between China and Korea. It took several years for dramatic changes to take place. To harmonize regional economic integration across the world, China and Korea have speeded up their FTA development. Korea is one of the major targets of China's FTA strategy. A critical step for China in its long-term strategic plan for regional economic cooperation is to initiate FTA negotiations with Korea. The strong growth in economic and trade relations and industrial complementariness between both sides has laid the solid foundations on an FTA. A China-Korea FTA would serve as a key leverage point to move forward FTA in East Asia. China and Korea have great influence on East Asia. The two countries should actively promote regional economic cooperation in East Asia, to establish the East Asia regional economic cooperation organizations as soon as possible. The establishment of China and Korea FTA is not only in according with the interests of both countries' people, but also have a very important role to the entire East Asian economic prosperity, peace and stability. So, two governments should grasp the opportunity to develop regional economic cooperation, solve the problems and disputes in the process of cooperation and to promote China, Korea and the whole East Asian economic development.



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